INDEPENDENT REVIEW COMMITTEE ON HONG KONG'S FRANCHISED BUS SERVICE

KMB & LWB -2 to KMB & LWB -12 (APPENDICES)

Tab	Document	Date	Bundle	Page
BUNDLE KMB-2 (pages 1 to 500)				
Appendix to the Submissions from KMB & LWB on 2018/04/24				
1.	Annex l a-i-1 to the Submission "*The Franchise granted to KMB covering the period from 1 July 2017 to 1 July 2027*"	--	KMB-2	1-33
2.	Annex l a-i-2 to the Submission "*The Franchise granted to LWB covering the period from 1 May 2013 to 1 May 2023*"	--	KMB-2	34-59
3.	Annex l a-i-3 to the Submission "*Guidelines on Bus Captain Working Hours, Rest Times and Meal Breaks (Revised in October 2010)*"	--	KMB-2	60
4.	Annex l a-i-4 to the Submission "*Guidelines on Bus Captain Working Hours, Rest Times and Meal Breaks (Revised in 2018) and TD's press release*"	23/02/2018	KMB-2	61-63
5.	Annex l a-i-5 to the Submission "*Guidelines on the Introduction of a New Electronic Payment System for the Collection of Fares in the Public Transport Sector (June 2017)*"	--	KMB-2	64-71
6.	Annex l a-i-6 to the Submission "*Guidelines on Service Improvement and Reduction in Bus Route Development Programmes*"	--	KMB-2	72-74
7.	Annex l a-i-7 to the Submission	--	KMB-2	75-446

	"*Schedule of Routes (Kowloon Motor Bus Company (1933) Limited) Order 2017 dated 10 January 2017 (Legal Notice 3 of 2017 published in Gazette)*"			
8.	Annex l a-i-8 to the Submission "*Schedule of Routes (Long Win Bus Company Limited) Order 2017 dated 10 January 2017 (Legal Notice 4 of 2017 published in Gazette)*"	--	KMB-2	447-490
9.	Annex l a-i-9 to the Submission "*Sample Schedule of Services for KMB Route No. 23*"	16/04/2018	KMB-2	491-492
10.	Annex l a-i-10 to the Submission "*General Guidelines in Planning Franchised Bus Services*" *(part)*	--	KMB-2	493-500
BUNDLE KMB-3 (pages 501 to 1000)				
10.	*(continued)* Annex l a-i-10 to the Submission "*General Guidelines in Planning Franchised Bus Services*"	--	KMB-3	501-509
11.	Annex l a-i-11 to the Submission "*General Guidelines on Deployment of Bus and/or Bus Trip in the Busy Corridors*"	--	KMB-3	510-511
12.	Annex l a-i-12 to the Submission "*Conditions for 1nstallation of TV Broadcasting System of Franchised Buses*"	--	KMB-3	512-514
13.	Annex l a-i-13 to the Submission "*Guidelines for Erection of Bus Shelters (September 1999)*"	--	KMB-3	515-544
14.	Annex l a-i-14 to the Submission "*Road Traffic (Construction and Maintenance of Vehicles)*	--	KMB-3	545-638

	Regulations (Cap 374A)"			
15.	Annex l a-i-15 to the Submission "*Recommended Minimum Specification Requirements for Franchised Bus (February 2012)*"	--	KMB-3	639-641
16.	Annex l a-i-16 to the Submission "*Administrative Bulletin No. 2.9 on Certificate of Fitness Examination for Franchised Buses (September 1997)*"	--	KMB-3	642-649
17.	Annex l a-ii-1 to the Submission "*TIH 2011 Annual Report*"	--	KMB-3	650-857
18.	Annex l a-ii-2 to the Submission "*TIH 2012 Annual Report*" *(part)*	--	KMB-3	858-1000
BUNDLE KMB-4 *(pages 1001 to 1500)*				
18.	*(continued)* Annex l a-ii-2 to the Submission "*TIH 2012 Annual Report*"	--	KMB-4	1001-1077
19.	Annex l a-ii-3 to the Submission "*TIH 2013 Annual Report*"	--	KMB-4	1078-1289
20.	Annex l a-ii-4 to the Submission "*TIH 2014 Annual Report*"	--	KMB-4	1290-1489
21.	Annex l a-ii-5 to the Submission "*TIH 2015 Annual Report*" *(part)*	--	KMB-4	1490-1500
BUNDLE KMB-5 *(pages 1501 to 2000)*				
21.	*(continued)* Annex l a-ii-5 to the Submission "*TIH 2015 Annual Report*"	--	KMB-5	1501-1685
22.	Annex l a-ii-6 to the Submission "*TIH 2016 Annual Report*"	--	KMB-5	1686-1897
23.	Annex l a-ii-7 to the Submission "*TIH 2017 Annual Report*" *(part)*	--	KMB-5	1898-2000
BUNDLE KMB-6				

(pages 2001 to 2500)				
23.	*(continued)* Annex l a-ii-7 to the Submission "*TIH 2017 Annual Report*"	--	KMB-6	2001-2109
24.	Annex l a-ii-8 to the Submission "*KMB Management Structure as at 24 April 2018*"	--	KMB-6	2110
25.	Annex l a-ii-9 to the Submission "*KMB Audited Financial Statements for the year ended 31 December 2011*"	--	KMB-6	2111-2164
26.	Annex l a-ii-10 to the Submission "*KMB Audited Financial Statements for the year ended 31 December 2012*"	--	KMB-6	2165-2217
27.	Annex l a-ii-11 to the Submission "*KMB Audited Financial Statements for the year ended 31 December 2013*"	--	KMB-6	2218-2270
28.	Annex l a-ii-12 to the Submission "*KMB Audited Financial Statements for the year ended 31 December 2014*"	--	KMB-6	2271-2324
29.	Annex l a-ii-13 to the Submission "*KMB Audited Financial Statements for the year ended 31 December 2015*"	--	KMB-6	2325-2378
30.	Annex l a-ii-14 to the Submission "*KMB Audited Financial Statements for the year ended 31 December 2016*"	--	KMB-6	2379-2436
31.	Annex l a-ii-15 to the Submission "*KMB Audited Financial Statements for the year ended 31 December 2017*"	--	KMB-6	2437-2494
32.	Annex l a-ii-16 to the Submission "*More About KMB 2011*" *(part)*	--	KMB-6	2495-2500

BUNDLE KMB-7 *(pages 2501 to 3000)*				
32.	*(continued)* Annex l a-ii-16 to the Submission "*More About KMB 2011"*	--	KMB-7	2501-2514
33.	Annex l a-ii-17 to the Submission "*More About KMB 2012*"	--	KMB-7	2515-2534
34.	Annex l a-ii-18 to the Submission "*More About KMB 2013*"	--	KMB-7	2535-2554
35.	Annex l a-ii-19 to the Submission "*More About KMB 2014*"	--	KMB-7	2555-2574
36.	Annex l a-ii-20 to the Submission "*More About KMB 2015*"	--	KMB-7	2575-2594
37.	Annex l a-ii-21 to the Submission "*More About KMB 2016*"	--	KMB-7	2595-2614
38.	Annex l a-ii-22 to the Submission "*LWB Management Structure as at 24 April 2018*"	--	KMB-7	2615
39.	Annex l a-ii-23 to the Submission "*LWB Audited Financial Statements for the year ended 31 December 2011"*	--	KMB-7	2616-2655
40.	Annex l a-ii-24 to the Submission "*LWB Audited Financial Statements for the year ended 31 December 2012*"	--	KMB-7	2656-2696
41.	Annex l a-ii-25 to the Submission "*LWB Audited Financial Statements for the year ended 31 December 2013*"	--	KMB-7	2697-2739
42.	Annex l a-ii-26 to the Submission "*LWB Audited Financial Statements for the year ended 31 December 2014*"	--	KMB-7	2740-2782
43.	Annex l a-ii-27 to the Submission "*LWB Audited Financial Statements for the year ended 31 December 2015*"	--	KMB-7	2783-2827

44.	Annex l a-ii-28 to the Submission "*LWB Audited Financial Statements for the year ended 31 December 2016*"	--	KMB-7	2828-2878
45.	Annex l a-ii-29 to the Submission "*LWB Audited Financial Statements for the year ended 31 December 2017*"	--	KMB-7	2879-2931
46.	Annex l a-ii-30 to the Submission "*More About LWB 2011*"	--	KMB-7	2932-2947
47.	Annex l a-ii-31 to the Submission "*More About LWB 2012*"	--	KMB-7	2948-2963
48.	Annex l a-ii-32 to the Submission "*More About LWB 2013*"	--	KMB-7	2964-2979
49.	Annex l a-ii-33 to the Submission "*More About LWB 2014*"	--	KMB-7	2980-2995
50.	Annex l a-ii-34 to the Submission "*More About LWB 2015*" *(part)*	--	KMB-7	2996-3000
BUNDLE KMB-8 (pages 3001 to 3500)				
50.	*(continued)* Annex l a-ii-34 to the Submission "*More About LWB 2015*"	--	KMB-8(A)	3001-3011
51.	Annex l a-ii-35 to the Submission "*More About LWB 2016*"	--	KMB-8(A)	3012-3027
52.	Annex l a-iii-1 to the Submission "*Code of Conduct for Directors and Employees*"	--	KMB-8(A)	3028-3064
53.	Annex l a-iii-2 to the Submission "*董事及僱員紀律守則*"	--	KMB-8(A)	3065-3085
54.	Annex l a-iii-3 to the Submission "*Outdoor Operations Staff Handbook*"	--	KMB-8(A)	3086-3135
55.	Annex l a-iii-4 to the Submission "*車務外勤員工服務手冊*"	--	KMB-8(A)	3136-3189
56.	Annex l a-iii-5 to the Submission "*Office Staff Handbook*"	--	KMB-8(A)	3190-3254

57.	Annex l a-iii-6 to the Submission "*維修員工安全規例*"	--	KMB-8(A)	3255-3310 3310-1 – 3310-56 (Translation)
58.	Annex l a-iii-7 to the Submission "*車長安全駕駛手冊*"	--	KMB-8(B)	3311-3352 3352-1 – 3352-42 (Translation)
59.	Annex l a-iii-8 to the Submission "*駕駛急彎之注意事項(1 video)*"	--	KMB-8(B)	3353
60.	Annex l a-iii-9 to the Submission "*車長壓力管理*"	--	KMB-8(B)	3354-3358 3358-1 – 3358-5 (Translation)
61.	Annex l a-iii-10 to the Submission "*注意路段駕駛貼士查詢*"	--	KMB-8(B)	3359-3376 3376-1 – 3376-42 (Translation)
62.	Annex l a-iii-11 to the Submission "*服務提昇及情緒管理(a series of videos)*"	--	KMB-8(B)	3377
63.	Annex l a-iii-12 to the Submission "*Codes of Practice (ISO 9001, ISO 14001 and OHSAS 18001)*" *(part)*	--	KMB-8(B)	3378-3500 3407-1 – 3407-7; 3414-1 – 3414-8; 3426-1 – 3426-14; 3434-1 – 3434-10; 3447-1 – 3447-3; 3454-1 –

				3454-7; 3462-1 – 3462-8; 3474-1 – 3474-7 (Translation)
BUNDLE KMB-9 *(pages 3501 to 4000)*				
63.	*(continued)* Annex l a-iii-12 to the Submission "*Codes of Practice (ISO 9001, ISO 14001 and OHSAS 18001)*"	--	KMB-9(A)	3501-3753 3502-1 - 3502-7; 3629-1 – 3629-7; 3636-1 – 3636-7; 3649-1 – 3649-3; (Translation)
64.	Annex l a-iv-1 to the Submission "*KMB's Sustainability Report 2016*"	--	KMB-9(A)	3754-3805
65.	Annex 1 a-iv-2 to the Submission "*LWB's Corporate Social Responsibility Report 2016*"	--	KMB-9(A)	3806-3818
66.	Annex 1 c-1 to the Submission "*Extracts of the report for KMB's PSS conducted in October 2017*"	--	KMB-9(A)	3819-3836
67.	Annex 1 c-2 to the Submission "*Extracts of the report for LWB's PSS conducted in November 2016*"	--	KMB-9(A)	3837-3839
68.	Annex 4 b-1 to the Submission "*Press release regarding the discussion at a meeting of the Legislative Council in June 2016*"	--	KMB-9(A)	3840-3844
69.	Annex 4 b-2 to the Submission "*Record regarding the discussion at a meeting of the Legislative*	--	KMB-9(A)	3845-3847 3847-1 –

	Council on 20 April 2018"			3847-4; (Translation)
70.	Annex 9 c-1 to the Submission "*Notices from KMB's Human Resources Department from 2012 to 2016"*	--	KMB-9(A)	3848-3852 3852-1 – 3852-9; (Translation)
71.	Annex 9 c-2 to the Submission "*Internal memos from KMB's Human Resources Department from 2012 to 2015*"	--	KMB-9(A)	3853-3857
72.	Annex 9 c-3 to the Submission "*Notices from KMB's Human Resources Department from 2016 to 2018*"	--	KMB-9(A)	3858-3865 3865-1 – 3865-8; (Translation)
73.	Annex 10 a-1 to the Submission "*Particulars of two-phased training programme for BC candidates*"	--	KMB-9(A)	3866
74.	Annex 10 c-1 to the Submission "*Internal memo of KMB and LWB*"	12/04/2018	KMB-9(A)	3867-3868 3868-1 – 3868-2 (Translation)
75.	Annex 10 d-1 to the Submission "*Image of the banner put up on KMB Staff website*"	--	KMB-9(A)	3869 3869-1 (Translation)
76.	Annex 10 e-1 to the Submission "*Particulars of route-specific training for employed BCs*"	--	KMB-9(A)	3870
77.	Annex 11 a-1 to the Submission "*Sample of Driving Offence Record Check*"	--	KMB-9(A)	3871-3872
78.	Annex 11 a-2 to the Submission "*Sample of TD Scheduled Driving Offence Check*"	--	KMB-9(A)	3873-3874
Appendix to the Submissions from KMB & LWB on 18 May 2018				

79.	Annex FQ2a-i "*Results of PLG sessions of KMB in 2016-2017*"	--	KMB-9(B)	3875 – 3952 3952-1 to 3952-149 (Translation)
80.	Annex FQ2a-ii "*Results of PLG sessions of LWB in 2016-2017*"	--	KMB-9(B)	3953 – 3992
81.	Annex FQ4d-i *"Sample data retrieved from black boxes showing speeding cases (report BOP 207)"*	--	KMB-9(B)	3993 – 3996 3974-1 to 3974-5; 3978-1 to 3978-2; 3982-1 to 3982-2; 3986-1 to 3986-2; 3991-1 to 3991-4; 3995-1 to 3995-3 (Translation)
82.	Annex FQ6-i *"Extracts of TD' s letter to KMB dated 1 0 March 2017"*	--	KMB-9(B)	3997 – 3998
83.	Annex FQ8-i *"Extracts of TD's letter to LWB dated 2 April2012"*	--	KMB-9(B)	3999 – 4000
BUNDLE KMB-10 *(pages 4001 to 4500)*				
84.	Annex FQ12a-i-D1 *"The work of the shift allocation team"*	--	KMB-10(A)	4001 – 4062 4062-1 to 4062-108

				(Translation)
85.	Annex FQ12a-i-D3 *"The work of a bus captain"*	--	KMB-10(A)	4063 – 4114 4114-1 to 4114-103 (Translation)
86.	Annex FQ12a-i-D4 *"Control of Operations"*	--	KMB-10(A)	4115 – 4134 4117-1; 4122-1; 4124-1; 4127-1; 4128-1; 4129-1; 4134-1; (Translation)
87.	Annex FQ12a-i-D5 *"Scheduling of Bus Service"*	--	KMB-10(A)	4135 – 4148 4140-1; 4147-1; (Translation)
88.	Annex FQ12a-i-D6 *"The work of the shift formulation team"*	--	KMB-10(A)	4149 – 4160 4160-1 to 4160-19 (Translation)
89.	Annex FQ12a-i-D8 *"The handling of bus traffic accident"*	--	KMB-10(A)	4161 – 4190 4190-1 to 4190-54 (Translation)
90.	Annex FQ12a-i-D9 *"Maintenance of Schedule of*	--	KMB-10(A)	4191 – 4200

	Service”			
91.	Annex FQ12a-i-D10 *“The contingency plan of emergency event”*	--	KMB-10(B)	4201 – 4234 4234-1 to 4234-54 (Translation)
92.	Annex FQ12a-i-D15 *“The work of the traffic affairs supervisor”*	--	KMB-10(B)	4235 – 4270 4270-1 to 4270-65 (Translation)
93.	Annex FQ12a-i-D16 *“The work of terminus supervisor”*	--	KMB-10(B)	4271 – 4292 4292-1 to 4292-22 (Translation)
94.	Annex FQ12a-i-R1 *“The training request form of bus captain”*	--	KMB-10(B)	4293 – 4294
95.	Annex FQ12a-i-R2 *“The notice of training of bus captain”*	--	KMB-10(B)	4295 – 4296 4295-1 (Translation)
96.	Annex FQ12a-i-R12 *“Report on the effect of Redeployment (sample form)”*	--	KMB-10(B)	4297 – 4298
97.	Annex FQ12a-i-R15 *“List of report and notification of various events”*	--	KMB-10(B)	4299 – 4300 4300-1 to 4300-2 (Translation)
98.	Annex FQ12a-ii-D1 *“Accident Prevention Report”*	--	KMB-10(B)	4301 – 4310

99.	Annex FQ12a-ii-D2 *"Traffic Accident Internal Record Maintenance"*	--	KMB-10(B)	4311 – 4326 4321-1; 4323-1; 4324-1 (Translation)
100.	Annex FQ12a-ii-D3 *""General" Non Traffic Accident"*	--	KMB-10(B)	4327 – 4342 4329-1; 4331-1; 4334-1; 4337-1; 4338-1; 4339-1; 4341-1; 4342-1 (Translation)
101.	Annex FQ12a-ii-D4 *"Traffic Accident Site Investigation"*	--	KMB-10(B)	4343 – 4358
102.	Annex FQ12a-ii-D5 *"Safe Driving Bonus Scheme and Civil Liability Assessment"*	--	KMB-10(B)	4359 – 4366
103.	Annex FQ12a-ii-D6 *"Accident Information to Transport Department"*	--	KMB-10(B)	4367 – 4376
104.	Annex FQ12a-ii-D7 *"Accident Prone Bus Captain"*	--	KMB-10(B)	4377 – 4386
105.	Annex FQ12a-ii-R1 *"Accident Prevention Report, KMB's letter to TD dated 26 July 2016 and other relevant documents"*	--	KMB-10(B)	4387 – 4396
106.	Annex FQ12a-ii-R2 *"Traffic Accident Report (sample*	--	KMB-10(B)	4397 – 4398

	form)"			
107.	Annex FQ12a-ii-R3 *"Incident Report (sample form)"*	--	KMB-10(B)	4399 – 4400 4400-1 to 4400-4 (Translation)
108.	Annex FQ12a-iii-D1 *"Design of Technical Training Course"*	--	KMB-10(B)	4401 – 4414
109.	Annex FQ12a-iii-R2 *"Annual Training Plan 2018"*	--	KMB-10(B)	4415 – 4420 4420-1 to 4420-9 (Translation)
110.	Annex FQ12a-iii-R3 *"Course Design Plan"*	--	KMB-10(B)	4421 – 4422 4421-1 (Translation)
111.	Annex FQ12a-iii-R4 *"TTS Training Course Design Control Form"*	--	KMB-10(B)	4423 – 4424 4424-1 to 4424-2 (Translation)
112.	Annex FQ12a-iii-R5 *"TTS Evaluation of Training Course"*	--	KMB-10(B)	4425 – 4430 4426-1 to 4426-2 (Translation)
113.	Annex FQ12a-iii-R6 *"TTS Training Course Feedback Corrective Action I Validation"*	--	KMB-10(B)	4431 – 4432 4432-1 to 4432-2

				(Translation)
114.	Annex FQ12a-iii-R7 *"In-House Training Record"*	--	KMB-10(B)	4433 – 4434 4433-1 (Translation)
115.	Annex FQ16b-i *"Sample training and assignment records for Route 102"*	--	KMB-10(B)	4435 – 4436 4435-1 (Translation)
116.	Annex FQ16b-ii *"Sample training and assignment records for Route 112"*	--	KMB-10(B)	4437 – 4438 4437-1 (Translation)
117.	Annex FQ19a-i *"Sample BC candidate interview evaluation form"*	--	KMB-10(B)	4439 - 4440
BUNDLE KMB-11 *(pages 4441 - 4826)*				
Annexes to the Letter from KMB & LWB to IRC providing further information after oral evidence hearing on 10 and 11 August 2018				
118.	Annex 1.1 *"Email from Gary Wong (SSQ) to General Managers of all depots"*	22/08/2014 (5:34 pm)	KMB-11	4441 – 4442 4443 – 4444 (Translation)
119.	Annex 1.2 *"Email from Jenny Yu (SSQ) to Operations Officers of all depots"*	27/08/2014 (11:11 am)	KMB-11	4445
120.	Annex 1.3 *"Email from Gary Wong (SSQ) to Operations Officers of all depots"*	27/08/2014 (11:42 am)	KMB-11	4446
121.	Annex 1.4 *"Email from Kwok Ho Yeung (KB) to Gary Wong (SSQ)"*	19/09/2014 (12:52 pm)	KMB-11	4447

122.	Annex 1.5 *"Email from Kwok Ho Yeung (KB) to Gary Wong (SSQ)"*	19/09/2014 (2:53 pm)	KMB-11	4448
123.	Annex 1.6 *"Email from Gary Wong (SSQ) to Kwok Ho Yeung (KB)"*	19/09/2014 (3:23 pm)	KMB-11	4449
124.	Annex 1.7 *"Email from Jenny Yu (SSQ) to Operations Officers of all depots"*	25/09/2014 (12:37 pm)	KMB-11	4450
125.	Annex 1.8 *"Email from Gary Wong (SSQ) to Operations Officers of all depots and LWB"*	08/10/2014 (9:47 pm)	KMB-11	4451
126.	Annex 1.9 *"Email from Gary Wong (SSQ) to Operations Officers of all depots and LWB"*	24/10/2014 (9:50 pm)	KMB-11	4452 – 4453
127.	Annex 1.10 *"Email from Gary Wong (SSQ) to Operations Officers of all depots"*	08/01/2015 (12:12 pm)	KMB-11	4454 – 4460 4461 – 4468 (Translation)
128.	Annex 1.11 *"Email from Aman Fong (SSQ) to General Managers of all depots and LWB"*	11/02/2015 (6:18 pm)	KMB-11	4469
129.	Annex 1.12 *"Email from Gary Wong (SSQ) to Owen Eckford (OD)"*	12/02/2015 (11:04 am)	KMB-11	4470
130.	Annex 1.13 *"Email from Owen Eckford (OD) to Gary Wong (SSQ)"*	12/02/2015 (4:28 pm)	KMB-11	4471
131.	Annex 1.14 *"Email from Gary Wong (SSQ) to Owen Eckford (OD)"*	12/02/2015 (6:12 pm)	KMB-11	4472
132.	Annex 1.15 *"Email from Owen Eckford (OD) to*	12/02/2015 (6:25 pm)	KMB-11	4473

	Gary Wong (SSQ)"			
133.	Annex 1.16 *"Email from Gary Wong (SSQ) to Safety & Service Quality Department"*	12/02/2015 (6: 48pm)	KMB-11	4474
134.	Annex 1.17 *"Updated list of names and positions of key persons shown in the documents / emails above"*	--	KMB-11	4475
135.	Annex 2.1 *"Extract of ISO Quality Procedure – Quality Instruction: Friends of KMB Volunteer Club"*	01/01/2018	KMB-11	4476 – 4477
136.	Annex 2.2 *"Extract of ISO Quality Procedure – Quality Instruction: Print Advertising Implementation"*	01/07/2017	KMB-11	4478 – 4479
137.	Annex 2.3 *"Extract of Backup Tape Retention Policy"*	04/02/2016	KMB-11	4480 – 4482
138.	Annex 2.4 *"Practice on Email Retention"*	--	KMB-11	4483
139.	Annex 3.1 *"Email from Terry Lo (TR) to ROM Taskforce with ROM Implementation Plan"*	13/07/2013 (1:44 pm)	KMB-11	4484 – 4491
140.	Annex 3.2 *"ROM System Specification"*	--	KMB-11	4492 – 4530
141.	Annex 3.3 *"Tender Document of ROM"*	--	KMB-11	4531 – 4559
142.	Annex 3.4 *"Email Correspondence between Catherine Yip (IT) and Evan Auyang (DMD)"*	29/10/2013 (11:20 am) (11:23 am)	KMB-11	4560 – 4562
143.	Annex 3.5 *"Email from Virginia Lam (PUR) to the concerned parties for ROM*	13/12/2013 (4:46 pm)	KMB-11	4563

	tendering"			
144.	Annex 3.6 *"Email from Kelvin Yeung (PUR) to the concerned parties for ROM tendering"*	02/01/2014 (11:09 am)	KMB-11	4564
145.	Annex 3.7 *"ROM Tender Analysis"*	--	KMB-11	4565
146.	Annex 3.8 *"Email correspondence amongst the concerned parties for ROM tendering with Powerpoint presentation – ROM Project Status Update"*	12/03/2014 to 13/03/2014	KMB-11	4566 – 4588
147.	Annex 3.9 *"4 Emails from Virginia Lam (PUR) to the Tenderers"*	02/04/2014	KMB-11	4589 – 4592
148.	Annex 3.10 *"Memo of Chung Lim Chan (IT)"*	23/06/2014	KMB-11	4593
149.	Annex 3.11 *"Memo of Chung Lim Chan (IT) with System Requirements Specification"*	18/08/2014	KMB-11	4594 – 4608
150.	Annex 3.12 *"Memo of Chung Lim Chan (IT) with System Proposal"*	18/11/2014	KMB-11	4609 – 4719 4682-1 to 4682-25; 4706-1 to 4706-23 (Translation)
151.	Annex 3.13 *"Memo of Chung Lim Chan (IT) concerning ROM Status Report"*	19/12/2014 to 17/09/2015	KMB-11	4720 – 4735
152.	Annex 3.14 *"Memo of Chung Lim Chan (IT)"*	26/10/2015	KMB-11	4736 – 4737

153.	Annex 3.15 *"Memo of Chung Lim Chan (IT)"*	17/12/2015	KMB-11	4738 – 4739
154.	Annex 3.16 *"Email correspondence between Chung Lim Chan (IT) and Louisa Lam (ODD)"*	03/02/2016 25/02/2016	KMB-11	4740 – 4742
155.	Annex 3.17 *"Application forms for FMI to add new users to access the project"*	23/10/2017 15/09/2017 25/08/2017	KMB-11	4743 – 4745
156.	Annex 3.18 *"Update list of names and positions of key persons shown in the documents / emails above"*	--	KMB-11	4746
157.	Annex 4.1 *"Internal Notice"*	05/03/2015	KMB-11	4747 4748 (Translation)
158.	Annex 5.1 *"Design reference from existing application in United Kingdom"*	--	KMB-11	4749 – 4754
159.	Annex 5.2 *"Letter from Alexander Dennis (Asia Pacific) Limited ("Alexander Dennis") with no objection to sourcing and retrofitting buses with the protective screens"*	22/11/2017	KMB-11	4755
160.	Annex 5.3 *"Letter from Volvo Bus Hong Kong Limited ("Volvo") with no objection to sourcing and retrofitting buses with the protective screens"*	12/06/2018	KMB-11	4756
161.	Annex 5.4 *"Letter from KMB to TD seeking approval to retrofit the protective shields"*	27/10/2017	KMB-11	4757 – 4759
162.	Annex 5.5 *"Letter from TD to KMB approving*	12/06/2018	KMB-11	4760

	the protective shields"			
163.	Annex 5.6 *"Letter from KMB to TD seeking approval to retrofit the protective shields"*	21/06/2018	KMB-11	4761
164.	Annex 5.7 *"Letter from TD to KMB approving the protective shields"*	25/06/2018	KMB-11	4762
165.	Annex 5.8 *"Cover of Brochure for Palclear"*	--	KMB-11	4763
166.	Annex 5.9 *"Information about Palram Industries Ltd."*	--	KMB-11	4764
167.	Annex 6.1 *"Photograph of the sticker with the warning message near the driver's seat of KMB/LWB's buses"*	--	KMB-11	4765
168.	Annex 6.2 *"Design of the sticker with the warning message"*	--	KMB-11	4766
169.	Annex 6.3 *"Video (with audio) showing the on board announcement that the bus captain is being impeded"* *(with translation of the announcement broadcasted)*	--	KMB-11	4767
170.	Annex 6.4 *"Internal Notice regarding the on board announcement"*	25/05/2017	KMB-11	4768 4769 – 4770 (Translation)
171.	Annex 7.1 *"Sample copy of the "DISC" Test Evaluation Form"*	--	KMB-11	4771 4772 – 4773 (Translation)
172.	Annex 8.1 *"Outside employment of the 311*	--	KMB-11	4774

	bus captains"			
173.	Annex 8.2 *"Print screen"*	--	KMB-11	4775 4776 (Translation)
174.	Annex 9.1 *"Declaration made by part-time bus captain who reported his/her alternative employment and worked in KMB/LWB for more than 18 hours per week"*	03/03/2018	KMB-11	4777 – 4778 4779 – 4781 (Translation)
175.	Annex 9.2 *"Declaration and brief report made by part-time bus captain who reported his/her alternative employment and worked in KMB/LWB for more than 10 but less than 18 hours per week"*	--	KMB-11	4782 – 4784 4785 – 4788 (Translation)
176.	Annex 10.1 *"Employment Contract of Monthly-Rated Bus Captain"*	21/08/2018	KMB-11	4789 – 4792 4793 – 4800 (Translation)
177.	Annex 10.2 *"Employment Contract of Monthly-Rated Bus Captain (for Bus Captains Re-employed after Retirement)"*	06/08/2018	KMB-11	4801 – 4803 4804 – 4809 (Translation)
178.	Annex 10.3 *"Employment Contract of Hourly-Rated Bus Captain"*	21/08/2018	KMB-11	4810 – 4812 4813 – 4818 (Translation)
179.	Annex 10.4 *"Employment Contract of*	06/08/2018	KMB-11	4819 – 4821

	Hourly-Rated Bus Captain (for Bus Captains Re-employed after Retirement)"			4822 – 4826 (Translation)
BUNDLE KMB-12 (pages 4827 - 5598)				
180.	Annex 11.1 *"BOP 207 records (Shatin Depot)"*	29/01/2018 to 13/02/2018	KMB-12(A)	4827 4828 – 4833 (Translation)
181.	Annex 11.2.1 *"Summary of data relating to speeding, sudden acceleration and harsh braking"*	19/12/2017 to 12/02/2018	KMB-12(A)	4834
182.	Annex 11.2.2 *"Bus Captain Performance: Speeding"*	06/02/2018 to 12/02/2018	KMB-12(A)	4835 4836 – 4837 (Translation)
183.	Annex 11.2.3 *"Bus Captain Performance: Sudden Acceleration"*	06/02/2018 to 12/02/2018	KMB-12(A)	4838 – 4841 4842 – 4847 (Translation)
184.	Annex 11.2.4 *"Bus Captain Performance: Harsh Brake"*	06/02/2018 to 12/02/2018	KMB-12(A)	4848 – 4850 4851 – 4855 (Translation)
185.	Annex 12.1 *"Summary of notes from meeting between TD and all bus operators and bus manufacturers"*	--	KMB-12(A)	4856
186.	Annex 12.2 *"Summary of correspondences*	--	KMB-12(A)	4857

	between KMB and TD"			
187.	Annex 12.3 *"Meeting Schedule with TD"*	--	KMB-12(A)	4858
188.	Annex 12.4 *"Notes of 1st Meeting held on 13 March 2018 of the Working Group on Enhancement of Safety of Franchised Buses"*	--	KMB-12(A)	4859 – 4869 4869-1 – 4869-11 (unredacted)
189.	Annex 12.5 *"Notes of 1st Meeting held on 19 April 2018 of the Technical Meeting on Training Arrangements for Bus Captains"*	--	KMB-12(A)	4870 – 4878 4878-1 – 4878-9 (unredacted)
190.	Annex 12.6 *"Notes of 2nd Meeting held on 23 April 2018 of the Working Group on Enhancement of Safety of Franchised Buses"*	--	KMB-12(A)	4879 – 4887 4887-1 – 4887-9 (unredacted)
191.	Annex 12.7 *"Notes of 3rd Meeting held on 21 June 2018 of the Working Group on Enhancement of Safety of Franchised Buses"*	--	KMB-12(A)	4888 – 4908 4908-1 – 4908-21 (unredacted)
192.	Annex 12.8 *"Draft Notes of 2nd Meeting held on 4 June 2018 of the Technical Meeting on Training Arrangements for Bus Captains"*	--	KMB-12(A)	4909 – 4920 4920-1 – 4920-12 (unredacted)
193.	Annex 12.9 *"Note of Meeting of the 1st Sub-Working Group on On-Vehicle Safety Devices for Franchised Buses on 27 March 2018"*	--	KMB-12(A)	4921 – 4925 4925-1 – 4925-5 (unredacted)
194.	Annex 12.10 *"Draft Notes of the 2nd Meeting of the Sub-Working Group on On-Vehicle Safety Devices for Franchised Buses on 12 June*	--	KMB-12(A)	4926 – 4932 4932-1 – 4932-7 (unredacted)

	2018”			
195.	Annex 12.11 *“Draft Notes of the 3rd Meeting of the Sub-Working Group on On-Vehicle Safety Devices for Franchised Buses on 27 June 2018”*	--	KMB-12(A)	4933 – 4938 4938-1 – 4938-6 (unredacted)
196.	Annex 12.12 *“Letter from KMB to TD”*	15/03/2018	KMB-12(A)	4939 – 4940
197.	Annex 12.13 *“Letter from TD to KMB”*	26/03/2018	KMB-12(A)	4941 – 4944
198.	Annex 12.14 *“Letter from KMB to TD”*	11/07/2018	KMB-12(A)	4945 – 4946
199.	Annex 13.1 *“Summary of Practice Note and Guidelines”*	--	KMB-12(A)	4947
200.	Annex 13.2 *“Summary of Correspondences between KMB and TD”*	--	KMB-12(A)	4948
201.	Annex 13.3 *“2nd and 4th Draft Guidelines on Training for Franchised Bus Captains, annexed to the Draft Notes of 2nd Meeting held on 4 June 2018 of Technical Meeting on Training Arrangements for Bus Captains”*	--	KMB-12(A)	4949 – 4960 4960-1 – 4960-12 (unredacted)
202.	Annex 13.4 *“The Practice Note on Training Framework for Franchised Bus Captains annexed to the Notes of 3rd Meeting held on 21 June 2018 of the Working Group on Enhancement of Safety of Franchised Buses”*	--	KMB-12(A)	4961 – 4981 4981-1 – 4981-21 (unredacted)

203.	Annex 13.5 *"Practice Note on Training Framework for Franchised Bus Captains annexed to letter from TD"*	06/08/2018	KMB-12(A)	4982 – 4987
204.	Annex 13.6 *"Letter from KMB to TD"*	18/07/2018	KMB-12(A)	4988 – 4989
205.	Annex 13.7 *"Letter from TD to KMB"*	06/08/2018	KMB-12(A)	4990 – 4996
206.	Annex 14.1 *"Job Application Form (Bus Captain)"*	--	KMB-12(A)	4997 – 4999
207.	Annex 14.2 *"Appendix to Job Application Form"*	--	KMB-12(A)	5000
208.	Annex 14.3 *"Authorisation Letter to Licensing Section of TD"*	--	KMB-12(A)	5001 5002 (Translation)
209.	Annex 14.4 *"KMB Medical Centre Medical Assessment Form"*	25/11/2017	KMB-12(A)	5003
210.	Annex 14.5 *"Certificate of Previous Conviction Issue under s75(5) of Road Traffic Ordinance (Cap 374)"*	20/11/2017	KMB-12(A)	5004 – 5005 5006 (Translation)
211.	Annex 14.6 *"Letter from TD enclosing an appendix with information"*	28/02/2018	KMB-12(A)	5007 – 5008
212.	Annex 14.7 *"KMB Medical Examination – Health Status Declaration"*	--	KMB-12(A)	5009
213.	Annex 15.1 *"Statistics of the venue of taking midday rest by KMB and LWB special shift bus captains"*	--	KMB-12(A)	5010
214.	Annex 16.1	--	KMB-12(A)	5011 –

	"Chapter 8 (Bus Safety) of KMB's Forward Planning Programme 2019-2023"			5064
215.	Annex 16.2 *"Chapter 8 (Bus Safety) of LWB's Forward Planning Programme 2019-2023"*	--	KMB-12(A)	5065 – 5114
216.	Annex 17.1 *"Table showing the number of passengers injured and fatalities in 2018"*	--	KMB-12(A)	5115 – 5116 5116-1 to 5116-3
217.	Annex 17.2 *"Information regarding the single "bus overturn/topple" case in 2016"*	--	KMB-12(A)	5117
218.	Annex 17.3 *"Information regarding the 27 "hit a street object or a vehicle or an animal""*	--	KMB-12(A)	5118
219.	Annex 18.1 *"Letter from KMB to Police (regarding illegal parking happened on 8 December 2017 at 18:22)"*	14/12/2017	KMB-12(A)	5119 – 5121 5122 (Translation)
220.	"Annex 18.2 *"Letter from KMB to Police (regarding illegal parking happened on 8 December 2017 at 18:32)"*	14/12/2017	KMB-12(A)	5123 – 5125 5126 (Translation)
221.	Annex 18.3 *"Letter from Police to KMB (in duplicate)"*	10/01/2018	KMB-12(A)	5127 – 5128
222.	Annex 18.4 *"Letter from KMB to Police (regarding illegal parking happened on 10 December 2017 at 20:50)"*	27/02/2018	KMB-12(A)	5129 – 5131 5132 (Translation)
223.	Annex 18.5	27/02/2018	KMB-12(A)	5133 –

	"Letter from KMB to Police (regarding illegal parking happened on 10 December 2017 at 20:52)"			5135 5136 (Translation)
224.	Annex 18.6 *"Letter from KMB to Police (regarding illegal parking happened on 6 June 2018 at 22:30)"*	28/06/2018	KMB-12(A)	6137 – 5138 5139 (Translation)
225.	Annex 18.7 *"Email correspondence between Patrick Pang (DOD) and Police Superintendent Chung Hung Yip Courtney"*	15/11/2017 14/08/2018	KMB-12(A)	5140 – 5141
226.	Annex 18.8 *"Email from Kenneth Kung (Operations Officer) to Patrick Pang (DOD) and some previous email correspondence with 4 pages of photos"*	14/11/2017 (12:50 pm) (11:34 am) (11:28 am)	KMB-12(A)	5142 – 5147 5148 – 5153 (Translation)
227.	Annex 18.9 *"Email from Kenneth Kung (Operations Officer) to Patrick Pang (DOD) with 4 pages of photos"*	15/11/2017 (8:34 am)	KMB-12(A)	5154 – 5158
228.	Annex 18.10 *"Email from Patrick Pang (DOD) to Leung Kin Wang (OD) with 4 pages of photos"*	15/11/2017 (1:19 pm)	KMB-12(A)	5159 – 5163
229.	Annex 18.11 *"Email from Kenneth Fung (Operations Officer) to Patrick Pang (DOD) and some previous email correspondence"*	20/11/2017 (8:16 pm)	KMB-12(A)	5164 – 5165 5166 – 5167 (Translation)
230.	Annex 18.12 *"Email from Kenneth Fung (Operations Officer) to Patrick*	23/11/2017 (10:58 am)	KMB-12(A)	5168 – 5174

	Pang (DOD) and some previous email correspondence with 4 photos"			5175 – 5181 (Translation)
231.	Annex 18.13 *"Email from Kenneth Fung (Operations Officer) to Patrick Pang (DOD) and some previous email correspondence"*	09/02/2018 (11:41 am)	KMB-12(A)	5182 – 5186 5187 – 5191 (Translation)
232.	Annex 18.14 *"Pro forma report to Police on illegal parking"*	--	KMB-12(A)	5192 5193 (Translation)
233.	Annex 18.15 *"Powerpoint presentation on the work procedure of reporting to Police on illegal parking"*	--	KMB-12(A)	5194 – 5204 5205 – 5215 (Translation)
234.	Annex 18.16 *"Record of report to Police on illegal parking updated as at 6 August 2018"*	--	KMB-12(A)	5216 – 5217 5218 – 5220 (Translation)
235.	Annex 19.1 *"Table identifying relevant parties in email correspondence"*	--	KMB-12(B)	5221
236.	Annex 19.2 *"Chronology and summary of emails between KMB and Openmatics"*	--	KMB-12(B)	5222
237.	Annex 19.3 *"Chronology and summary of emails between KMB and Alexander Dennis"*	--	KMB-12(B)	5223
238.	Annex 19.4 *"Chronology and summary of*	--	KMB-12(B)	5224

	emails between KMB and Volvo"			
239.	Annex 19.5 *"Email from Jan Kulis of Openmatics to Chun Kin Chan (SER)"*	02/08/2018 (9:44 pm)	KMB-12(B)	5225
240.	Annex 19.6 *"Email from Chun Kin Chan (SER) to Jan Kulis of Openmatics"*	03/08/2018 (8:36 am)	KMB-12(B)	5226
241.	Annex 19.7 *"Email from Chun Kin Chan (SER) to Jan Kulis of Openmatics"*	04/08/2018 (1:28 pm)	KMB-12(B)	5227
242.	Annex 19.8 *"Email from Jan Kulis of Openmatics to Chun Kin Chan (SER)"*	06/08/2018 (2:30 pm)	KMB-12(B)	5228
243.	Annex 19.9 *"Email from Chun Kin Chan (SER) to Jan Kulis of Openmatics"*	06/08/2018 (2:42 pm)	KMB-12(B)	5229
244.	Annex 19.10 *"Email from Chun Kin Chan (SER) to Jan Kulis of Openmatics"*	17/08/2018 (10:33 am)	KMB-12(B)	5230
245.	Annex 19.11 *"Email from Chun Kin Chan (SER) to Jan Kulis of Openmatics"*	17/08/2018 (1:02 pm)	KMB-12(B)	5231
246.	Annex 19.12 *"Email from Jan Kulis of Openmatics to Chun Kin Chan (SER)"*	17/08/2018 (5:51 pm)	KMB-12(B)	5232
247.	Annex 19.13 *"Email from Jan Kulis of Openmatics to Chun Kin Chan (SER)"*	17/08/2018 (7:35 pm)	KMB-12(B)	5233
248.	Annex 19.14 *"Email from Sai Lok Ho (SER) to Andy Boulton of Alex Dennis"*	29/03/2018 (7:03 pm)	KMB-12(B)	5234
249.	Annex 19.15 *"Email from Sai Lok Ho (SER) to Andy Boulton of Alex Dennis"*	28/05/2018 (6:30 pm)	KMB-12(B)	5235

250.	Annex 19.16 *"Email from Andy Boulton of Alex Dennis to Sai Lok Ho (SER)"*	06/07/2018 (6:46 pm)	KMB-12(B)	5236
251.	Annex 19.17 *"Email from Sai Lok Ho (SER) to Andy Boulton of Alex Dennis"*	02/08/2018 (2:40 pm)	KMB-12(B)	5237
252.	Annex 19.18 *"Email from Andy Boulton of Alex Dennis to Sai Lok Ho (SER)"*	02/08/2018 (2:44 pm)	KMB-12(B)	5238
253.	Annex 19.19 *"Email from Sai Lok Ho (SER) to Andy Boulton of Alex Dennis"*	03/08/2018 (9:42 am)	KMB-12(B)	5239
254.	Annex 19.20 *"Email from Andy Boulton of Alex Dennis to Sai Lok Ho (SER)"*	03/08/2018 (1:03 pm)	KMB-12(B)	5240
255.	Annex 19.21 *"Email from Sai Lok Ho (SER) to Scott Harvey of Volvo"*	29/03/2018 (7:05 pm)	KMB-12(B)	5241
256.	Annex 19.22 *"Email from Sai Lok Ho (SER) to Julian Lu of Volvo"*	28/05/2018 (6:28 pm)	KMB-12(B)	5242
257.	Annex 19.23 *"Email from Julia Lu of Volvo to Sai Lok Ho (SER)"*	29/05/2018 (8:58 am)	KMB-12(B)	5243
258.	Annex 19.24 *"Email from Sai Lok Ho (SER) to Julian Lu of Volvo"*	02/08/2018 (2:32 pm)	KMB-12(B)	5244
259.	Annex 19.25 *"Email from Julia Lu of Volvo to Sai Lok Ho (SER)"*	02/08/2018 (3:01 pm)	KMB-12(B)	5245
260.	Annex 19.26 *"Email from Sai Lok Ho (SER) to Julian Lu of Volvo"*	03/08/2018 (9:44 am)	KMB-12(B)	5246
261.	Annex 19.27 *"Email from Julia Lu of Volvo to Sai Lok Ho (SER)"*	06/08/2018 (9:21 am)	KMB-12(B)	5247
Supplemental Information provided by KMB to the IRC on 11 September 2018				
262.	Extract of KMB's 5 year plan 2013	--	KMB-12(B)	5248 –

	– 2017 – Chapter 8 (Bus Safety)			5266
263.	Extract of KMB's 5 year plan 2014 – 2018 – Chapter 8 (Bus Safety)	--	KMB-12(B)	5267 – 5285
264.	Extract of KMB's 5 year plan 2015 – 2019 – Chapter 8 (Bus Safety)	--	KMB-12(B)	5286 – 5302
265.	Extract of KMB's 5 year plan 2016 – 2020 – Chapter 8 (Bus Safety)	--	KMB-12(B)	5303 – 5319
266.	Extract of KMB's 5 year plan 2017 – 2021 – Chapter 8 (Bus Safety)	--	KMB-12(B)	5320 – 5336
267.	Extract of LWB's 5 year plan 2013 – 2017 – Chapter 8 (Safety Review and Improvement Measures in Bus Operation)	--	KMB-12(B)	5337 – 5351
268.	Extract of LWB's 5 year plan 2014 – 2018 – Chapter 8 (Safety Review and Improvement Measures in Bus Operation)	--	KMB-12(B)	5352 – 5366
269.	Extract of LWB's 5 year plan 2015 – 2019 – Chapter 8 (Safety Review and Improvement Measures in Bus Operation)	--	KMB-12(B)	5367 – 5383
270.	Extract of LWB's 5 year plan 2016 – 2020 – Chapter 8 (Safety Review and Improvement Measures in Bus Operation)	--	KMB-12(B)	5384 – 5400
271.	Extract of LWB's 5 year plan 2017 – 2021 – Chapter 8 (Safety Review and Improvement Measures in Bus Operation)	--	KMB-12(B)	5401 – 5419
Annexes to the Reply Letter from KMB & LWB to IRC dated 3 October 2018 in response to IRC's letter dated 21 September 2018				
272.	Annex 1(a)(i) Sudden Acceleration Report for Selected Bus Captains	24/07/2018 to 30/07/2018	KMB-12(B)	5420 – 5577
273.	Annex 1(b)(i) Harsh Braking Report for Selected Bus Captains	24/07/2018 to 30/07/2018	KMB-12(B)	5578 – 5595
274.	Annex 3(a)	30/08/2018	KMB-12(B)	5596

	BOP207 Speeding Report			
275.	Annex 3(b) BOP207 Speeding Report	02/09/2018	KMB-12(B)	5597
276.	Annex 3(c) BOP207 Speeding Report	06/09/2018	KMB-12(B)	5598

From: Gary Wong SSQ
Sent: Friday, August 22, 2014 5:34 PM
To: Kin Keung Woo TM; Siu Hung Fung ST; Andrew Kwan LCK; Kwok Ho Yeung KB; Henry Yeung LCK; Al Law ST; Dennis Ng KB; Henry Yeung LCK; Kevin Kwan TM
Cc: Richard Lee HR; Safety & Service Quality Department
Subject: RE: Proper names of Identified Sharp bends/ Roundabouts

Dear All,

Further to my email this afternoon regarding the above captioned subject, two more location names from STD are revised and highlighted in red below. Attached please find the final version of "Safe Speed Limit" card which will be passed to Printing Section of CFMD for necessary action.

車廠	急彎/迴旋處		安全限速(km/h)
	Original	Revised	
九龍灣廠	西貢公路天橋往清水灣道	清水灣道往西貢公路	15
九龍灣廠	將軍澳道(南行)往秀茂坪道	將軍澳道(北行)往秀茂坪道	20
屯門廠	皇珠路(東行)往海皇路 (南行)	皇珠路(九龍方向)往海皇路 (屯門南廠方向)	25
屯門廠	青山公路(大欖)(南行) 往屯門公路(北行)	青山公路(大欖)往屯門公路 (屯門方向)	25
屯門廠	洪天路(南行)往元朗公路(南行)	洪天路往元朗公路(屯門方向)	25
荔枝角廠	興華街西近荔寶路迴旋處	興華街西入荔寶路迴旋處	20
沙田廠	大埔道往吐露港公路	大埔公路往吐露港公路	25
沙田廠	馬鞍山繞道往西沙路(北行)-大彎	馬鞍山繞道往西沙路(北行)	25
沙田廠	馬鞍山繞道往西沙路(北行)-細彎	西沙路往沙安街	25
沙田廠	掃管埔路往雞嶺迴旋處	新運路往雞嶺迴旋處	25

Gary
HSSQD

Safe Speed Limit Card (KMB)

Chinese version

車廠	急彎/迴旋處	安全限速 (km/h)
九龍灣廠	清水灣道往西貢公路	15
九龍灣廠	碧雲道往高超道	15
九龍灣廠	新清水灣道往順利邨道支路	20
九龍灣廠	觀塘道往龍翔道支路	20
九龍灣廠	觀塘道往啓祥道	20
九龍灣廠	啓祥道往偉業街	20
九龍灣廠	啓祥道往啟福道	20
九龍灣廠	將軍澳道(北行)往秀茂坪道	20
車廠	急彎/迴旋處	安全限速 (km/h)
九龍灣廠	將軍澳道(南行)往茶果嶺道	20
九龍灣廠	將軍澳隧道公路往寶順路	20
九龍灣廠	寶順路往寶康路	20
九龍灣廠	寶順路往唐明街	20
屯門廠	皇珠路(九龍方向)往海皇路(屯門南廠方向)	25
屯門廠	青山公路(大欖)往屯門公路(屯門方向)	25
屯門廠	洪天路往元朗公路(屯門方向)	25
屯門廠	博愛交滙處近往青山公路支路(元朗方向)	25
車廠	急彎/迴旋處	安全限速 (km/h)
荔枝角廠	和宜合道右轉梨木樹巴士總站	15
荔枝角廠	安足街右轉石排街	15
荔枝角廠	涌美路左轉青衣鄉事會路	15
荔枝角廠	興華街西入荔寶路迴旋處	20
荔枝角廠	興華街西迴旋處近新巴車廠	20
荔枝角廠	青衣西路右轉西草灣路	20
荔枝角廠	寮肚路左/右轉青衣西路	20
荔枝角廠	青康路左轉青衣路	20
車廠	急彎/迴旋處	安全限速 (km/h)
沙田廠	大埔公路往吐露港公路	25
沙田廠	馬鞍山繞道往西沙路(南行)	25
沙田廠	馬鞍山繞道往西沙路(北行)	25
沙田廠	西沙路往沙安街	25
沙田廠	青沙公路往美田路	25
沙田廠	掃管埔路往新運路(往粉嶺/石湖墟)	25
沙田廠	新運路往雞嶺迴旋處	25
		2014 年 10 月版

English version

Depot	Location of Sharp Bend/Roundabout	Safe Speed Limit (km/h)
KBD	Clear Water Bay Road to Hiram's Highway	15
KBD	Pik Wan Road to Ko Chiu Road	15
KBD	New Clear Water Bay Road to Shun Lee Tsuen Road slip road	20
KBD	Kwun Tong Road to Lung Cheung Road slip road	20
KBD	Kwun Tong Road to Kai Cheung Road	20
KBD	Kai Cheung Road to Wai Yip Street	20
KBD	Kai Cheung Road to Kai Fuk Road	20
KBD	Tseung Kwan O Road (North Bound) to Sau Mau Ping Road	20
Depot	Location of Sharp Bend/Roundabout	Safe Speed Limit (km/h)
KBD	Tseung Kwan O Road (South Bound) to Cha Kwo Ling Road	20
KBD	Tseung Kwan O Tunnel Road into Po Shun Road	20
KBD	Po Shun Road into Po Hong Road	20
KBD	Po Shun Road onto Tong Ming Street	20
TMD	From Wong Chu Road (Kowloon Bound) to Hoi Wong Road (Tuen Mun South Depot Bound)	25
TMD	From Castle Peak Road (Tai Lam) to Tuen Mun Road (Tuen Mun Bound)	25
TMD	From Hung Tin Road to Yuen Long Highway (Tuen Mun Bound)	25
TMD	Pok Oi Interchange near the slip road to Castle Peak Road (Yuen Long Bound)	25
Depot	Location of Sharp Bend/Roundabout	Safe Speed Limit (km/h)
LCKD	Wo Yi Hop Road right turn onto Lei Muk Shue B/T	15
LCKD	On Chuk Street right turn onto Shek Pai Street	15
LCKD	Chung Mei Rd. left turn onto Tsing Yi Heung Sze Wui Rd	15
LCKD	Hing Wah Street West onto Lai Po Road Roundabout	20
LCKD	Hing Wah Street West Roundabout near depot of NWFB	20
LCKD	Tsing Yi Road West right turn onto Sai Tso Wan Road	20
LCKD	Liu To Road left / right turn onto Tsing Yi Road West	20
LCKD	Tsing Hong Road left turn onto Tsing Yi Road	20
Depot	Location of Sharp Bend/Roundabout	Safe Speed Limit (km/h)
STD	Tai Po Road to Tolo Highway	25
STD	Ma On Shan Bypass to Sai Sha Road (South Bound)	25
STD	Ma On Shan Bypass to Sai Sha Road (North Bound)	25
STD	Sai Sha Road to Sha On Street	25
STD	Tsing Sha Highway to Mei Tin Road	25
STD	So Kwun Po Road to San Wan Road (to Fanling / Shek Wu Hui)	25
STD	San Wan Road to Kai Leng Roundabout	25
		Oct 2014 version

From: Gary Wong SSQ
Sent: Friday, August 22, 2014 5:34 PM
To: Kin Keung Woo TM; Siu Hung Fung ST; Andrew Kwan LCK; Kwok Ho Yeung KB; Henry Yeung LCK; Al Law ST; Dennis Ng KB; Henry Yeung LCK; Kevin Kwan TM
Cc: Richard Lee HR; Safety & Service Quality Department
Subject: RE: Proper names of Identified Sharp bends/ Roundabouts

Dear All,

Further to my email this afternoon regarding the above captioned subject, two more location names from STD are revised and highlighted in red below. Attached please find the final version of "Safe Speed Limit" card which will be passed to Printing Section of CFMD for necessary action.

Depot	Sharp bends/ Roundabouts		Safe Speed Limit
	Original	Revised	
Kowloon Bay Depot	Hiran's Highway Flyover to Clear Water Bay Road	Clear Water Bay Road to Hiram's Highway	15
Kowloon Bay Depot	Tseung Kwan O Road (South Bound) to Sau Mau Ping Road	Tseung Kwan O Road (North Bound) to Sau Mau Ping Road	20
Tuen Mun Depot	From Wong Chu Road (East Bound) to Hoi Wong Road (South Bound)	From Wong Chu Road (Kowloon Bound) to Hoi Wong Road (Tuen Mun South Depot Bound)	25
Tuen Mun Depot	From Castle Peak Road (Tai Lam) (South Bound) to Tuen	From Castle Peak Road (Tai Lam) to Tuen Mun Road	25

	Mun Road (North Bound)	(Tuen Mun Bound)	
Tuen Mun Depot	From Hung Tin Road (South Bound) to Yuen Long Highway (South Bound)	From Hung Tin Road to Yuen Long Highway (Tuen Mun Bound)	25
Lai Chi Kok Depot	High Wah Street West near Lai Po Road Roundabout	High Wah Street West onto Lai Po Road Roundabout	20
Sha Tin Depot	Tai Po Road to Tolo Highway	Tai Po Road to Tolo Highway	25
Sha Tin Depot	Ma On Shan Bypass to Sai Sha Road (North Bound) – Big bend	Ma On Shan Bypass to Sai Sha Road (North Bound)	25
Sha Tin Depot	Ma On Shan Bypass to Sai Sha Road (North Bound) – Small bend	Sai Sha Road to Sha On Street	25
Sha Tin Depot	So Kwun Po Road to Kai Leng Roundabout	San Wan Road to Kai Leng Roundabout	25

From: Jenny Yu SSQ
Sent: Wednesday, August 27, 2014 11:11 AM
To: Al Law ST; Dennis Ng KB; Henry Yeung LCK; Kevin Kwan TM
Cc: Aman Fong SSQ; Gary Wong SSQ; Hoi Keung Ng SSQ; Raymond Cheng SSQ; Shu Kai Lam SSQ
Subject: Safe Speed Limit Training Video - Staff List

Dear All,

Re the captioned, I have created 30 excel files in SSQ Share Folder (Y:\SSQ\Sharp Bends_Roundabouts\Staff List - Safe Speed Limit Training Video), please input 3 types of information for each excel file:

1. Employee No.
2. Depot (KB/LCK/STD/TM) [Please follow these depot codes exactly]
3. Bus Rt No.

Please feel free to contact me if you have any queries and **send a notification email to us upon completion of the data input**.

Thanks and regards,
Jenny

From: Gary Wong SSQ
Sent: Wednesday, August 27, 2014 11:42 AM
To: Al Law ST; Dennis Ng KB; Henry Yeung LCK; Kevin Kwan TM
Cc: Aman Fong SSQ; Hoi Keung Ng SSQ; Raymond Cheng SSQ; Shu Kai Lam SSQ; Jenny Yu SSQ
Subject: RE: Safe Speed Limit Training Video - Staff List

Dear All,

Pls. proceed according to the Communication Plan as the plan was agreed by OD.

Gary
HSSQD

From: Kwok Ho Yeung KB
Sent: Friday, September 19, 2014 12:52 PM
To: Gary Wong SSQ
Cc: Aman Fong SSQ; Kin Keung Woo TM; Andrew Kwan LCK; Siu Hung Fung ST; Chi Man Ho DOD
Subject: Records of Watching Video of Sharp Bends for Route Familiarization

Dear Gary,

I refer to the captioned subject and, on behalf of Depots, please be informed that Depots only agreed with reminding the BC to watch the video of sharp bends concerning route familiarization in the previous meeting and we will not mark their watching records. By the way, we have already kept the critical briefing records of speed limits at various sharp bends as evidence of BC's awareness.

Regards,

Yeung Kwok Ho

From: Kwok Ho Yeung KB
Sent: Friday, September 19, 2014 2:53 PM
To: Gary Wong SSQ
Cc: Aman Fong SSQ; Kin Keung Woo TM; Andrew Kwan LCK; Siu Hung Fung ST; Chi Man Ho DOD; Dennis Ng KB
Subject: RE: 回覆： Records of Watching Video of Sharp Bends for Route Familiarization

Dear all,

One clarification is that these videos are restricted to the selected BCs on Staff Web now.

Regards,

Yeung Kwok Ho

From: Gary Wong SSQ
Sent: Friday, September 19, 2014 3:23 PM
To: Kwok Ho Yeung KB; Gary Wong SSQ
Cc: Aman Fong SSQ; Kin Keung Woo TM; Andrew Kwan LCK; Siu Hung Fung ST; Chi Man Ho DOD; Dennis Ng KB
Subject: 回覆： RE: 回覆： Records of Watching Video of Sharp Bends for Route Familiarization

Yes. This approach is based on the advice from MD.

Gary

From: Jenny Yu SSQ
Sent: Thursday, September 25, 2014 12:37 PM
To: Al Law ST; Dennis Ng KB; Henry Yeung LCK; Kevin Kwan TM
Cc: Aman Fong SSQ; Gary Wong SSQ; Hoi Keung Ng SSQ; Shu Kai Lam SSQ
Subject: FW: KMB SSQ - 安全限速提示咭 / KMB-QS-14016

Dear All,

The safe speed limit cards have been delivered to SSQD today. The invoices in hard copy will be sent to you by today. Kindly please settle the payment accordingly upon receiving the invoices.

The cards will be dispatched to you in Oct 2014 after the completion of the denoted items mentioned in the communication plan.

Please feel free to talk if you have any queries.

Thanks and regards,
Jenny

From: Gary Wong SSQ
Sent: Wednesday, October 08, 2014 9:47 AM
To: Al Law ST; Dennis Ng KB; Henry Yeung LCK; Kevin Kwan TM
Cc: Safety & Service Quality Department
Subject: Progress on Implementation of Safe Speed Limits

Dear All,

Pls. fill in the actual completion date for action item #2 and how many days to complete action items #6 & 7.

Actually, this practice should be started after the pass away of "Occupy Central"

Pls. revert by 10 Oct 2014 (Fri).

Gary
HSSQD

From: Gary Wong SSQ
Sent: Friday, October 24, 2014 9:50 AM
To: Al Law ST; Dennis Ng KB; Henry Yeung LCK; Kevin Kwan TM; Siu Wah Ma LWB
Cc: Safety & Service Quality Department
Subject: FW: Progress on Implementation of Safe Speed Limits

Dear All,

I have revised action items 7 & 8 and added action item 9 in the attached file.

Gary
HSSQD

Implementation of Safe Speed limits – 31 Sharp Bends & Roundabouts

Action Item	LCKD	STD	KBD	TMD	LWB
1) Update driving tips in staff website.	30/09/2014				
2) Update album and kept in relevant TS offices/designated locations.	08/10/2014	15/10/2014	08/10/2014	08/10/2014	N/A
3) Identify name list of relevant BC for each specific route.	26/09/2014	24/09/2014			
4) Upload the name list of relevant BC and the safety videos (including convert the format) in staff website.	To be done by SSQD, ITD and HRD in mid Oct 2014				
5) Collect "Safe Speed Limits" cards from the vendor.	Available on 25 Sep 2014				Available on 29 Sep. 2014
6) Update the progress and seek OD's approval.	To be done by SSQD upon completion of action items 1) to 4)				
7) Conduct briefings (with briefing note) on safe speed limits and issue "Safe Speed Limits" cards to all TS and Inspectors who will brief all involved BC.	Within 2 weeks after the "Occupy Central"				
8) Conduct briefings (with briefing note) on safe speed limits and issue "Safe Speed Limits" cards to all buddy drivers who will brief the same safety issues to relevant new BC during share ride.					
9) Conduct briefings on safe speed limits and issue "Safe Speed Limits" cards to all involved staff of Duty Dispatch Section (DSS) who will brief the BC concerned after completion of route familiarization.					
10) Inform BCTS and PMS the effective day of safe speed limits.					
11) Issue internal notice for the implementation of safe speed limits.					
12) Issue "Safe Speed Limits" cards and conduct briefings to all involved BC with briefing note by inspectors and TS.					N/A

From: Gary Wong SSQ
Sent: Thursday, January 08, 2015 12:12 PM
To: Al Law ST; Dennis Ng KB; Henry Yeung LCK; Kevin Kwan TM; Mike Ho LWB
Cc: Safety & Service Quality Department
Subject: RE: Progress on Implementation of Safe Speed Limits

Dear All,

Following the completion of the clearance of protest sites in Dec. 2014, I intend to raise the "Speed Limits for the 31 identified sharp bends and roundabouts" issue and seek OD's approval on next week.

In this connection, the action plan is revised. Pls. let me know if the timeline or proposed actions need to be further revised.

Pls. revert by **13 Jan. 2015 (Wed)**.

Gary
HSSQD

Implementation of Safe Speed limits – 31 Sharp Bends & Roundabouts

Action Item	LCKD	STD	KBD	TMD	LWB
1) Collect "Safe Speed Limits" cards from the vendor. Safe Speed Limit Card-KMB (Chi) R5 (Safe Speed Limit Card-LWB (Chi).pdf	Available on 29 Sep. 2014				
2) Update driving tips in staff website.	30 Sep. 2014				
3) Identify and update the name list of relevant BC for each specific route.	23 Jan. 2015				
4) Upload the name list of relevant BC and the safety videos (including convert the format) in staff website.	28 Jan. 2015				
5) Seek OD's approval.	To be done by SSQD upon completion of action items 1) to 4)				
6) Issue internal notice for the implementation of safe speed limits. Internal notice for 31 Sharp Bends and Rour	Within 2 weeks upon approval by OD.				
7) Inform BCTS and PMS the effective day of safe speed limits.	Immediate after issuance of internal notice.				
8) Conduct briefings (with briefing note) on safe speed limits and issue "Safe Speed Limits" cards to all TS and Inspectors who will brief all involved BC. Briefing note for implementation of 31	Within 2 weeks upon approval by OD				
9) Conduct briefings (with briefing note) on safe speed limits and issue "Safe Speed Limits" cards to all buddy drivers who will brief the same safety issues to relevant new BC during share ride.					
10) Conduct briefings on safe speed limits and issue "Safe Speed Limits" cards to all involved staff of Duty Dispatch Section (DSS) who will brief the BC concerned after completion of route familiarization.					
11) Issue "Safe Speed Limits" cards and conduct briefings to all involved BC with briefing note by inspectors and TS.	a) To be completed within 1 month (Scheduled BC and Part-time BC. b) To be completed within 2 months (including spare BC).				

車廠	急彎/迴旋處	安全限速 (Km/h)
九龍灣廠	清水灣道往西貢公路	15
九龍灣廠	碧雲道往高超道	15
九龍灣廠	新清水灣道往順利邨道支路	20
九龍灣廠	觀塘道往龍翔道支路	20
九龍灣廠	觀塘道往啓祥道	20
九龍灣廠	啓祥道往偉業街	20
九龍灣廠	啓祥道往啓福道	20
九龍灣廠	將軍澳道(北行)往秀茂坪道	20
九龍灣廠	將軍澳道(南行)往茶果嶺道	20
九龍灣廠	將軍澳隧道公路往寶順路	20
九龍灣廠	寶順路往寶康路	20
九龍灣廠	寶順路往唐明街	20
屯門廠	皇珠路(九龍方向)往海皇路 (屯門南廠方向)	25
屯門廠	青山公路(大欖)往屯門公路 (屯門方向)	25
屯門廠	洪天路往元朗公路(屯門方向)	25
屯門廠	博愛交滙處近往青山公路支路 (元朗方向)	25

車廠	急彎/迴旋處	安全限速 (Km/h)
荔枝角廠	和宜合道右轉梨木樹巴士總站	15
荔枝角廠	安足街右轉石排街	15
荔枝角廠	涌美路左轉青衣鄉事會路	15
荔枝角廠	興華街西入荔寶路迴旋處	20
荔枝角廠	興華街西迴旋處近新巴車廠	20
荔枝角廠	青衣西路右轉西草灣路	20
荔枝角廠	寮肚路左/右轉青衣西路	20
荔枝角廠	青康路左轉青衣路	20
沙田廠	大埔公路往吐露港公路	25
沙田廠	馬鞍山繞道往西沙路(南行)	25
沙田廠	馬鞍山繞道往西沙路(北行)	25
沙田廠	西沙路往沙安街	25
沙田廠	青沙公路往美田路	25
沙田廠	掃管埔路往新運路(往粉嶺/石湖墟)	25
沙田廠	新運路往雞嶺迴旋處	25

九KMB 2014年10月版

龍運巴士有限公司	2014 年 10 月版	
急彎/迴旋處	最高限速(km/h)	有關路線
青康路左轉青衣路	20	A31, E32
馬鞍山繞道往西沙路(北行)	25	A41P, 私牌
西沙路往沙安街	25	
掃管埔路往新運路(往粉嶺/石湖墟)	25	A43, N42A
新運路往雞嶺迴旋處	25	
皇珠路(九龍方向)往海皇路(屯門南廠方向)	25	私牌
洪天路往元朗公路(屯門方向)	25	N30
博愛交滙處近往青山公路支路(元朗方向)	25	E34, 私牌

急彎/迴旋處之安全限速

為提升各同事對於交通路面急彎/迴旋處之安全駕駛意識，公司就31個急彎/迴旋處的位置設定安全限速。

同時，公司已印製「安全限速」提示咭予各同事，以便查閱駕駛路線所涉及有關急彎/迴旋處位置之安全限速。各同事須因應路面情況以不超過有關急彎/迴旋處的安全限速駕駛，以免發生意外。

有關31個急彎/迴旋處的位置及所設定安全限速之詳情，請參閱附表：

車廠	急彎/迴旋處	安全限速(km/h)
九龍灣廠	清水灣道往西貢公路	15
九龍灣廠	碧雲道往高超道	15
九龍灣廠	新清水灣道往順利邨道支路	20
九龍灣廠	觀塘道往龍翔道支路	20
九龍灣廠	觀塘道往啓祥道	20
九龍灣廠	啓祥道往偉業街	20
九龍灣廠	啓祥道往啟福道	20
九龍灣廠	將軍澳道(北行)往秀茂坪道	20
九龍灣廠	將軍澳道(南行)往茶果嶺道	20

九龍灣廠	將軍澳隧道公路往寶順路	20
九龍灣廠	寶順路往寶康路	20
九龍灣廠	寶順路往唐明街	20
屯門廠	皇珠路(九龍方向)往海皇路 (屯門南廠方向)	25
屯門廠	青山公路(大欖)往屯門公路 (屯門方向)	25
屯門廠	洪天路往元朗公路 (屯門方向)	25
屯門廠	博愛交滙處近往青山公路支路 (元朗方向)	25
荔枝角廠	和宜合道右轉梨木樹巴士總站	15
荔枝角廠	安足街右轉石排街	15
荔枝角廠	涌美路左轉青衣鄉事會路	15
荔枝角廠	興華街西入荔寶路迴旋處	20
荔枝角廠	興華街西迴旋處近新巴車廠	20
荔枝角廠	青衣西路右轉西草灣路	20
荔枝角廠	寮肚路左/右轉青衣西路	20
荔枝角廠	青康路左轉青衣路	20
沙田廠	大埔公路往吐露港公路	25
沙田廠	馬鞍山繞道往西沙路(南行)	25
沙田廠	馬鞍山繞道往西沙路(北行)	25
沙田廠	西沙路往沙安街	25
沙田廠	青沙公路往美田路	25
沙田廠	掃管埔路往新運路(往粉嶺/石湖墟)	25
沙田廠	新運路往雞嶺迴旋處	25

有關31個急彎/迴旋處安全限速將於2015年1月30日起實施。

急彎/迴旋處安全限速

1） 公司已就 31 個急彎/迴旋處設定安全限速。

2） 為咗方便查閱對你駕駛路線所涉及有關急彎/迴旋處嘅安全限速，依家派發「安全限速」提示咭。

3） 請你因應路面情況以不超過有關急彎/迴旋處的安全限速駕駛。

Depot	Sharp bends/ Roundabouts	Safe Speed Limit (Km/h)	Depot	Sharp bends/ Roundabouts	Safe Speed Limit (Km/h)
Kowloon Bay Depot	Clear Water Bay Road to Hiram's Highway	15	Lai Chi Kok Depot	Wo Yi Hop Road right turn onto Lei Muk Shue B/T	15
Kowloon Bay Depot	Pik Wan Road to Ko Chiu Road	15	Lai Chi Kok Depot	On Chuk Street right turn onto Shek Pai Street	15
Kowloon Bay Depot	New Clear Water Bay Road to Shun Lee Tsuen Road slip road	20	Lai Chi Kok Depot	Chung Mei Rd. left turn onto Tsing Yi Heung Sze Wui Rd	15
Kowloon Bay Depot	Kwun Tong Road to Lung Cheung Road slip road	20	Lai Chi Kok Depot	Hing Wah Street West onto Lai Po Road Roundabout	20
Kowloon Bay Depot	Kwun Tong Road to Kai Cheung Road	20	Lai Chi Kok Depot	Hing Wah Street West Roundabout near depot of NWFB	20
Kowloon Bay Depot	Kai Cheung Road to Wai Yip Street	20	Lai Chi Kok Depot	Tsing Yi Road West right turn onto Sai Tso Wan Road	20

Kowloon Bay Depot	Kai Cheung Road to Kai Fuk Road	20	Lai Chi Kok Depot	Liu To Road left/ right turn onto Tsing Yi Road West	20
Kowloon Bay Depot	Tseung Kwan O Road (North Bound) to Sau Mau Ping Road	20	Lai Chi Kok Depot	Tsing Hong Road left turn onto Tsing Yi Road	20
Depot	**Sharp bends/ Roundabouts**	**Safe Speed Limit (Km/h)**	**Depot**	**Sharp bends/ Roundabouts**	**Safe Speed Limit (Km/h)**
Kowloon Bay Depot	Tseung Kwan O Road (South Bound) to Cha Kwo Ling Road	20	Sha Tin Depot	Tai Po Road to Tolo Highway	25
Kowloon Bay Depot	Tseung Kwan O Tunnel Road into Po Shun Road	20	Sha Tin Depot	Ma On Shan Bypass to Sai Sha Road (South Bound)	25
Kowloon Bay Depot	Po Shun Road into Po Hong Road	20	Sha Tin Depot	Ma On Shan Bypass to Sai Sha Road (North Bound)	25
Kowloon Bay Depot	Po Shun Road onto Tong Ming Street	20	Sha Tin Depot	Sai Sha Road to Sha On Street	25
Tuen Mun Depot	From Wong Chu Road (Kowloon	25	Sha Tin Depot	Tsing Sha Highway to Mei Tin Road	25

	Bound) to Hoi Wong Road (Tuen Mun South Depot Bound)				
Tuen Mun Depot	From Castle Peak Road (Tai Lam) to Tuen Mun Road (Tuen Mun Bound)	25	Sha Tin Depot	So Kwun Po Road to San Wan Road (to Fanling / Shek Wu Hui)	25
Tuen Mun Depot	From Hung Tin Road to Yuen Long Highway (Tuen Mun Bound)	25	Sha Tin Depot	San Wan Road to Kai Leng Roundabout	25
Tuen Mun Depot	Pok Oi Interchange near the slip road to Castle Peak Road (Yuen Long Bound)	25	KMB Version as of October 2014		

Long Win Bus Company Limited	**Version as of October 2014**	
Sharp bends/ Roundabouts	**Maximum Speed Limit (km/h)**	**Relevant Route**
Tsing Hong Road left turn onto Tsing Yi Road	20	A31, E32
Ma On Shan Bypass to Sai Sha Road (North Bound)	25	A41P, Private License
Sai Sha Road to Sha On Street	25	
So Kwun Po Road to San Wan Road (to Fanling / Shek Wu Hui)	25	A43, N42A
San Wan Road to Kai Leng Roundabout	25	
From Wong Chu Road (Kowloon Bound) to Hoi Wong Road (Tuen Mun South Depot Bound)	25	Private License
From Hung Tin Road to Yuen Long Highway (Tuen Mun Bound)	25	N30
Pok Oi Interchange near the slip road to Castle Peak Road (Yuen Long Bound)	25	E34, Private License

1.10

Safe Speed Limits of Sharp Bends/Roundabouts

To increase all colleagues' awareness of safe driving in respect of the sharp bends/roundabouts of the traffic roads, the Company has set the safe speed limits for the locations of 31 sharp bends/roundabouts.

At the same time, the Company has printed the "Safe Speed Limits" cards for all colleagues to enable all of you to conveniently check the safe speed limits of the relevant locations of the sharp bends/roundabouts involved in the driving routes. All colleagues shall adapt to the road conditions and not exceed the safe speed limits of the relevant sharp bends/roundabouts to prevent accidents.

Please refer to the attached table for the locations and safe speed limits of the 31 sharp bends/roundabouts:

Depot	Sharp bends/ Roundabouts	Safe Speed Limit (Km/h)
Kowloon Bay Depot	Clear Water Bay Road to Hiram's Highway	15
Kowloon Bay Depot	Pik Wan Road to Ko Chiu Road	15
Kowloon Bay Depot	New Clear Water Bay Road to Shun Lee Tsuen Road slip road	20
Kowloon Bay Depot	Kwun Tong Road to Lung Cheung Road slip road	20
Kowloon Bay Depot	Kwun Tong Road to Kai Cheung Road	20
Kowloon Bay Depot	Kai Cheung Road to Wai Yip Street	20
Kowloon Bay Depot	Kai Cheung Road to Kai Fuk Road	20
Kowloon Bay Depot	Tseung Kwan O Road (North Bound) to Sau Mau Ping Road	20
Kowloon Bay Depot	Tseung Kwan O Road (South Bound) to Cha Kwo Ling Road	20

Kowloon Bay Depot	Tseung Kwan O Tunnel Road into Po Shun Road	20
Kowloon Bay Depot	Po Shun Road into Po Hong Road	20
Kowloon Bay Depot	Po Shun Road onto Tong Ming Street	20
Tuen Mun Depot	From Wong Chu Road (Kowloon Bound) to Hoi Wong Road (Tuen Mun South Depot Bound)	25
Tuen Mun Depot	From Castle Peak Road (Tai Lam) to Tuen Mun Road (Tuen Mun Bound)	25
Tuen Mun Depot	From Hung Tin Road to Yuen Long Highway (Tuen Mun Bound)	25
Tuen Mun Depot	Pok Oi Interchange near the slip road to Castle Peak Road (Yuen Long Bound)	25
Lai Chi Kok Depot	Wo Yi Hop Road right turn onto Lei Muk Shue B/T	15
Lai Chi Kok Depot	On Chuk Street right turn onto Shek Pai Street	15
Lai Chi Kok Depot	Chung Mei Rd. left turn onto Tsing Yi Heung Sze Wui Rd	15
Lai Chi Kok Depot	Hing Wah Street West onto Lai Po Road Roundabout	20
Lai Chi Kok Depot	Hing Wah Street West Roundabout near depot of NWFB	20
Lai Chi Kok Depot	Tsing Yi Road West right turn onto Sai Tso Wan Road	20
Lai Chi Kok Depot	Liu To Road left/ right turn onto Tsing Yi Road West	20
Lai Chi Kok Depot	Tsing Hong Road left turn onto Tsing Yi Road	20
Sha Tin Depot	Tai Po Road to Tolo Highway	25

Sha Tin Depot	Ma On Shan Bypass to Sai Sha Road (South Bound)	25
Sha Tin Depot	Ma On Shan Bypass to Sai Sha Road (North Bound)	25
Sha Tin Depot	Sai Sha Road to Sha On Street	25
Sha Tin Depot	Tsing Sha Highway to Mei Tin Road	25
Sha Tin Depot	So Kwun Po Road to San Wan Road (to Fanling / Shek Wu Hui)	25
Sha Tin Depot	San Wan Road to Kai Leng Roundabout	25

The safe speed limit in relation to the 31 sharp bends/roundabouts shall be implemented from 30 January 2015.

Safe Speed Limits of Sharp Bends/Roundabouts

1) The Company has set the safe speed limits for the 31 sharp bends/roundabouts.

2) In order to enable you to conveniently check the safe speed limits of the sharp bends/roundabouts involved in your driving routes, the Company hereby provides the "Safe Speed Limits" cards.

3) Please drive in accordance with the road conditions and do not exceed the safe speed limits for the relevant sharp bends/roundabouts.

From: Aman Fong SSQ
Sent: Wednesday, February 11, 2015 6:18 PM
To: Siu Hung Fung ST; Kin Keung Woo TM; Siu Wah Ma LWB; Andrew Kwan LCK; Kwok Ho Yeung KB; Richard Lee HR
Cc: Gary Wong SSQ; Shu Kai Lam SSQ
Subject: RE: sharp bend - review
Importance: High

Dear Sir,

To finalize the speed limit and arrangement, the meeting will be held as follows:

Date: 12.2.2015 (Thursday)
Time: 0900-0930
Venue: Conference Rm 901, HQ

Pls kindly attend.

Sorry for the rush.

Regards,
Aman

From: Gary Wong SSQ
Sent: Thursday, February 12, 2015 11:04 AM
To: Owen Eckford OD
Subject: Safe Speed Limits for the Identified Sharp Bends and Roundabouts

Dear Owen,

A meeting with all depot heads and GM of LWB is held this morning to revisit the safe speed limits for the 31 identified sharp bends and roundabouts. Taking into consideration of traffic congestion during peak-hours and media concern, it is agreed by all depot heads and GM of LWB that we will adopt the suggested safe speed limits validated by BCTS. Attached please find the updated information on safe speed limits.

The only difference are Location no. 16 (On Chuk Street right turn onto Shek Pai Street) and Location no. 19 (New Clear Water Bay Rd. to Shun Lee Tsuen Rd. slip road) where the safe speed limits rounded down from 18 km/h to 15 km/h and from 28 km/h to 25 km/h respectively.

Upon approval, we will proceed the formality for quotations of safe speed limits cards for all BC (including spare copies to be placed in B/T and Duty Dispatch Offices) and prepare Internal Notice to be issued by Traffic Department and LWB. Before full implementation of safe speed limits, we will also prepare briefing note for SSQ Coordinators who will conduct briefings to staff of Duty Dispatch Offices, buddy drivers and part-time BC, inspectors and TS. Inspectors and TS will then conduct quick briefings to all BC during the issuance of safe speed limits cards on the first day of implementation. In addition, we will also update the videos which will be posted on website such that all staff can access the real situation on the identified road sections. We expect that this new practice can come into operation in mid/late April 2015. If agreed, I will then prepare an action plan for the implementation program.

For your approval please.

Gary
HSSQD

From: Owen Eckford OD
Sent: Thursday, February 12, 2015 4:28 PM
To: Gary Wong SSQ
Subject: RE: Safe Speed Limits for the Identified Sharp Bends and Roundabouts

Dear Gary,

I think you know that I have always had a reservation about this approach. It is not the method of calculation or the science behind it but rather the idea of telling professional drivers at what speed to take a curve in the absence of any restrictions or speed limit guidance from the road authorities. I wonder whether these limits will be actually observed by the BC's (we have no effective means of enforcing them) and whether their implementation might be ridiculed by our drivers or the drivers resent this advice in respect of what is a basic driving skill.

I am just not sure whether we should continue with this approach or revert to a simple message of driving with respect to the road conditions and taking bends and curves at safe speed. When I consider that we seem to have had virtually no accidents due to buses taking curves at excessive speeds, other than the incident that gave rise to this project I can think of none, and thus the risk would be considered fairly low and thus the amelioration measures need only be relatively light in nature as well.

I welcome your thoughts.

Kind regards
Owen

From: Gary Wong SSQ
Sent: Thursday, February 12, 2015 6:12 PM
To: Owen Eckford OD
Subject: RE: Safe Speed Limits for the Identified Sharp Bends and Roundabouts

Dear Owen,

According to the past records, there were 3 traffic accidents related to bus toppled over or likely to have toppled over:.

1) KMB bus (Rt. 692) - Tseung Kwan O occurred on 9 Nov. 2009 resulting in 2 dead and 34 injured. The BC drove at a speed of 62 km/h where the speed limit was 50 km/h. (toppled-over)
2) LWB bus (crew shuttle bus) - Pok Oi Interchange near the slip road to Castle Peak Road (Yuen Long Direction) on 11 March 2011 resulting in the BC sustained bodily injury. The BC drove at a speed of 68 km/h where the speed limit was 50 km/h.(toppled-over)
3) KMB bus (deadrun trip) - Hoi Wong Road heading in the direction of Tuen Mun Swimming Pool on 22 May 2014 resulting in the BC sustained bodily injury. The BC drove at a speed of 57-58 km/h where the speed limit was 50 km/h. (near-miss)

Even though the limitation of technologies for effective monitoring of safe speeds through these sharp bends/roundabouts, we still have some measures to draw the attention of BC. In this regard, I would counter-propose 3 follow-up actions:

1) Draft internal notice to be issued by Traffic Department in Feb/March 2015 (not specify locations and speed limits) to draw the attention of all BC about "Safety Driving through Sharp Bends and Roundabouts".
2) Prepare safety poster for the month of April with the same topic.
3) BCTS to quote Tseung Kwan O toppled over incident as a lesson learnt for all new BC trainees.

For your comment please.

Gary
HSSQD

From: Owen Eckford OD
Sent: Thursday, February 12, 2015 6:25 PM
To: Gary Wong SSQ
Subject: RE: Safe Speed Limits for the Identified Sharp Bends and Roundabouts

Dear Gary,

I broadly agree with your suggestion but let's speak briefly tomorrow and finalise a decision.

Kind regards
Owen

From: Gary Wong SSQ
Sent: Thursday, February 12, 2015 6:48 PM
To: Safety & Service Quality Department
Subject: FW: Safe Speed Limits for the Identified Sharp Bends and Roundabouts

FYI

Name	Position at the material time
Edmond Ho MD	Managing Director
Owen Eckford OD	Operations Director
Gary Wong SSQ	Head of Safety and Service Quality Department
Jenny Yu SSQ	Administration Officer of Safety and Service Quality Department
Aman Fong SSQ	Assistant Manager of Safety and Service Quality Department Note: currently Assistant Manager of Training and Quality Assurance Department
Kin Keung Woo TM	General Manager of Tuen Mun Depot
Andrew Kwan LCK	General Manager of Lai Chi Kok Depot Note: currently General Manager of Sha Tin Depot
Siu Hung Fung ST	General Manager of Sha Tin Depot
Kwok Ho Yeung KB	General Manager of Kowloon Bay Depot
Siu Wah Ma LWB	General Manager of Long Win Bus
Kevin Kwan TM	Operations Officer of Tuen Mun Depot
Henry Yeung LCK	Operations Officer of Lai Chi Kok Depot
Al Law ST	Operations Officer of Sha Tin Depot
Dennis Ng KB	Operations Officer of Kowloon Bay Depot
Mike Ho LWB	Operations Officer of Long Win Bus

KMB
CUSTOMER SERVICE DEPARTMENT
QUALITY INSTRUCTION

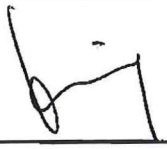
CU/QI-03
ISSUE: 8
DATE: 01-01-18
PAGE : 1 of 11

QUALITY INSTRUCTION

FRIENDS OF KMB VOLUNTEER CLUB

A CONTROLLED COPY SHOULD BEAR THE "CONTROLLED" STAMP IN RED AND AN ASSIGNED NUMBER. ONLY THE CONTROLLED COPY IS SUBJECT TO AUTOMATIC UPDATE.

PLEASE REFER ONLY TO THE CONTROLLED COPY.

Prepared by:		Daisy Chow Assistant Manager, Customer Service
		Carrie Kwong LQR, Customer Service Department
Approved by:		P Y Chan Head of Customer Service Department

3. Records

Record Type	Filing Location	Indexed By	Retention Time	Responsibility
(1) Minutes of Unit Leaders Monthly Meetings	Customer Service Department	Year & Month	At least 3 years	CSA/CSO or delegates
(2) Minutes of Core-Unit Leaders Bi-monthly Meetings	Customer Service Department	Year & Bi-month	At least 3 years	CSA/CSO or delegates
(3) Programming	Customer Service Department	Nature and Date	At least 3 years	CSA/CSO or delegates
(4) Member's File	Customer Service Department	Membership number	Until member's membership no longer valid	CSA/CSO or delegates

KMB HEADQUARTERS
COMMUNICATIONS AND PUBLIC AFFAIRS DEPARTMENT
QUALITY INSTRUCTION

CPA/QI-01
ISSUE: 1
DATE: 01-07-17

QUALITY INSTRUCTION

PRINT ADVERTISING IMPLEMENTATION

PREPARED BY : Betsy
BETSY LEUNG
(ASSISTANT MANAGER)

APPROVED BY :
EMILY HUI
HEAD OF COMMUNICATIONS AND
PUBLIC AFFAIRS DEPARTMENT

5. Records

Record Type	Filing Location	Indexed by	Retention Time	Responsibility
1. Artwork Design for print advertising	Communications and Public Affairs Department	Subject	1 year	AM or delegate
2. Colour Proof for print advertising	Communications and Public Affairs Department	Subject	1 year	AM or delegate
3. Quotation/ Media Plan for print advertising	Communications and Public Affairs Department	Subject	3 years	AM or delegate
4. Copy of Print Advertising	Communications and Public Affairs Department	Subject	3 years	AM or delegate

Backup Tape Retention Policy

1. LAN Server in Kowloon Bay Data Centre

(Note 1) Responsible Party	Server Name / Project ID	Tape Label	Frequency	Type of tape	*(Note 2)* Retention Period	*(Note 3)* Operator	*(Note 4)* No. of current versions		*(Note 4)* No. of non current versions		Remarks
							KB	LCK	KB	LCK	
TSD	W2K server	NBU for File Service, W2K, Sybase, Mail, DMS & SQL (01 – 30) *	Daily	LTO6	1 month	OPD	0	1	29	0	**Requirements from TSD :** **1. LAN Server in Headquarters** - Effective from 1 January 2015, daily backup to tape for NBU for File Service, W2K, Sybase, Mail, DMS & SQL will be done on every day - Effective from 1 January 2015, monthly backup to tape for NBU for File Service, W2K, Sybase, Mail, DMS & SQL will be done on last day of each month. **2. LAN Server in remote sites** - For KMB depots, backup will be done on working weekdays (i.e. Monday to Friday)
		NBU for File Service, W2K, Sybase, Mail, DMS & SQL MMCCYY	Monthly	LTO6	2 years	OPD	0	1	0	ALL	
	File server	NBU for File Service, W2K, Sybase, Mail, DMS & SQL (01 – 30) *	Daily	LTO6	1 month	OPD	0	1	29	0	
		NBU for File Service, W2K, Sybase, Mail, DMS & SQL MMCCYY	Monthly	LTO6	2 years	OPD	0	1	0	ALL	
	DMS Server	NBU for File Service, W2K, Sybase, Mail, DMS & SQL (01 – 30) *	Daily	LTO6	1 month	OPD	0	1	29	0	
		NBU for File Service, W2K, Sybase, Mail, DMS & SQL MMCCYY	Monthly	LTO6	2 years	OPD	0	1	0	ALL	

Backup Tape Retention Policy

1. LAN Server in Kowloon Bay Data Centre (cont.)

(Note 1) Responsible Party	Server Name / Project ID	Tape Label	Frequency	Type of tape	*(Note 2)* Retention Period	*(Note 3)* Operator	*(Note 4)* No. of current versions		No. of non current versions		Remarks
							KB	LCK	KB	LCK	
TSD	Exchange Server	NBU for File Service, W2K, Sybase, Mail, DMS & SQL (01 – 30) *	Daily	LTO6	1 month	OPD	0	1	29	0	**3. Project backup** - For projects (BMS, CPS, EPM, IAS, IMS, MPF, PAY, PMS, VRS) backup will be done upon user request before closing. DB will be copied to Tempdb_sb00na$(\\nt007jsyb) or Tempdb_sb00nb$(\\nt007ksyb) by W2K backup program "NTBackup", then by "COPY" command to copy the DB to the folder in HQs NAS. - For project (RCS) backup will be done upon user request before closing. DB will be copied to \\nt00nhsb\d$\temp_db by TSD then by "COPY" command to copy the DB to the folder in KB NAS. - For contingency, DB will be copied to ST NAS. The total number of files in two NAS disks with Raid image in KB Data Centre and ST Backup Centre are the same - Copy the requested DB from KB NAS to development or testing server upon request from project team. Direct access to the backup is restricted.
		NBU for File Service, W2K, Sybase, Mail, DMS & SQL MMCCYY	Monthly	LTO6	2 years	OPD	0	1	0	ALL	
	SYBASE Server	NBU for File Service, W2K, Sybase, Mail, DMS & QL (01 – 30) *	Daily	LTO6	1 month	OPD	0	1	29	0	
		NBU for File Service, W2K, Sybase, Mail, DMS & SQL MMCCYY	Monthly	LTO6	2 years	OPD	0	1	0	ALL	

Backup Tape Retention Policy

Note:
1. Responsible party needs to follow all problems and make amendments via Helpdesk call. He/ She has the right to specify the tape location, retention period and number of tape versions required.
2. By default, retention period is two years for all monthly backup, tapes will be reused after retention period.
3. Operator is dedicated to mount tape or run job only according to the instruction given by responsible party.
4. Backup tapes can be stored either in KB Data Centre or LCK OPD Store Room.
   Monthly backup tapes will be sent to LCK OPD Store Room after job completion. For contingency, current version of tape label marked with * will be sent to LCK OPD Store Room usually on Tuesday and Thursday and non-current version will be collected back to KB Data Centre.
   For CSC, FMS & HRMS, tapes will be collected back to KB Data Centre according to the instructions stated in http:\\nt00pwww\servercab.
5. For confidential purpose or special request, backup tapes such as IAS are kept by user.

Practice on Email Retention

Type of Email	Retention Period	Retention Location
Emails on Microsoft Outlook for current staff, provided that the emails are not deleted by the staff	No time limit	Server subject to standard backup cycle
Emails on Microsoft Outlook for former staff, provided that the emails are not deleted by the staff	2 years from the last backup after his/her last day in office. Those emails cannot be restored upon expiry of 2 years as the backup tape will be recycled every 2 years.	Off-site storage location (i.e. LCK Depot)
Archived emails, if any, for both current and former staff (Note 1)	Permanent as long as the PST file in the hard disk has not been erased	Local computer (Note 2)

Note 1:
It is optional for users to decide whether to archive emails to their hard disk. When users decide to perform email archiving (based on email aging, obsolete projects, etc.), the system will generate a PST file in the hard disk storing the archived emails.

Note 2:
If the computer hard disk of a former staff has not been erased, theoretically it is possible to retrieve their archived emails.

From: Terry Lo TR
Sent: Saturday, July 13, 2013 1:44 PM
To: Susanna Wong HR; Wendy Siu TR; Catherine Yip IT; Kin Keung Woo TM; Siu Hung Fung ST; Andrew Kwan LCK; Kwok Ho Yeung KB; Jeff Poon LWB; Virginia Lam PUR; Winnie SF Ho CFM; Chun Kin Chan SER
Cc: Kenrick Fok OD; Chi Man Ho HD; Siu Wah Ma LWB; Jacky Cheng CDD; Alice Wong ODO; Eric Lee PUR; Ivan Au PUR; Kelvin Yeung PUR; Thomas Tong CFM
Subject: RE: Real-time Operations Management System - Task Force kick-off meeting on 12 July 2013

Dear all,

The kick-off meeting in yesterday's morning is referred.

Please be reminded that the system was agreed to be named as "Real-time Operations Management System(ROM)". Should you have further input to the attached work plan, please let me know by 16 July 2013. The revised work plan will then send to you for follow-up. Thanks.

Regards,
Terry LO
Assistant Manager, Operations Project
Traffic Department
Tel : [redacted]

1. Real-time Operations Management System software and in-bus console development

Objectives
Ensure the software fits users' requirement and smoothen operations

Targets
Complete software development and installation by July 2014 ready for pilot launch at LCKD

Dependencies

Taskforce
Catherine Yip, Senior Manager, ITD (Lead)
Chan Chun Kin, Senior Engineer, Engineering Office
Virginia Lam, Assistant Manager, Purchasing
Jeff Poon, Assistant Manager, Traffic Operations, LWB
Terry Lo, Assistant Manager, Operations Projects, Traffic

	Level	Activity	Owner	Status	Start date	Revised start date	End date	Revised end date	Remark
1.1	Fleet management software	Identify potential fleet management software vendor and arrange for software demo	Catherine Yip	On track	29-Apr-13		17-May-13		
		Shortlist software vendors based on software demo		Not started	20-May-13		22-May-13		Changed to build KMB's own software with the help of software developers
		Draft and issue RFP to shortlisted software vendors		Not started	15-Jul-13		16-Aug-13		
		Evaluate software vendors and finalize software selection		Not started	02-Sep-13		30-Sep-13		
		Finalize terms & conditions and award contract to selected software vendor		Not started	16-Sep-13		18-Oct-13		
		Develop detailed specification for software customization and other development needed (e.g., interfacing with existing KMB software)		Not started	01-Aug-13		30-Sep-13		
		Coordinate software customization and interfacing with existing KMB applications		Not started	21-Oct-13		21-Nov-13		
		Coordinate system testing and User Acceptance Test (UAT) with relevant users		Not started	02-Apr-14		31-Jul-14		
1.2	Bus cabin set up	Determine the design and specification of the console in sync with the software capabilities	Jeff Poon	Not started	01-Aug-13		16-Aug-13		
		Shortlist console vendors based on spec	Catherine Yip	Not started	02-Sep-13		30-Sep-13		
		Identify location within bus cabin for in-bus console set up (may differ by bus type)	CK Chan	Not started	01-Sep-13		19-Sep-13		
		Determine constraints on in-bus console (e.g., size, etc.) and provide input to IT as part of the tendering	CK Chan	Not started	22-Sep-13		03-Oct-13		
		Draft and issue RFP to shortlisted console vendors	Catherine Yip	Not started	15-Jul-13		16-Aug-13		
		Evaluate console vendors and finalize console selection	Catherine Yip	Not started	02-Sep-13		30-Sep-13		
		Finalize terms & conditions and award contract to selected console vendor	Catherine Yip	Not started	16-Sep-13		18-Oct-13		

		Develop detailed specification for console customization and other development needed (e.g., interfacing with the software and existing KMB applications)	Jeff Poon	Not started	01-Aug-13		30-Sep-13		
		Coordinate software customization and interfacing with software and existing KMB applications	Catherine Yip	Not started	21-Oct-13		21-Nov-13		
		Coordinate system testing and UAT with relevant users	Jeff Poon	Not started	02-Apr-14		31-Jul-13		
		Retrofit	Jeff Poon	Not started	TBD		TBD		

2. Data preparation for software

Objectives
Ensure the software would have updated input to reflect frequent change in operations

Targets
Have ready information before customization of software starts

Dependencies

Taskforce
Wendy Siu, Head of Traffic (Lead) Catherine Yip, Senior Manager, ITD

	Level	Activity	Owner	Status	Start date	Revised start date	End date	Revised end date	Remark
2.1	Data for fleet management system	Conduct one-off exercise to gather GPS location of all en-route bus stops / temini and routes	Wendy Siu	On track	01-Jun-13		31-Jan-14		
		Establish process to update GPS location of en-route bus stops / termini and routes in case of bus stop / termini move / addition / removal or route change / addition / removal		Not started	03-Feb-14		28-Feb-14		

3. Operating practice and organization change codification

Objectives
Determine how the future operation is run and ensure the software has the right and aligned input

Targets
Ensure the input for software is timely and the software could perform what the practice demands

Dependencies

Taskforce
Ho Chi Man, Head of Depots (Lead)
Fung Siu Hung, General Manager, STD
Andrew Kwan, Senior Manager, LCKD
Woo Kin Keung, General Manager, TMD
Susanna Wong, Head of HRD
Catherine Yip, Senior Manager, ITD
Jeff Poon, Assistant Manager, Transport Operations, LWB
Alice Wong, Assistant Manager, Projects, ODO
Terry Lo, Assistant Manager, Operations Projects, Traffic

	Lever	Activity	Owner	Status	Start date	Revised start date	End date	Revised end date	Remark
3.1	Operating practices	Identify a group of high performing terminus supervisors, inspectors and OO to codify rule-based operating practices in bus bunching, departure management, incident management, etc. (based on high-level process map already developed as part of Telematics design)	Fung Siu Hung	Not started	12-Jul-13		16-Jul-13		
		Provide input to IT to ensure detailed specification for tendering caters for all possible scenarios in operating practices	Fung Siu Hung and Catherine Yip	Not started	19-Jul-13		15-Oct-13		
		Develop high level operating procedures on rule-based operating practices in bus bunching, departure management, incident management, etc. (to be refined later as and when fleet management software prototype is ready)	Fung Siu Hung	Not started	19-Jul-13		20-Aug-13		
		Work with selected software vendor (expected by end of Aug) on detailed design	Fung Siu Hung and Catherine Yip	Not started	02-Sep-13		04-Oct-13		
		Work with vendor on system and user interface, developing, testing and refining the prototype	Fung Siu Hung and Catherine Yip	Not started	07-Oct-13		27-Jun-14		
		Develop and refine the operating manual with reference to the interface design and the feedback from pilot result	Fung Siu Hung	Not started	01-Dec-13		05-Sep-14		
3.2	Organization and roles & responsibilities	Define roles and responsibilities for different operation execution staff in both transition period and in end state (including senior controller, controller, inspectors, bus stop assistants, terminus supervisors - only in interim state)	Andrew Kwan, Susanna Wong and Alice Wong	Not started	21-Aug-13		25-Aug-13		
		Define high level transition plan to evolve to future organization, lay out different options with cost & benefit analysis		Not started	21-Aug-13		25-Aug-13		
		Seek management approval on recommended option for transition		Not started	28-Aug-13		01-Sep-13		
		Define hierarchies and span of control of different operation execution staff		Not started	28-Aug-13		01-Sep-13		
		Determine number of staff required for different positions		Not started	04-Sep-13		15-Sep-13		
		Define detailed capability & qualification requirements for senior controllers and controllers		Not started	07-Sep-13		18-Sep-13		
		Define compensation structure of senior controllers and controllers		Not started	21-Sep-13		09-Oct-13		

		Develop recruitment strategy and plan to recruit for new positions (internal and/or external)		Not started	12-Oct-13		30-Oct-13		
		Launch recruitment to identify and obtain the qualified people (both existing employee or potential employee)		Not started	23-Dec-13		28-Mar-14		
		Execute the transition plan		Not started	23-Dec-13		28-Mar-14		
		Refine the organization and roles and responsibilities with the feedback from pilot result		Not started	01-Sep-14		02-Oct-14		
3.3	Training & development	Identify a group of experienced trainers in terminus supervisors and inspectors to co-develop training materials with the operating practice sub-task force	Woo Kin Keung and Susanna Wong	Not started	11-Nov-13		15-Nov-13		
		Co-develop the operating manual with the operating practice sub-task force		Not started	01-Dec-13		31-Dec-13		
		Develop the training material based on the operating manual		Not started	02-Jan-14		27-Jan-14		
		Test and refine the training material with focus groups of experienced terminus supervisors and inspectors		Not started	30-Jan-14		24-Feb-14		
		Train controllers and inspectors for the pilot		Not started	31-Mar-14		20-May-14		
		Refine the training with the feedback from pilot result		Not started	01-Dec-13		05-Sep-14		
		Train controllers and inspectors for all LCKD		Not started	01-Sep-14		26-Sep-14		
		Train controllers and inspectors for KBD, STD, TMD		Not started	TBD		TBD		

4. Pre-pilot and pilot preparation & launch

Objectives
Ensure LCKD pilot is set up on time with smooth operation

Targets
Pilot launch at LCKD by Jul 2014

Dependencies

Taskforce
Andrew Kwan, Senior Manager, LCKD (Lead)
Woo Kin Keung, General Manager, TMD
Susanna Wong, Head of HRD
Catherine Yip, Senior Manager, ITD
Winnie Ho, Assistant Manager, Administration, CFMD
Virginia Lam, Assistant Manager, Purchasing
Alice Wong, Assistant Manager, Projects, ODO
Terry Lo, Assistant Manager, Operations Projects, Traffic

	Level	Activity	Owner	Status	Start date	Revised start date	End date	Revised end date	Remark
4.1	Pre-pilot - TMD	Set up a mini work station at TMD	Woo Kin Keung and Catherine Yip	Not stated	01-Jan-14		14-Jan-14		
		Trial on real time departure management by TS		Not stated	31-Jan-14		01-Mar-14		
		Refine fleet management software with reference to the result of simulation		Not stated	02-Mar-14		31-Mar-14		
4.2	Control center setup - LCKD pilot design	Define scope of pilot (including pilot routes, number of buses involved, etc.)	Andrew Kwan	Not started	29-Jul-13		12-Aug-13		
		Flesh out detailed design of pilot control center (i.e. RCO)		Not started	15-Aug-13		30-Sep-13		
		Tender and order required hardware		Not started	01-Oct-13		31-Dec-13		
		Renovate pilot control center		Not started	01-Mar-14		31-Mar-14		
		Install hardware and software at pilot control center		Not started	15-Apr-14		30-Apr-14		
4.3	Candidate identification & training - LCKD pilot	Determine number of staff required for pilot control center	Andrew Kwan	Not started	07-Oct-13		18-Oct-13		
		Select appropriate staff to be controllers at pilot control center		Not started	21-Oct-13		31-Jan-14		
		Train selected controllers	Woo Kin Keung and Susanna Wong	Not started	31-Mar-14		20-May-14		
		Train inspectors and terminus supervisors		Not started	31-Mar-14		20-May-14		
4.4	Pilot launch	Launch the pilot control center	Andrew Kwan	Not started	01-Jul-14		31-Aug-14		
		Closely monitor operations of control center and review the result and refine any design on physical set up, operating practice, organization and roles & responsibilities, behavior and performance and training		Not started	04-Aug-14		05-Sep-14		
4.5	LCKD full scale roll-out	Locate possible LCKD location(s) for full roll-out control center set up	Andrew Kwan	Not started	29-Jul-13		12-Aug-13		
		Lay out conditions and physical constraints of identified locations (including space available, license needed, electricity supply, broadband situation, etc.)		Not started	15-Aug-13		19-Aug-13		
		Conduct high-level cost analysis on renovation and control center set up at selected location(s)		Not started	22-Aug-13		26-Aug-13		

		Seek management approval on control center set up at selected locations	Not started	29-Aug-13		02-Sep-13		
		Apply for license, if needed, for location(s) selected for control center set up	Not started	29-Aug-13		28-Sep-13		
		Finalize locations for control center set upbased on status of license application	Not started	TBD		TBD		
		Develop the detailed design plan of full roll out control center	Not started	TBD		TBD		
		Tender and determine the contractor	Not started	TBD		TBD		
		Renovate the full roll out control center	Not started	TBD		TBD		
		Install the hardware and software for full roll out control center	Not started	TBD		TBD		
		Refine the physical setup for other depots with the feedback from pilot result	Not started	TBD		TBD		

The Kowloon Motor Bus Company (1933) Limited

System Specifications
for
Real-time Operations Management System (ROM)

V1.10

Real-time Operations Management System (ROM) System Specifications

Table of Contents

Part I Definitions, Acronyms and Abbreviations

B/T	Bus terminus
BOM	On-board Bus Monitoring System, KMB's inhouse system
DBMS	Database Management System
DCS	Driver Communication System, a module of ROM
ETA	Estimated arrival time of buses
GPS	Global Positioning System
Headway	Time interval between the buses on a route
Mid-way departure	Buses departing from mid-way bus stop
OBD	On-board Telematics Device
OCS	Operations Control Centre System, a module of ROM
ROM	Real-time Operations Management System
Shortworking	Buses departing from B/T and then to mid-way bus stop to pick up passengers
TTS	Text-to-speech system
VoIP	Voice over Internet Protocol

Part II Introduction and Scope of Work

1. Introduction

1.1 Each KMB bus will be equipped with an on-board telematics device (OBD) which captures data (GPS, engineering and driving information) about the bus at a one-second interval. The data will be sent to KMB backend data server every 30 seconds via 3G mobile network. The collected data will be processed by KMB's On-board Bus Monitoring System (BOM) to generate estimated arrival time of buses.

1.2 The ROM comprises of two modules:

1.2.1 Operations Control Centre System (OCS) - a backend system

1.2.2 Driver Communication System (DCS) - a two-way communication system with driver console installed on bus

1.3 The OCS communicates with the DCS through the 3G network of the OBD. In addition, each bus's real-time positioning data, bus estimated arrival time, bus information and driver information etc. that are required to provide the functions specified in the functional requirements section will be provided by the KMB Enterprise Data Server.

1.4 The main functions of ROM are to assist Dispatchers from Operations Control Centres and Terminus Supervisors from Bus Termini to:

1.4.1 Manage bus departures and bus trips

1.4.2 Handle special situations that cause disruptions to bus services

1.4.3 Communicate with drivers, via voice, text and sound recordings for any information or special messages that needs driver's attention and action

1.5 The main system objectives are to control and monitor bus services, streamline workflow and improve operational efficiency so as to provide the best bus services to the public even in unexpected resources shortage or special situations that will cause bus disruption.

2. Scope of Work

2.1 The Contractor shall design, manufacture (see 2.2), develop, supply, deliver, install, test and commission ROM, providing hardware, software, system integration, documentation and services as described in this tender document within an expected time frame of around 26 months:

2.1.1 With a high degree of skill, care and diligence normally exercised by recognized professional firms or by highly skilled experienced service providers with sufficient resources including project management resources.

2.1.2 In conformance to all respects with this specifications and so that they fulfill the purpose indicated by or to be reasonably inferred from the specification; and

2.1.3 In a safe manner and free from any unreasonable or avoidance risk to any person's health and well-being and in an economic and efficient manner.

2.1.4 Provide warranty and maintenance services and rectify defects of ROM as specified in this document.

2.1.5 Liaise with equipment suppliers to resolve all integration problems.

2.1.6 Submit software source code, design documentations, installation plan and drawings, test specifications and reports, operations manuals, drawings and other documentations that are developed in this contract, except those proprietary systems or modules specified in the Contractor's System Proposal.

2.2 The Contractor can propose an off-the-shelf driver console as long as it fulfills requirements as specified in this document.

Part III Functional Requirements

1. Operations Control Centre System (OCS)

1.1 An electronic map shall form part of the OCS and the following functions shall be provided:

1.1.1 Zoom-in function down to 1:2000. Direct map access by users are required (ie no internet access is required).

1.1.2 Display to show real-time location of buses using different colors and/or codes to show that buses need dispatcher's attention. Typical display criteria: show all buses, by depot, by zone, by terminus, by route, by dispatcher's access routes, only show buses that need dispatcher's attention.

1.1.3 Allow authorized users to add and edit bus stops, road junctions and tunnels that do not allow buses to pass through, speed limit, turning restriction etc. on the map using a user-friendly tool.

1.1.4 Allow dispatcher to draw a certain area on the map so that buses within the boundary of the drawn area are:

a. Highlighted for sending text and voice messages

b. Used for speed calculation so that the average speed of highlighted area are displayed

1.1.5 Alert the dispatcher if the bus is off its normal routing .

1.1.6 Alert the dispatcher for possible bus theft case when the bus is moving while it is supposed to be parked especially at night time .

1.1.7 Allow printing a certain area of the map for KMB's internal distribution to outdoor staff.

1.1.8 Export map data to other KMB map-based systems.

1.1.9 Import map data from other KMB map-based systems.

1.1.10 An update of base map on a half-yearly basis or on an as-needed basis.

1.2 Core System Functions

1.2.1 Operations Management

a. Bus trip management

(1) Handle routes of different nature including routes with special departures, circular routes and routes jointly operated with other bus operators.

(2) Handle frequent and non-frequent bus departures. Definition of frequency is parameter driven. Initially frequent bus departures are set as headway of twelve minutes or below.

(3) In bus trip management, frequent bus departures are measured by headway deviation while non-frequent bus departures are measured by schedule adherence.

(4) Calculate and spot out possible service irregularity based on (3) above. Estimate the seriousness of service abnormality in terms of the extent of service gap, length of service irregularity, number of passengers affected, effect on lost trips etc.

(5) Provide one or several service restoration options to regulate departures with prioritization and pre-defined criteria based on schedule adherence, headway adherence, carrying capacity, demand level etc. Information such as potential service gap, estimated time of arrival (ETA) of buses (ETA is provided by KMB Interface Data

Server), available resources at nearby locations, benefits and shortcomings etc. shall also be provided.

(6) The service restoration options which should include but not limited to the following:
   i. even out departure at bus terminus
   ii. midway departure
   iii. additional departure
   iv. diversion
   v. line split (split a routing into two service lines)
   vi. shortworking or service curtailment
   vii. deadrun (i.e. not carrying any passengers) to opposite terminating point
   viii. bus swap

   Refer to Appendix B for possible restoration options

(7) Regulation of bus departures are done automatically based on a set of rules with elements of the rules configurable. The configurable items should include but not limited to the followings:
   i. route and service type
   ii. demand flow and pattern at different periods
   iii. carrying capacity as a result of headway adjustment
   iv. driver working guidelines
   v. availability of buses

   If rules cannot be applied, the regulation of bus departures are performed manually by dispatchers.

b. Handle planned special situations that will cause service disruption to more than one individual trip:
   (1) Allow dispatcher to input the planned situation with effective date and time. Historical planned situation shall be available to avoid re-input by the dispatcher.
   (2) Allow dispatcher to input restoration measures based on historical record or newly simulated decision support information.

c. Handle unplanned special situations that will cause service disruption to more than one individual trip:
   (1) Allow dispatcher to select the unplanned situation from historical special situation. If there is no similar historical situation, allow the dispatcher to input the unplanned situation.
   (2) Allow dispatcher to input restoration measures based on historical record of planned or newly simulated service irregularity analysis and restoration recommendations.
   (3) All unplanned special situations and restoration measure shall be stored as historical record for use in future.

d. Handle unplanned special situations that will cause service disruption to only one individual trip:
   (1) Examples of such situations are accidents, bus breakdown, driver's sickness etc.
   (2) Allow dispatcher to input service restoration measure based on the dispatcher's decision or the system's simulated service irregularity analysis and restoration.

e. Manage Emergency situation
   (1) Emergency triggered by driver via pressing an emergency button of the driver console.
      i. OCS will trigger voice communication and recording of voice will be in effect.
      ii. OCS will start playing CCTV video captured live from the OBD (provisional requirement).
   (2) Emergency or incident triggered by the dispatcher
      i. Allow the dispatcher to trigger voice communication.
      ii. Allow the dispatcher to trigger recording of voice.
      iii. Allow the dispatcher to trigger playing of CCTV video captured live from the OBD (provisional requirement).
      iv. Allow the dispatcher to send photos or documents (photo, map, word etc.) to the driver console of the bus.

1.2.2 Bus monitoring functions
   a. Display buses running on a line chart to show where buses are along a route. Information on headway, ETA, occupancy and current journey time, etc. are shown on the line chart. Different color or code of buses is used to show that the bus needs dispatcher's attention. Typical display criteria: show all buses by depot, by zone, by bus terminus, by route, by dispatcher's access routes, only show buses that needs dispatcher's attention.
   b. Display buses in termini to show how many and where buses are (and their next departure time), and available drivers at each terminus and ETA of next several buses arriving at each of the terminus. Buses are colored differently highlighting where intervention from dispatcher is needed. Typical display criteria: show all termini by depot, by zone, by bus terminus, by route, by dispatcher's access routes, only show termini that needs dispatcher's attention.
   c. Display buses that need dispatcher's attention on a screen in order of importance score which is calculated by rules described in (1) below. Typical display criteria: by all routes, by all routes within a depot, by all routes within a zone, by all routes within a bus terminus, by dispatcher group's access routes, by individual dispatcher's access right.
      (1) Rules that needs dispatcher's attention:
         i. Bus is entering a restricted area
         ii. Bus is not running according to schedule
         iii. Bus frequency exceed a threshold limit
         iv. Driver has pressed an emergency/incident button on the driver console
         v. Bus is moving off its normal routing
         vi. Bus is suspected of being moved by an unauthorized person
         vii. Driver working guideline is violated
         viii. Driver without required training
      (2) Remove the line of display when the abnormal situation is being handled by the dispatcher.
   d. Allow the responsible dispatcher to handle the display mentioned above according to the dispatcher's access right.

1.2.3 Logging of events provided by outdoor staff
   a. Allow the dispatcher to input text messages for information provided by outdoor staff via phone.

b. Allow the dispatcher to handle photos sent by outdoor staff via smart phones or portable devices.

1.2.4 Communication function

a. Communicate with the public
   (1) Send text messages to the public (via sending the text to KMB Interface Data Server).
   (2) Send voice announcement to passengers at selected bus termini (provisional requirement).

b. Communicate with drivers
   (1) Provide instruction to drivers by voice via TTS, text and graphics via the driver console. The instructions can be sent to an individual driver, to all drivers (capable of sending to 4000 drivers), or to group of drivers (by route, zone, etc).
   (2) Provide headway information to the drivers.
   (3) Able to handle functions as specified in Part III item 2 (Driver Communication System) stated below.
   (4) Call driver's mobile phone directly through OCS (optional)
   (5) Send email to drivers

1.2.5 Reporting functions

a. Provide operational reports and enquiries for dispatchers in performing their duties with the objective of enabling the dispatchers to manage by exceptions and the exceptional status shall be determined by reference to adjustable parameters.

b. Provide statistical reports and enquiries for dispatchers and managers to make decisions with regard to bus trips and staff monitoring etc.

1.2.6 Administration and audit trail

a. Functions to add and edit access right of dispatchers according to each individual function of the system, and data access right (depot, route, route group, zone, dispatcher group) of dispatchers.

b. All activities performed by the dispatcher will be logged and reported.

1.3 Voice System

1.3.1 Communicate with driver. All voice communication between the dispatcher and the driver will be recorded.

a. Allow the dispatchers to speak directly with a driver by 2-way voice communication via VoIP (around 2 minutes per conversation). When voice communication is in effect, there shall be no interruption to the normal uploading or downloading of other text messages or data.

b. The recorded voice data can be retrieved by date and time, bus registration number, route number or employee number of the driver or the dispatcher.

c. The retention period of the recorded voice data is one month. After that, the data will be placed in an off-line system for retrieval for two years.

1.3.2 Able to handle recorded audio file (less than 1 minute's voice) from the driver.

1.3.3 All voice messages sent from dispatchers to the driver console will be handled by TTS in Cantonese. The messages can be sent to an individual driver, to all drivers (capable of sending to 4000 buses), or to group of drivers (by route, zone, etc.).

1.3.4 Able to send pre-set messages (1 to 99) to driver console. The messages will be mapped to voice messages (not over 3 minutes' voice) stored at the driver console.

2. Driver Communication System (DCS)

2.1 A driver console will be installed on each bus. The driver console will provide the following functions:

2.1.1 Display color graphics and text data

a. Dynamic text messages can only be displayed when the bus is stationary where the stationary information is provided by the on-board device (OBD). A global parameter shall be provided to activate or deactivate 'stationary'. That is, the messages can be displayed when the bus is moving (ie deactivate 'stationary').
b. Display messages and graphics sent by the dispatcher or automatically sent from the OCS under certain conditions such as when the bus is located at a certain bus stop.
c. Display real-time indicators showing driving behavior of the driver with information available from the OBD. For abnormal driving behavior, different beep sounds shall be prompted to the driver. A global parameter shall be provided to activate or deactivate this function.

2.1.2 Voice communication

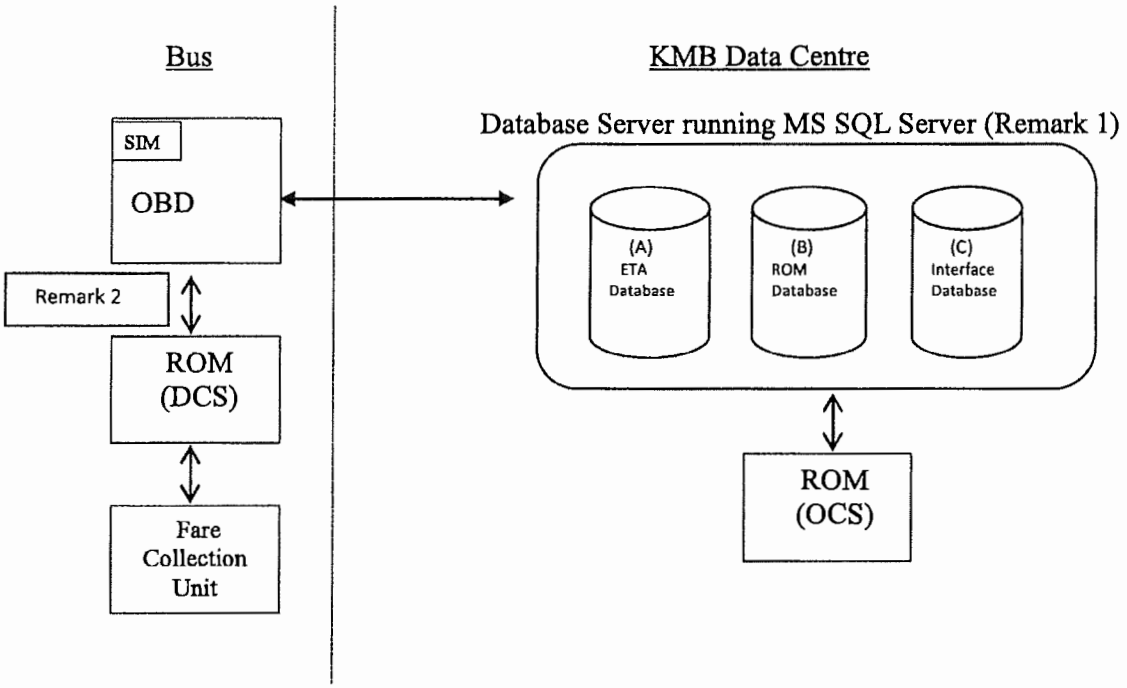
a. TTS messages sent from the OCS will be received by DCS as voice.
b. Voice recording is available and can be sent to the OCS.
c. Request to talk function can be triggered to initiate a two-way voice communication with the dispatcher.
d. Broadcast TTS voice messages sent from the OCS under certain conditions such as when the bus is located a certain bus stop.
e. Provide pre-saved voice messages (99 messages of 1 minute for each message)

2.1.3 Other functions

a. All messages sent by the dispatcher that requires acknowledgement shall be acknowledged via an acknowledgement key of the driver console keypad.
b. All unread messages are automatically displayed when the bus is stationary.
c. All messages sent by the dispatcher (voice and text) shall be kept in the console for two days and could be retrieved by the driver.
d. Other available keys of the driver console keypad are: emergency/accident, bus full, bus stop full of passengers, lost property, bus breakdown, report bus problem, request to record, request to talk.
e. When the mechanical keypad is not found, a soft keypad shall be available.
f. When a certain keypad is pressed (e.g. lost property, report bus problem), a form will be displayed on the console screen for driver to input information and/or record voice message. The form will be sent to OCS for further processing.

g. Application version number shall be sent to ROM (OCS) once a new version of application is successfully activated.
h. Self-diagnostic functions shall be provided to check whether the driver console hardware and OBD interface functions normally. A screen to show problems detected shall be shown to the driver. Problems found shall also be sent to the ROM (OCS) if the communications part still functions.

Part IV External Interface Requirements



1. ROM (DCS)
   - 1.1 Messaging with OBD via Ethernet/USB/RS485 interface
   - 1.2 Obtain driving behavior data thru messaging with OBD
   - 1.3 Obtain bus stationary information thru messaging with OBD
   - 1.4 Send driver messages to ROM (OCS) via OBD
   - 1.5 Send Fare Collection Unit data to ROM (OCS) via ROM (DCS) (see 1.10)
   - 1.6 Receive control center messages via OBD
   - 1.7 Receive software update package of ROM (DCS) via OBD
   - 1.8 Synchronize time from OBD
   - 1.9 Receive diagnostic signals from OBD

   Interface with Fare Collection Unit
   - 1.10 Messaging with on-board Fare Collection Unit via RS485
   - 1.11 Obtain operating data from Fare Collection Unit such as driver card ID, device ID, bus no., route no, destination, stage, no. of passengers boarded, no. of passengers alighted etc

2. ROM (OCS)
   - 2.1 ROM (OCS) will operate on a database server provided by KMB running MS SQL Server
   - 2.2 The database server is now already in place. A database instance (A) is storing the real-time telematics data of the day and ETA data
   - 2.3 ROM(OCS) will operate on a new database instance (B) on the server to store its own data
   - 2.4 ROM(OCS) can retrieve necessary data from the database instance (A) mentioned in 2.2
   - 2.5 ROM (OCS) also needs data from other KMB in-house systems. Another database instance (C) will be created for the system interfaces: System interface data server.

KMB in-house systems will post data to the database instance (C) periodically. This set of data includes but not limited to:

2.5.1 Master tables like bus master, bus routes master, employee master

2.5.2 Referential tables like bus type table, depot table

2.5.3 Operating data like bus and crew schedule information, trip records

2.6 ROM(OCS) shall also post its real-time data (such as bus departures, lost property data, messages reported by outdoor staff) to database instance (C) for use by KMB in-house systems

3. ROM (OCS) ←→ ROM (DCS)

3.1 ROM (DCS) sends driver messages to ROM (OCS) via OBD's mobile network

3.2 ROM (DCS) receives control center messages from ROM (OCS) via mobile network

3.3 ROM (DCS) receives its software update package via mobile network

Remark 1: Existing Database Server information

(1) DBMS: MS SQL 2012 Service Pack 1

(2) Software: VMware vSphere 5.1, Windows Server 2012, High Availability through vMotion

Remark 2: All data exchanges between DCS and OCS will be via the 3G mobile network installed at the OBD. Physical interface and protocol requirements are confirmed after mutual agreement by the Contractor and the OBD supplier.

The above is an overall description only. Detailed interface requirements are defined by both KMB and the Contractor in the user requirements collection process.

Part V System Hardware & Software Requirements

1. System Hardware (Driver Console)

1.1 General Description

1.1.1 A driver console is required to be installed on each of the buses for drivers to communicate with the Operations Control Centre. The console will be designed and installed in a way that would not cause safety hazard to drivers.

1.1.2 The console shall come with a main unit, a detached mechanical keypad, a detached microphone and loudspeaker. Refer to Appendix D, E and F for reference information on driver console. More descriptions on the required features are as follows:

a. Mobile network of 4G SIM modem shall be available. The network shall be able to automatically connect to 3G/2G if 4G/3G network cannot be detected (optional quotation).
b. The monitor shall be supported by a backlight so that it is still visible under a dark environment.
c. The monitor shall come with a cover to ensure it is still visible under the sunlight.
d. The monitor shall be UV protected to ensure it is durable under sunlight.
e. The driver console is automatically turned on when the OBD is working.
f. The driver console shall provide RS485 communication for system interfaces such as KMB's fare collection unit.
g. The driver console shall provide Ethernet/USB/RS485 interface for communication with OBD.
h. The driver console shall provide a user-friendly tool to drivers for adjusting the volume and screen brightness.

1.2 Standards

1.2.1 The latest edition of relevant and applicable British Standards (BS), International Organization for Standardization (ISO), Institution of Engineering and Technology (IET) (formerly Institution of Electrical Engineers (IEE)) or International Electrotechnical Commission (IEC) Standards shall be used. The Contractor may submit equivalent national standards; however, these must be submitted in English and approved by KMB.

1.2.2 All electrical works and installation shall be to the latest edition of the Institution of Electrical Engineers Regulations for Electrical Installations together with any amendments thereto.

1.3 Equipment Submission

1.3.1 The names of manufacturers of materials and equipment proposed by the Contractor for incorporation into the ROM, together with all relevant information including performance, capacities, sizes, technical specification, certified test reports, etc., shall be furnished when required by KMB which shall have the power to reject any part, which in its opinion is unsatisfactory, or not in compliance with the specifications and such part shall be replaced at no extra cost to KMB.

1.3.2. Approval by KMB of any set-up, equipment and materials shall not relieve the Contractor from its responsibility to comply with drawings, specifications and the required standards.

Part V System Hardware & Software Requirements

1.4 Drawing Submissions

1.4.1 The Contractor shall prepare and submit for the approval by KMB working drawings for all works under this Contract.

1.4.2 Approval by KMB of working drawings shall not relieve the Contractor of its responsibility to comply with the Contract unless specifically stated as not complying in the approval document.

1.4.3 Complete schedule of approved drawings shall be submitted prior to commencement of commissioning.

1.5 Design and Construction

1.5.1 Best efforts shall be made to produce an equipment design, which is both functional and attractive. Conceptual and style impressions shall be submitted as a preliminary stage in the development process. A proof of concept is required before confirmation of design and construction.

1.5.2 All equipment shall be designed and manufactured to facilitate inspection, cleaning and repair. Particular attention shall be given to the life expectancy and maintenance requirements.

1.5.3 Modular construction shall be used in the assembly of the constituent equipment installed in the vehicle.

1.5.4 All modules shall have a discrete serial number etched and engraved on the units.

1.6 Compliance with the Specifications

1.6.1 The requirements of the specifications shall be complied with in full. Any deviation to the specifications shall be submitted to KMB for approval.

1.7 General Technical Requirements of Driver Console

1.	Operating temperature	0 to 55 °C
2.	Storage temperature	0 to 75 °C
3.	Humidity	5% to 98% relative humidity
4.	Ingress protection	IEC529 compliant, IP54
5.	Drop and vibration	applicable to the vibrant operating environment of buses
6.	Electromagnetic Interference & Emissions (EMI)	conform to recognized international standards (Ref.: FCC Part15 Subpart, Class A; En55022: 1998, (CISPR22: 1997) Class A)
7.	Electromagnetic Compatibility (EMC) & Immunity	conform to recognized international standards (Ref.: EN55024: 1998)
8.	Safety	conform to recognized international standards (Ref.: UL1950, CSAC22No.950, EN60950, IEC950 ...etc.)
9.	Power supply	- 24 $V_{d.c.}$ nominal regulated @ 27 ± 0.5 $V_{d.c}$ - Transient voltage surge may be greater than 50 $V_{d.c.}$ at time of starting engine - Total current consumption allowable: ≤ 5 $A_{d.c.}$

2. System Hardware (ROM Backend Systems)

2.1 The contractor shall provide backend servers (both production and disaster recovery) for running of ROM with requirements specified in this document. The production servers will be installed at KMB Data Centre and will be connected to the KMB network. The disaster recovery servers with warm standby (switching from primary to standby servers to be completed within 15 minutes) will be installed at KMB's Disaster Recovery Centre. Database server will be provided by KMB with information provided in Part IV (External Interface Requirements) of this document. In the case of major system failure at the KMB Data Centre that rendered the OCS unavailable, OCS shall be restorable at the KMB Disaster Recovery Centre within one (1) hour without data loss and such switch-over shall be transparent to DCS and to the Operations Control Centres.

2.2 Other proposed servers such as web server, map server, application server, messaging and voice server etc. provided by contractor shall come with high availability feature allowing restoration of service within 15 minutes.

3. System Software

3.1 ROM shall be a web-based application on Internet Information Services (IIS 7.5 or above) conforming to HTML 5 standard. The development tool used shall be Visual Studio 2012 or above and the preferred programming language is C#.

3.2 The encoding, representation and handling of text shall conform to Unicode UTF-8 standard. All machine user interfaces shall be in Chinese, English or both Chinese and English.

3.3 Two versions of application software with effective date shall reside in the Driver Console so that the new version of software could be loaded through the mobile network before the effective date. If there is any problem with the new version during activation, the system shall fallback to the old version.

3.4 A logical identification number which shall be available to uniquely identify the Driver Console. The identification number shall be mapped to the MAC address of the Console.

3.5 All audio and video files shall be compressed before sending and decompressed before opening for user's view. The compression and decompression method shall be of the latest open compression technology/algorithm.

Part VI System Quality Requirements

1. Quality

1.1 The Contractor shall declare its quality plan which shall be ISO 9000 or equivalent. The plan shall be approved by KMB.

1.2 After award of Contract, the Contractor shall prepare and submit for the acceptance of KMB a system assurance plan which shall include schedules for the preparation and submission of data and analysis in respect of system safety, reliability and maintainability for the complete system and the equipment making up the system.

1.3 The system assurance plan shall also cover the quality aspects of project management and activities throughout the entire systems development cycle.

1.4 The system assurance plan shall identify the Dates of Completion as scheduled for accomplishment of these tasks. These requirements shall include but not limit to operation equipment interfaces, maintenance, training, rules and procedures.

1.5 The Contractor shall submit status reports of progress achieved and problem resolution in the areas of system safety, reliability, maintainability, and human factors based on a Dates of Completion chart included in the system assurance plan.

1.6 Full traceability of all components in relation to place, batch and date of manufacture shall be provided.

2. Security

2.1 The data design shall ensure all data downloads and uploads are secure with audit detection of any anomaly.

2.2 Authentication between devices shall ensure that non-genuine transmissions are prohibited.

2.3 The Contractor shall detail all security features of the system and shall provide sufficient information to enable these features to be implemented in any future system, equipment, or modules used in the expansion or development of the system.

2.4 All software and firmware shall be protected and immunized against any attack by malicious software.

2.5 All software and firmware shall be protected against unauthorized access and duplication.

3. Testing Requirements

3.1 The Contractor shall submit a detailed programme for the testing and commissioning prior to the commencement of activities.

3.2 All tests shall conform to the relevant BS, IET/ IEE, IEC Standards or its equivalents.

3.3 The Contractor shall perform tests, to ensure that the equipment and system delivered meet the established criteria of performance, reliability and availability in every respect in accordance with the requirements of the specifications.

3.4 Testing of the equipment to be supplied under this Contract shall fall into the following main categories:

3.4.1 Engineering prototype tests at Contractor's works

3.4.2 Production prototype and environmental tests at Contractor's works

3.4.3 Production tests at Contractor's works

3.4.4 Trial run implementation monitoring

3.4.5 Pilot implementation monitoring

3.4.6 Performance tests in Hong Kong

3.4.7 Acceptance tests on designated sites in Hong Kong

3.4.8 System integration tests

3.5 The Contractor shall be responsible for submitting the test results to KMB for approval.

4. Engineering Prototype Tests

4.1 These tests shall comprise thorough testing by the Contractor of engineering prototype units and systems for type approval. These tests may be witnessed by KMB or its appointed representatives.

4.2 During the prototype tests, determination tests shall be conducted to provide confidence that the declared performance and reliability requirements are satisfied.

4.3 Individual units and the complete assemblies shall be tested and approved by KMB before any bulk production of any particular unit commences.

4.4 KMB shall be satisfied that all units forming the complete system meet its performance requirements both in standalone mode and within the system configuration.

4.5 Any correction shown to be necessary as a result of these engineering prototype tests shall be incorporated in the production units.

5. Production Prototypes and Environmental Tests

5.1 The Contractor shall demonstrate to KMB's satisfaction that the corrections deemed necessary as a result of engineering prototype tests have all been incorporated in the production prototypes.

5.2 The production prototypes shall be inspected for general standards of assembly, finishes and workmanship.

5.3 Environmental testing of sample units shall ensure that the units are suitable in all respects for the purpose intended and such testing shall include but not be limited to:

a. Vibration
b. Dust and airborne particles
c. Temperature

d. Humidity
e. Accelerated life testing
f. Testing over a range of electrical variables including transient and other perturbations
g. Performance

6. Electromagnetic Compatibility Plan & Tests

6.1 The Contractor shall submit an Electromagnetic Compatibility (EMC) plan to KMB for approval after award of Contract. The plan shall adopt a top down approach and describe the EMC strategy and process.

6.2 The EMC plan shall identify a comprehensive list of specifications, standards, method statements and procedures to be submitted to KMB for approval. The EMC plan shall also include a programme, which shall identify the dates for EMC submissions.

6.3 The Contractor shall employ suitable design techniques and construction methods to minimize the effects of electromagnetic interference.

6.4 Susceptibility

6.4.1 All electrical, communication and computer equipment set-up shall be immune to other equipment in the site environment. All interference mechanisms shall be considered, including radiated interference, induced interference, capacitive-coupled interference, conducted interference and electrostatic discharge. Major sources of interference to be considered in a bus include existing lighting, electronic destination board, smartcard equipment, electrical circuitry and control over sensitive door edge, power ramp, gear box, engine, and various items of rotating machinery such as alternator and starter.

6.4.2 All electrical, electronic, communication and computer equipment of the Driver Console shall continue to function correctly under all normal levels of interference.

6.5 Emissions

6.5.1 The electrical, electronic communications and computer equipment in association with the system upgrade shall not generate electromagnetic interference, which affects the operation of other equipment in both the site and bus operating environment described above.

6.6 Restrictions of Choice of Frequencies

6.6.1 The frequencies and bandwidths used for wireless communication shall be chosen so that the fundamental frequencies, harmonics and cross-products generated by the plant shall not interference with those of other existing systems in vehicle and in site.

6.6.2 The frequencies and bandwidths employed in the site operation shall exclude those frequencies known to be major sources of interference.

6.7 The EMC plan shall be used throughout the design process to ensure no interference with and no susceptibility to external equipment.

6.8 The EMC plan shall outline the extent of testing proposed by the Contractor both before and after the equipment has been installed. The plan shall include but not be limited to activities to investigate and rectify EMC problems encountered after installation.

6.9 EMC Tests

6.9.1 The Contractor shall include the following tests in the EMC plan, or propose an equivalent set of tests based on alternative standards:

a. RFI immunity tests
b. conducted RFI
c. static discharge
d. transient and surges

7. Production Tests

7.1 The Contractor shall undertake the testing and certification of all materials and components, sub-assemblies and unit assemblies used in the line production process. Details of these tests shall be agreed with KMB and approval obtained before equipment is packed for shipment.

7.2 Tests shall include but not be limited to:

a. physical inspection
b. dimension check
c. electrical check
c. calibration check
d. output check
e. operational check
f. loading check

Part VII Performance and Reliability Requirements

1. ROM (OCS)

1.1 The response time of bus trip management functions shall be within 3 seconds in 95% of all cases under the peak load condition, ie when the total number of concurrent users as defined in Appendix C use the system simultaneously. Even the most complicated function shall not exceed 20 seconds.

1.2 The display of bus monitoring functions shall be refreshed every 3 seconds where 3 is a configurable time. The response time shall be within 3 seconds in 95% of all cases under the peak load condition, ie when the total number of concurrent users as defined in Appendix C use the system simultaneously.

1.3 The response time and performance of other functions shall be defined before system integration test of pilot run (phase 1).

1.4 The availability of OCS must be achieved at over 99.95% for every month upon the acceptance of OCS.

1.5 OCS shall be able to process a minimum of 16,000 operational data messages to buses per hour.

1.6 For voice messaging performance, OCS shall be able to handle a minimum of 1,200/hour-voice call connections.Voice shall be of high clarity.

1.7 For TTS voices, human voice clarity is preferred.

2. ROM (DCS)

2.1 The driver console start up time shall be within 12 seconds to show the first display screen (diagnostic result) to driver. The total start up time shall be within 24 seconds.

2.2 The loading of driver console application over the mobile network shall be completed within 1 minute. The activation of such application in the console shall be less than 30 seconds.

2.3 The loading of driver console firmware over the mobile network shall be completed within 3 minute. The activation of such application in the console shall be less than 1 minute.

2.3 The time to display the relevant screen on the driver console shall be within 1 second after the driver presses the physical button.

2.4 The time to display the relevant screen on the driver console shall be within 1 second after the information is sent from the OBD.

2.5 The time to generate voice from TTS text shall be within 2 second when the text message is sent from the OBD.

Part VII Performance and Reliability Requirements

2.6 The voice produced by the driver console system shall be distinguished by the driver under background noise level not exceeding 68 dB(A).

2.7 The performance and reliability* indices of the driver console must be achieved at least 90% at the commencement of the trial run, more than 95% at the commencement of the pilot run, more than 99.5% at the end of the pilot run (subject to review in due course). Also, most important of all, the Contractor shall ensure data integrity at all material times. That is to say, any relaxation in any reliability indices above shall incur no adverse impacts on the full integrity of data.

Remark: * The definition of performance and reliability shall be mutually agreed before trial run and shall include but not limited to the followings: number of faulty equipment, MTBF, number of system failures, data upload/download error. The specified percentages represent the corresponding monthly average.

Part VIII Maintenance & Supporting Tools Requirements

1. The ROM system will be running 24-hours round the clock although from around 2:00am to 5:30am, there will only be less than two hundred overnight running buses operating. However, on some festival days, more overnight running buses will be operating.

2. The Contractor shall provide warranty services and rectify defects of ROM and related system integration. The system maintenance hours and response time are as follows:

1.	On-site support hours	For Pilot Runs: Monday to Sunday: 05:00 – 24:00 Normal office hours after Pilot Run: Monday – Friday: 09:00 – 18:00 Saturday: 09:00 – 23:00
2.	Off-site support hours (24-hour hotline)	If critical problem is found that causes disruption to normal operation, on-site support will be required with support personnel to arrive at the designated site within 2 hours upon request.
3.	Response time after the call	15 minutes – for critical problem on the system that causes disruption to normal operation 2 hours – if the system is still working but with minor faults found.
4.	Turnaround time for repair of Driver Console (<14 days) (Malfunctioned Driver Console will be uninstalled by KMB and sent to the Contractor for diagnosis and repair)	For general maintenance, turnaround time for the Driver Console is 5 working days.

3. The Contractor shall provide development systems, demonstration equipment and diagnostic tool for ROM.

4. The development systems shall be supplied to enable system and equipment software development, and compilation of machine executable codes for production system. The development system shall be ready before pilot run.

5. A complete set of demonstration equipment for the Driver Console shall be provided which shall show the multi-application nature of the system and be used as a testing platform for new applications.

6. A complete set of diagnostic tool for the Driver Console shall be provided to enable any major firmware upgrade that is not feasible to be transmitted over the air, and for on-site diagnosis.

Part IX Documentation and Training Requirements

1. Documentation

1.1 The Contractor shall submit all operation and maintenance manuals in relation to equipment and systems in accordance with the specifications.

1.2 The Contractor shall supply a detailed list of documentation to be supplied together with its quantity for the approval by KMB.

1.3 The documentation shall include but not be limited to the following: overall system manual describing the system configuration, data and file transmission and downloading methods.

1.4 Equipment parts manuals – component layout drawings shall show the location of each individual component used in a unit, sub-unit and plug-in card, marked in its circuit reference number, outline and polarizing details where necessary.

1.5 Circuit diagrams, logic diagrams, and block diagrams for the operation and maintenance of the equipment and system.

1.6 Software documentation

1.6.1 Document for all computer software supplied under the Contract shall be provided.

1.6.2 The documentation shall enable KMB to fully modify and develop the software supplied under the Contract.

1.6.3 The documentation shall include programme descriptions, algorithms, listings, label cross-reference tables, source with inline comments, and object disks, flowcharts, sub-routine hierarchy, methods, criteria of execution and other necessary information. This information shall be supplied prior to system commissioning.

1.6.4 Manuals relating to the operating system of the computer systems shall be provided by the Contractor.

1.7 The Contractor shall provide the following documents during the course of the project to support KMB operations of the ROM System:

Item	Document Name	Purpose	Intended Audience	Format	Language
1	ROM System – Overview of the system	An overview document introducing the overall system, configurations, data transmission and application upgrade mechanisms especially on driver console	Technical Personnel	PDF	English
2	Manuals for OCS				
2.1	ROM (OCS) functional specification	A specification describing the functions of ROM (OCS)	Technical Personnel	PDF	English

Part IX Documentation and Training Requirements

Item	Document Name	Purpose	Intended Audience	Format	Language
2.2	ROM (OCS) design specifications	A specification describing the ROM (OCS) system design	Technical Personnel	PDF	English
2.3	ROM (OCS) program specifications	A specification describing the ROM (OCS) source code modules (programs/scripts or the like)	Technical Personnel	PDF	English
2.4	ROM (OCS) installation manual	Documentation for KMB technical staff to install OCS.	Technical Personnel	PDF	English and Traditional Chinese
2.5	ROM (OCS) user manual	An user documentation for Operation Control Centre Staff to use the ROM (OCS) system	Depot staff	PDF	Traditional Chinese
2.6	ROM (OCS) operations manual	A manual with relevant diagrams for KMB engineers to perform daily operation, technical maintenance and diagnostic of the ROM (OCS) system	Technical Engineers	PDF	English and Traditional Chinese
2.7	ROM (OCS) disaster recovery manual	A manual detailing the procedure of how the ROM (OCS) system may be switched from running on the production servers to the disaster recovery servers.	Technical Engineers	PDF	English
3	Manuals for DCS				
3.1	Driver Console Equipment Parts Manual and Bill of Materials list	A manual describing the equipment parts of the system and Bill of Materials List	Technical Maintenance Personnel	PDF	English
3.2	ROM (DCS) functional specification	A specification describing the functions of ROM (DCS)	Technical Personnel	PDF	English
3.3	ROM (DCS) design specifications	A specifications describing the ROM (DCS) system design	Technical Personnel	PDF	English
3.4	ROM (DCS) program specifications	A specification describing the ROM (DCS) source code modules (programs/scripts or the like)	Technical Personnel	PDF	English

Part IX Documentation and Training Requirements

Item	Document Name	Purpose	Intended Audience	Format	Language
3.5	ROM (DCS) installation manual	Documentation for KMB engineers to install the Driver Console on the vehicle	Technical Engineers	PDF	English and Traditional Chinese
3.6	Driver Console user manual	An simple user documentation for drivers to handle the Driver Console	Drivers	PDF	English and Traditional Chinese
3.7	Driver Console operations manual	A manual with relevant diagrams for KMB engineers to perform technical maintenance and diagnostic for Driver Console	Technical Engineers	PDF	English and Traditional Chinese

The documents shall be reviewed before formal submission and approved by KMB.

1.8 For third party software, the Contractor will provide the third party manuals or pointer for KMB to download the required third party software manuals.

1.9 Hardware and software specifications of ROM (OCS) and ROM (DCS) will be provided. The relevant operation and maintenance manuals will also be included.

1.10 Both hard and soft copies of drawing and diagrams will be included. However, relevant tools for reading the drawing files, e.g. CAD tools, will not be included.

1.11 In addition to the technical specifications mentioned, the Contractor will also build an interface specification for all external and internal system interfaces after system design has finalized. It is expected to be delivered after completion of System Integration Test of ROM (DCS).

1.12 The Contractor will also submit test plans and test reports to KMB for review and acceptance. Regular progress reports will also be submitted to KMB for review and comment.

2. Technology Transfer Training

2.1 KMB I.T. technical staff shall be involved in system development including detailed system design, coding, testing etc. Technology transfer training shall also be provided to the technical staff.

2.2 Technology transfer training shall be provided to KMB I.T. staff so that the system could be maintained by KMB. Training shall include system operation, trouble shooting and system enhancement etc. Details of the training class and schedule shall be mutually agreed before trial run. Sample training schedule is as follows:

Part IX Documentation and Training Requirements

2.2.1 For OCS:

Item	Course description	No of courses*	Participants per course	Total no of participants	Course schedule
1	System Operation & trouble shooting	1	10	10	After user acceptance test (phase 1 pilot run)
2	Maintenance (preventive & corrective)	1	10	10	After user acceptance test (phase 1 pilot run)
3	Design and support courses	2	10	10	After user acceptance test (phase 1 pilot run)

2.2.2 For DCS:

Item	Course description	No of courses*	Participants per course	Total no of participants	Course schedule
1	System Operation & trouble shooting	1	10	10	After user acceptance test (phase 3 pilot run)
2	Maintenance (preventive & corrective)	1	10	10	After user acceptance test (phase 3 pilot run)
3	Design and support courses	2	10	10	After user acceptance test (phase 3 pilot run)

3. User Training

Item	Course description	No of courses	Participants per course	Total no of participants	Course schedule
1	OCS training for trainer	2	10	20	Before pilot run (phase 1) UAT
2	OCS training for trainer	2	10	20	Before pilot run (phase 2)
3	DCS training for trainer	2	10	20	Before pilot run (phase 2)
4	OCS training for all users	2	20	40	Before pilot run (phase 3)
5	DSC training for trainer	5	10	50	Before implementation
6	OCS training for all users	4	20	80	Before implementation

Part X Implementation Plan and Major Milestones

1. Introduction

1.1 Upon signing of contract, KMB will provide a Detailed User and System Interface Requirements document to the Contractor. This document will be used as a basis for discussion for confirmation of KMB requirements. The provision of such document helps to shorten the time required for user requirements collection to be performed by the Contractor. In system design, KMB shall be involved as there are interfaces requirements. The final system design shall be reviewed (at least two rounds shall be catered for) and approved by KMB.

1.2 ROM (OCS) (without driver communication functions) will be delivered first to ensure that the system is stable before drivers are involved in the pilot run of the entire system.

2. Pilot Runs

2.1 There will be three phases of pilot runs. Phase 1 will be for ROM (OCS) (without driver communication functions). This pilot run will be taken place at the Lai Chi Kok Operations Control Centre and at one dispatcher working desk at each of the four depots or bus termini, namely, Kowloon Bay Depot, Shatin Depot and Tuen Mun Depot, and LWB.

2.2 Phase 2 and 3 pilot run will be for ROM (OCS) and ROM (DCS). Phase 2 (ie driver console trial) involves 30 buses having driver console installed on one to two routes. While Phase3 involves a total of 220 buses and around 15 routes.

2.3 The Contractor is required to provide first and second line maintenance services:
The required response time for the first line maintenance service (service hours from 05:00 to 24:00) is as follows:

a. within 1.5 hours – if the equipment goes out of service; or
b. within 2.0 hours – if the equipment is still working but with minor faults found

2.4 Before commencement of the pilot run (Phase 1 and Phase 2), approval of commissioning test, system integration test and user acceptance tests are required.

2.4.1 Commissioning Test

a. The Contractor is required to perform a range of commissioning tests to demonstrate that all items have been correctly installed and that the system operates in every respect in accordance with the specifications. These tests shall be conducted in accordance with the specifications and be subject to the approval of KMB. They shall be performed by the Contractor and witnessed by KMB representative. Any defect, which becomes apparent in the course of these tests, shall be immediately rectified and corresponding remedy properly incorporated into the system by the Contractor at its expense.

2.4.2 System Integration Test

a. After completion and approval of all commissioning tests, the Contractor is required to perform a range of system integration tests to verify that the entire system performs properly with systems of different levels including OCS and DCS, and integration with KMB Data servers. These tests shall be submitted in accordance with the specified programme and be subject to the approval of KMB's appointed representatives. They shall be performed by

the Contractor and witnessed by KMB's appointed representatives. Any defect, which may become apparent during the course of these tests, shall be immediately rectified and corresponding remedy properly incorporated into the system by the Contractor at its expenses. The tests shall include functional and operational tests of the system and of all equipment. System accuracy and performance shall be observed and reported.

2.4.3 User Acceptance Test

a. Upon approval of the system integration test by KMB, User Acceptance Test performed by KMB shall commence. The test shall cover at least two rounds of functional tests, three rounds of system performance tests and two rounds of stress tests. The test plan, detailed schedule and acceptance criteria shall be submitted by the Contractor and approved by KMB before System Integration Test. The Contractor shall assist KMB and provide the necessary tools for KMB to effectively conduct the User Acceptance Tests including but not limited to tools and procedures for the simulation of concurrent user sessions and generation of the required data loading.

2.5 Upon successfully completion and approval of the user acceptance test, Phase 1 and Phase 2 of pilot run, a full scale pilot run (Phase 3) will be commenced. The scale of Phase 3 pilot run will be for 220 buses including the 30 buses during Phase 2 from selected routes. The installation of driver console will be in batches of 30 buses during Phase 2 pilot run until a total of 220 buses is reached at end stage of Phase 3 pilot run.

3. Evaluation

3.1 Evaluation and review on system performance and suitability will be based on the following criteria, on a weekly basis, as soon as the pilot run (Phase 1), pilot run (Phase 2) and full scale pilot run (Phase 3) takes effect:

3.2 Criteria:

a. Data integrity – data completeness among different systems
b. Data accuracy – correctness of data in all functions
c. System performance and reliability- as specified in Part VII
d. System scalability – no performance impact for data growth as specified in Appendix A
e. System functionality – system performs functionally in compliance with this specification and the Detailed User and System Interface Requirements

3.3 Contractor is required to provide the corresponding project management plan, risk management plan and quality assurance plan in support of its proposed technical methodology and approach for KMB endorsement before implementation.

3.4 The Contractor shall submit the corresponding consolidated reports and records to KMB for evaluation and approval.

4. Full Production Implementation

4.1 Implementation shall commence upon KMB's approval of completion of the pilot run.

Part X Implementation Plan and Milestone Dates

4.2 The scope of the implementation shall generally be as follows:

4.2.1 Equipping the full fleet of 3,000 buses with driver consoles by batches at four main depots (Kowloon Bay, Shatin, Tuen Mun and Lai Chi Kok) (the exact number of buses will be confirmed at contract signing stage. The schedule of implementation will be mutually agreed at system integration test).

4.2.2 The detailed methodology of implementation shall be proposed by the Contractor and approved by KMB.

4.2.3 A master implementation programme for full fleet implementation with incorporation of all previous corrections/enhancements of equipment and system design agreed in the pilot runs shall be submitted for KMB's approval immediately after confirmation of a successful system integration test mentioned above. Provision for KMB to adjust and review by the end of trial run and pilot runs should be made.

Part X Implementation Plan and Milestone Dates

5. Milestone Dates

Below are the milestone dates for Contractor's reference:

Milestone Activities	End Date		Remark
	OCS	DCS	
1. Project Plan Submission	28-Feb-2014		
2. User requirements Confirmation	28-Feb-2014		
3. System Design	29-Mar-2014		
4. System Integration Test (phase 1 pilot run)	30-Aug-2014	--	Phase 1 pilot run: all OCS functions except those interfacing with DCS
5. Engineering Prototype	--	30-Aug-2014	
6. Production Prototype	--	30-Sep-2014	
7. User Acceptance Test (phase 1 pilot run)	15-Oct-2014	--	
8. Training for pilot run (phase 1 pilot run)	15-Oct-2014	--	
9. Laboratory Test and Certification	--	31-Oct-2014	
10. Pilot run (phase 1) Completion	11-Dec-2014		
11. System Integration Test (phase 2)	31-Oct-2014		Phase 2 pilot run: 30 buses installed with driver console
12. User Acceptance Test (phase 2)	30-Nov-2014		
13. Training for pilot run (phase 2)	30-Nov-2014		
14. Installation for pilot run (phase2) run (30 buses)	--	31-Dec-2014	
15. Pilot run (phase 2) Completion	31-Jan-2015		
16. Training for pilot run (phase 3)	31-Jan-2015		Phase 3 pilot run: 220 buses installed with driver console
17. Installation for pilot run (190 buses) completion	--	9-Apr-2015	
18. Pilot run (phase 3) Completion	30-Apr-2015		
19. Training for full fleet Completion	31-Jul-2015		
20. Installation Phase 1 – 500 buses installed and commissioned	--	31-Aug-2015	
21. Installation Phase 2 – 1,000 buses installed and commissioned	--	31-Dec-2015	
22. Installation Phase 3 – 1,280 buses* installed and commissioned	--	31-Mar-2016	* Total no. of buses to be confirmed
23. Supply and deliver of 150 sets of Driver Console		31-Mar-2016	Spare driver consoles
24. Project Completion	30-June-2016		

Appendices

Appendix A Estimated Data Volume and DCS Loading

(1) Estimated Data Volume

Item	Data	Estimated Total
1	Number of buses	4,000
2	Number of routes	500
3	Number of bus stops	5,000
4	Number of bus termini	300
5	Number of trips	65,000
6	Number of drivers	9,000
7	Number of staff excluding drivers	3,500
8	Number of text messages/hour	16,000
9	Number of TTS messages/hour	16,000
10	Number of two-way voice communication/hour	16,000

The contractor shall allow for at least 20% increase in data volume in the ROM system for both hardware and software.

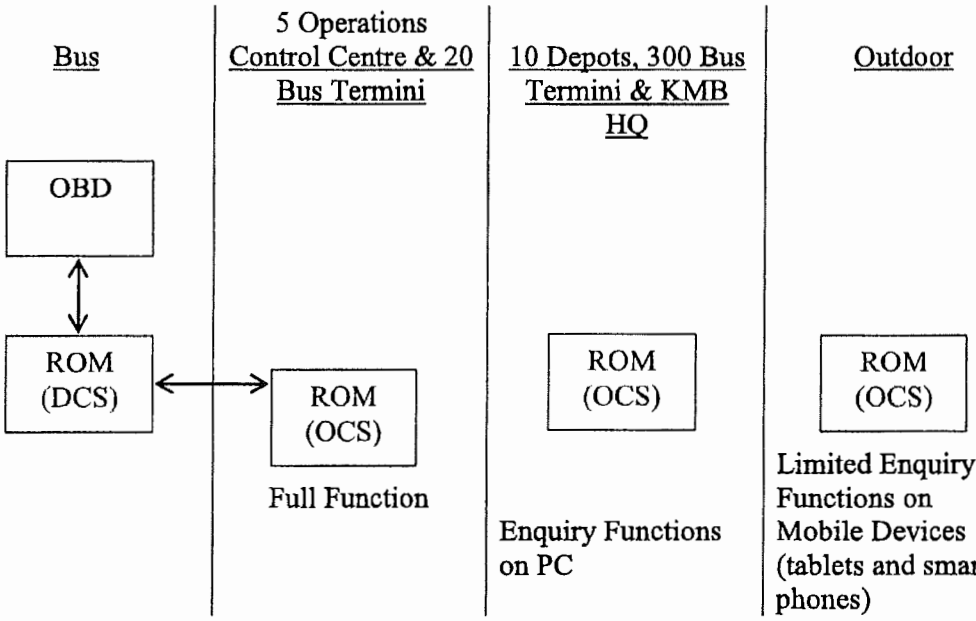
(2) Estimated DCS Loading

	Function	Peak Load	Average Load
ROM (DCS)	Receiving message from ROM (OCS)	20 messages per hour	4 messages per hour
	Receiving driving behavior & bus stationery messages from OBD	1 message per second	1 message per second
	Sending messages to ROM (OCS)	20 messages per hour	4 message per hour
	Receiving message from fare collection device	2 messages per minute	30 messages per hour

Appendix B Possible Bus Service Restoration Options

Scenario	Possible Bus Service Restoration Options							
	Regulation for buses on the road	Regulate/ Even out departure at B/T	Mid-way departure	Assign additional bus	Arrange bus diversion	Line split	Arrange shortworking	Deadrun to opposite B/T
Bus bunching	X	X						
Traffic congestion		X	X	X	X		X	X
Crew/ Vehicle shortage		X	X	X				
Road blockage / closure			X	X	X	X	X	
Mechanical Breakdown		X	X	X				
Bus Accident		X	X	X				

Appendix C Number of Concurrent Users at Different Locations



Number of Concurrent Users using ROM (OCS)

User	Number of Concurrent Users		Location
	Pilot Stage	End Stage	
Bus Drivers	Less than 400	4000	On Bus
Controllers	8	80	Control Centres
Operations Officers and Managers	10	60	Depots and HQ
Inspectors	10	90	Outdoor

Number of Concurrent Users using ROM (DCS)

User	Number of Concurrent Users		Location
	Pilot Stage	End Stage	
Bus Drivers	Less than 400	4000	On Bus

Appendix D Driver Console Requirements Summary

1. Driver Console Unit (DCU)

Installation Location	Somewhere near the upper left-hand side in front of the driver's dash panel
Dimension	About 170 (L) x 135 (W) x 20 (H) mm (with 6/7 inches (152/178 mm) touch-sensitive color monitor)
Color	Grey
Other features and requirement	1. Monitor screen with anti-reflection feature 2. UV protected 3. Industrial grade 4. An on/off mechanical button 5. Soft keypad with the same number of buttons as the mechanical keypad described below. 6. Voice recording function 7. Support 4G mobile network (optional) 8. Monitor to be illuminated by backlight 9. Driver console to be installed and mounted on an adjustable rack 10. Device is colored touch sensitive monitor 11. Monitor to be come with a tiny cover for improving the visibility under the sunlight 12. Power on light for indicating the device is being tuned on automatically when the on-board is working 13. The console shall be mounted and dismounted with a physical key 14. The console shall be embedded with an anti-theft system (separate quote on cost) 15. Buzzers are to be provided for different sound beats under different operational scenarios 16. A tool to adjust the volume and screen brightness

2. Mechanical Keypad

Installation Location	It is installed a bit underneath the left hand side of BC's dash panel
Dimension	About 150 (L) x 65 (W) x 20 (H) mm
Color	Grey
Other features and requirement	1. With 10 buttons, 8 of which for designated function whereas the remaining 2 for expansion in future 2. Keypad to be illuminated by backlight (optional quote) 3. Power on light for indicating the device is being tuned on automatically when the on-board device is working 4. This mechanical keypad is activated if detected by the main unit of the Driver Console

3. Microphone

Installation Location	Somewhere near the right hand side control panel at offside of the BC driving cab window
Dimension	to be provided by the Contractor after choosing a suitable type
Color	Grey/black

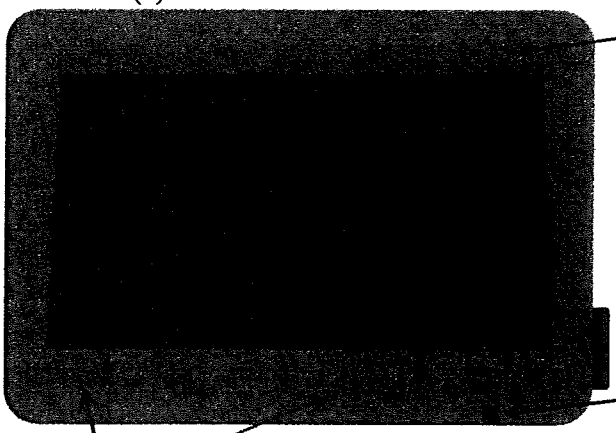
4. Loudspeaker(s)

Installation Location	Somewhere at the ceiling top of the BC's driving cabin at rear right hand side (subject to availability of space of different bus type)
Dimension	to be provided by the Contractor after choosing a suitable type
Color	Grey/black

5. Details please refer to Appendix E for pictorial description and Appendix F for dimension sketch of the Driver Console. The Contractor can use information of these two appendices as a reference but shall propose a Driver Console that fits for the purpose of this contract.

Appendix E Driver Console Pictorial Description

Hardware (1) - Driver Console Main Unit

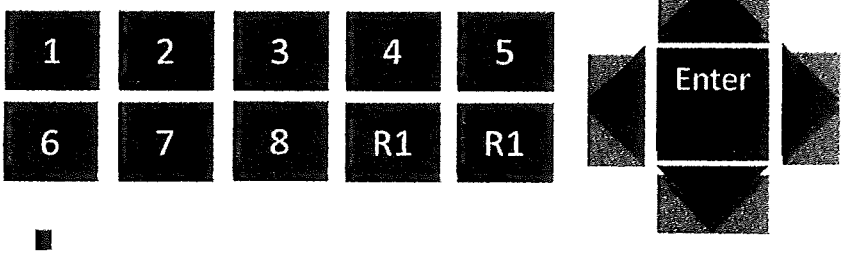


A slight cover/canopy will be fabricated to ensure the visibility of the screen under the strong sunlight

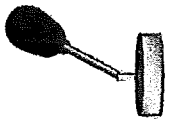
Power on indication light

A couple of buzzers to be provided

Hardware (2) –Detachable Mechanical Keypad
(10 buttons with 2 reserved for future expansion)



Hardware (3) - Microphone

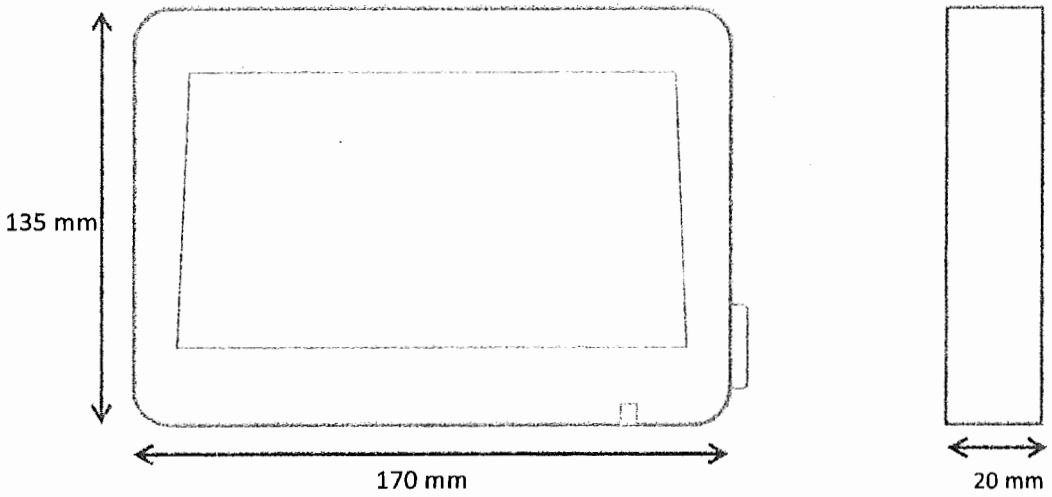


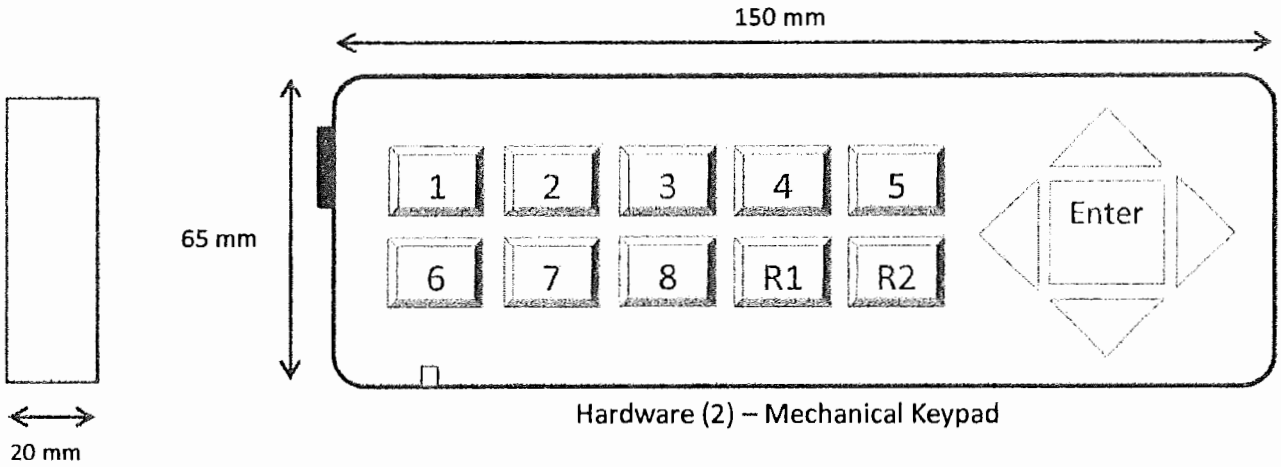
Hardware (4) – Loudspeaker

About 60 x 40 (mm)

Appendix F Driver Console Dimension Sketch

Hardware (1) – Driver Console Unit





Hardware (2) – Mechanical Keypad

The Kowloon Motor Bus Company (1933) Limited
9 Po Lun Street
Lai Chi Kok
Kowloon
HONG KONG

Tender Document

Real-time Operations Management System

Tender Reference:

2013/SUB/TEN/0038

Tender Closing Deadline:
8 November 2013
10:00 AM (HKSAR Time)

Contents

1. Scope of Tender

1.1 Requirement Scope

The scope of this tender is for the design, development, manufacture, supply, delivery, installation, test and commissioning of the Real-time Operations Management System ("ROM") (hereinafter referred to as the "Services") for The Kowloon Motor Bus Company (1933) Limited ("KMB") and Long Win Bus Company Limited ("LWB"), in the Hong Kong Special Administrative Region of the People's Republic of China ("HKSAR"), in accordance with the terms and conditions specified in this document (the "Tender Document"). The term "Tenderer" shall mean the company which submits a tender offer ("Tender Offer") to KMB in response to this tender. KMB shall be responsible for conducting this tender exercise.

1.2 Prime Contractor Role

The Tenderer shall act as the prime contractor who is solely responsible for carrying out the Services for KMB and LWB in accordance with the ROM Specifications Document in the Tender Document on a turnkey basis, and must assume all the obligations, responsibilities and liabilities for carrying out the Services (where applicable) and after sales services.

2. Information for the Tenderer

2.1 Tender Document

2.1.1 This Tender Document consists of:

(a) Information for the Tenderer
(b) Conditions of Tender
(c) Information required from Tenderer
(d) Conditions of Contract for ROM which are provided separately in Microsoft WORD file format
(e) ROM Specifications Document , which are provided separately in Microsoft WORD file format

together with the tender schedules ("Tender Schedules") and the Microsoft EXCEL file to be completed and returned by the Tenderers upon submission of tender.

2.1.2 The successful Tenderer shall be required to enter into formal contract(s) with KMB and/or LWB in accordance with the terms and conditions as stipulated in Clause 5 of this Tender Document ("**Formal Contract(s)**").

2.2 Tender Assessment

2.2.1 Evaluation of Tenders

Tender Offer / proposal shall be reviewed and evaluated in its entirety as a whole and KMB is not bound to accept the lowest price tender or any tender. KMB reserves the rights to:

(a) conduct negotiation with the shortlisted parties after tender evaluation to finalize the Formal Contract(s),

(b) Accept or reject all or any part of any Tender Offer / proposal subject only to the sole and absolute discretion of KMB and LWB.

3. Conditions of Tender

3.1 Tender Closing Deadline

The Tenderer must deliver its Tender Offer to KMB on or before the tender closing deadline as stipulated below. The Tenderer shall clearly mark the tender reference below in all its tender submission by whatever means. Late and incomplete tenders may not be accepted and may be excluded from consideration.

Tender Reference: 2013/SUB/TEN/0038 ("Tender Reference")
Tender Closing Deadline: [**8 November 2013**], 10:00 am HKSAR Time ("Tender Closing Deadline")

3.2 Preparation and Lodgment of Tender

3.2.1 The Tenderer shall prepare and submit its Tender Offer (in hard copy and electronic format) in accordance with the terms and conditions specified in this Tender Document at the Tenderer's own costs.

3.2.2 Tender Offers shall be submitted in two separate packages in the manner as specified below:

(a) **Tender Offer Package A -** to be submitted electronically
The Tenderer shall fill out the Tender Schedule TS-4 provided by KMB in Microsoft EXCEL file format, and encrypt the quotation data to create a text file by using the built in macro functions.
The Tenderer shall deliver this Tender Offer Package A which contains the encrypted quotation text file as described in this Sub-clause (a) to the KMB Purchasing Department by electronic mail at the below designated electronic tender box.

Electronic Tender Box address: tenders@kmb.hk

(b) **Tender Offer Package B** – to be submitted personally
The Tender Offer Package B ("Package B") shall include the completed and duly signed Form of Tender, and all Tender Schedules (other than Tender Schedule TS-4) completed by the Tenderer, and all other relevant supporting documents as specified in Clause 6 in this Tender Document.

Package B shall be packed in sealed envelope(s) clearly marked with the Tender Reference.

The Tenderer must submit personally one full set documents of Package B to be marked with "ORIGINAL" and four (4) sets of these documents to be marked with "COPY" to the tender box which is located at

KMB Purchasing Department
12/F KMB Headquarters
9 Po Lun Street, Lai Chi Kok, Kowloon

The Tenderer shall also submit six (6) complete soft copies (stored at USB or compact disc) of its Package B to be marked with "SOFT COPY". Tenderers are reminded to cross examine all their respective Tender Offer data submitted in different formats and to ensure that all such data are free from typographical errors and contradictions. In case there is any discrepancy between the sets, the Tender Offer marked with "ORIGINAL" shall prevail.

3.3 Enquiries and Addenda

3.3.1 Tenderer's enquiries (if any) must be sent to KMB in accordance with the below instructions no later than 28-October-2013, 5:00 pm HKSAR Time:

(a) Commercial enquiries
To: KMB Purchasing Department
E-mail: kmb.purchasing@kmb.hk

(b) Technical enquiries
To: KMB Information Technology Department
E-mail: cyip@kmb.hk

The Tenderer shall state on the e-mail subject heading "Tender Enquiry - 2013/SUB/TEN/0038 and provide full contact details in the message. Late submission of enquiries may not be entertained.

3.3.2 Addenda may be issued prior to the Tender Closing Deadline for the purpose of clarifying this Tender Document or to effect modification to any of the terms and conditions of this Tender Document. Each addendum issued shall be distributed to each Tenderer via e-mail by the Purchasing Department of KMB from the designated e-mail address stated in the above 3.3.1(a). The Tenderer must acknowledge receipt of each note by confirmation e-mail to the Purchasing Department. For the avoidance of doubt, the addenda issued shall form part of this Tender Document. In case of inconsistency between this Tender Document and the Addenda, the Addenda shall prevail.

3.4 Tenderer to inform itself

The Tenderer shall be deemed to have:

(a) examined the Tender Document and the Addenda (if any) provided by KMB to the Tenderer;

(b) examined all further information relevant to the risks, contingencies and other circumstances having an effect on its Tender Offer which is obtainable by the making of reasonable enquiries; and

(c) satisfied itself as to the correctness and sufficiency of its Tender Offer including tendered prices or lump sums which will be deemed to cover the cost of complying with all obligations under the contract and of all matters and things necessary for the due and proper performance and completion of the supply of the relevant products in accordance with the contract.

3.5 Options

3.5.1 If the Tenderer wishes to make proposals for the application of any alternative component / system which it considers shall result in cost reduction or other advantages to KMB, the Tenderer shall offer to KMB the alternative as an option.

3.5.2 The Tenderer shall clearly declare whether the proposed option involve a material departure from the ROM Specifications Document of KMB and mark
(a) on the relevant Tender Schedules and the Microsoft EXCEL file provided by KMB, the component in question and the relevant cost variance and/or benefit; and
(b) on the statement of compliance with the ROM Specifications Document the full specification of the option offered.

3.5.3 KMB shall have the sole discretion to accept or reject options offered.

3.6 Validity Period

The Tender Offer submitted by the Tenderer shall remain valid for a minimum period of twelve (12) calendar months from the Tender Closing Deadline and shall remain binding and be capable of acceptance at any time before the expiration of that period.

3.7 Notification of Tender Result

The selected Tenderer(s) shall receive a notification within twelve (12) months after the Tender Closing Deadline. Unsuccessful Tenderers shall be notified in writing.

3.8 Effect of Tender Submission

A Tenderer who submits a Tender Offer in response to this Tender Document shall be deemed to have accepted all terms and conditions as stipulated in this Tender Document, and to warrant that
(a) the Tenderer has the necessary resources, experience, expertise and capacity to supply of the relevant products in accordance with the Conditions of Contract mentioned in this Tender Document; and
(b) all the statements, representations, claims and assertions made in its Tender Offer are true and correct.

3.9 Offers of Gratuities

The offer of advantage or other inducement by any person with a view to influencing acceptance of a proposal may be an offence under the Hong Kong Prevention Bribery Ordinance (Chapter 201) and such action will result in the rejection of the proposal.

3.10 Anti-collusion

Tenderers shall not communicate to any person other than KMB and/or LWB (as the case may be) the amount of any tender, adjust the amount of any tender by arrangement with any other person, make any arrangement with any other person about whether or not it or that other person should or should not tender or otherwise collude with any other person in any manner whatsoever in the tendering process. Any breach of or non-

compliance with this clause by the Tenderer shall, without affecting the Tenderer's ability for such breach rules and laws or non-compliance, invalidate its tender.

4. Information required from the Tenderer

The Tenderer must complete the Form of Tender and return it with signature as part of **Tender Package B**.

4.1 Tender Schedules to be completed and submitted by the Tenderer

No.	Title	To be included in
TS-1	Statement of Compliance – Conditions of Contract	Package B
TS-2	Statement of Compliance – ROM Specifications Document	Package B
TS-3	System Hardware Technical Details Sheet	Package B
TS-4	Price Schedule	Package A
TS-5	Implementation Schedule	Package B
TS-6	Specific / Add-value Feature and Limitation of Tender offer	Package B
TS-7	Warranty Schedule	Package B
TS-8	Spares Schedule	Package B
TS-9	Corporate Responsibilities Schedule	Package B

4.2 Other information to be completed and submitted by the Tenderer

No.	Title	To be included in
1	Latest Financial Report	Package B
2	Company Profile (including Certificate of Incorporation and Business Registration Certificate)	Package B
3	Relevant Project Experience	Package B
4	Hardware Specification and Data Sheet	Package B

FORM OF TENDER

Tender Reference:
2013/SUB/TEN/0038

Tender Closing Deadline:
[8 November 2013]
10:00 AM (HKSAR Time)

To: The Kowloon Motor Bus Company (1933) Limited ("KMB")

In consideration that KMB would consider the Tender Offer submitted by us in response to KMB's captioned Tender Document (the "Tender Document"):

1. We hereby confirm that:
   (a) we have read and fully understand the Tender Document, including the terms and conditions stated in clause 3 of the Tender Document; and
   (b) in response to the Tender Document, we hereby submit our Tender Offer to KMB.
2. We shall meet the obligations as described in the Tender Document on the basis set out in our Tender Offer.
3. We warrant to KMB that:
   (a) we have the necessary resources, experience, expertise and capacity to supply the goods and services as described in the Tender Document; and
   (b) all the statements, schedules, representations, claims and assertions made in our Tender Offer are true, accurate and not misleading.
4. We fully understand and agree that:
   (a) KMB shall not be responsible for any cost or expense incurred by us in connection with or arising from the preparation of our Tender Offer or subsequent submissions or representations to KMB; and
   (b) KMB is not bound to accept the lowest price tender or any tender and KMB reserves the rights to conduct negotiations with the shortlisted parties after tender evaluation to finalize the supply contract as it deems appropriate.
5. We undertake to KMB that our Tender Offer, including all the completed Tender Schedules and submitted information, shall remain valid and binding upon us for acceptance for a period of twelve (12) calendar months from the Tender Closing Deadline specified in the Tender Document or as otherwise specified from time to time by KMB (as the case may be).
6. If our Tender Offer is accepted, we agree to enter into a contract with KMB and LWB in respect of the design, development, manufacture, supply, delivery, installation, test and commissioning for the Real-time Operations Management System of the relevant products stipulated in clause 6 based on the Conditions of Contract stipulated in clause 5 the Tender Document and the Tender Schedules submitted in our Tender Offer to KMB.

Signed by:
Company name: _____
Representative's name and title: _____

Signature with chop: _____

Date: _____

Tender Schedule TS-1

Statement of Compliance – Conditions of Contract

The Conditions of Contract is provided by KMB to the Tenderer separately in Microsoft WORD file format.

The Tenderer must state below any areas of non-compliance, in sequence, and its position in relation to any requirement of the Conditions of Contract where the Tenderer considers that it does not comply within its Tender Offer. The Tenderer shall state its explanation as to the reason for each of the non-compliance. Please insert "Nil" in the blanks for full compliance.

To: The Kowloon Motor Bus Company (1933) Limited ("KMB")

We, _____ (*name of the Tenderer*) undertake to KMB that our Tender Offer submitted to KMB in response to this Tender Document fully complies with each and every requirement of the Conditions of Contract with the exception of the departures listed below.

Conditions of Contract stipulated in Clause 5 of this Tender Document

Clause No. and Clause Title	Sub-clause No. (if applicable)	Non-compliance and Explanation

Name of Tenderer

Authorized Signature & Chop

* Please use supplementary sheets if required.

Tender Schedule TS-2

Statement of Compliance – ROM Specifications Document

The ROM Specifications Document is provided by KMB to the Tenderer separately in Microsoft WORD file format.

The Tenderer shall detail its compliance to each requirement stipulated in the ROM Specifications Document of KMB with clear reference to each individual clause number by completing the table below. The Tenderers must submit a response to each individual clause. A broad statement of compliance will not be accepted.

To: The Kowloon Motor Bus Company (1933) Limited ("KMB")

We, _____ (*name of the Tenderer*) undertake to KMB that our Tender Offer submitted to KMB in response to this Tender Document fully complies with each and every requirement stipulated in the ROM System Specifications Document.

The Tenderer's proposal shall describe the solution proposed, the system design and how the system will be implemented. Topics shall include, without limitation, system architecture, technologies adopted, specification of proposed computing equipment (including driver console), system quality description, performance and reliability description, documentation and training, project team structure and implementation plan, and such other topics which the Tenderer would like to draw to the attention of KMB.

ROM Specifications Document stipulated in Clause 6 of this Tender Document

Clause No.	Sub-clauseNo. (if applicable)	Compliance status (Comply / Not comply)	Tenderer's proposal
Part II. Introduction and Scope of Work			
1	1.1-1.5		
2	2.1-2.2		
Part III. Functional Requirements			
1.1	1.1.1		
	1.1.2		
	1.1.3		
	1.1.4		
	1.1.5		

	1.1.6		
	1.1.7		
	1.1.8		
	1.1.9		
	1.1.10		
1.2	1.2.1.a.1		
	1.2.1.a.2		
	1.2.1.a.3		
	1.2.1.a.4		
	1.2.1.a.5		
	1.2.1.a.6		
	1.2.1.a.7		
	1.2.1.b.1		
	1.2.1.b.2		
	1.2.1.c.1		
	1.2.1.c.2		
	1.2.1.c.3		
	1.2.1.d.1		
	1.2.1.d.2		
	1.2.1.e.1.i		
	1.2.1.e.1.ii		
	1.2.1.e.2.i		
	1.2.1.e.2.ii		
	1.2.1.e.2.iii		
	1.2.1.e.2.iv		
	1.2.2.a		
	1.2.2.b		
	1.2.2.c		
	1.2.2.d		
	1.2.3.a		

	1.2.3.b		
	1.2.4.a.1		
	1.2.4.a.2		
	1.2.4.b.1		
	1.2.4.b.2		
	1.2.4.b.3		
	1.2.4.b.4		
	1.2.4.b.5		
	1.2.5.a		
	1.2.5.b		
	1.2.6.a		
	1.2.6.b		
1.3	1.3.1.a		
	1.3.1.b		
	1.3.1.c		
	1.3.2		
	1.3.3		
	1.3.4		
2.1	2.1.1.a		
	2.1.1.b		
	2.1.1.c		
	2.1.2.a		
	2.1.2.b		
	2.1.2.c		
	2.1.2.d		
	2.1.2.e		
	2.1.3.a		
	2.1.3.b		
	2.1.3.c		
	2.1.3.d		

	2.1.3.e		
	2.1.3.f		
	2.1.3.g		
	2.1.3.h		
Part IV. External Interface Requirements			
1	1.1		
	1.2		
	1.3		
	1.4		
	1.5		
	1.5		
	1.7		
	1.8		
	1.9		
	1.10		
	1.11		
2	2.1		
	2.2		
	2.3		
	2.4		
	2.5		
	2.6		
3	3.1		
	3.2		
	3.3		
Part V. System Hardware & Software Requirements			
1.1	1.1.1		
	1.1.2		
1.2	1.2.1		
	1.2.2		
1.3	1.3.1		

	1.3.2		
1.4	1.4.1		
	1.4.2		
	1.4.3		
1.5	1.5.1		
	1.5.2		
	1.5.3		
	1.5.4		
1.6	1.6.1		
1.7	1 to 9		
2	2.1		
	2.2		
3	3.1		
	3.2		
	3.3		
	3.4		
	3.5		
Part VI. System Quality Requirements			
1	1.1		
	1.2		
	1.3		
	1.4		
	1.5		
	1.6		
2	2.1		
	2.2		
	2.3		
	2.4		
	2.5		
3	3.1		
	3.2		

	3.3		
	3.4		
	3.5		
4	4.1		
	4.2		
	4.3		
	4.4		
	4.5		
5	5.1		
	5.2		
	5.3		
6	6.1		
	6.2		
	6.3		
	6.4		
	6.5		
	6.6		
	6.7		
	6.8		
	6.9		
7	7.1		
	7.2		
Part VII. Performance and Reliability Requirements			
1	1.1		
	1.2		
	1.3		
	1.4		
	1.5		
	1.6		
	1.7		
2	2.1		

	2.2		
	2.3		
	2.4		
	2.5		
	2.6		
	2.7		
Part VIII. Maintenance & Supporting Tools Requirements			
1			
2	1 to 4		
3			
4			
5			
6			
Part IX. Documentation and Training Requirements			
1	1.1		
	1.2		
	1.3		
	1.4		
	1.5		
	1.6		
	1.7		
	1.8		
	1.9		
	1.10		
	1.11		
	1.12		
2	2.1		
	2.2		
3	1 to 6		
Part X. Implementation Plan and Major Milestones			
1	1.1		
	1.2		

2	2.1		
	2.2		
	2.3		
	2.4.1		
	2.4.2.a		
	2.4.3.b		
	2.5		
3	3.1		
	3.2		
	3.3		
	3.4		
4	4.1		
	4.2.1		
	4.2.2		
	4.2.3		

Name of Tenderer

Authorized Signature & Chop

* Please use supplementary sheets if required.

Tender Schedule TS-3

System Hardware Technical Details Sheet

The Tenderer shall provide KMB with the technical details of its product(s) to be offered in response to this Tender Document.

The Tenderer shall quote prices in Hong Kong Dollars in the Tender Schedule TS-4 (other currencies are not acceptable) and provide deliverable details for all system hardware as listed in this Tender Schedule.

To: The Kowloon Motor Bus Company (1933) Limited ("KMB")

We, _____ (*name of the Tenderer*) warrant to KMB that all equipment provided by us must be fit for the purpose and must not be obsolete or known to be phasing-out materials, equipment and/or technologies. We further undertake that if during the design phases, there exists any latest technology which better fit for the purpose of the equipment, we shall forthwith submit written proposal(s) to KMB proposing all necessary amendments to the design and specification of the above proposed hardware making use of such latest technologies in the equipment and upon KMB's approval of such written proposal(s). We shall provide the equipment in accordance with such proposal(s) at no additional cost to KMB, and at no compromise of any specification, quality and performance of the submitted design already endorsed by KMB and without any claim against KMB on or in connection with any abortive and/or additional designs as a result thereof.

	Technical Details Sheet Item	Details of Deliverables
A.	**Technical Details of ROM**	
	1 Driver Console	
	1.1 Hardware brand name and model	
	1.2 Brief specification	
	a. CPU with speed	
	b. Operating system	
	c. Memory type & size (industrial grade or not)	
	- RAM	
	- Flash	
	- Others (specify)	
	d. I/O interface	
	e. Speakers	
	f. Microphone	
	g. 4G modem	
	1.3 Dimensions in cm	
	1.4 Weight in gram	
	1.5 Power requirement	
	1.6 Mounting method	
	1.7 Average life	
	1.8 Built-in features	
	1.9 Industrial standard	
	1.10 Operating environment	
	1.11 Mean time between failure	
	1.12 Software development tools	
	1.13 Protocol	
	1.14 Data capacity	
	1.15 Security/ authentication	

Technical Details Sheet Item	Details of Deliverables
1.16 Brand name and model of card reader / writer	
1.17 Monitor type and size	
1.18 Other information	
2 Voice (OCS)	
2.1 Production Machine	
2.1.1 Hardware brand name and model	
2.2.2 Brief specification	
a. CPU with speed	
b. Operating system	
c. Memory type & size	
d. I/O interface	
e. Other features	
2.1.3 Dimensions in cm	
2.1.4 Weight in gram	
2.1.5 Power requirement	
2.1.6 Mounting method	
2.1.7 Average life	
2.1.8 Built-in features	
2.1.9 Industrial standard	
2.1.10 Operating environment	
2.1.11 Mean time between failure	
2.1.12 Software development tools	
2.1.13 Protocol	
2.1.14 Data capacity	
2.1.15 Security/ authentication	
2.1.16 Monitor type and size	
2.1.17 Other information	
2.2 Development Machine	
2.2.1 Hardware brand name and model	
2.2.2 Brief specification	
a. CPU with speed	
b. Operating system	
c. Memory type & size	
d. I/O interface	
e. Others	
2.2.3 Hard disk capacity	
2.2.4 Data capacity	
2.2.5 Software development tools	
2.3 Disaster Recovery Machine	
[Tenderer to insert technical details of others supplied machines, if required]	
3 Web server (OCS)	
3.1 Production machine	
3.1.1 Hardware brand name and model	
3.1.2 Brief specification	
a. CPU with speed	
b. Operating system	
c. Memory type & size	
d. I/O interface	
e. Others	
3.1.3 Dimension in cm	
3.1.4 Weight in gram	
3.1.5 Hard disk capacity	
3.1.6 Data capacity	
3.1.7 Software tools	

Technical Details Sheet Item	Details of Deliverables
3.1.8 · Protocol **3.2 Disaster Recovery Machine** 3.2.1 Hardware brand name and model 3.2.2 Brief specification a. CPU with speed b. Operating system c. Memory type & size d. I/O interface 3.2.3 Dimensions in cm 3.2.4 Weight in gram 3.2.5 Hard disk capacity 3.2.6 Data capacity 3.2.7 Software development tools 3.2.8 Other software used 3.2.8 Security/authentication 3.2.9 Protocol **3.3 Development Machine** 3.3.1 Hardware brand name and model 3.3.2 Brief specification a. CPU with speed b. Operating system c. Memory type & size d. I/O interface 3.3.3 Hard disk capacity 3.3.4 Data capacity 3.3.5 Software development tools 3.3.6 UPS (not less than 30 min.) 3.3.7 Other software used **4. App-Server / Map Server and Messaging Server** **4.1 Production machine** **4.2 Development machine** [Tenderer to insert technical details of others supplied machines, if required] **5 Backup Device** 5.1 Backup equipment brand name and model a. Backup speed b. Data storage size	

Name of Tenderer

Authorized Signature & Chop

* Please use supplementary sheets if required.

Tender Schedule TS-4

Price Schedule

The Tenderer shall fill out this Tender Schedule in the Microsoft EXCEL file separately provided by KMB, and encrypt the quotation data to create a text file by using the built in macro functions. The encrypted quotation text file generated for Tender Schedule TS-4 shall form the **Tender Offer Package A**.

Price Terms:	
Currency:	Hong Kong Dollars (Other currencies are not acceptable.)
DAP KMB Unit Price:	Delivered At Place - KMB designated site(s), including all costs for delivery to KMB's designated site(s) in the HKSAR.

Tender Schedule TS-5

Implementation Schedule

The Tenderer shall propose the anticipated Dates of Completion for each activity correspondingly together with a bar chart type master programme showing all required activities on both OCS and DCS for tender assessment in accordance with the referenced milestone dates as set out below.

The required Dates of Completion of milestone activities are listed as follow:

Milestone Activities	End Date		Remark
	OCS	DCS	
1. Project Plan Submission	28-Feb-2014		
2. User requirements Confirmation	28-Feb-2014		
3. System Design	29-Mar-2014		
4. System Integration Test (Phase 1 pilot run)	30-Aug-2014	--	Phase 1 pilot run: all OCS functions except those interfacing with DCS
5. Engineering Prototype	--	30-Aug-2014	
6. Production Prototype	--	30-Sep-2014	
7. User Acceptance Test (Phase 1 pilot run)	15-Oct-2014	--	
8. Training for pilot run (Phase 1 pilot run)	15-Oct-2014	--	
9. Laboratory Test and Certification	--	31-Oct-2014	
10. Pilot run (Phase 1) Completion	11-Dec-2014		
11. System Integration Test (Phase 2)	31-Oct-2014		Phase 2 pilot run: 30 buses installed with driver console
12. User Acceptance Test (Phase 2)	30-Nov-2014		
13. Training for pilot run (Phase 2)	30-Nov-2014		
14. Installation for pilot run (Phase2) run (30 buses)	--	31-Dec-14	
15. Pilot run (Phase 2) Completion	31-Jan-2015		

16. Training for pilot run (Phase 3)	31-Jan-2015		Phase 3 pilot run: 220 buses installed with driver console
17. Installation for pilot run (190 buses) completion	--	9-Apr-2015	
18. Pilot run (Phase 3) Completion	30-Apr-2015		
19. Training for full fleet Completion	31-Jul-2015		
20. Installation Phase 1 – 500 buses installed and commissioned	--	31-Aug-2015	
21. Installation Phase 2 – 1,000 buses installed and commissioned	--	31-Dec-2015	
22. Installation Phase 3 – 1,280 buses* installed and commissioned	--	31-Mar-2016	* Total no. of buses to be confirmed
23. Supply and delivery of 150 sets of Driver Console		31-Mar-2016	Spare driver consoles
24. Project Completion	30-Jun-2016		

Name of Tenderer

Authorized Signature & Chop

* Please use supplementary sheets if required

Tender Schedule TS-6

Specific / Add-value Feature and Limitation of Tender offer

The Tenderer shall clearly mark in this schedule other value added options, special features and limitation come with its tender offer in response to this Tender Document.

Name of Tenderer

Authorized Signature & Chop

* Please use supplementary sheets if required.

Tender Schedule TS-7

Warranty Schedule

The Tenderer shall specify the warranty offered to KMB as part of its Tender Offer in response to this Tender Document.

[OCS - Software]

Item	Quot Code or Ref no. (if any)	Item description	Warranty	Remark

[OCS - Hardware]

Item	Quot Code. or Ref no. (if any)	Item description	Warranty	Remark

[DCS - Software]

Item	Quot Code. or Ref no. (if any)	Item description	Warranty	Remark

[DCS - Hardware]

Item	Quot Code. or Ref no. (if any)	Description	Warranty	Remark

Name of Tenderer

Authorized Signature & Chop

* Please use supplementary sheets if required.

Tender Schedule TS-8

Spares Schedule

The Tenderer shall quote a 5-year price package for the major ROM hardware components as below,

Quot. Code	Item	Part No.	Description	Fixed Unit Price (HKD)

Price Terms:

Currency: Hong Kong Dollars (Other currencies are not acceptable.)

DAP KMB Unit Price: Delivered At Place - KMB designated site(s), including all costs for delivery to KMB's designated site(s) in the HKSAR.

Name of Tenderer

Authorized Signature & Chop

* Please use supplementary sheets if required.

Tender Schedule TS-9

Corporate Responsibilities Schedule

The Tenderer shall provide a brief account on its up-to-date status of the following:

(1) The Tenderer's awareness on
   (a) environmental care, health and safety, and
   (b) the prevention of use of forced labour and child labour;

(2) Measures taken by the Tenderer to check compliance of its key subcontractors / suppliers with its standards on the above points (1)(a) and (1)(b);

(3) The Tenderer's major social controversies, fines or settlements related to subcontractor / supplier activities.

Name of Tenderer

Authorized Signature & Chop

* Please use supplementary sheets if required.

5. Conditions of Contract

5.1 The successful Tenderer (the "Contractor" as in the Conditions of Contract) shall enter into a Formal Contract with KMB and/or LWB based on the terms and conditions stated in Conditions of Contract which are provided separately by KMB in Microsoft WORD file format.

5.2 The Tenderer shall provide KMB with statements of compliance against each of the Conditions of Contract mentioned in Clause 3 [see details in Tender Schedule TS-1] upon Tender Offer submission.

6. ROM Specifications Document

6.1 The ROM Specifications Document of KMB is provided to Tenderer separately in Microsoft WORD file format.

6.2 The Tenderer shall provide KMB with statements of compliance against each of the ROM Specifications Document mentioned in Clause 3 [see details in Tender Schedules TS-2] upon Tender Offer submission.

- END -

From: Evan Auyang DMD
Sent: Tuesday, October 29, 2013 11:23 AM
To: Catherine Yip IT
Cc: James Louey CD; Eric Lee PUR; Alfred Yuen IT; Chi Man Ho HD; Alice Wong ODO
Subject: RE: ROM extension of tender closing date

Dear Catherine,

I support the team's recommendation on extension. We need to ensure that the most knowledgeable vendors (the ones that have asked for extensions are the ones with real actual experience on ROM) are included.

Tks.

Regards,
Evan Auyang
Deputy Managing Director
The Kowloon Motor Bus Company (1933) Ltd.

From: Catherine Yip IT
Sent: October 29, 2013 11:20 AM
To: Evan Auyang DMD
Cc: James Louey CD; Eric Lee PUR; Alfred Yuen IT; Chi Man Ho HD; Alice Wong ODO
Subject: ROM extension of tender closing date

Dear DMD,

All eight tenderers have attended pre-tender meetings. Three of them have requested to extend the tender closing date.

Item	**Common Queries Raised by Tenderer**	**Tenderers**							
		Autotoll	HP	ICO	INIT	IVU	PCCW	Trapeze	Volvo
1.	Tenderers considered ROM tender as a complicated package. There are many system interfaces and the scope of work includes bus installation which would require negotiation with local sub-contractor. Hence, request for extension of tender return due to lack of time for preparation.				✓ (extend 4 weeks)	✓ (at least extend 3 weeks)		✓ (extend 4 weeks)	

HPur and his team, HIT and myself met yesterday to discuss the issue. It was concluded that an extension of 4 weeks would be appropriate for the following reasons:

(1) Overseas tenderers will not submit their proposals if there is insufficient preparation time

(2) Based on the questions raised by the tenderers at the meeting, the team commented that only one or two local tenderers were well prepared. It is likely that local tenderers will send their requests for extension just a few days before the closing day

The consequences may result in re-tender if only one tenderer submits proposal.

We have thus drafted a new schedule:

Current	Propose
Tender Issue Date: 11-Oct-2013	Tender Issue Date: 11-Oct-2013
28-Oct: 1st round tender queries close	28-Oct: 1st round tender queries close
31-Oct: taskforce response deadline	31-Oct: taskforce response deadline
4-Nov: 1st round queries distribution to tenderers	4-Nov: 1st round queries distribution
	11-Nov: 2nd round queries close
	18-Nov: taskforce response deadline
	20 Nov: 2nd round queries distribution to tenderers
Tender Closing Date: 8-Nov-2013	Revised Tender Closing Date: 6-Dec-2013 *(i.e. 4 weeks extension from 8-Nov-2013)*
Post-tender meeting: 18 to 22-Nov-2013	16-20/Dec/2013
Recommendation to management: 6-Dec-2013	15-Jan-2014* *Due to Christmas and New Year holidays in December, the proposed evaluation period is 6 calendar weeks instead of 4.
Pilot run of OCC: 16/10/14 – 11/12/14	27/11/14 – 8/1/2015

If you have no comment on the proposed new schedule, Purchasing Dept will inform the tenderers for an extension of 4 weeks on tender closing date.
Thank you very much for your attention.

Thanks and regards,
Catherine Yip
Senior Manager, Information Systems
Information Technology Department

From: Virginia Lam PUR
Sent: Friday, December 13, 2013 4:46 PM
To: Catherine Yip IT; Chun Kin Chan SER; Terry Lo TR; Alice Wong ODO; Siu Hung Fung ST
Cc: Kelvin Yeung PUR
Subject: [URGENT] ROM: Tender Assessment
Importance: High

Dear Team,

Further to the four tenders received from Autotoll, INIT, Trapeze and Volvo, for technical proposal, trust you should all have a chance to review the proposal this week.

For financial part, both Kelvin and I are reviewing and clarifying with each tenderer for their quotes, requesting for breakdown on OCS and DCS, etc. Since next week already 16 Dec, we would like to invite you all to discuss on the follow items:

1. Selection of shortlisted tenderers
2. Acceptance criteria to KMB on ROM requirement (as you all know, we have various options in the tender), we would like to discuss and distinguish what are the must items in order to help for preparation of the price comparison and tender assessment
3. Post-tender queries to shortlisted tenderers
4. Post-tender interview dates and arrangement (whether in person? Or teleconference?)

Please advise by return your availability, aim for each next week.

Kelvin: please help to arrange with this meeting, thank you.

Best Regards,
Virginia Lam
Purchasing Department

From: Kelvin Yeung PUR
Sent: Thursday, January 02, 2014 11:09 AM
To: Catherine Yip IT; Chun Kin Chan SER; Terry Lo TR; Alice Wong ODO; Siu Hung Fung ST
Cc: Virginia Lam PUR
Subject: ROM: Post-tender meeting

Dear Team

As discussed, the 4 tenderers are invited to attend the captioned. Please find the schedules as below.

Date & Time	Tenderer	Attendee	Venue	Remarks
13 Jan 2014, 2:00pm – 3:30pm	Autotoll	• Don Chan • Owen Leung • Aileen Ng • Joanna Chan	1201 conference room	In-person
14 Jan 2014, 9:00am – 10:30am	INIT	• Paul Gwynn • Klaus Janke • Michael Kadisch • Keith Rowell • Suvi Hamunen	1201 conference room	In-person
14 Jan 2014, 11:30am – 1:00pm	Volvo	• Jeremy Knight • Emil Christiansen • Jose Talamantes • Amir Skangic • Victor H. Castillo	1201 conference room	In-person & video conference

We are still awaiting Trapeze's reply and have already sent it the reminders. Will keep you updated once it is confirmed.

Thank you for your attention.

Best regards,
Kelvin Yeung
Purchasing Department

Tender: Real-time Operations Management System ("ROM")
Tender Schedule TS-4 (Price Schedule)
Tender No.: 2013/SUB/TEN/0038
Price Schedule Analysis for ROM: OCS + DCS

	Tenderers			
	Autotoll (HK$ 'Millions)	**INIT*** (HK$ 'Millions)	**Trapeze** (HK$ 'Millions)	**Volvo*** (HK$ 'Millions)
Total for OCS (excl. Options):				
Total for DCS (excl. Options):				
Total Tender Price for ROM (OCS+DCS):				
Tender Price Ranking:				

Definition
1. OCS refers Operations-Control Centre System, a backend system with servers.
2. DCS refers Driver Communication System, a two-way communciation system with driver console units to be installed on all KMB/LWB buses with approx. quantity of 3,000.

Background
Tender Scope: The ROM comprises of two modules: OCS and DCS.
The main functions of ROM are to assist dispatchers from Operations Control Centres and Terminus Supervisors from Bus Termini to:
(1) manage bus departures and bus trips;
(2) handle special situations that cause disruptions to bus services; and
(3) communicate with drivers, via voice, test and sound recordings for information and special messages that requires driver's attention and action.

***Remark:**
1. After cost breakdown of OCS and DCS received from Volvo dated 16-Dec, revised figures have been reflected above in red with total tender price remain the same.
2. For INIT, after clarification on POS conversion problem with IT and IA Depts, the quoted prize for INIT had been updated in red, however, further cost breakdown analysis is still on-going.
3. After further clarification on bundled quotes and contract options from Autotoll and Trapeze, the breakdown for both OCS and DCS have also been updated with the total e tender price remain the same.

From: Catherine Yip IT
Sent: Wednesday, March 12, 2014 11:59 AM
To: Alice Wong ODO; Virginia Lam PUR; Siu Hung Fung ST; Chun Kin Chan SER; Terry Lo TR
Cc: Ivan Au PUR; Steve Ching PUR
Subject: RE: ROM: Invitation to pre-meeting: Presentation to SM on 13/3

Dear all,

Most updated one v4. Would Alice pls help to prepare a project and relevant files?
Virginia and I may be a bit late for the meeting. Pls go ahead for discussion if we are late.

Thanks and regards,
Catherine Yip
Senior Manager, Information Systems
Information Technology Department

From: Alice Wong ODO
Sent: Thursday, March 13, 2014 7:24 AM
To: Catherine Yip IT; Virginia Lam PUR; Siu Hung Fung ST; Chun Kin Chan SER; Terry Lo TR
Cc: Ivan Au PUR; Steve Ching PUR
Subject: RE: ROM: Invitation to pre-meeting: Presentation to SM on 13/3

Dear all,

Updated.

Regards,
Alice Wong
Tel [redacted]

From: Alice Wong ODO
Sent: Thursday, March 13, 2014 1:26 PM
To: Catherine Yip IT; Virginia Lam PUR; Siu Hung Fung ST; Chun Kin Chan SER; Terry Lo TR
Cc: Ivan Au PUR; Steve Ching PUR
Subject: RE: ROM: Invitation to pre-meeting: Presentation to SM on 13/3

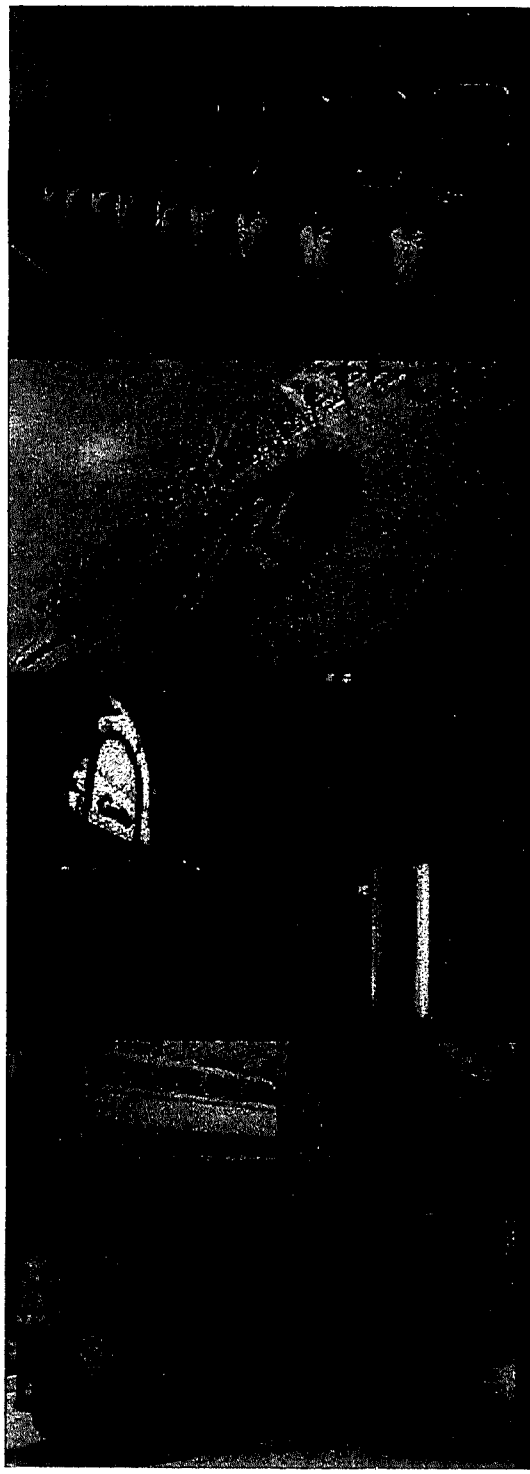
Dear all,

Attached please find the final version for your record.

Regards,
Alice Wong
Tel: [redacted]

九巴服務 日日進步

Real-time Operations Management System (ROM) Project Status Update



Date: 13 March, 2014
Time: 11:00 am

Taskforce members

	Staff	Title
Purchasing	• Virginia Lam	Assistant Manager
ITD	• Catherine Yip	Senior Manager, Information Systems
Depots	• Fung Siu Hung • Alice Wong	Depot GM, Shatin Depot Assistant Manager, Projects, ODO
Traffic	• Terry Lo	Assistant Manager, Operations Projects
Service	• CK Chan	Senior Engineer, Engineering Office

Agenda

2. Review ROM tender progress and tender assessment

3. Cost and benefit analysis

4. The way forward

Overview of two major modules of ROM system

Dispatcher

❶ Operations Control Centre System (OCS)

Function 1 – Bus monitoring

- E-map
- Line chart
- Virtual termini

Function 2 – Departure & incident management

- Alert dispatcher to service irregularity
- Provide service restoration options to dispatcher

Function 3 – Headway management

- Draw dispatcher's attention to bunching problem for intervention

Two-way communi-cations

Instruction

Acknow-ledgment

Bus Captain

❷ Driver Communication System (DCS) – driver console

Function 1 – Sending message to BC via graphics / text / light

- Departure information (e.g. adjusted departure time or diversion)
- Headway information
- Driving indicator

Function 2 – Voice communications

- Direct 2-way voice communications between BC & dispatcher via VoIP
- Text-to-speech voice messages (e.g. black spot ahead)
- Request to record, e.g., report full of passengers at bus stop of other route

Agenda

1. Overview of two major modules of ROM

2. [redacted]

3. Cost and benefit analysis

4. The way forward

Schedule of this tender

Date	Schedule
July to Sept 2013	Expression of Interest issued to 16 interested vendors
10-Oct-2013	Task Force confirmed to shortlist the 8 tenderers for tender
11-Oct-2013	KMB issued the tender document for the supply and installation of Real Time Operations Management System ("ROM")
18-Oct to 25-Oct-2013	Pre-Tender Meeting with 8 tenderers
28-Oct-2013	Tender enquiries deadline
6-Dec-2013	Tender closing deadline by 10:00 AM (Hong Kong Time)
20-Dec-2013	Task Force Meeting to review with shortlisted tenderers for post tender interview
8-Jan-2014	KMB issued post tender queries to shortlisted tenderers
13-Jan to 17-Jan-2014	Post tender interviews with Autotoll, INIT, Trapeze and Volvo
7-Feb-2013	Task Force Meeting to review the technical score card for both Operation Control System (OCS) and Driver Communication System (DCS)
5-Mar-2013	Consolidation of tender assessment and recommendation

Tender assessment and evaluation
Commercial considerations (weighted 50%)

	Autotoll	INIT	Trapeze	Volvo
1) Price index (Max score = 40)				
2) Contract compliances				
3) Financial risks				

Weighted score

Tender assessment and evaluation
Technical considerations (weighted 50%)

	Autotoll	INIT	Trapeze	Volvo
1) Tailor-made system				
2) Compliances to KMB requirements				
3) Make use of KMB's telematics onboard device				
4) Interfaces with KMB systems				
5) Handling of system changes after implementation				
6) Bus operations knowledge				
7) Retrofit experience on KMB buses				
8) Local support				

Weighted score

Conclusion

1. Autotoll obtained the highest total scores ( ) on both commercial and technical side, which is higher than the second score ( ).
2. From commercial point of view:
   - Autotoll complied with most of critical contractual terms and accept on **provision of IP Rights** to KMB.
   - Autotoll also considered as the **lowest financial risk vendor** from the financial assessment by Accounts Department.
3. From technical point of view:
   - Autotoll is the only tenderer **offering a build from scratch solution**. As such, KMB's existing telematics onboard device can be used.
   - **Flexible and cost saving** for further system enhancements.
   - It has experience in **manufacturing driver consoles** and related system, and implementing a number of **map-based projects**. Feasibility in integrating with TD's Traffic Incident Management System is also an added advantage.
   - Weaknesses – It has **limited bus operations knowledge**.

Agenda

1. Overview of two major modules of ROM

2. Review ROM tender progress and tender assessment

[redacted]

4. The way forward

Benefits of OCS vs OCS & DCS for the years from 2014 to 2024 (HK$ million)

	OCS	OCS & DCS
Increase in operating cost		
• Depreciation for the system • OCC setup / renovation • Staff costs • System repair & maintenance fee		
Saving in operating costs		
• Reduce staff cost • Reduce claims & repair cost due to accident (e.g. voice message to alert black spot or map dissemination to prevent wrong turn) • Saving from waybill paper		
Revenue increase		
• Ridership increase due to departure & headway management ➢ Minimize the happening of bus bunching ➢ Ensure schedule adherence of fixed-departure routes ➢ Service restoration instruction from OCC		
Net saving in operating costs before tax		

Other non-quantified benefits from DCS:

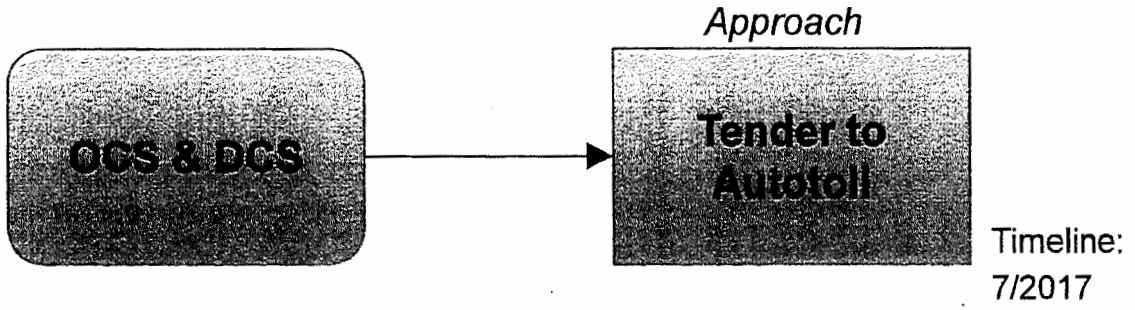
a) Enable real-time communication with BCs for more dynamic and better timeliness in resources re-allocation
b) BCs obtain information of parking location at terminus via DCS for better yard management
c) BCs report spots of high demand via DCS to improve service and increase revenue
d) BCs input statistics via DCS under un-attended operation to collect valuable statistics for planning & operational purposes
e) BCs report bus problem via DCS to transmit details to Service Department for early preparation of maintenance
f) Enable map dissemination to BCs in case of route diversion or when requested by captains to better efficiency & resource utilization

Revisit scope of the project

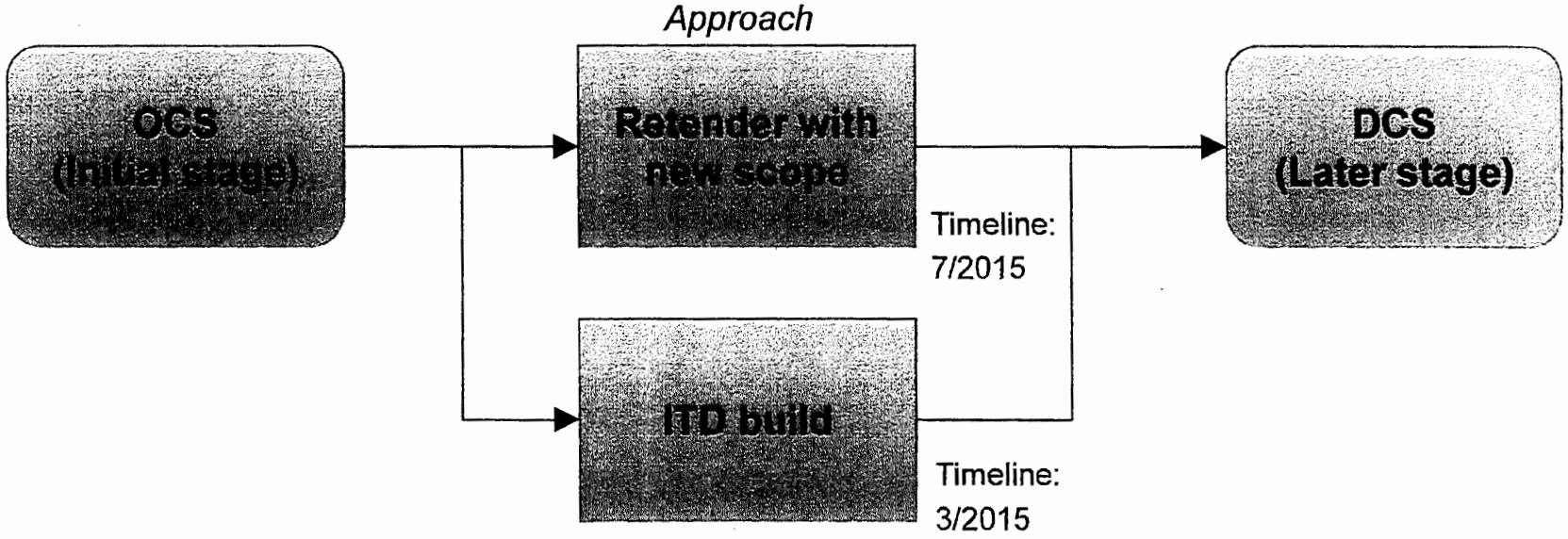
	OCS	DCS
1) **Cost**	Low	High (Installation of driver consoles on the whole fleet)
2) **Benefit**	High	High
3) **Risks**	Low (Crucial functions such as receiving data from bus and ETA are already in place)	High • No off-the-shelf driver console that suits our requirements is available • Bus captains are involved in the workflow change
4) **Implementation timeline**	~ 1 year	~ 3 years

One-off delivery vs phased-delivery

Option 1: One-off delivery



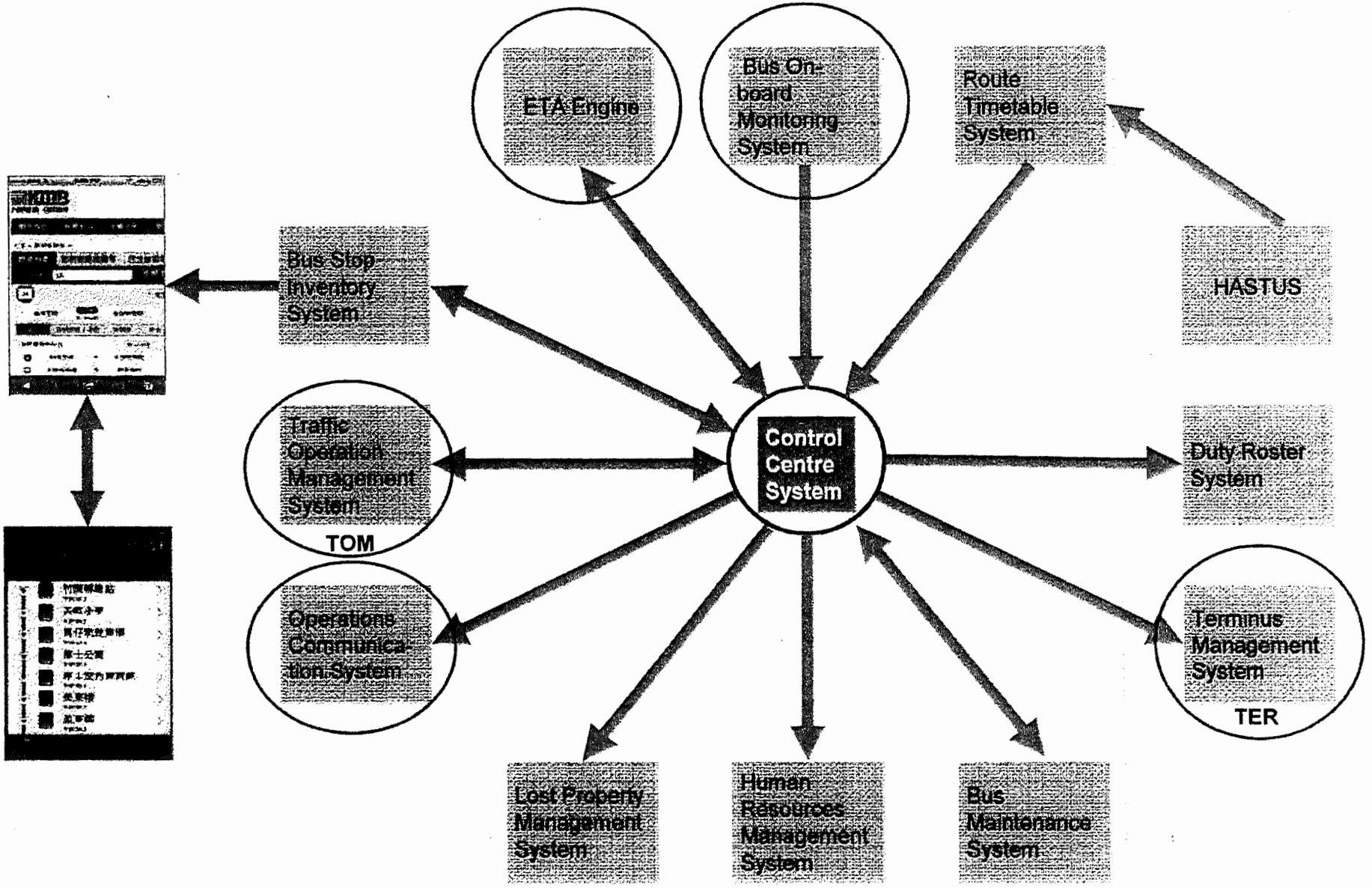
Option 2: Phased-delivery



Agenda

1. Overview of two major modules of ROM
2. Review ROM tender progress and tender assessment
3. Cost and benefit analysis

KMB IT application interfaces



ITD Build vs Retender option

	ITD Build	Retender
1) **Bus operations knowledge**	Extensive and KMB specific	No (from vendors contacted so far)
2) **Systems interfaces handling**	Direct	Indirect
3) **Knowledge transfer (business & KMB systems)**	N/A	~ 2+ months
4) **Technology transfer after system implementation**	Not required	Required
5) **Phased delivery**	Feasible	Not desirable
6) **Truly proprietary system**	Yes	Maybe
7) **System cost (hardware and software)**	~ 40% to 70% of retender cost (assumption of adding 2 contract developers)	NA
8) **Risk**	Low	Medium
9) **Timeline**	3/2015 (1st phase)	Tentative 7/2015 (full functional)

Thank You

Balanced Score Card for tender assessment rating

Balanced Score Card for Real-time Operations Management System (ROM) CONFIDENTIAL

Tender ref.: 2013/SUB/TEN/0038

(Marking Scheme prepared by Purchasing)

	Criteria	Rating	Autotoll	INIT	Trapeze	Volvo	PCCW	ICO	HP	IVU
A. Commercial										
1	**Tender Price**									
	ROM=OCS + DCS									
2	**#Compliance in Conditions of Contract** *(2 (comply); 1 (partial comply); 0 (non-comply))*									
	a) Cl. 4.1 & 4.2									
	b) Cl. 5.4									
	c) Cl. 7.2									
	d) Cl. 15.2									
	e) Cl. 16.2									
	Maximum marks: 50									
	Total:									
3	**Risks**									
	a) Financial position **(-0 (no risk), -1 (low risks), -3 (medium risks), -5 (high risks))**									
	Total of A (after risk factors)									
B. Technical *(Weighted Score: Summary of OCS (50%) + Summary of DCS (50%))*										
1	**Technical Score** ** *(refer to table of summary for OCS and DCS as stated below*									
	Total of B (after risk factors)									
	Total Score (A+B):									

 # Remark: 2(a) Cl. 4.1 Bank guarantee/Cl. 4.2 Parent Company Guarantee; 2(b) Cl. 5.4 Liquidated damages; 2(c) Cl. 7.2 System warranty-10 yrs undertaking; 2(d) Cl. 15.2 Contractor's liability; and 2(e) Cl. 16.2 Insurance against Injury to Persons and Damage to Property

Balanced Score Card for OCS

Summary of Tender Assessment– Real-time Operations Management System (OCS) 7/2/2014

Operations Control Centre System (OCS)

(Marking Scheme prepared by the Technical Team)

Vendor Name	Autotoll	INIT	Trapeze	Volvo	PCCW	ICO	HP	IVU
Part 1: OCS *(Total in Part 1: weighted 50% of ROM)*								
(a) Specification meets KMB's Functional Requirements **Maximum Mark: 25**								
(b) Specification meets KMB's Non-Functional Requirements **Maximum Mark: 15**								
(c) Proposed Solution **Maximum Mark: 6**								
(d) Other Value-added features **Maximum Mark: 2**								
(e) System Limitations **Maximum Mark: 2**								
Sub-total:								
*Risk Rating (-1 to -10)**								
****Total of Part 1:**								

****Project risks: -10 = highest risk; -1 = lowest risk***

Project risks: (1) Able to complete the project (2) Able to meet project timeline (3) Able to integrate systems (OBD, KMB's systems/databases, Octopus system) (4) Technical know-how

Balanced Score Card for DCS

Summary of Tender Assessment– Real-time Operations Management System (DCS) 7/2/2014

Driver Communication System (DCS)

(Marking Scheme prepared by the Technical Team)

Vendor Name	Autotoll	INIT	Trapeze	Volvo	RCCW	ICO	HP	MJ
Part 2: DCS *(Total in Part 2: weighted 50% of ROM)*								
(a) Specification meets KMB's Functional Requirements **Maximum Mark: 18**								
(b) Specification meets KMB's Non-Functional Requirements **Maximum Mark: 17**								
(c) Proposed Solution **Maximum Mark: 5**								
(d) Proposed Product **Maximum Mark: 5**								
(e) Other Value-added features **Maximum Mark: 3**								
(f) System Limitations **Maximum Mark: 2**								
Sub-total:								
*Risk Rating (-1 to -10)**								
****Total of Part 2:**								

****Project risks: -10 = highest risk; -1 = lowest risk***

Project risks: (1) Able to complete the project (2) Able to meet project timeline (3) Able to integrate with OBD (4) Able to integrate with automatic fare collection system (5) Able to manufacturing of brand new driver console (6) Technical know-how of on-board voice communication (TTS, VoIP)

From: Procurement
Sent: Wednesday, April 02, 2014 3:47 PM
To: owen.leung@autotoll.com.hk
Subject: <Autotoll> KMB Tender Ref: 2013/SUB/TEN/0038: Tender for The Real-time Operations Management System (ROM) Project

Dear Owen,

Thank you for your offer dated 6 December 2013 for the captioned Tender.

We regret to inform you that after rounds of review and evaluation of the received tender offers, KMB had decided not to award the contract for this project "Real-time Operations Management System" to any tenderer in this scope at this moment.

In this regard, we would like to thank you for all your effort put on this Tender submission. We look forward to working with you in coming projects soon.

Best Regards,
Virginia Lam
Purchasing Department | KMB
Tel.: [redacted]

From: Procurement
Sent: Wednesday, April 02, 2014 3:48 PM
To: shamunen@initag.com
Subject: <INIT> KMB Tender Ref: 2013/SUB/TEN/0038: Tender for The Real-time Operations Management System (ROM) Project

Dear Suvi,

Thank you for your offer dated 6 December 2013 for the captioned Tender.

We regret to inform you that after rounds of review and evaluation of the received tender offers, KMB had decided not to award the contract for this project "Real-time Operations Management System" to any tenderer in this scope at this moment.

In this regard, we would like to thank you for all your effort put on this Tender submission. We look forward to working with you in coming projects soon.

Best Regards,
Virginia Lam
Purchasing Department | KMB
Tel.: [redacted]

From: Procurement
Sent: Wednesday, April 02, 2014 3:49 PM
To: Hans.Blankestijn@trapezegroup.com
Subject: <Trapeze> KMB Tender Ref: 2013/SUB/TEN/0038: Tender for The Real-time Operations Management System (ROM) Project

Dear Hans,

Thank you for your offer dated 6 December 2013 for the captioned Tender.

We regret to inform you that after rounds of review and evaluation of the received tender offers, KMB had decided not to award the contract for this project "Real-time Operations Management System" to any tenderer in this scope at this moment.

In this regard, we would like to thank you for all your effort put on this Tender submission. We look forward to working with you in coming projects soon.

Best Regards,
Virginia Lam
Purchasing Department | KMB
Tel. [redacted]

From: Procurement
Sent: Wednesday, April 02, 2014 3:48 PM
To: emil.christiansen@volvo.com
Cc: V00047 <jeremy.knight@volvo.com>
Subject: <Volvo> KMB Tender Ref: 2013/SUB/TEN/0038: Tender for The Real-time Operations Management System (ROM) Project

Dear Emil,

Thank you for your offer dated 6 December 2013 for the captioned Tender.

We regret to inform you that after rounds of review and evaluation of the received tender offers, KMB had decided not to award the contract for this project "Real-time Operations Management System" to any tenderer in this scope at this moment.

In this regard, we would like to thank you for all your effort put on this Tender submission. We look forward to working with you in coming projects soon.

Best Regards,
Virginia Lam
Purchasing Department | KMB
Tel. [redacted]

The Kowloon Motor Bus Co. (1933) Ltd.

MEMORANDUM

To :	**Distribution**	**Date :**	**23 June 2014**
From :	**ROM Project Leader** **Information Technology Department**	**Ref. :**	**MM/ADD/14007**

Real-time Operations Management System (ROM) Project Status

Development of the ROM project was officially launched on 12 May 2014. Detail requirement collection and functional design are in progress. Project team targeted to finalise the user requirement specification by the end of June 2014 and release the first draft of System Proposal by the end of July 2014.

Should you have any queries, please feel free to contact me at [redacted].

Thank you for your attention.

Chung-lim Chan

Distribution
- Operations Director
- Head of Traffic Department
- Senior Manager, Operations, Kowloon Bay Depot
- Senior Manager, Operations, Lai Chi Kok Depot
- General Manager, Shatin Depot
- General Manager, Tuen Mun Depot
- General Manager, Long Win Bus Co. Ltd.

cc Ms. Alice Wong (ODO Office)
Mr. Terry Lo (Traffic Department)
Mr. Yik-sing Kwok (Kowloon Bay Depot)
Mr. Ken Wong (Lai Chi Kok Depot)
Mr. Kelvin Yeung (Tuen Mun Depot)
Mr. Jeff Poon (Long Win Bus Co. Ltd.)
Ms. Catherine Yip (Head of Information Technology Department)
Mr. Michael Lee (Principal Systems Analyst, Information Technology Department)

The Kowloon Motor Bus Co. (1933) Ltd.

MEMORANDUM

To : Distribution **Date : 18 August 2014**

From : ROM Project Leader **Ref. : MM/ADD/14011**
Information Technology Department

Real-time Operations Management System (ROM) Project Status

The Requirement Specification of ROM version 1.0 has been signed back from all users in July. Project Team has also worked out the first draft of ROM System Proposal with users in July.

In August, Project team and users will still be working on the System Proposal and target to finalise it before mid September.

Should you have any queries, please feel free to contact me at [redacted]

Thank you for your attention.

Grace (for Wm)
Chung-lim Chan

Distribution
Operations Director
Head of Traffic Department
Senior Manager, Operations, Kowloon Bay Depot
Senior Manager, Operations, Lai Chi Kok Depot
General Manager, Shatin Depot
General Manager, Tuen Mun Depot
General Manager, Long Win Bus Co. Ltd.

cc Ms. Alice Wong (ODO Office)
Mr. Terry Lo (Traffic Department)
Mr. Yik-sing Kwok (Kowloon Bay Depot)
Mr. Ken Wong (Lai Chi Kok Depot)
Mr. Chun-ho Lo (Shatin Depot)
Mr. Kelvin Yeung (Tuen Mun Depot)
Mr. Jeff Poon (Long Win Bus Co. Ltd.)
Ms. Catherine Yip (Head of Information Technology Department)
Mr. Michael Lee (Principal Systems Analyst, Information Technology Department)

THE KMB INFORMATION TECHNOLOGY DEPARTMENT

SYSTEM REQUIREMENTS SPECIFICATION

For

REAL-TIME OPERATION MANAGEMENT SYSTEM

(ROM)

DOCUMENT NO.

KDP-ROM-RS001.0

	Prepared by Project Team	Reviewed and Approved by Principal Systems Analyst
Name	CHAN CHUNG LIM	Michael Lee
Signature	Lim	
Date	3/7/2014	3/7/2014

Acknowledgement

The System Requirements Specification is prepared by the ROM Project Team of the Information Technology Department. Any query about the contents of this specification may be forwarded to

Mr. Chan Chung Lim	(Project Leader)	Ext. [redacted]
Ms. Grace Woo	(Assistant Project Leader)	Ext. [redacted]

We would like to take this opportunity to thank the following colleagues for their full support during user requirements collection:

Mr Fung Siu Hung (Shatin Depot)

Ms Alice Wong (OD Office)

Mr Terry Lo (Traffic Department)

Mr Yik Sing Kwok (KB Depot)

Mr Johnny Liu (KB Depot)

Mr Ken Wong (LCK Depot)

Mr Tony Wong (LCK Depot)

Mr Terrence Tam (ST Depot)

Mr Kelvin Yeung (TM Depot)

Mr Kenneth Ng (TM Depot)

Mr Kelvin Mak (Long Win)

Introduction

This System Requirements Specification (Document No. KDP-ROM-RS00.1) describes the requirements of the Real-Time Operation Monitoring System (ROM) collected from users.

Chapter 1 states the system goals and objectives and describes what the system is required to do to meet the system requirements. General requirement and performance expectation are also stated.

Chapter 2 lists out the system activities in more details. Specific goals and objectives, activity outlines, input/output requirements and general consideration of each activity are stated as a foundation for the design of the future system.

Users should read this document carefully and sign off to confirm that it is a formal statement of their requirements.

Due to very tight project schedule, the Project Team has to assume that users with no feedback by **4th July 2014** accept the System Requirements Specification and no change to the requirements will be handled thereafter.

Table of Contents

1. GENERAL OVERVIEW

1.1 Application Area Goals and Objectives

- Strengthen the dispatchers in handling bus service disruption
- Improve operational efficiency so as to provide the best bus service to the public
- Standardise the working procedure in daily bus operation

1.2 Systems Goals and Objectives

- Streamline the bus operation
- Ensure schedule adherence to elevate customer satisfaction
- Attain optimal resources utilisation

1.3 Activities Definitions

1.3.1 Real-time bus monitoring

Provide an overview of the operating status to dispatchers so that preventive and remedy actions can be taken in a timely manner

1.3.2 Departure management

Assist dispatchers in resources utilisation and departures regulation

1.3.3 Diversion management

Assist dispatchers in handling incidents which involve road diversion. It also provides a framework for incident management in future.

1.3.4 Communication management

Provide an efficient and convenient way for communication among bus captains, dispatchers, outdoor staff and other concerned parties

1.4 General Considerations

1.4.1 ROM will be running on 7 days x 24 hours basis.

1.4.2 ROM should be running in Control Centres and at some major termini.

1.4.3 User interface can be toggled between Chinese and English

1.4.4 User interface must be simple and straight-forward

1.4.5 ROM should be scalable so that future expansion can be carried out conveniently

1.4.6 Data security, accuracy and timeliness should be guaranteed in the system interface between ROM and KMB existing system

1.4.7 System design should cater for yard management which is to be handled by ROM in future

1.5 General Performance Measurement

1.5.1 Accuracy

- System should ensure data accuracy and timeliness. No operational fault should be due to data inaccuracy or latency

1.5.2 Capacity

- System performance should not be hampered by 200% increase of normal transaction volume

1.5.3 Efficiency

- Average no. of buses managed by a dispatcher should be higher than the average no. of buses managed by a terminus supervisor

1.5.4 Quality

- System deployment should be transparent to end user
- Quick response time :
  - Simple updating function – under 5 seconds (e.g. modify a departure time)
  - Complicated updating functions – under 30 seconds (e.g. Automatic departure time regulation)
  - Simple enquiry functions – under 5 seconds
  - Complicated enquiry functions – under 10 seconds
  - Simple reports – under 10 seconds
  - Complicated reports – under 1 minute

1.5.5 Flexibility

- The system design should be able to handle mass route re-organisation under short notice
- The system should be able to run at control centre, terminus or office.

1.5.6 Security

- No unauthorised user can break into the system
- A user can only perform the tasks up to his/her authority
- All user activities should be traceable

1.5.7 Reliability

- No single point of failure
- Disaster recovery plan should be available and well-tested before production of the system

2. ACTIVITIES DESCRIPTION

2.1 Real-time Bus Monitoring

2.1.1 Goals and Objectives

2.1.1.1 To give dispatchers an overiw of the bus operating status so that irregularity can be alerted and remedy action be taken in a timely manner

2.1.1.2 To maximize the capacity of dispatchers with the aid the monitoring functions

2.1.2 Scope and Boundaries

2.1.2.1 Enable users to view the current status of a set of buses, bus termini and bus stops on digital maps or on a line chart

2.1.2.2 The set of buses, bus termini and bus stops can be selected in a flexible and configurable way

2.1.2.3 Users should be able to conveniently switch on or off the information of a bus on map/line chart such as the bus number, running number, minute(s) ahead or behind schedule, the crew duty and bus captain operating the trip, speed etc

2.1.2.4 Users should be able to conveniently switch on or off the information of a bus terminus on map/line chart such as the ETA of each route of the terminus, the spare resources at the terminus etc

2.1.2.5 Users should be able to conveniently switch on or off the information of a bus stop on map/line chart such as last arrival time and ETA of each route etc

2.1.2.6 System should be able to alert the buses going off-track of its operating route

2.1.3 Input requirements

Spatial data

2.1.3.1 Base maps covering at least the following layers:

- Buildings
- Coastaline
- Country park
- District
- Estate
- Flyover
- Football playground
- Footbridge
- Railway stations and lines (including tram and peak tram)
- Park
- Pavement
- Pavement barrier
- Pier
- Placename & village point
- Swimming pool
- Reservoir
- Road centreline and road network
- Sea
- Street

- Tennis court
- Tunnel
- Traffic rules

2.1.3.2 ROM users should be able to maintain spatial data in ROM including but may not be limited to :

- Bus routing
- Bus terminus location
- Bus stop location

2.1.3.3 Able to input both gazetted and actual version of the spatial data

2.1.3.4 Able to input changes in advance

Interface from other systems

2.1.3.5 Real-time telematics information (BTS)

2.1.3.6 Estimated time of arrival of buses at stop level (BOM)

2.1.3.7 Bus operation schedule (Hastus)

2.1.3.8 Textual data of bus routing and bus stop location (BSI)

2.1.4 Output requirements

2.1.4.1 The map view and line chart should auto-refresh at a configurable interval

2.1.4.2 Use different colours/icons to illustrate buses of specific conditions such as not in service, buses of lost GPS location, etc

2.1.4.3 Can easily toggle between the map view and the line chart

Specific for map view

2.1.4.4 The base maps should be down to the scale of 1:2000

2.1.4.5 Users can conveniently configure which map layers should be visible or invisible

2.1.4.6 Multiple routes shown be shown in different colours on map

2.1.4.7 Road segments where buses are slow-moving should be high-lighted

2.1.4.8 Able to play back the movement of a set of buses on map

2.1.4.9 Able to retrieve a past snapshot of the map view

2.1.4.10 Allow to print out the whole or a part of the map

2.1.4.11 Linkage to Google street view

2.1.4.12 Linkage to CCTV cameras provided by Transport Department

Specific for line chart

2.1.4.13 The spacing between the stops on a line chart can be proportional to the actual distance apart or at equi-separation

2.1.4.14 Allow to hide a number of stops on a line chart

2.1.5 General Considerations

2.1.5.1 After the smooth operation of ROM, the spatial data maintained in ROM should be considered to serve as a source for other GIS systems of KMB:

2.1.5.1.1 Passenger Enquiry System (PEQ)
2.1.5.1.2 Mapping system of Planning & Development Department (MAP)
2.1.5.1.3 KMB web site and mobile app

2.2 Departure Management

2.2.1 Goals and Objectives

2.2.1.1 To improve bus service by atttaining a high level of schedule adherence

2.2.1.2 To optimize the utilization of spare resources

2.2.1.3 To control the lost trip percentage

2.2.2 Scope and Boundaries

2.2.2.1 Departure time regulation

2.2.2.1.1 The operating schedule will be passed from Hastus to ROM and TOM before the operating day

2.2.2.1.2 Duty Dispatch Office will make changes in TOM before or on the operating day, such as:

- Cancel duties due to crew or bus shortage
- Swap bus captains among duties
- Swap buses among duties
- Add temporary duties if spare resources are available

2.2.2.1.3 ROM should enable dispatchers to refine the departure schedule prior to daily operation according to the updates in TOM

2.2.2.1.4 Regulation may also be required during the daily operation as a consequence of bus breakdown, traffic accident or bus captain who quitted duty

2.2.2.1.5 The regulation method can be saved as a template for re-applying in future under similar situation

2.2.2.2 Departures monitoring

2.2.2.2.1 Departures delayed or potentially delayed should be brought to the attention of dispatchers

2.2.2.2.2 System should inform the dispatcher other departure(s) affected by the delay

2.2.2.2.3 Delayed departures should be displayed in descending order of severity which is dependent on factors like:

- Whether the departure is the first/last departure of the day (by direction)
- Whether the route is a BPS route
- The departure frequency at the time slot
- The average occupancy of the route at the time slot

2.2.2.2.4 The acknowledgement status and the regulation arrangements for the delayed departures should be shown

2.2.2.2.5 A dispatcher can conveniently configure the set of routes to be monitored by him/her

2.2.2.3 Redeployment management

2.2.2.3.1 Provide aids for dispatchers to re-allocate resources among routes in response to service disruption

2.2.2.3.2 Redeployment arrangement should take into account factors like average occupancy, departure frequency, lost trip percentage of the concerned routes

2.2.2.3.3 Redeployment arrangement must comply to a set of constraints such as bus captain qualification, bus captains working guideliines compliance, overnight parking location compliance etc

2.2.3 Input requirements

Input in ROM

2.2.3.1 Bus breakdown information

2.2.3.2 The attendance and responsible routes of the dispatchers

Interface from other systems

2.2.3.3 Lost trip statistics (TER)

2.2.3.4 Average carriage per trip by time intervals (CSS)

2.2.3.5 Real-time telematics information (BTS)

2.2.3.6 Estimated time of arrival of buses at stop level (BOM)

2.2.3.7 Bus operation schedule (Hastus)

2.2.3.8 Duty dispatch information (TOM)

2.2.3.9 Bus routing information (BSI)

2.2.3.10 Traffic accident information (OCM)

2.2.3.11 Duty Roster System (DRS)

2.2.4 Output requirements

2.2.4.1 The departures which need dispatcher's attention would be shown on a large TV and at the dispatcher's desktop

2.2.5 General Considerations

2.2.5.1 Dispatcher can use the communication methods mentioned in 2.4 to inform the regulation results to bus captains

2.2.5.2 Audit trail must be provided for all the departure regulation activities

2.2.5.3 Departure management in ROM should also cater for operation under typhoon situation. ROM should assist in managing the bus withdrawal on advent of typhoon and service restoration after typhoon.

2.3 Diversion Management

2.3.1 Goals and Objectives

2.3.1.1 Improve the timeliness in handling an incident which involves road diversion

2.3.1.2 Build the framework for incident management by ROM in future when driver console is in place

2.3.2 Scope and boundaries

2.3.2.1 Impact analysis on a planned or un-planned road diversion

2.3.2.2.1 Provide convenient ways for user to specify the roads blocked due to an incident
2.3.2.1.2 Identify the bus routes affected
2.3.2.1.3 Identify the buses trapped in the incident spot
2.3.2.1.4 Identify the buses on the way to the incident spot

2.3.2.2 Recommendations on the diversion method

2.3.2.2.1 System should recommend the diversion method(s) under the road blockage
2.3.2.2.2 User may modify the diversion method recommended by the system or directly draw the diversion path on map manually
2.3.2.2.3 The diversion methods can be saved as templates for condiseration in future under similar situation

2.3.3 Input requirements

Spatial data

2.3.3.1 As mentioned in 2.1.3

Interface from other systems

2.3.3.2 Real-time telematics information (BTS)

2.3.3.3 Estimated time of arrival of buses at stop level (BOM)

2.3.3.4 Bus operation schedule (Hastus)

2.3.3.5 Duty dispatch information (TOM)

2.3.3.6 Bus routing information (BSI)

2.3.4 Output requirements

2.3.4.1 A sketch of the gazetted routing (蛇仔圖) of all routes

2.3.4.2 A sketch of diversion method (蛇仔圖) for the affected routes

2.3.5 General Considerations

2.3.5.1 Dispatcher should be able to use the communication methods mentioned in 2.4 to inform the diversion arrangement to bus captains

2.3.5.2 Audit trail must be provided for the diversion management activities

2.4 Communication Management

2.4.1 Goals and Objectives

2.4.1.1 To improve the efficieny in the communication among dispacthers, bus captains, outdoor staff and other user parties

2.4.1.2 Build the framework for incident management by ROM in future when driver console is in place

2.4.2 Scope and boundaries

2.4.2.1 Phone call communication

2.4.2.1.1 ROM should provide functions which assist dispatchers in telephone communication with bus captains

2.4.2.2 Disseminate message to bus captains via TER

2.4.2.2.1 Dispatcher should be able to input message on the map view or line chart to disseminate to selected bus captain(s) via TER

2.4.2.2.2 Dispatcher should be informed of any message failed to disseminate

2.4.3 Input requirements

Interface from other systems

2.4.3.1 Phone number of the bus captains (TOM)

2.4.3.2 Bus operation schedule (Hastus)

2.4.4 Output requirements

2.4.4.1 Map view and line chart should also show the messaging details

2.4.5 General Considerations

2.4.5.1 Audit trail must be provided for the message dissemination activities

GLOSSARY

BPS
Stand for Best Practise Scheduling for bus operation. Generally bus hopping would be employed to a large extent under this practise

Dispatcher
The person who operates at the control centre and takes the current responsibilities of a terminus supervisor

BOM
Bus Onboard Management System of KMB

BSI
Bus Stop Inventroy System of KMB

DRS
Duty Roster System of KMB

OCM
Operations Communication Management System of KMB

ETA
Estimated time of arrival of the bus at a specific location

TER
Terminus Management System of KMB

TOM
Traffic Operation Management System of KMB

The Kowloon Motor Bus Co. (1933) Ltd.

MEMORANDUM

To : **Distribution** **Date :** **18 November 2014**

From : **ROM Project Leader**
Information Technology Department **Ref. :** **MM/ADD/14016**

Real-time Operations Management System (ROM) Project Status

All users have signed back the System Proposal in October. ROM project is now at the implementation stage. Project Team is building the system according to the design illustrated in the System Proposal and the progress is on schedule.

Digital Map sourcing is in progress. We are waiting for the quotation from 2 selected vendors.

We figured out that ROM need to interface with 13 existing systems. We are about to issue System Change Request to those interface projects where system modification is required for the interface.

We plan to invite users to have an early inspection of the most critical functions of ROM so as to smoothen the next stage - User Acceptance Test.

Should you have any queries, please feel free to contact me at [redacted]

Thank you for your attention.

Lim

Chung-lim Chan

Distribution
Operations Director
Head of Traffic Department
Senior Manager, Operations, Kowloon Bay Depot
Senior Manager, Operations, Lai Chi Kok Depot
General Manager, Shatin Depot
General Manager, Tuen Mun Depot
General Manager, Long Win Bus Co. Ltd.

TO : Head of Information Technology Department
FROM : Operations Director's Office

APPROVAL OF SYSTEM PROPOSAL

Project : Real-Time Operation Management System (ROM)

Document No. : KDP-LPM-SP01.0

We approve the above-mentioned System Proposal.

Approved By

Head of Department/Depot

29 Oct 2014
Date

TO : Head of Information Technology Department
FROM : Tuen Mun Depot

APPROVAL OF SYSTEM PROPOSAL

Project : Real-Time Operation Management System (ROM)

Document No. : KDP-LPM-SP01.0

We approve the above-mentioned System Proposal.

Approved By

Head of Department/Depot

20/10/14
Date

TO : Head of Information Technology Department
FROM : Lai Chi Kok Depot

APPROVAL OF SYSTEM PROPOSAL

Project : Real-Time Operation Management System (ROM)

Document No. : KDP-LPM-SP01.0

We approve the above-mentioned System Proposal.

Approved By

Head of Department/Depot

12 Nov 2014
Date

TO : Head of Information Technology Department
FROM : Shatin Depot

APPROVAL OF SYSTEM PROPOSAL

Project : Real-Time Operation Management System (ROM)

Document No. : KDP-LPM-SP01.0

We approve the above-mentioned System Proposal.

Approved By

Head of Department/Depot

7/11/2014

Date

THE KMB INFORMATION TECHNOLOGY DEPARTMENT

SYSTEM PROPOSAL

for

REAL-TIME OPERATION MANAGEMENT SYSTEM (ROM)

DOCUMENT NO.

KDP-ROM-SP01.0

	Prepared by Project Team	Reviewed and Approved by Principal Systems Analyst
Name	CHAN CHUNG LIM	Richard Lee
Signature	Lim	
Date	10/10/2014	10/10/2014

PREFACE

This document contains 10 chapters:

Chapter 1 System Overview
It describes the objectives and benefits that can be achieved and the various functions that are provided by the proposed system. It also contains the general system flow and the corresponding description of each step within the system flow.

Assumptions and Constraints that are unique to the system are stated for better user understanding of the proposed system. The other computerized systems that provide information to or retrieve information from the system are listed together with the shared information items.

Chapter 2 System Configuration
It describes the hardware and software environment in which the system can be operated.

Chapter 3 Contact Points
When the system is installed in the future, users have to contact different personnels from Information Technology Department and other user departments when running the system, this chapter shows all the persons from each department that are involved with the system and their corresponding telephone numbers.

Chapter 4 System Security
It lists the security features built in the system.

Chapter 5 General User Responsibilities
It states the general functions and responsibilities that should be performed and observed by users to ensure the accuracy and integrity of the system.

Chapter 6 File Retention Policy
It proposes at what time interval the data files are stored and how long they are kept.

Chapter 7 System Functions Section
It describe the system functions provided by ROM except reports which are described in Chapter 8. It also lists the users of each function.

Chapter 8	Control Center Operation It illustrates how ROM can assist dispatchers in control center operation by some examples cases
Chapter 9	Contingency Measure It describes briefly what measures to be taken in case of system failure or operation disorder such as typhoon.
Chapter 10	Development Schedule It describes briefly the major activities to be performed by the project team and the user departments in each of the subsequent phases in the system development life cycle. It also contains a project implementation schedule for those subsequent phases.

The Appendix contains additional information about the system that will better help the user to understand the proposed system.

In order to meet the project schedule, project team has to assume that users with no feedback before **24th October, 2014**, accept the System Proposal and no change to the requirements will be handled hereafter.

Acknowledgement

The System Proposal is prepared by the ROM Project Team of the Information Technology Department. Any query about the contents of this specification may be forwarded to:

Mr. Chan Chung Lim Tel. No. [redacted]

Ms. Grace Woo Tel. No. [redacted]

Thanks to all the colleagues involved in the functional design phase of ROM system, especially:

Mr. Fung Siu Hung (Shatin Depot)

Ms. Alice Wong (OD Office)

Mr. Terry Lo (Traffic Department)

Mr. Yik Sing Kwok (KB Depot)

Mr. Ken Wong (LCK Depot)

Mr. Tony Wong (LCK Depot)

Mr. Kelvin Yeung (TM Depot)

Mr. Chris Lo (Shatin Depot)

Mr. Kelvin Mak (Long Win)

CONTENTS

1. System Overview

1.1 System Objectives and Benefits

This document proposes the future ROM System which aims to fulfill the requirements stated in the ROM System Requirement Specification Version 1.0 (KDP-ROM-RS001.0). This system will assist dispatchers in the monitoring and management of bus operation at the Operation Control Center (OCC).

The centralised management of bus operation is expected to bring the following benefits:

- Standardise the working procedure across all depots of KMB
- Streamline the bus operation
- Improve operational efficiency
- Ensure schedule adherence to elevate customer satisfaction
- Attain optimal resources utilisation
- Improve the timeliness in handling service disruption

1.2 General System Flow

a) Before the operating day
   a.1 Hastus passes the working timetable to ROM one day in advance
   a.2 Having loaded into ROM, dispatchers can modify the working timetable in advance as requested by Operation

b) On the operating day
   b.1 Manage exceptions detected by system
      b.1.1 System will generate incidents onto the Incident Board which require dispatchers' attention. Examples are:
         (1) TOM system informs there's resource shortage/addition to a route
         (2) ROM predicted there's insufficient layover or meal break time for a trip
         (3) ROM detected there's insufficient layover or meal break time for a trip on the actual bus arrival
         (4) A bus is off-route
         …… etc.
      b.1.2 ROM will automatically set the incident handler to be the primary respondent of the route so that the case will appear on the large TV and on the designated dispatcher's monitor.
      b.1.3 The primary respondent of the route may acknowledge the case to handle it. Alternatively he/she may reject it if he/she is busy. If rejected, system automatically assign secondary respondent to be the handler. If also rejected by the secondary respondent, the incident will be assigned to OCC commander
      b.1.4 If no response from the designated handler within a configurable length of time, ROM will also pass the case to the next handler
      b.1.4 A case would disappear from the Incident Board depending on its nature. For the examples in b.1.1:
         (1) disappear after the handler declared the regulation is done or is not necessary
         (2) disappear when sufficient layover or meal break time is predicted or bus actually arrived
         (3) disappear after the bus captain obtained the revised departure time
         (4) disappear if the bus back to the right routing or dispatcher instructed to ignore

   b.2 Manage exceptions reported by bus captains or other parties
      b.2.1 Bus Breakdown
         - Bus captain reports bus breakdown to Reception Office
         - Reception Office advise BC to drive the bus to depot or a terminus
         - Reception Office informs input the accident in BMS and pass to ROM
         - Affected departures will appear on the Incident Board
         - Dispatcher(s) perform departure time regulation / resources re-allocation (抽調) for affected departures where necessary
         - System automatically sends message to inform the relevant termini of the affected route(s) which are still managed by TER
         - When the bus finished repair or substitute bus is available, dispatcher advise the BC how and where to resume duty and input the arrangement into ROM

      b.2.2 Traffic accident
         - Bus captain reports the accident to Radio Control
         - Radio Control arrange inspector(s) to support at the accident spot
         - Radio Control input the case into OCM
         - ROM obtain the accident information from OCM
         - Affected departures will appear on the Incident Board
         - Dispatcher(s) perform departure time regulation / resources re-allocation (抽調) for affected departures where necessary
         - System automatically sends message to inform the relevant termini of the affected route(s) which are still managed by TER
         - Inspector inform OCC the accident case has been settled
         - Switch to bus breakdown handling method (b.2.1)

b.2.3 Other incidents
- Record the incident into ROM
- Arrange inspector to support the BC if necessary
- If service is disrupted by the incident, affected departures will appear on the Incident Board
- System automatically sends message to inform the relevant termini of the affected route(s) which are still managed by TER
- Dispatcher(s) perform departure time regulation / resources re-allocation (抽調) for affected departures where necessary

b.3 Handle redeployment to special routes (race course routes, railway contingency routes etc.)
b.3.1 Select buses and redeploy to the special route
b.3.2 Affected bus captains will be prompted to contact OCC when they tap card at terminus
b.3.3 System automatically sends message to inform the relevant termini of the affected route(s) which are still managed by TER

b.4 Message dissemination by Radio Control
b.4.1 Prepare the message and specify the messaging properties such as affected terminus, routes etc.
b.4.2 May make use of the digital map to determine the affected terminus or routes
b.4.3 Specify the targeted termini to receive the message or all termini
b.4.4 Send out the message

b.5 Message dissemination to bus captains by OCC
b.5.1 Prepare the message and specify the messaging properties such as the effective time, targeted recipient(s), acknowledgement requirement etc.
b.5.2 Send out the message
b.5.3 Read the messages sent from Radio Control and forward the message to BC if appropriate

c) Shift end/day end processing
C.1 Dispatcher verifies data completeness of the day/shift and rectify where necessary
c.2 Dispatcher hand over out-standing incidents to next shift

1.3 System Functions

ROM will provide the following set of functions to assist the control center operation outlined in section 1.2.

Reference tables Maintenance

This set of functions is to maintain the system parameters and reference data

Real-time Bus Monitoring

This set of functions help dispatchers visualize the current status of the bus operation on a digital map or a line chart. These tools enable dispatchers to locate buses, check current headway, predict arrival and evaluate the traffic conditions in a very convenient way.

Departure Management

This set of functions is the core of the ROM system. It aims to facilitate the dispatchers in the following ways:

- Spot out abnormal conditions in bus operation so that preventive/remedial action can be taken in a timely manner
- Provide thorough information for dispatchers to make decision during resources re-allocation
- Perform departure time regulation in the most effective way
- Fast response to handle bus service disruption such as bus breakdown, accident, congestion etc.
- Conveniently disseminate messages to bus captain(s)

Dispatchers Management

This set of functions are mainly used for managing the roster, attendance and responsibilities of dispatchers

Reporting

System provides many reports for monitoring, audit trail, analysis and management purposes

Access Control

This set of functions are for a master user to manage the access right in ROM for other colleagues

Section 1.4 will further elaborate on the system functions

1.4 Description of System Functions

1.4.1 Reference Tables maintenance

1.4.1.1 Maintain OCC table

1.4.1.1.1 Maintain the information of an OCC

- OCC code
- Description
- Depot

1.4.1.2 Maintain system parameters table

1.4.1.2.1 Maintain system parameters:

- Whether ETA should be enabled
- Incident handler acknowledgement time-out limit
- Minimum layover between arrival and departure
- Maximum allowable delay in bus departure
- Traffic jam recognition : more than X% of buses with delay Y minutes or more relative to the scheduled arrival time
- The percentage of journey time to be elapsed before ETA should be shown
- Default settings of Map/Line view

1.4.1.3 Maintain route table

1.4.1.3.1 Maintain the information of a route:

- Whether ETA should be enabled for the route (override the setting in system parameter)
- Start date for management under ROM
- "Tap card" exemption time for the route if applicable
- The primary respondents and secondary respondents of the route
- The percentage of journey time to be elapsed before ETA should be shown (override the system parameter)

1.4.1.4 Maintain bus captains table

1.4.1.4.1 Maintain the information of a bus captain:

- Telephone no.

1.4.1.5 Maintain incident nature table

1.4.1.5.1 Maintain the properties of an incident

- Incident code
- Incident description
- Whether selectable by dispatcher

1.4.1.6 Maintain resources hunting priority score settings

1.4.1.6.1 Maintain the formula and weighs in the priority score on resources available for re-deployment

1.4.1.7 Maintain incident severity score settings

1.4.1.7.1 Maintain the formula and weighs in the severity score for incidents on the Incident Board

1.4.2 Real-time Bus Monitoring

1.4.2.1 Bus Display on map view

1.4.2.1.1 User can check the staus of a set of buses, bus termini and bus stops on digital maps

1.4.2.1.2 The set of buses, bus termini and bus stops can be selected by geo-fence method or a combination of routes, buses and bus captains

1.4.2.1.3 User can switch on or off the information of a bus on map such as the bus number, running number, minute(s) ahead or behind schedule, the crew duty and bus captain operating the trip, speed etc

1.4.2.1.4 Users can switch on or off the information of a bus terminus on map such as the ETA of each route of the terminus, the spare resources at the terminus etc

1.4.2.1.5 User can switch on or off the information of a bus stop on map such as last arrival time and ETA of each route etc

1.4.2.1.6 Buses going off track are high-lighted

1.4.2.1.7 May auto-refresh at a configurable interval

1.4.2.1.8 Use different colours/icons to illustrate buses of specific conditions such as not in service, buses of lost GPS location, etc

1.4.2.1.9 Can easily toggle into line chart

1.4.2.1.10 User can configure which map layers should be visible or invisible

1.4.2.1.11 Multiple routes should be shown in different colours on map

1.4.2.1.12 Able to play back the movement of a set of buses on map

1.4.2.1.13 Able to retrieve a past snapshot of the map view

1.4.2.1.14 Provide link to Google street view

1.4.2.1.15 Provide icon on map to link to CCTV cameras provided by Transport Department

1.4.2.1.16 Allow user to disseminate message to a specific bus captain/bus duty

1.4.2.2 Bus Display on line chart

1.4.2.2.1 User can check the staus of a set of buses, bus termini and bus stops on line chart

1.4.2.2.2 The set of buses, bus termini and bus stops can be selected by a combination of routes, buses and bus captains

1.4.2.2.3 User can switch on or off the information of a bus on map such as the bus number, running number, minute(s) ahead or behind schedule, the crew duty and bus captain operating the trip, speed etc

1.4.2.2.4 Users can switch on or off the information of a bus terminus on map such as the ETA of each route of the terminus, the spare resources at the terminus etc

1.4.2.2.5 User can switch on or off the information of a bus stop on map such as last arrival time and ETA of each route etc

1.4.2.2.6 May auto-refresh at a configurable interval

1.4.2.2.7 Use different colours/icons to illustrate buses of specific conditions such as not in service, buses of lost GPS location, etc

1.4.2.2.8 Can easily toggle into map view

1.4.2.2.9 The spacing between the stops on a line chart can be proportional to the actual distance apart or at equi-separation

1.4.2.2.10 Allow to hide a number of stops on a line chart

1.4.3 Departure Management Functions

1.4.3.1 行車事件表 (Incident Board)

1.4.3.1.1 A table to show the incidents which require the attention of dispatchers. The incidents may be automatically created or manually input as described in 1.4.3.1.2 – 1.4.3.1.5

1.4.3.1.2 Incidents which automatically detected by system

- A trip predicted to have delay which cannot be absorbed by the layover or caused insufficient meal break time
- A route probably encountering traffic jam, identified by more than X% of buses with ETA - scheduled arrival time > Y minutes or more, where X and Y are system parameters
- Delayed departure - a trip where the bus has not departed after N1 minutes from the scheduled departure time where N1 is a system parameter
- Early departure - a trip where the bus has departed N2 minutes or more before the scheduled departure time where N2 is a system parameter
- Off-track buses
- Suspected delay of tap card by bus captain – bus captain not yet tap card after N3 minutes or more from the bus arrival time deduced from Wi-Fi signal and telematics status
- Buses where the operating route is consistent with the route selected on the bus stop announcement device (provisional)

1.4.3.1.3 Incidents triggered by bus captains tapping card at terminus

- Bus captain tap card and ROM recognized that the delay cannot be absorbed by the layover or caused insufficient meal break time

1.4.3.1.4 Incidents interfaced from other systems (traffic accidents etc)

- BMS informed a bus breakdown
- OCM informed a traffic accident
- TOM informed a duty is cancelled due to bus or BC shortage

1.4.3.1.5 Incidents input by dispatchers

- Input a bus breakdown reported by bus captain (in case BMS has not yet passed the case to ROM)
- Input a traffic accident reported by bus captain (in case OCM has not yet passed the case to ROM)
- Input a bus captain who has requested early leave from duty
- Input an incident reported by bus captain which caused service disruption, such as lost property case

1.4.3.1.6 ROM will set the incident handler to be a primary respondent of the route among the dispatchers on duty. If no primary responsible dispatcher is on duty, ROM will look for a secondary responsible dispatcher of the route.

1.4.3.1.7 Once the case handler is assigned, the case will also appear on the assigned dispatcherr's monitor

1.4.3.1.8 The assigned dispatcher should acknowledge the incident within a time limit which is a onfigurable system parameter. If not acknowledged within the time limit, system will re-assign the case to another dispatcher

1.4.3.1.9 The assigned dispacter may decline to handle the incident if he/she is too busy. He/she can reject the case so that ROM will select another dispatcher at once

1.4.3.1.10 2 versions of the Incident Board – TV version and dispatcher version

TV version

- Show all outstanding incidents
- Sort in the descending order of urgency score (please see appendix A.2 for definition of urgency score)
- An incident is defaulted with a handler who should be the primary respondent of the route
- If the primary respondent is occupied at the moment, he/she can pass the incident to the secondary respondent of the route
- If the secondary respondent is also occupied at the moment, he/she can pass the incident to the OCC commander

Dispatcher version

- Defaulted to show the outstanding incidents responsible by the dispatcher
- Sort in the descending order of urgency score as for TV version
- Contain more information such as ETA and the next duty(s) affected by the incident
- Provide links to Map View, Line Chart, Arrival/Departure Board and Timetable Maintenance functions

1.4.3.1.11 The conditions for an incident to disappear from the Incident Board depend on the nature of the incident. Project team will confirm the details with users at a later stage

1.4.3.1.12 Please see the sample of TV version in 7.2.2.1 and dispatcher version in 7.2.2.3

1.4.3.2 行車概況表 (Route Performance Board)

1.4.3.2.1 A chart to show the performance of a set of routes in the following aspects:
- Schedule adherence
- Lost trip percentage

1.4.3.2.2 TV version
- Show all the routes which are now managed by the OCC
- Sorted in descending order of severity score (please see appendix A.2 for definition of severity score)
- Please see a sample in 7.2.2.2

1.4.3.2.3 Dispatcher version
- The dispatcher's default page contains the Incident Board at the upper portion and the Route Performance Board at the lower portion
- The Route Performance Board will show the routes where the dispatcher is a primary or secondary responsible person
- Sorted by route no. within the primary responsible routes and secondary responsible routes
- Please see a sample in 7.2.2.3

1.4.3.3 行車班次表 (Arrival/Departure Board)

1.4.3.3.1 A chart to show all trips of a route being operated togther with next departures
1.4.3.3.2 Shown by both bounds
1.4.3.3.3 Different colours to distinguish trips of different status:
- Trips not yet departed, bus is already at the terminus
- Trips not yet departed, bus has not arrived at the terminus
- Trips departed and bus is on the road

1.4.3.3.4 ETA is shown for departed trips
1.4.3.3.5 Allow to merge or split different route variants on a chart provided they are on the same bound
1.4.3.3.6 Allow to merge or split parent route and son route(s)
1.4.3.3.7 Headway information and lost trip statistics are shown
1.4.3.3.8 The no. of charts shown on one page is configurable
1.4.3.3.9 Special incident associated with a trip will be high-lighted in red
1.4.3.3.10 Provide links to Map View, Line Chart and TimeTable Maintenance function
1.4.3.3.11 Provide the telephone no. of bus captains currently at the termini
1.4.3.3.12 Please see a sample in 7.2.2.7 & 7.2.2.8

1.4.3.4 修改行車時間表 (Working Timetable Maintenance)

1.4.3.4.1 Dispatchers can amend the working timetable by this function
1.4.3.4.2 Can specify the working timetable for a set of route(s), bus(es) or bus captain(s).
1.4.3.4.3 May also retrieve the working timetable related to an incident
1.4.3.4.4 The timetable retrieved is a set of bus operation activities which originate from the Hastus System
1.4.3.4.5 Can toggle among the time view, bus view and BC view
1.4.3.4.6 Default is the time view. User can only view the information under bus view or BC view. Update is allowed in time view only
1.4.3.4.7 Under time view, user can switch to the departure time regulation mode which has the following features:
- Departures of different bounds can be separated into upper and lower windows
- Provide simple auto-regulation function. Please see more details in appendix A.
- Can save the regulated timetable for re-applying in future under the same situation

1.4.3.4.8 Dispatchers can input message on a trip so that bus captain will view the message when he/she taps card to report arrival at terminus
1.4.3.4.9 Resources re-allocaton aids are provided:
- High-light a trip and invoke the resources hunting function
- Available resources suitable for deploying to the high-lighted trips will be shown
- Supplementary information are provided for dispatcher to make decision on which bus/BC to be utilised
- User may change the searching criteria to explore on the available resources

1.4.3.4.10 Please see a sample in 7.2.2.9.8

1.4.3.5 電台發放訊息 (Message dissemination from Radio Control)

1.4.3.5.1 Replace the message dissemination function TME022 of TER System

1.4.3.5.2 Radio Control Section and Depot Operation may disseminate messages to termini using this function

1.4.3.5.3 Will provide all the existing messaging criteria as for TME022

1.4.3.5.4 User may invoke the digital map and geo-fence on it to figure out the relevant routes for a message

1.4.3.5.5 The message disseminated may also be viewed by OCC (please see 1.4.3.6)

1.4.3.5.6 Please see a sample in 7.2.2.4

1.4.3.6 OCC 發放訊息 (OCC message dissemination)

1.4.3.6.1 This function is used by dispatchers to disseminate messages to bus captains for the following purposes:

- Post information to bus captains (e.g. re-routing is in effect)
- Give instruction to bus captains (e.g. contact control center, taking statistics)

1.4.3.6.2 Dispatcher can specify the following messaging properties

- Recipients
- Effective date and time range
- Acknowledgement requirement
- Maximum display time
- Display before departure or after arrival

1.4.3.6.3 Dispatcher may also view the messages diseminated by Radio Control in 1.4.3.5 and pick the relevant ones to send to bus captains

1.4.3.7 車長到站拍卡 (Arrival Reporting by Bus Captains)

1.4.3.7.1 This function is used to convey message(s) to bus captains when they tap the driver card at terminus to report arrival

1.4.3.7.2 2 sources of messages:

- System automatically send the next departure instruction to bus captain
- Message placed by dispatchers (please see 1.4.3.4 and 1.4.3.6)

1.4.3.7.3 Will interact with TER such that ROM and TER will serve their own set of departures. This arrangement is necessary in the interim period where some routes are managed by TER and some by ROM

1.4.3.7.4 A number pad will be attached to the terminus PC to enable 2-way communication with bus captains with OCC

1.4.3.8 調度員下班程序 (Dispatcher Sign-out Procedure)

1.4.3.8.1 Departures responsible by the dispatcher with incomplete input, if any, will be shown for the dispatcher to note and rectify

1.4.3.8.2 Out-standing incidents of the dispatcher will be shown. He/she should close the incident(s) which are already completed

1.4.3.8.3 Once signed out, outstanding incidents of the dispatcher will be automatically assigned to the responsible dispatcher next shift who should acknowledge the incident on his/her incident board

1.4.4 Dispatchers Management Functions

1.4.4.1 Maintain dispatcher table
1.4.4.1.1 Maintain the basic information of a dispatcher such as the his/her role and belonging OCC

1.4.4.2 Maintain shift duration table
1.4.4.2.1 Maintain the start time and end time of a dispatcher shift
1.4.4.2.2 The shift durations can be overlapping

1.4.4.3 Import / Maintain the duty roster of dispatchers
1.4.4.3.1 Can import dispatchers' duty roster of the coming month into ROM from an Excel file
1.4.4.3.2 Allow to modify the imported duty roster

1.4.4.4 Maintain the working status of dispatcher
1.4.4.4.1 Input the working status of a dispatcher on current day if different from the roster

1.4.4.5 Re-assignemnt of dispatcher responsibility
1.4.4.5.1 Show the responsible routes of dispatchers on current day or a future day
1.4.4.5.2 High-light routes with less than 2 resposible persons
1.4.4.5.3 User may temporarily add the primary/secondary responsible dispatcher for a route

1.4.5 Reporting
1.4.5.1 Monitoring Reports
1.4.5.1.1 List of BCs who are willing / not willing to run extra trips or redeployment
1.4.5.1.1.1 Selection Criteria
1.4.5.1.1.1.1 BC Employee No. / Route No. (either one must be input)
1.4.5.1.1.1.2 Operating Time Range
1.4.5.1.1.1.3 Shift – Day / Night / All
1.4.5.1.1.1.4 Duty Category – Special Only / L-Duty / All
1.4.5.1.1.1.5 Preference – Willing / Not Willing / All
1.4.5.1.1.2 Output
1.4.5.1.1.2.1 Operating date range
1.4.5.1.1.2.2 BC Employee No.
1.4.5.1.1.2.3 BC Name in Chinese
1.4.5.1.1.2.4 Scheduled Duty assigned
1.4.5.1.1.2.5 Trained Route No. (active)
1.4.5.1.1.2.6 % that willing to taking extra work
1.4.5.1.1.3 Remarks
1.4.5.1.1.3.1 A function for user to input/maintain preference of BC working extra trips or redeployment is required
1.4.5.1.1.4 Used By
1.4.5.1.1.4.1 Depots, LW, Traffic

1.4.5.1.2 Prompt list of BCs / trips / routes with abnormal departure or arrival records
1.4.5.1.2.1 Selection Criteria
1.4.5.1.2.1.1 Operating Date (must be before current day)
1.4.5.1.2.1.2 Departures/Arrival earlier/ later than scheduled time for [ ] minutes or more
1.4.5.1.2.1.3 Operating Route and run no. (optional)
1.4.5.1.2.1.4 Terminus (optional)
1.4.5.1.2.1.5 Departure time range
1.4.5.1.2.1.6 BC Employee No. (optional)
1.4.5.1.2.1.7 Abnormality – Advanced / Delayed / Delay of Tap Card / Without record of Tap Card / Without Wi-Fi signal
1.4.5.1.2.2 Output
1.4.5.1.2.2.1 Abnormality
1.4.5.1.2.2.2 Operating Date
1.4.5.1.2.2.3 Operating Route No.
1.4.5.1.2.2.4 Terminus
1.4.5.1.2.2.5 BC Employee No.
1.4.5.1.2.2.6 BC Name in Chinese
1.4.5.1.2.2.7 BC Duty
1.4.5.1.2.2.8 Bus No.
1.4.5.1.2.2.9 Departure/Arrival Time
1.4.5.1.2.2.10 Scheduled Departure Time
1.4.5.1.2.2.11 Last Tap Card Time
1.4.5.1.2.2.12 Time difference in minutes (-ve for early; +ve for delay)
1.4.5.1.2.3 Remarks
1.4.5.1.2.3.1 Departure time is deduced from the telematics data or Wi-Fi data where the former takes precedence
1.4.5.1.2.4 Used By
1.4.5.1.2.4.1 Depots, LW, Traffic

1.4.5.1.3 Prompt list of BCs with abnormal driving behaviour
1.4.5.1.3.1 Selection Criteria
1.4.5.1.3.1.1 Operating Date (must be before current day)
1.4.5.1.3.1.2 Limit exceed

1.4.5.1.3.1.3 Operating Route and run no. (optional)
1.4.5.1.3.1.4 Departure time range
1.4.5.1.3.1.5 BC Employee No. (optional)
1.4.5.1.3.1.6 Abnormality – Speeding / Drive too slow / Skip Stop(s) / Skip must stopped location / Off-Trace (at least one must be selected, allow to select more than one)
1.4.5.1.3.2 Output
1.4.5.1.3.2.1 Abnormality
1.4.5.1.3.2.2 Operating Date
1.4.5.1.3.2.3 Incident time
1.4.5.1.3.2.4 Operating route
1.4.5.1.3.2.5 BC Employee No.
1.4.5.1.3.2.6 BC Name in Chinese
1.4.5.1.3.2.7 BC Duty
1.4.5.1.3.2.8 Bus No.
1.4.5.1.3.2.9 Incident Location – name of street
1.4.5.1.3.2.10 Direction
1.4.5.1.3.2.11 Speed Limit (if applicable)
1.4.5.1.3.2.12 Actual Speed captured
1.4.5.1.3.3 Remarks
1.4.5.1.3.3.1 System will report various abnormality according to user selection – e.g. violate traffic rules, fail to observe a "must stop" bus stop, drive too slow, over speed at specific location, not operate according to assigned routeing, etc.
1.4.5.1.3.3.2 System shall eliminate case(s) of driving too slow if incident of traffic congestion/incidents where recorded in ROM.
1.4.5.1.3.4 Used By
1.4.5.1.3.4.1 Depots, LW, Traffic

1.4.5.1.4 Bus breakdown statistics analysis by reporting BC
1.4.5.1.4.1 Selection Criteria
1.4.5.1.4.1.1 BC Employee No.
1.4.5.1.4.1.2 Bus No.
1.4.5.1.4.1.3 Route No.
1.4.5.1.4.1.4 Operating Date Range
1.4.5.1.4.1.5 Street Name
1.4.5.1.4.1.6 Bus Type
1.4.5.1.4.1.7 Option to show affected Trip only
1.4.5.1.4.1.8 Breakdown by – Bus Type, Street, Operating Route, BC Employee No., Bus No.
1.4.5.1.4.2 Output
1.4.5.1.4.2.1 BC Employee No.
1.4.5.1.4.2.2 BC Employee Name in Chinese
1.4.5.1.4.2.3 Operating Date
1.4.5.1.4.2.4 Bus No.
1.4.5.1.4.2.5 Bus Type
1.4.5.1.4.2.6 Operating Route
1.4.5.1.4.2.7 Break down Item(s)
1.4.5.1.4.2.8 Break down Location (Street name)
1.4.5.1.4.2.9 Incident Reported Time
1.4.5.1.4.2.10 Time of arrival of maintenance station
1.4.5.1.4.3 Remarks
1.4.5.1.4.3.1 Bus breakdown items will be interfaced from BMS
1.4.5.1.4.3.2 Arrival time is deduced from the telematics data or Wi-Fi data where the former takes precedence
1.4.5.1.4.3.3 A delay of 2 days of bus breakdown information is expected
1.4.5.1.4.4 Used By
1.4.5.1.4.4.1 Depots, LW, Traffic

1.4.5.1.5 Route performance analysis report
1.4.5.1.5.1 Selection Criteria
1.4.5.1.5.1.1 Operating Date Range*
1.4.5.1.5.1.2 Operating Time Range*
1.4.5.1.5.1.3 Day – Weekdays / Saturday / Sunday&PH / Daily / All
1.4.5.1.5.1.4 OCC*
1.4.5.1.5.1.5 Zone*
1.4.5.1.5.1.6 Route Group*
1.4.5.1.5.1.7 Operating Route No.
1.4.5.1.5.1.8 Staff No. / Name
1.4.5.1.5.1.9 Exception Only
1.4.5.1.5.1.10 Report Type – Monthly Average / Comparison
1.4.5.1.5.2 Output
1.4.5.1.5.2.1 Adequacy of Journey Time
1.4.5.1.5.2.1.1 % of trips above the scheduled journey time + layover
1.4.5.1.5.2.1.2 % of trips behind / equal to / ahead of ETA
1.4.5.1.5.2.2 Start Time adherence (STA) - % of trips departing on-time (no more than 1 min. ahead and 3 mins. behind of schedule)
1.4.5.1.5.2.3 Punctuality – % of trips with service gaps higher than 30% variance tolerance level
1.4.5.1.5.2.4 Reliability – lost trip rate with categories
1.4.5.1.5.2.5 Incident
1.4.5.1.5.2.5.1 Number and % of trip with incident
1.4.5.1.5.2.5.2 Number and % of trip with departure time regulated
1.4.5.1.5.2.5.3 Number of times with redeployment
1.4.5.1.5.2.6 Monthly Averages
1.4.5.1.5.2.6.1 Monthly average of SAT & Punctuality of selected date/time range
1.4.5.1.5.2.7 Comparison Report
1.4.5.1.5.2.7.1 Date/time average of SAT & Punctuality
1.4.5.1.5.2.7.2 MoM average of SAT & Punctuality
1.4.5.1.5.2.7.3 YoY average of SAT & Punctuality
1.4.5.1.5.3 Remarks
1.4.5.1.5.3.1 Multiple date range, time range, OCCs, Zone, Route Groups and Categories are allowed for comparison across various comparison groups.
1.4.5.1.5.3.2 STA only apply to routes with peak headway > 10 mins will show
1.4.5.1.5.3.3 Trips considered being on-time if its actual departure time ahead/behind of schedule (after adjustment) no more than 1 min and 3 mins respectively.
1.4.5.1.5.3.4 System shall keep a profile of user selection criteria
1.4.5.1.5.4 Used By
1.4.5.1.5.4.1 Depots, LW, Traffic

1.4.5.1.6 Dispatcher performance report – Departure Management
1.4.5.1.6.1 Selection Criteria
1.4.5.1.6.1.1 Operating Date Range*
1.4.5.1.6.1.2 Operating Time Range*
1.4.5.1.6.1.3 OCC*
1.4.5.1.6.1.4 Route Group*
1.4.5.1.6.1.5 Operating Route No.
1.4.5.1.6.1.6 Staff No. / Name
1.4.5.1.6.1.7 Category* – Late arrival, Late arrival (affect other departure / route), Bus breakdown, Accident, Crew shortage, Bus withdrawn, BC quit while on-duty, Passenger related service delay
1.4.5.1.6.1.8 Exception Only
1.4.5.1.6.1.9 Report Type – Monthly Average / Comparison

1.4.5.1.6.2 Output
1.4.5.1.6.2.1 Start Time adherence (STA) - % of trips departing on-time (no more than 1 min ahead and 3 mins behind of schedule)
1.4.5.1.6.2.2 Punctuality – % of trips with service gaps higher than 30% variance tolerance level
1.4.5.1.6.2.3 Monthly Averages
1.4.5.1.6.2.3.1 Monthly average of SAT & Punctuality of selected date/time range
1.4.5.1.6.2.4 Comparison Report
1.4.5.1.6.2.4.1 Date/time average of SAT & Punctuality
1.4.5.1.6.2.4.2 MoM average of SAT & Punctuality
1.4.5.1.6.2.4.3 YoY average of SAT & Punctuality
1.4.5.1.6.3 Remarks
1.4.5.1.6.3.1 Multiple date range, time range, OCCs, Route Groups and Categories are allowed for comparison across various comparison groups.
1.4.5.1.6.3.2 STA only apply to routes with peak headway > 10 mins will show
1.4.5.1.6.3.3 Trips considered being on-time if its actual departure time ahead/behind of schedule (after adjustment) no more than 1 min and 3 mins respectively.
1.4.5.1.6.3.4 System shall keep a profile of user selection criteria
1.4.5.1.6.4 Used By
1.4.5.1.6.4.1 Depots, LW, Traffic

1.4.5.1.7 Dispatcher performance report – Time to Resolution
1.4.5.1.7.1 Selection Criteria
1.4.5.1.7.1.1 Operating Date Range*
1.4.5.1.7.1.2 Operating Time Range*
1.4.5.1.7.1.3 OCC*
1.4.5.1.7.1.4 Route Group*
1.4.5.1.7.1.5 Operating Route No.
1.4.5.1.7.1.6 Staff No. / Name
1.4.5.1.7.1.7 Category* – Late arrival, Late arrival (affect other departure / route), Bus breakdown, Accident, Crew shortage, Bus withdrawn, BC quit while on-duty, Passenger related service delay
1.4.5.1.7.1.8 Exception Only
1.4.5.1.7.1.9 Report Type – Monthly Average / Comparison
1.4.5.1.7.2 Output
1.4.5.1.7.2.1 Number (and percentage) of cases handled by Principal Dispatcher (assigned by system)
1.4.5.1.7.2.2 Number (and percentage) of cases handled by Backup Dispatcher (assigned by system)
1.4.5.1.7.2.3 Number (and percentage) of cases handled by Backup Dispatcher (self-initiated pick up)
1.4.5.1.7.2.4 Average time (minutes) for Principal Dispatcher to handle each case
1.4.5.1.7.2.5 Average time (minutes) for Backup Dispatcher to handle each case
1.4.5.1.7.2.6 Number of message dispatched
1.4.5.1.7.2.7 Average login time (minutes) - Dispatcher need to logout for leaving the OCC, e.g. go to toilet or have lunch
1.4.5.1.7.2.8 After integration with Telephony System, add report of number of phone-in call handled and length of each call
1.4.5.1.7.3 Remarks
1.4.5.1.7.3.1 Multiple date range, time range, OCCs, Route Groups and Categories are allowed for comparison across various comparison groups.
1.4.5.1.7.3.2 System shall keep a profile of user selection criteria
1.4.5.1.7.4 Used By
1.4.5.1.7.4.1 Depots, LW, Traffic

1.4.5.1.8 Dispatcher performance report – Attendance Record
1.4.5.1.8.1 Selection Criteria
1.4.5.1.8.1.1 Operating Date Range
1.4.5.1.8.1.2 OCC
1.4.5.1.8.1.3 Route Group

1.4.5.1.8.1.4 Staff No. / Name
1.4.5.1.8.2 Output
1.4.5.1.8.2.1 Operating Date
1.4.5.1.8.2.2 OCC
1.4.5.1.8.2.3 Staff No./Name
1.4.5.1.8.2.4 Working Days
1.4.5.1.8.2.5 Red Circle Days
1.4.5.1.8.2.6 SL
1.4.5.1.8.2.7 CL
1.4.5.1.8.2.8 Injury Leave
1.4.5.1.8.2.9 Leaving Work Early
1.4.5.1.8.2.10 Quit While on-duty
1.4.5.1.8.3 Remarks
1.4.5.1.8.3.1 Multiple date range, time range, OCCs, Route Groups and Categories are allowed for comparison across various comparison groups.
1.4.5.1.8.3.2 System shall keep a profile of user selection criteria
1.4.5.1.8.4 Used By
1.4.5.1.8.4.1 Depots, LW, Traffic

1.4.5.2 Analysis Reports
1.4.5.2.1 Journey time analysis report
1.4.5.2.1.1 Selection Criteria
1.4.5.2.1.1.1 Operating Date Range
1.4.5.2.1.1.2 BC Employee No.
1.4.5.2.1.1.3 Special Day Type – Mon-Fri / Sat. / Sunday&PH / Weekdays
1.4.5.2.1.1.4 Operating Route / Run / Direction
1.4.5.2.1.1.5 Operating Time Range
1.4.5.2.1.1.6 Passing Stops
1.4.5.2.1.1.7 Rule out Stop(s) – allow user to omit stop(s)
1.4.5.2.1.1.8 X-axis – Distance / Time
1.4.5.2.1.2 Output
1.4.5.2.1.2.1 Bus Stop (BSI Stop)
1.4.5.2.1.2.2 Stop by stop traveling time
1.4.5.2.1.2.3 Stop by stop travelled distance
1.4.5.2.1.2.4 Stop by stop average moving speed
1.4.5.2.1.2.5 Stop by stop passenger count
1.4.5.2.1.2.6 A line chart presentation
1.4.5.2.1.2.6.1 Cumulative sum of passenger count against user selected X-axis
1.4.5.2.1.2.6.2 Moving speed against user selected X-axis
1.4.5.2.1.2.6.3 Average moving speed against user selected X-axis of each selected date range
1.4.5.2.1.2.7 Summary
1.4.5.2.1.2.7.1 Cumulative distance in KM
1.4.5.2.1.2.7.2 Total time spend
1.4.5.2.1.2.7.3 Total moving Time
1.4.5.2.1.2.7.4 Total Time idled
1.4.5.2.1.2.7.5 Average Speed
1.4.5.2.1.2.7.6 Average moving speed
1.4.5.2.1.2.7.7 Highest speed
1.4.5.2.1.2.7.8 Average
1.4.5.2.1.2.7.9 Cumulative passenger count
1.4.5.2.1.3 Remarks
1.4.5.2.1.3.1 Multiple date range is allowed for average speed comparison across various periods.
1.4.5.2.1.3.2 Multiple day type is allowed
1.4.5.2.1.3.3 Multiple / broken time range is allowed along a single time period.
1.4.5.2.1.3.4 Allow user to select bus stop(s) on graphical map view

1.4.5.2.1.4 Used By
1.4.5.2.1.4.1 Depots, LW, Traffic

1.4.5.2.2 Prediction of journey time over two locations
1.4.5.2.2.1 Selection Criteria
1.4.5.2.2.1.1 Operating Date Range
1.4.5.2.2.1.2 BC Employee No.
1.4.5.2.2.1.3 Special Day Type – Mon-Fri / Sat. / Sunday&PH / Weekdays
1.4.5.2.2.1.4 Operating Route / Run / Direction
1.4.5.2.2.1.5 Operating Time Range
1.4.5.2.2.1.6 Passing Stops
1.4.5.2.2.1.7 Rule out Stop(s) – allow user to omit stop(s)
1.4.5.2.2.1.8 Punctuality %
1.4.5.2.2.2 Output
1.4.5.2.2.2.1 Bus Stop (BSI Stop)
1.4.5.2.2.2.2 Punctuality – less than 45%
1.4.5.2.2.2.3 Punctuality – less than 50%
1.4.5.2.2.2.4 Punctuality – less than 55%
1.4.5.2.2.2.5 Punctuality – less than 60%
1.4.5.2.2.2.6 :
1.4.5.2.2.2.7 Punctuality – less than 90%
1.4.5.2.2.2.8 Punctuality – less than 95%
1.4.5.2.2.2.9 Punctuality – greater than and equal to 95%
1.4.5.2.2.2.10 Summary
1.4.5.2.2.2.10.1 Cumulative distance in KM
1.4.5.2.2.2.10.2 Total traveling time
1.4.5.2.2.2.10.3 Total moving Time
1.4.5.2.2.2.10.4 Total Time idled
1.4.5.2.2.2.10.5 Average Speed
1.4.5.2.2.2.10.6 Average moving speed
1.4.5.2.2.2.10.7 Highest speed
1.4.5.2.2.2.10.8 Average RMP
1.4.5.2.2.2.10.9 Cumulative passenger count

1.4.5.2.2.3 Remarks
1.4.5.2.2.3.1 Multiple day type is allowed
1.4.5.2.2.3.2 Multiple / broken time range is allowed along a single time period.
1.4.5.2.2.3.3 Allow user to select bus stop(s) on graphical map view
1.4.5.2.2.4 Used By
1.4.5.2.2.4.1 Depots, LW, Traffic

1.4.5.2.3 Journey time comparison report
1.4.5.2.3.1 Selection Criteria
1.4.5.2.3.1.1 Operating Date Range
1.4.5.2.3.1.2 Main Depot / Zone
1.4.5.2.3.1.3 Operating Route / Run / Direction
1.4.5.2.3.1.4 Operating Time Range
1.4.5.2.3.1.5 Passing Stops
1.4.5.2.3.1.6 Rule out Stop(s) – allow user to omit stop(s)
1.4.5.2.3.1.7 Punctuality range
1.4.5.2.3.2 Output
1.4.5.2.3.2.1 Route
1.4.5.2.3.2.2 Stops that average punctuality below selected punctuality range
1.4.5.2.3.2.3 Stops that average punctuality fall within selected punctuality range
1.4.5.2.3.2.4 Stops that average punctuality higher than selected punctuality range

1.4.5.2.3.3 Remarks
1.4.5.2.3.3.1 Multiple route no. is allowed
1.4.5.2.3.3.2 Running No. is optionally
1.4.5.2.3.3.3 Multiple / broken time range is allowed along a single time period.
1.4.5.2.3.3.4 Allow user to select bus stop(s) on graphical map view
1.4.5.2.3.3.5 Consecutive stops that fall in to the same punctuality group will be grouped and reported together
1.4.5.2.3.4 Used By
1.4.5.2.3.4.1 Depots, LW, Traffic

1.4.5.2.4 Daily Lost Trip and Journey Time Analysis
1.4.5.2.4.1 Selection Criteria
1.4.5.2.4.1.1 Operating Date Range
1.4.5.2.4.1.2 Main Depot
1.4.5.2.4.1.3 Operating Time Period – default 4 time periods for user selection but can be modified
1.4.5.2.4.1.4 Lost Trip % - Internal / External
1.4.5.2.4.2 Output
1.4.5.2.4.2.1 Route No.
1.4.5.2.4.2.2 Direction
1.4.5.2.4.2.3 Scheduled Journey Time
1.4.5.2.4.2.4 Average Journey Time
1.4.5.2.4.2.5 Scheduled Trip
1.4.5.2.4.2.6 Actual Trip
1.4.5.2.4.2.7 Lost Trip %
1.4.5.2.4.2.8 Special Incident – display any incident recorded within selected date/time range (if any)
1.4.5.2.4.3 Remarks
1.4.5.2.4.3.1 Lost trip % will being calculated based on Internal / External formula
1.4.5.2.4.3.2 Break by Operating Date, Main Depot
1.4.5.2.4.4 Used By
1.4.5.2.4.4.1 Depots, LW, Traffic

1.4.5.2.5 Daily Lost Trip Analysis by Special Incident
1.4.5.2.5.1 Selection Criteria
1.4.5.2.5.1.1 Operating Date Range
1.4.5.2.5.1.2 Main Depot
1.4.5.2.5.1.3 Operating Time Period – default 4 time period for user selection but can be modified
1.4.5.2.5.1.4 Special Incident – All or single selection
1.4.5.2.5.1.5 Lost Trip % - Internal / External
1.4.5.2.5.2 Output
1.4.5.2.5.2.1 Incident Type
1.4.5.2.5.2.2 Route No.
1.4.5.2.5.2.3 Lost Trip %
1.4.5.2.5.3 Remarks
1.4.5.2.5.3.1 Lost trip % will being calculated based on Internal / External formula
1.4.5.2.5.4 Used By
1.4.5.2.5.4.1 Depots, LW, Traffic

1.4.5.2.6 Bus breakdown tendency
1.4.5.2.6.1 Selection Criteria
1.4.5.2.6.1.1 BC Employee No.
1.4.5.2.6.1.2 Bus No.
1.4.5.2.6.1.3 Route No.
1.4.5.2.6.1.4 Operating Date Range
1.4.5.2.6.1.5 Street Name
1.4.5.2.6.1.6 Bus Type
1.4.5.2.6.1.7 Option to show affected Trip only

1.4.5.2.6.1.8 Breakdown by – Bus Type, Street, Operating Route, BC Employee No., Bus No.
1.4.5.2.6.2 Output
1.4.5.2.6.2.1 Operating Date
1.4.5.2.6.2.2 Bus No.
1.4.5.2.6.2.3 Bus Operating Route
1.4.5.2.6.2.4 Major breakdown item
1.4.5.2.6.2.5 Action Taken
1.4.5.2.6.2.6 Breakdown Summary
1.4.5.2.6.3 Remarks
1.4.5.2.6.3.1 Bus breakdown items shall be interfaced from BMS
1.4.5.2.6.3.2 Arrival time is deduced from the telematics data or Wi-Fi data where the former takes precedence
1.4.5.2.6.3.3 A delay of 2 days of bus breakdown information is expected
1.4.5.2.6.4 Used By
1.4.5.2.6.4.1 Depots, LW, Traffic

1.4.5.3 Miscellaneous Reports
1.4.5.3.1 Average Passenger Boarding by Route by Bus Stop
1.4.5.3.1.1 Selection Criteria
1.4.5.3.1.1.1 Operating date range
1.4.5.3.1.1.2 Operating Route No.
1.4.5.3.1.2 Output
1.4.5.3.1.2.1 Operating Route No.
1.4.5.3.1.2.2 Journey Distance
1.4.5.3.1.2.3 Bus Stops (BSI Code/Stop Name) in operating sequence
1.4.5.3.1.2.4 Average no. of passenger(s) across hourly period
1.4.5.3.1.2.5 Summary
1.4.5.3.1.2.5.1 All day total by bus stop
1.4.5.3.1.2.5.2 Average by bus stop by operating time period
1.4.5.3.1.3 Used By
1.4.5.3.1.3.1 Depots, LW, Traffic

1.4.5.3.2 Passenger Boarding by Route by Bus Stop Comparison across various operating time period
1.4.5.3.2.1 Selection Criteria
1.4.5.3.2.1.1 Operating date range (allow multiple)
1.4.5.3.2.1.2 Operating Route No.
1.4.5.3.2.2 Output
1.4.5.3.2.2.1 Operating Route No.
1.4.5.3.2.2.2 Bus Stops (BSI Code/Stop Name) in operating sequence
1.4.5.3.2.2.3 Passenger Boarding Summary of each given time range
1.4.5.3.2.2.3.1 All day total by bus stop
1.4.5.3.2.2.3.2 Average passenger boarding by bus stop by 4 operating time periods
1.4.5.3.2.3 Used By
1.4.5.3.2.3.1 Depots, LW, Traffic

1.4.5.3.3 Boarding survey statistic – Passenger Boarding by Bus Stop
1.4.5.3.3.1 Selection Criteria
1.4.5.3.3.1.1 Operating Date Range
1.4.5.3.3.1.2 Comparison Bus Route and Stop (multiple)
1.4.5.3.3.1.2.1 Operating Route No.
1.4.5.3.3.1.2.2 Bus Stop
1.4.5.3.3.2 Output
1.4.5.3.3.2.1 Route No.
1.4.5.3.3.2.2 Bus No.
1.4.5.3.3.2.3 Bus Arrival Time
1.4.5.3.3.2.4 No. of passenger aboard at that particular bus stop

1.4.5.3.3.2.5 Passenger Boarding Summary of each given time range
1.4.5.3.3.2.5.1 All day total by bus stop
1.4.5.3.3.2.5.2 Average passenger boarding by bus stop by 4 operating time periods
1.4.5.3.3.3 Used By
1.4.5.3.3.3.1 Depots, LW, Traffic

1.4.5.3.4 Overnight parking summary by parking location
1.4.5.3.4.1 Selection Criteria
1.4.5.3.4.1.1 Operating date
1.4.5.3.4.1.2 Main Depot / Depot
1.4.5.3.4.2 Output
1.4.5.3.4.2.1 Depot
1.4.5.3.4.2.2 Bus No.
1.4.5.3.4.2.3 Bus Duty
1.4.5.3.4.2.4 Bus Duty sign-off time
1.4.5.3.4.2.5 Scheduled parking location
1.4.5.3.4.2.6 Bus order (if any)
1.4.5.3.4.3 Remarks
1.4.5.3.4.3.1 System will report buses overnight parking location according to current bus duty assignment and orders.
1.4.5.3.4.4 Used By
1.4.5.3.4.4.1 Depots, LW, Traffic

1.4.5.3.5 Survey enquiry report
1.4.5.3.5.1 Selection Criteria
1.4.5.3.5.1.1 Operating Date Range
1.4.5.3.5.1.2 Operating Time Range
1.4.5.3.5.1.3 Operating Route No. (optional)
1.4.5.3.5.1.4 Survey items
1.4.5.3.5.1.4.1 Wheelchair
1.4.5.3.5.1.4.2 Octopus checking status
1.4.5.3.5.1.4.3 Breakdown of equipment
1.4.5.3.5.2 Output
1.4.5.3.5.2.1 Operating date
1.4.5.3.5.2.2 Depot
1.4.5.3.5.2.3 Bus No.
1.4.5.3.5.2.4 Report Item
1.4.5.3.5.2.5 Report Time
1.4.5.3.5.2.6 Affected Bus Duty
1.4.5.3.5.2.7 Affected BC Employee No.
1.4.5.3.5.2.8 Departure Time
1.4.5.3.5.3 Remarks
1.4.5.3.5.3.1 Multiple Time Range is allowed
1.4.5.3.5.4 Used By
1.4.5.3.5.4.1 Depots, LW, Traffic

1.4.5.4 Contingency Report
1.4.5.4.1 Snapshot of Working Timetable – Time View
1.4.5.4.1.1 Selection Criteria
1.4.5.4.1.1.1 Operating Date
1.4.5.4.1.1.2 Main Depot / Depot
1.4.5.4.1.2 Output
1.4.5.4.1.2.1 Operating Date
1.4.5.4.1.2.2 Operating Route No.
1.4.5.4.1.2.3 Operating Bus No.
1.4.5.4.1.2.4 Operating BC Employee No. / Name & BC Duty (Route/Run/Shift)

1.4.5.4.1.2.5 Bus Duty – Route & Run No.
1.4.5.4.1.2.6 Duty activity – Pay Trip / Light-Run / Dead-Run
1.4.5.4.1.2.7 Scheduled Departure Time
1.4.5.4.1.2.8 Scheduled Departure Location
1.4.5.4.1.2.9 Scheduled Termini Location
1.4.5.4.1.2.10 Indicator of Meal-break
1.4.5.4.1.2.11 Indicator of Coffee-break
1.4.5.4.1.2.12 Drive-in Bus No.
1.4.5.4.1.2.13 Drive-in BC Employee No. / Name & BC Duty (Route/Run/Shift)
1.4.5.4.1.2.14 Drive-in Route No.
1.4.5.4.1.3 Remarks
1.4.5.4.1.3.1 Redeploy-in & Redeploy-out shall also be included
1.4.5.4.1.4 Used By
1.4.5.4.1.4.1 Depots, LW

1.4.5.4.2 Snapshot of Working Timetable – Bus View
1.4.5.4.2.1 Selection Criteria
1.4.5.4.2.1.1 Operating Date
1.4.5.4.2.1.2 Main Depot / Depot
1.4.5.4.2.2 Output
1.4.5.4.2.2.1 Operating Date
1.4.5.4.2.2.2 Bus Duty – Route & Run No.
1.4.5.4.2.2.3 Operating Route No.
1.4.5.4.2.2.4 Operating BC Employee No. / Name & BC Duty (Route/Run/Shift)
1.4.5.4.2.2.5 Duty activity – Pay Trip / Light-Run / Dead-Run
1.4.5.4.2.2.6 Scheduled Departure Time
1.4.5.4.2.2.7 Scheduled Departure Location
1.4.5.4.2.2.8 Scheduled Termini Location
1.4.5.4.2.2.9 Indicator of Meal-break
1.4.5.4.2.2.10 Indicator of Coffee-break
1.4.5.4.2.3 Used By
1.4.5.4.2.3.1 Depots, LW

1.4.5.4.3 Snapshot of Working Timetable – BC View
1.4.5.4.3.1 Selection Criteria
1.4.5.4.3.1.1 Operating Date
1.4.5.4.3.1.2 Main Depot / Depot
1.4.5.4.3.2 Output
1.4.5.4.3.2.1 Operating Date
1.4.5.4.3.2.2 BC Duty – Route No. / Run No. & Shift
1.4.5.4.3.2.3 BC Employee No. / Name
1.4.5.4.3.2.4 Duty activity – Pay Trip / Light-Run / Dead-Run
1.4.5.4.3.2.5 Operating Route No.
1.4.5.4.3.2.6 Operating Bus No. & Bus Duty
1.4.5.4.3.2.7 Scheduled Departure Time
1.4.5.4.3.2.8 Scheduled Departure Location
1.4.5.4.3.2.9 Scheduled Termini Location
1.4.5.4.3.2.10 Indicator of Meal-break
1.4.5.4.3.2.11 Indicator of Coffee-break
1.4.5.4.3.3 Used By
1.4.5.4.3.3.1 Depots, LW

1.4.5.5 Maintenance logs
1.4.5.5.1 Working Timetable maintenance log
1.4.5.5.1.1 Selection Criteria
1.4.5.5.1.1.1 Operating date / time range

1.4.5.5.1.1.2 Main Depot / Depot
1.4.5.5.1.1.3 Operating Route No.
1.4.5.5.1.1.4 Bus No.
1.4.5.5.1.1.5 BC Employee No.
1.4.5.5.1.1.6 Responsible Dispatcher
1.4.5.5.1.1.7 Dispatcher
1.4.5.5.1.2 Output
1.4.5.5.1.2.1 Modified System Date/time
1.4.5.5.1.2.2 Action logged
1.4.5.5.1.2.3 Operating Date
1.4.5.5.1.2.4 Bus duty
1.4.5.5.1.2.5 Bus no.
1.4.5.5.1.2.6 BC Employee No.
1.4.5.5.1.2.7 Modified By
1.4.5.5.1.2.8 Modifiable items on working timetable
1.4.5.5.1.2.8.1 Activity – Pay trip / Light-run/ Dead-run
1.4.5.5.1.2.8.2 Assigned Bus No.
1.4.5.5.1.2.8.3 Assigned BC Employee No.
1.4.5.5.1.2.8.4 Operating Route no.
1.4.5.5.1.2.8.5 Departure Time
1.4.5.5.1.2.8.6 Start Location
1.4.5.5.1.2.8.7 End Location
1.4.5.5.1.2.8.8 Cancellation reason
1.4.5.5.1.2.8.9 Meal break
1.4.5.5.1.2.8.10 Coffee break
1.4.5.5.1.2.8.11 … etc.
1.4.5.5.1.3 Used By
1.4.5.5.1.3.1 Depots, LW, Traffic

1.4.5.5.2 Incident board moving log
1.4.5.5.2.1 Selection Criteria
1.4.5.5.2.1.1 Operating date / time range
1.4.5.5.2.1.2 Main Depot / Depot
1.4.5.5.2.1.3 Operating Route No.
1.4.5.5.2.1.4 Bus No.
1.4.5.5.2.1.5 BC Employee No.
1.4.5.5.2.1.6 Responsible Dispatcher
1.4.5.5.2.1.7 Incident Reference No.
1.4.5.5.2.2 Output
1.4.5.5.2.2.1 Modified System Date/time
1.4.5.5.2.2.2 Action logged
1.4.5.5.2.2.3 Operating Date
1.4.5.5.2.2.4 Affected Bus duty
1.4.5.5.2.2.5 Affected Bus no.
1.4.5.5.2.2.6 Affected BC Employee No.
1.4.5.5.2.2.7 Assigned dispatcher
1.4.5.5.2.2.8 Assigned incident no.
1.4.5.5.2.2.9 Incident Event
1.4.5.5.2.2.10 Event creator
1.4.5.5.2.2.11 Remarks
1.4.5.5.2.3 Used By
1.4.5.5.2.3.1 Depots, LW, Traffic

1.4.5.5.3 System Tables Maintenance log
1.4.5.5.3.1 Remarks
1.4.5.5.3.1.1 System will keep a traceable maintenance log of System Tables mentioned in 1.4.1
1.4.5.5.3.2 Used By
1.4.5.5.3.2.1 Depots, LW, Traffic

1.4.5.5.4 Message Dissemination log
1.4.5.5.4.1 Remarks
1.4.5.5.4.1.1 System will keep a traceable maintenance log of message disseminated which are perform via various functions
1.4.5.5.4.2 Used By
1.4.5.5.4.2.1 Depots, LW, Traffic

1.4.5.5.5 Dispatcher roster maintenance log
1.4.5.5.5.1 Remarks
1.4.5.5.5.1.1 System will keep a traceable maintenance log of dispatchers' roster
1.4.5.5.5.2 Used By
1.4.5.5.5.2.1 Depots, LW, Traffic

1.4.6 Access Control Function

1.4.6.1 Maintain access control authority (新增/修改用戶資料)
1.4.6.1.1 This function is used to create user account and assign data access right for a user account

1.4.6.2 Print Access Control maintenance log list (列印用戶資料修改紀錄表)
1.4.6.2.1 This function is used to print the maintenance log for the updates done in 1.4.6.1

1.4.6.3 Assign user to user group (修改用戶與用戶群組關係)
1.4.6.3.1 This function is used to assign a user account to user group(s)

1.4.6.4 Print user group assignment log list (列印用戶與用戶群組關係修改紀錄表)
1.4.6.4.1 This function is used to print the maintenance log for the updates done in 1.4.6.3

1.4.6.5 Maintain user group access authority (修改用戶群組權限)
1.4.6.5.1 This Function is used to create user groups and define their functional access right

1.4.6.6 Print user group access control authority maintenance list (列印用戶群組權限修改紀錄表)
1.4.6.6.1 This function is used to print the maintenance log for the updates done in 1.4.6.5

1.5 System Assumptions and Constraints

1. A route belongs to one and only one depot

2. The migration from TER to ROM is on route basis

3. It is preferable to equip all buses of a route with telematics device before the route is managed by ROM

4. It is preferable to equip the termini of a route with Wi-Fi detection facilities before a route is managed by ROM

5. All graphical user interfaces in ROM will be in Chinese initially. Bilingual version will be provided later through System Change Request (SCR)

6. The sample screens and reports illustrated in this document are subject to fine tuning at implementation stage but all the functionality will be fulfilled as specified

7. The estimated arrival time (ETA) as seen in ROM is retrieved from BOM. The estimation would vary from the actual time to a certain extent. The typical magnitude of variance could be obtained from BOM system.

8. ROM handles jointly operated routes in the following way:
   - ETA information of non-KMB trips is NOT available
   - Scheduled departure time of non-KMB trips is used in headway calculation

9. ROM assumes that digital maps for corporate use has been acquired by the end of November 2014

10. ROM will provide the light-run ETA base on the scheduled light-run travelling time passed from Hastus

1.6 System Interface

Inbound interface to ROM:

From	Interface Contents	Frequency
BTS	telematics data	real time
BOM	All-stop estimated arrival time data (ETA)	real time
	Inter-stop journey time	Daily
CSS	Octopus card usage transactions	Daily
HRM	Employee information	Daily
BMS	Bus master, bus type information	Daily
	Bus breakdown information	Real time
BCS	Working timetable, overnight parking location, lightrun and deadrun travelling time	Daily
IAS	Accident rate	Daily
TER	Buses at terminus detected thru Wi-Fi	Real time
	Bus departure time at termini for routes not yet managed by ROM	Real time
	Lost trip statistics	Daily and real time
	"Tap card" message(s) for bus captain	Real time
TOM	Bus and crew assignment data	Daily and real time
	Duty cancellation data	Real time
	Training information	Daily
OCM	Bus accident information	Real time
CST	Route complaint figures	Daily
BSI	Bus stop and terminus name and location (textual), bus routing information	Daily
RTS	Route master	Daily

Outbound interface from ROM:

To	Interface Contents	Frequency
TER	Messages to terminus (replace TME022)	Real time
	Bus departure time at termini for routes already managed by ROM	Real time
	Drover card ID of the "tap card" bus captain	Real time
TOM	Bus captain quit-duty data	Real time
BOM	Bus departure time at termini for routes already managed by ROM	Real time

Systems description:

BTS - Bus Telematics System
BOM - Bus Onboard Monitoring System
CSS - Contactless System Card System
BCS - Bus and Crew Scheduling System
OCM - Operations Communication Management System
TER - Terminus Management System
TOM - Traffic Operation Management System
CST - Customer Feedback Management System
BSI - Bus Stop Inventory System
HRM - Human Resources Management System
BMS - Bus Maintenance System
IAS - Insurance Administration System
RTS - Route Timetable System

2. System Configuration

2. System configuration

2.1 Hardware Description

ROM System is intended to run on KMB Network with the following hardware requirement:

For general users
- Standard hardware configuration (refer http://it.kmbh.com.hk/Public/IT_Template/Justification.htm)

For dispatchers
- Standard hardware configuration (refer http://it.kmbh.com.hk/Public/IT_Template/Justification.htm) plus 2 additional monitors and a graphic card support up to 4 monitors

For the terminus PC (for BC to tap card to report arrival)
- Standard hardware configuration for a TER terminus PC plus a number pad.
- As at September 2014, the standard configuration for TER terminus PC is:

  DELL OPTIPLEX XE2 SFF Base
  Intel Core I3-4330 Processor (Dual Core, 4MB Cache, 3.50GHz, w/ HD 4600 Graphics)
  1 keyboard (without USB hub), 1 mouse, 2 USB ports and 2 Com ports
  2 x 2GB DDR3 1333 MHz SDRam
  Pre-load Chinese Windows 7 Professional (32bit)
  500GB SATA HDD(7,200rpm)
  Giga Network LAN card
  VGA/DVI Cable adaptor
  No CD Rom, No DVD Rom, No 3.5" floppy drive
  2 x display port to dvi adaptor
  With built-in VGA port and built-in display port
  Sound card and internal speaker
  Dell Dust Filter for small form factor optiplex XE
  Dell Professional P1914S 19" W UltraSharp LCD or equivalent
  Analog RGB and Digital DVI-D
  Height-adjustable stand (130 mm up or down) allows users to set the monitor to their own comfort level
  VESA compliant 100 mounting

2.2 Software Description

ROM System will utilize the following software:
- MS SQL Server
- MS .net framework
- GIS tools

3. Contact Points

3. Contact Points

3.1 User Contact Point

Traffic Department	:	Mr. Terry Lo	(27868783)
OD Office	:	Ms. Alice Wong	(27868825)
Shatin Depot	:	Mr. Fung Siu Hung	(29468012)
Kowloon Bay Depot	:	Mr. Kwk Yik Sing	(34067006)
Lai Chi Kok Depot	:	Mr. Ken Wong	(34731918)
Tuen Mun Depot	:	Mr. Kelvin Yeung	(34067708)
Long Win Bus Company	:	Mr. Kelvin Mak	(27085634)

3.2 IT Contact Point

Handle system change request and enquiries

. Project Leader	:	Mr. Chan Chung Lim	(27868852)
. Assistant Project Leader	:	Ms. Grace Woo	(27868851)

4. System Security

4. System security

4.1 The access right in ROM is controlled in 2 aspects – function and data. Functional aspect means which windows are allowed for a user to open whereas data aspect means the scope of data a user is allowed to view or update.

4.2 Functional access right is controlled by user group. A user group is allowed to use a pre-defined set of system functions. A user may belong to one or more user groups. If a user belongs to more than one user group, he/she is entitled to the functions of all his/her user groups.

4.3 Data access right is defined by which depot's data a user is allowed to update or browse. It is defined for each individual user, not for user group.

4.4 One master user for each department. The master user can create users with access right up to his/her own. There are logs for creation/maintenance of user accounts.

4.5 The master user can delegate the right to create user accounts to a descendant user but its descendant has no right to do so.

4.6 The parent user can enquire/amend/delete any descendant user but it cannot view the password of the user.

4.7 Each ROM user is prompted to change password every 6 months. If the password is not changed after 9 months, the user id. will be disabled.

4.8 Password must not be less than 5 characters.

4.9 User may not use previous 3 passwords.

4.10 Anti-virus measures are taken for files updated on local machine or on network servers.

4.11 A High Availability architecture will be implemented to ensure that the database server is always up and running. In case of disaster at HQ, user may switch to operate at I.T. Back-up Site without loss of data.

5. General User Responsibilities

5. General User Responsibilities

1. Assign password to authorized personnel only and control the system functions that can be performed by each person.

2. After online maintenance is performed, user should print out the log list and verify whether there is any data entry error.

3. Diagnose any error messages and consult the project team if necessary.

4. Train colleagues who are new to the system so that they may pick up in shortest time.

5. Always logoff the application when you are not using it.

6. Data Retention Policy

6. Data Retention Policy

Data Category	**Retention Period**
Trip operating data	18 months
Maintenance log	6 months
Daily back-up tapes	30 days
Monthly back-up tapes	2 years

7. System Functions Section

7.1 Summary of System Functions

Function	Description	Sample	Used By			
			Depots	LW	Traffic	ODO
1.4.1 Reference Tables maintenance						
1.4.1.1	Maintain OCC Table	N/A	X	X		
1.4.1.2	Maintain System Parameters Table	N/A	X	X	X	
1.4.1.3	Maintain Route Table	N/A	X	X		
1.4.1.4	Maintain Bus Captain Table	N/A	X	X		
1.4.1.5	Maintain Incident Nature Table	N/A			X	
1.4.1.6	Maintain Incident Event Table	N/A			X	
1.4.1.7	Maintain resources hunting priority score settings	N/A			X	
1.4.1.2	Maintain incident severity score settings	N/A			X	
1.4.2 Real-time Bus Monitoring						
1.4.2.1	Bus Display on map view	7.2.1.1	X	X	X	X
1.4.2.2	Bus Display on line chart	7.2.1.2	X	X	X	X
1.4.3 Departure Management						
1.4.3.1	Incident Board	7.2.2.1	X	X	X	X
1.4.3.2	Route Performance Board	7.2.2.2	X	X	X	X
1.4.3.3	Arrival/Departure Board	7.2.2.8	X	X	X	X
1.4.3.4	Working Timetable Maintenance	7.2.2.9	X	X		
1.4.3.5	Message dissemination to OCC	7.2.2.4			X	
1.4.3.6	Message dissemination to Bus Captain	7.2.2.5	X	X	X	
1.4.3.7	Arrival Reporting by Bus Captains	7.2.2.6	X	X		

Function	Description	Sample	Used By			
			Depots	LW	Traffic	ODO
1.4.3.8	Dispatcher Sign-out Procedure	N/A	X	X		
1.4.4 Dispatchers Management Functions						
1.4.4.1	Maintain dispatcher table	N/A	X	X		
1.4.4.2	Maintain Shift duration table	N/A	X	X		
1.4.4.3	Import/Maintain the duty roster of dispatchers	N/A	X	X		
1.4.4.4	Maintain the working status of dispatcher	N/A	X	X		
1.4.4.5	Re-assignment of dispatcher responsibility	N/A	X	X		
1.4.5 Reporting						
1.4.5.1	Monitoring Reports	N/A	X	X	X	X
1.4.5.1.1	List of BCs who are willing / not willing to run extra trips or redeployment	N/A	X	X	X	X
1.4.5.1.2	Prompt list of BCs / trips / routes with abnormal departure or arrival records	N/A	X	X	X	X
1.4.5.1.3	Prompt list of BCs with abnormal driving behaviour	N/A	X	X	X	X
1.4.5.1.4	Bus breakdown statistics analysis by reporting BC	N/A	X	X	X	X
1.4.5.1.5	Route performance analysis report	N/A	X	X	X	X
1.4.5.1.6	Dispatcher performance report – Departure Management	N/A	X	X	X	X
1.4.5.1.7	Dispatcher performance report – Time to Resolution	N/A	X	X	X	X
1.4.5.1.8	Dispatcher performance report – Attendance Record	N/A	X	X	X	X
1.4.5.2.1	Journey time analysis report	N/A	X	X	X	X
1.4.5.2.2	Prediction of journey time over two locations	N/A	X	X	X	X
1.4.5.2.3	Journey time comparison report	N/A	X	X	X	X
1.4.5.2.4	Daily Lost Trip and Journey Time Analysis	N/A	X	X	X	X
1.4.5.2.5	Daily Lost Trip Analysis by Special Incident	N/A	X	X	X	X

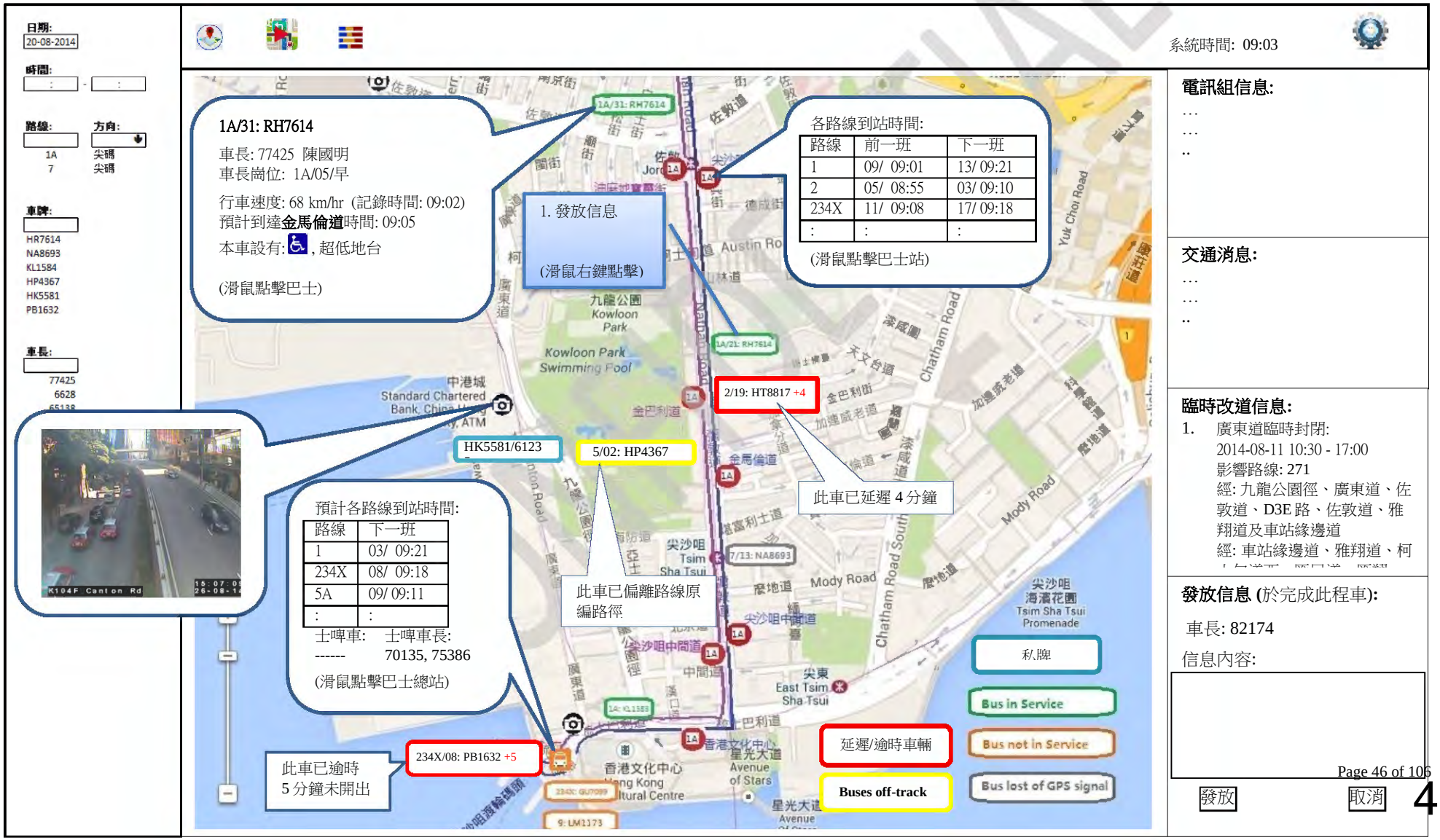
Function	Description	Sample	Used By			
			Depots	LW	Traffic	ODO
1.4.5.2.6	Bus breakdown tendency	N/A	X	X	X	X
1.4.5.3.1	Average Passenger Boarding by Route by Bus Stop	N/A	X	X	X	X
1.4.5.3.2	Passenger Boarding by Route by Bus Stop Comparison across various operating time period	N/A	X	X	X	X
1.4.5.3.3	Boarding survey statistic – Passenger Boarding by Bus Stop	N/A	X	X	X	X
1.4.5.3.4	Overnight parking summary by parking location	N/A	X	X	X	X
1.4.5.3.5	Survey enquiry report	N/A	X	X	X	X
1.4.5.4	Contingency Report	N/A	X	X	X	X
1.4.5.5.1	Working Timetable maintenance log	N/A	X	X	X	X
1.4.5.5.2	Incident board moving log	N/A	X	X	X	X
1.4.5.2	Analysis Reports	N/A	X	X	X	X
1.4.5.3	Miscellaneous Reports	N/A	X	X	X	X
1.4.5.4	Contingency Reports	N/A	X	X	X	X
1.4.5.5	Maintenance Logs	N/A	X	X	X	X

7.2 Sample of System Functions

7.2.1 Real-time Bus Monitoring

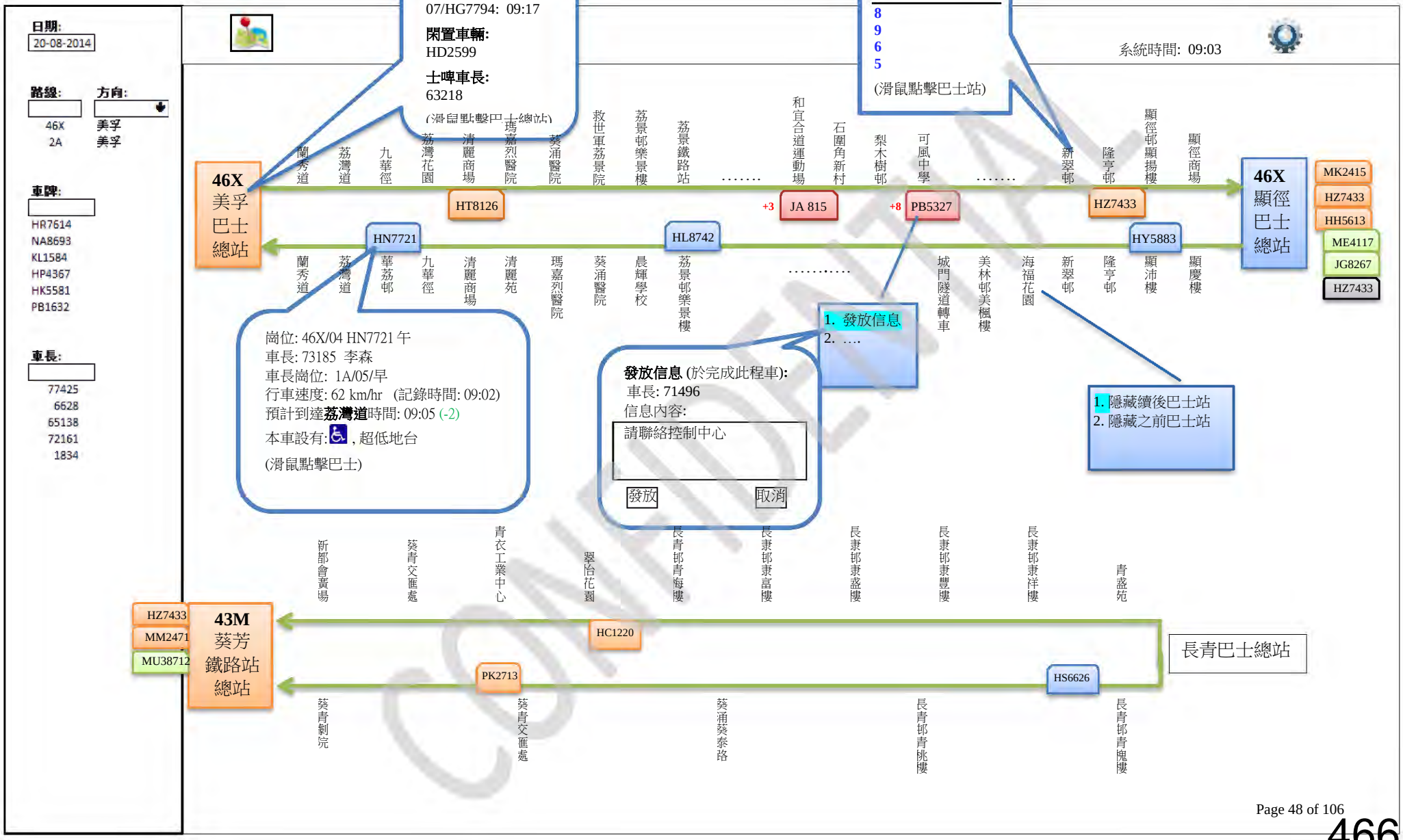
7.2.1.1 Bus Display on map view

7.2.1.1.1 General View



7.2.1.1.1 Geo-fencing

7.2.1.2 Bus Display on line chart



7.2.2 Departure Management

7.2.2.1 Incident Board – Incident Board shown on OCC Display

車務控制中心: 荔枝角　　系統時間: 2014-08-01 09:34:12

調度員	事件類別	路線	字軌	車長編號	車輛編號	輸入者	輸入時間	參考編號
王大同	預計延遲到達	C 8A	01	1155	RI6134	ROM	09:32:47	31668
張子良	延遲抵達沒有原因	C46	05	65325	KL6385	ROM	09:33:51	31675
李超	欠人	C12	05	66421	GS4853	TOM	08:45:20	31523
王大同	欠車	C 2A	06	67656	KR4350	TOM	08:45:20	31513
何小明	尚未抵達 影響往後出車	C40	03	65318	KW3187	王大同	09:18:05	31608
張子良	壞車	C108	02	73493	MM2038	李超	08:12:16	31468
李超	劈車	C42A	07	77251	JK1583	何小明	09:12:06	31594
張子良	交通意外	C39A	05	85047	LM2168	OCM	07:45:20	31353
王大同	失物處理 - 留後	C43A	08	70524	MK5518	王大同	07:50:10	31381
李超	改變行車路線	C35A	04	73914	ND6181	ROM	09:28:20	31618
						:		
						:		
						:		

調度員尚未確認處理事件

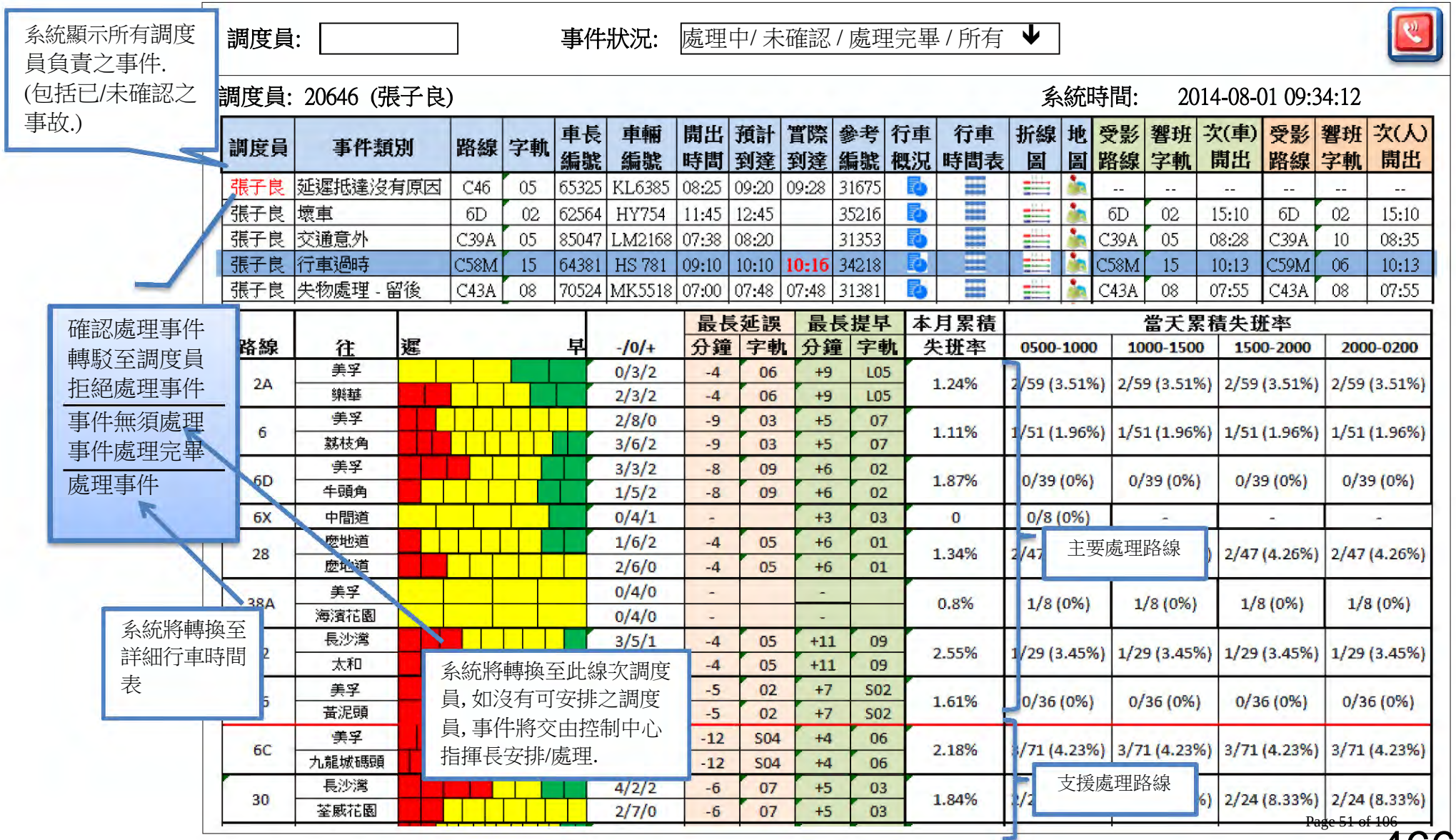
顯示尚待處理事件有:
1. 系統自動偵測
2. 調度員輸入

7.2.2.2 Route Performance Board

車務控制中心: 荔枝角

路線	往	遲 早	-/0/+	最長延誤 分鐘	最長延誤 字軌	最長提早 分鐘	最長提早 字軌	本月累積 失班率	當天累積失班率 0500-1000	1000-1500	1500-2000	2000-0200
2A	美孚		0/3/2	-4	06	+9	L05	1.24%	2/59 (3.51%)	2/59 (3.51%)	2/59 (3.51%)	2/59 (3.51%)
	樂華		2/3/2	-4	06	+9	L05					
6	美孚		2/8/0	-9	03	+5	07	1.11%	1/51 (1.96%)	1/51 (1.96%)	1/51 (1.96%)	1/51 (1.96%)
	荔枝角		3/6/2	-9	03	+5	07					
6C	美孚		5/6/2	-12	S04	+4	06	2.18%	3/71 (4.23%)	3/71 (4.23%)	3/71 (4.23%)	3/71 (4.23%)
	九龍城碼頭		3/10/2	-12	S04	+4	06					
6D	美孚		3/3/2	-8	09	+6	02	1.87%	0/39 (0%)	0/39 (0%)	0/39 (0%)	0/39 (0%)
	牛頭角		1/5/2	-8	09	+6	02					
6X	中間道		0/4/1	-		+3	03	0	0/8 (0%)	-	-	-
28	麼地道		1/6/2	-4	05	+6	01	1.34%	2/47 (4.26%)	2/47 (4.26%)	2/47 (4.26%)	2/47 (4.26%)
	麼地道		2/6/0	-4	05	+6	01					
30	長沙灣		4/2/2	-6	07	+5	03	1.84%	2/24 (8.33%)	2/24 (8.33%)	2/24 (8.33%)	2/24 (8.33%)
	荃威花園		2/7/0	-6	07	+5	03					
38A	美孚		0/4/0	-		-		0.8%	1/8 (0%)	1/8 (0%)	1/8 (0%)	1/8 (0%)
	海濱花園		0/4/0	-		-						
46X	美孚		3/10/2	-5	S11	+9	08	1.78%	4/84 (4.76%)	4/84 (4.76%)	4/84 (4.76%)	4/84 (4.76%)
	顯徑		2/14/1	-5	S11	+9	08					
72	長沙灣		3/5/1	-4	05	+11	09	2.55%	1/29 (3.45%)	1/29 (3.45%)	1/29 (3.45%)	1/29 (3.45%)
	太和		1/3/4	-4	05	+11	09					
86	美孚		2/3/2	-5	02	+7	S02	1.61%	0/36 (0%)	0/36 (0%)	0/36 (0%)	0/36 (0%)
	黃泥頭		1/4/2	-5	02	+7	S02					
86A	甘泉街		0/5/3	-		+4	L03	1.91%	2/49 (4.08%)	2/49 (4.08%)	2/49 (4.08%)	2/49 (4.08%)
	沙田圍		3/4/2	-		+4	L03					
102	美孚		3/13/0	-4	08	+3	S05	1.58%	3/36 (8.33%)	3/36 (8.33%)	3/36 (8.33%)	3/36 (8.33%)
	筲箕灣		1/8/2	-4	08	+3	S05					
102P	筲箕灣		4/12/3	-6	S13	+4	06	1.91%	2/49 (4.08%)	2/49 (4.08%)	2/49 (4.08%)	2/49 (4.08%)

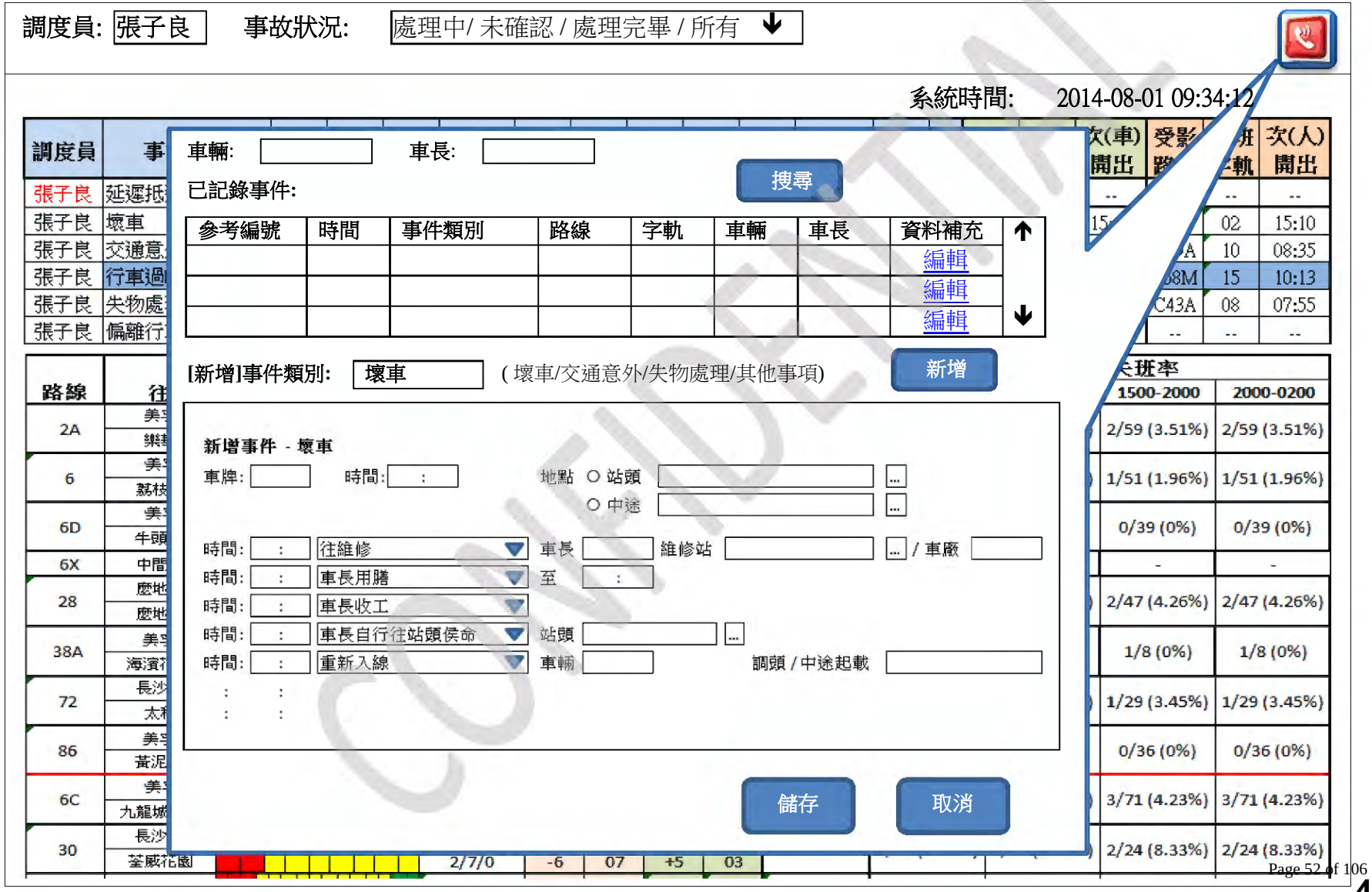
7.2.2.3 Dispatcher Monitor Board



調度員	事件類別	路線	字軌	車長編號	車輛編號	開出時間	預計到達	實際到達	參考編號	行車概況	行車時間表	折線圖	地圖	受影路線	響班字軌	次(車)開出	受影路線	響班字軌	次(人)開出
張子良	延遲抵達沒有原因	C46	05	65325	KL6385	08:25	09:20	09:28	31675					--	--	--	--	--	--
張子良	壞車	6D	02	62564	HY754	11:45	12:45		35216					6D	02	15:10	6D	02	15:10
張子良	交通意外	C39A	05	85047	LM2168	07:38	08:20		31353					C39A	05	08:28	C39A	10	08:35
張子良	行車過時	C58M	15	64381	HS 781	09:10	10:10	10:16	34218					C58M	15	10:13	C59M	06	10:13
張子良	失物處理 - 留後	C43A	08	70524	MK5518	07:00	07:48	07:48	31381					C43A	08	07:55	C43A	08	07:55

路線	往	遲 早	-/0/+	最長延誤 分鐘	最長延誤 字軌	最長提早 分鐘	最長提早 字軌	本月累積失班率	當天累積失班率 0500-1000	1000-1500	1500-2000	2000-0200
2A	美孚		0/3/2	-4	06	+9	L05	1.24%	2/59 (3.51%)	2/59 (3.51%)	2/59 (3.51%)	2/59 (3.51%)
	樂華		2/3/2	-4	06	+9	L05					
6	美孚		2/8/0	-9	03	+5	07	1.11%	1/51 (1.96%)	1/51 (1.96%)	1/51 (1.96%)	1/51 (1.96%)
	荔枝角		3/6/2	-9	03	+5	07					
6D	美孚		3/3/2	-8	09	+6	02	1.87%	0/39 (0%)	0/39 (0%)	0/39 (0%)	0/39 (0%)
	牛頭角		1/5/2	-8	09	+6	02					
6X	中間道		0/4/1	-		+3	03	0	0/8 (0%)	-	-	-
28	慶地道		1/6/2	-4	05	+6	01	1.34%	2/47		2/47 (4.26%)	2/47 (4.26%)
	慶地道		2/6/0	-4	05	+6	01					
38A	美孚		0/4/0	-		-		0.8%	1/8 (0%)	1/8 (0%)	1/8 (0%)	1/8 (0%)
	海濱花園		0/4/0	-		-						
2	長沙灣		3/5/1	-4	05	+11	09	2.55%	1/29 (3.45%)	1/29 (3.45%)	1/29 (3.45%)	1/29 (3.45%)
	太和			-4	05	+11	09					
5	美孚			-5	02	+7	S02	1.61%	0/36 (0%)	0/36 (0%)	0/36 (0%)	0/36 (0%)
	黃泥頭			-5	02	+7	S02					
6C	美孚			-12	S04	+4	06	2.18%	3/71 (4.23%)	3/71 (4.23%)	3/71 (4.23%)	3/71 (4.23%)
	九龍城碼頭			-12	S04	+4	06					
30	長沙灣		4/2/2	-6	07	+5	03	1.84%			2/24 (8.33%)	2/24 (8.33%)
	荃威花園		2/7/0	-6	07	+5	03					

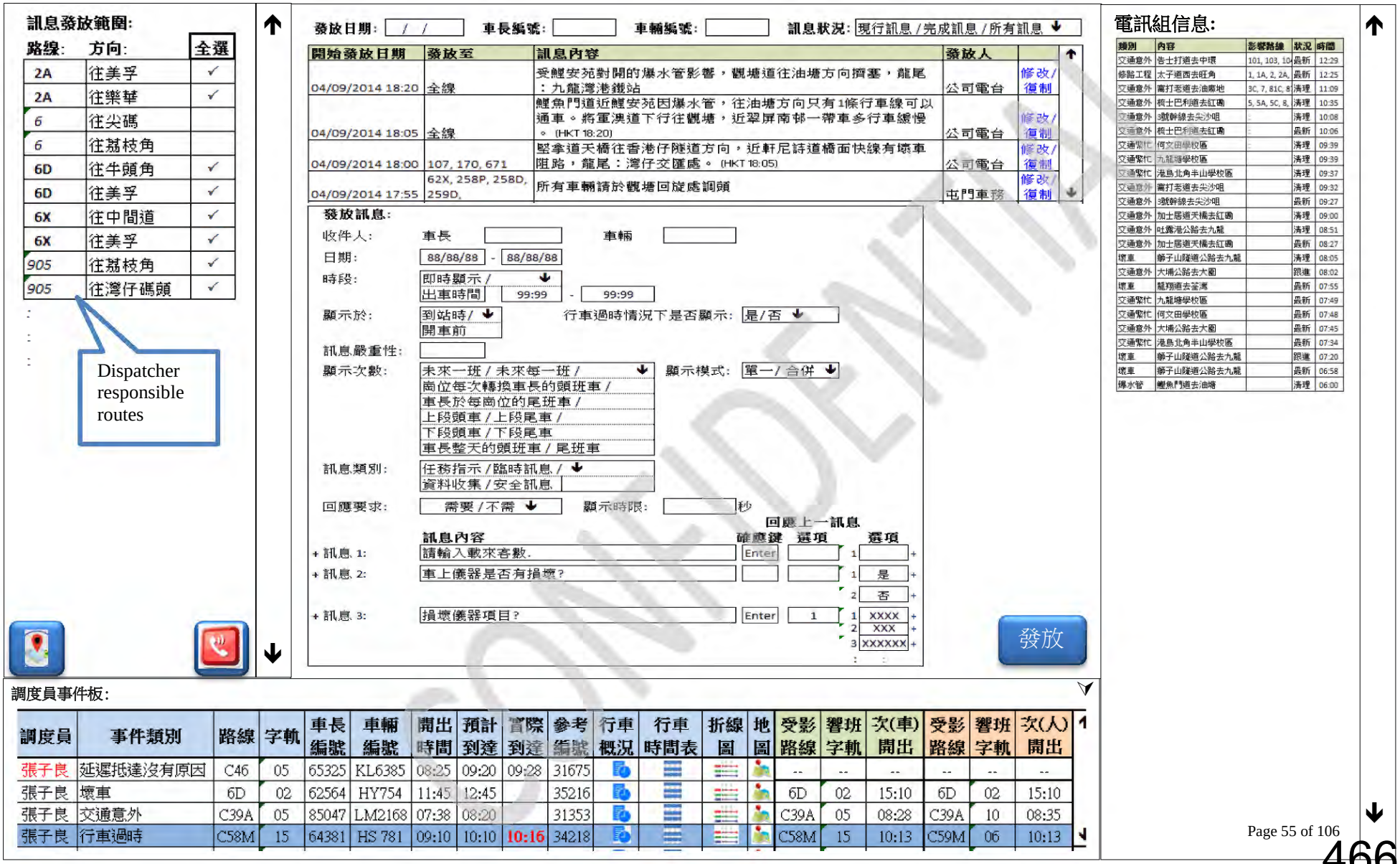
7.2.2.3.1 Record call-in incident



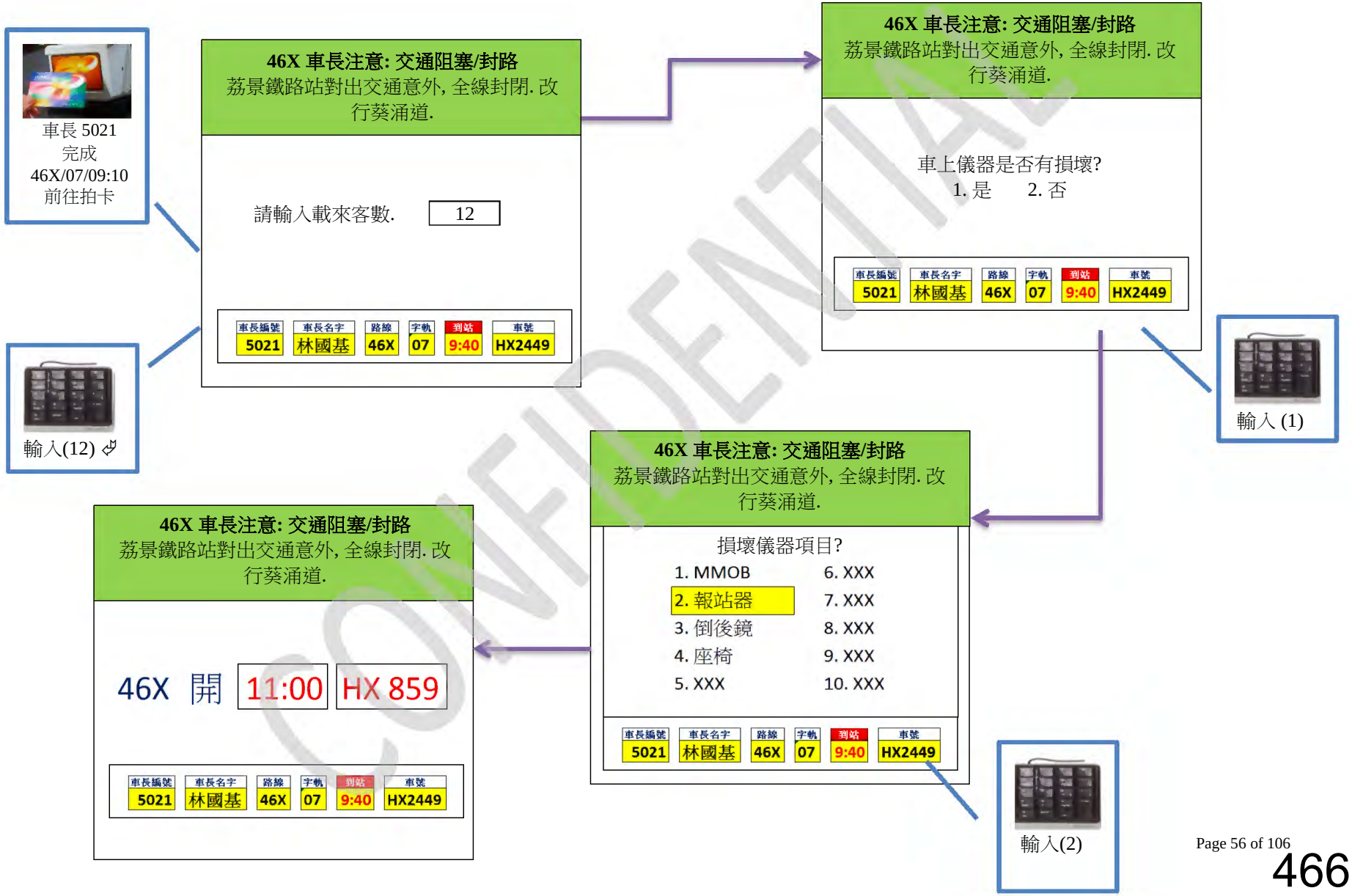
7.2.2.4 Message dissemination to OCC


訊息發放範圍:
路線:
方向:
全選
2A 往美孚
2A 往荔華
6 往尖碼
6 往荔枝角
6D 往牛頭角
6D 往美孚
6X 往中間道
6X 往美孚
905 往荔枝角
905 往灣仔碼頭
發放日期:
車長編號:
車輛編號:
訊息狀況: 現行訊息 / 完成訊息 / 所有訊息
開始發放日期
發放至
訊息內容
發放人
已確認訊息之調度員:
調度員
確認時間
OCC
受影響路線:
路線
方向
全選
8 尖碼
8 九龍[鐵路站
36B 梨木樹
36B 渡華路
42A 長亨
42A 渡華路
46 順場
46 渡華路
60X 屯門市中心
60X 渡華路
63X 田心路
63X 渡華路
68X 洪元路
68X 渡華路
69X 天瑞邨
69X 渡華路
81 禾輋
81 渡華路
95 翠林
95 渡華路
203E 彩虹
203E 九龍[鐵路站
全清
確定
取消
受影響路段範圍
亦可從現有路段選取
受影響路線

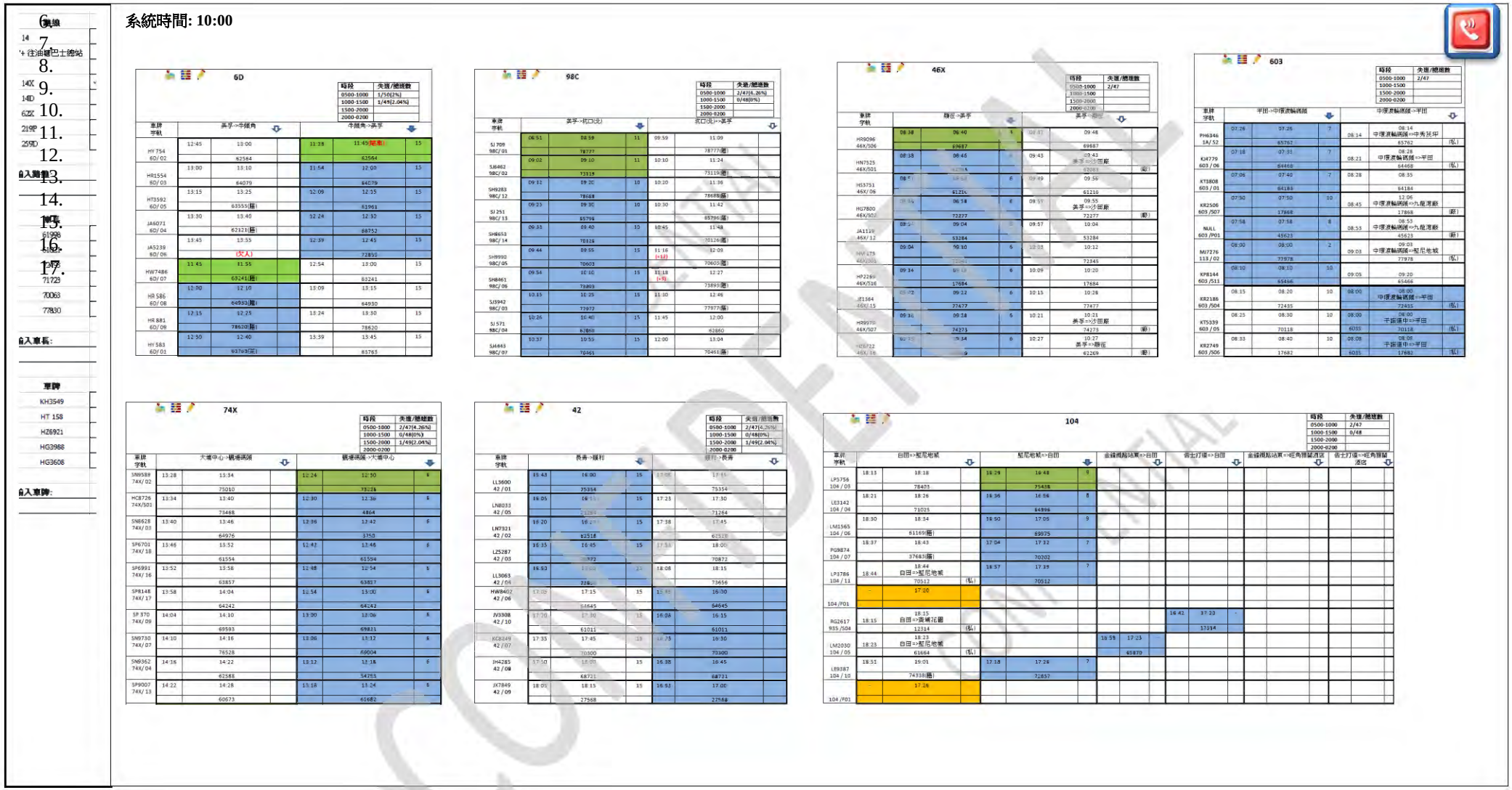
7.2.2.5 OCC Message dissemination



7.2.2.6 Arrival Reporting by Bus Captain



7.2.2.7 Multiple Arrival and Departure Board

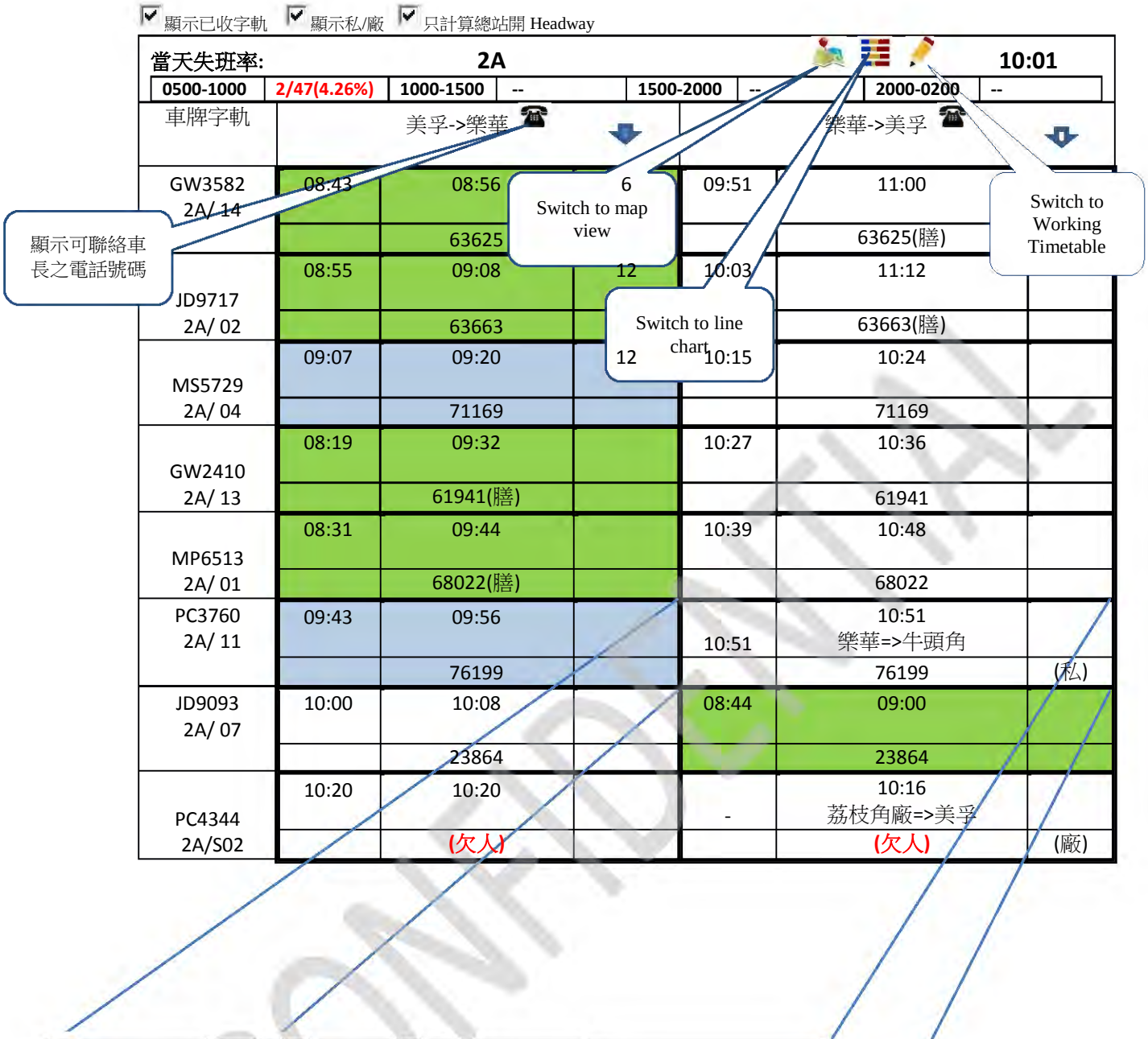


7.2.2.8 Single Arrival and Departure Monitoring

當天失班率: 2A 10:01

0500-1000	2/47(4.26%)	1000-1500	--	1500-2000	--	2000-0200	--

車牌字軌	美孚->樂華			樂華->美孚		
GW3582	08:43	08:56	6	09:51	11:00	
2A/ 14		63625			63625(膳)	
JD9717	08:55	09:08	12	10:03	11:12	
2A/ 02		63663			63663(膳)	
MS5729	09:07	09:20	12	10:15	10:24	
2A/ 04		71169			71169	
GW2410	08:19	09:32	12	10:27	10:36	
2A/ 13		61941(膳)			61941	
MP6513	08:31	09:44	12	10:39	10:48	
2A/ 01		68022(膳)			68022	
PC3760	09:43	09:56	12	10:51	10:51 樂華=>牛頭角	
2A/ 11		76199			76199	(私)
JD9093	10:00	10:08	12	08:44	09:00	
2A/ 07		23864			23864	
PC4344	10:20	10:20	12	-	10:16 荔枝角廠=>美孚	
2A/S02		(欠人)			(欠人)	(廠)
LF3614	09:19	10:32	12	11:32	11:36	
2A/ 03		74658(膳)			74658	
KR4350	09:25	10:44	12	11:44	11:48	
2A/ 06		69966(膳)			69966	
NE 714	09:31	10:56	12	11:56	12:00	
2A/ 05		78696(膳)			78696	
GW2556	11:00	11:08	12	09:45	10:00	
2A/ 16		18635			18635	
JA9579	11:12	11:20	12	10:12	10:12	
2A/S01		73252			73252	
PC3112	10:12	11:30	10	09:03	09:12	
2A/ 15		68802(膳)			68802	
RE 508	10:24	11:40	10	09:15	09:24	
2A/ 08		28476(膳)			28476	
PC3522	10:36	11:55	15	09:27	09:36	
2A/ 12		69800(膳)			69800	
MZ2851	10:48	12:00	5	09:39	09:48	
2A/ 09		63665(膳)			63665	



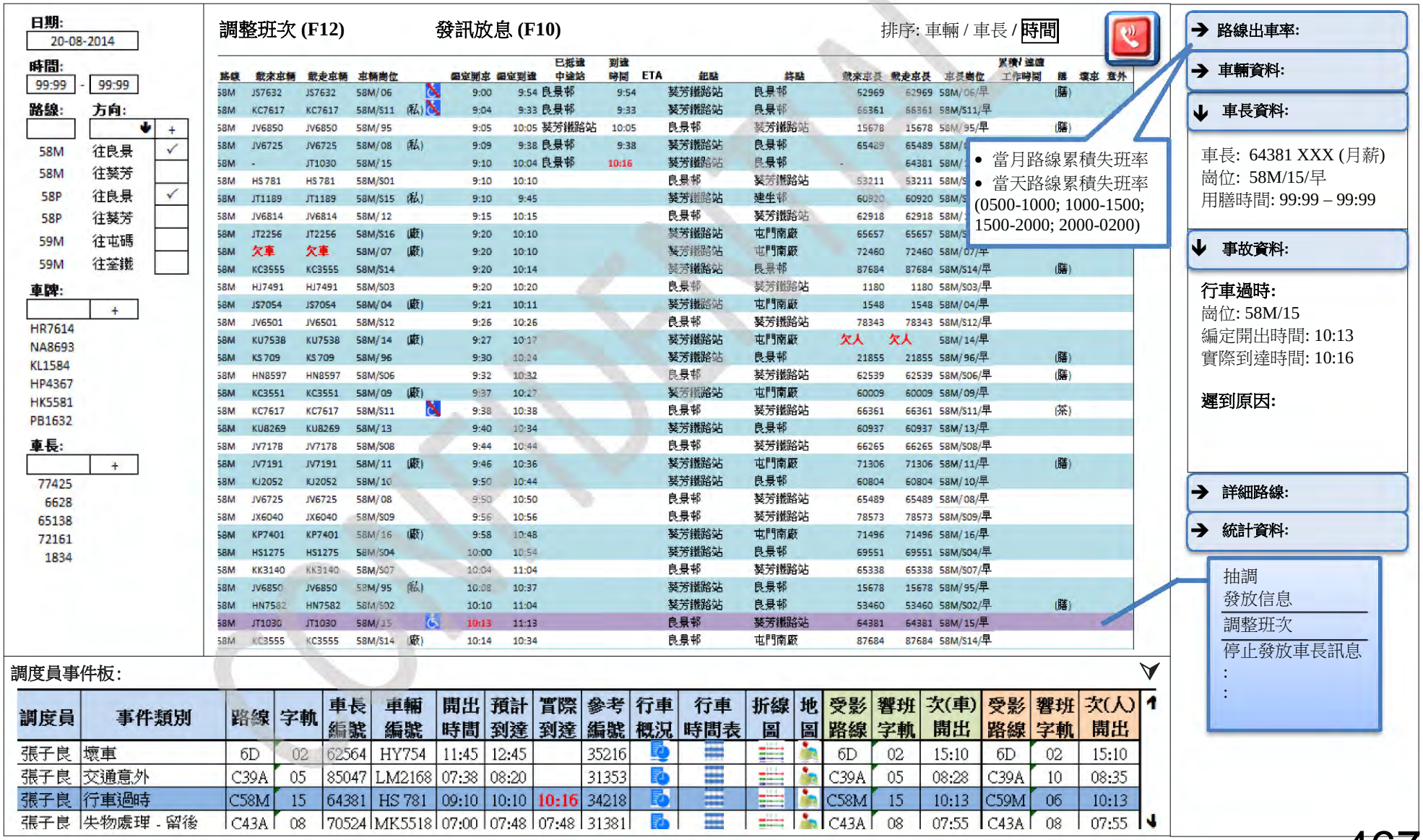
上一班次之編定/預計/實際到達時間	編定/實際開出時間 顯示起點=>終點(如與標題顯示之終點不同)	與前車開出時間之差距
車輛行走路線(如與標題顯示之路線不同)	車長編號,用膳狀況(膳,茶)	顯示班次性質(私,廠)

背色說明:

上一班次已到達
上一班次已開出但未到達
上一班次未開出

7.2.2.9 Maintain Working Timetable

7.2.2.9.1 Working Timetable – Time View



路線	載來車輛	載走車輛	車輛崗位		編定開出	編定到達	已抵達中途站	到達時間	ETA	起點	終點	載來車長	載走車長	車長崗位	累積/連續工作時間	膳	環車	意外
58M	JS7632	JS7632	58M/06		9:00	9:54	良景邨	9:54		葵芳鐵路站	良景邨	62969	62969	58M/06/早		(膳)		
58M	KC7617	KC7617	58M/S11	(私)	9:04	9:33	良景邨	9:33		葵芳鐵路站	良景邨	66361	66361	58M/S11/早				
58M	JV6850	JV6850	58M/95		9:05	10:05	葵芳鐵路站	10:05		良景邨	葵芳鐵路站	15678	15678	58M/95/早		(膳)		
58M	JV6725	JV6725	58M/08	(私)	9:09	9:38	良景邨	9:38		葵芳鐵路站	良景邨	65489	65489	58M/				
58M	-	JT1030	58M/15		9:10	10:04	良景邨	10:16		葵芳鐵路站	良景邨	-	64381	58M/				
58M	HS781	HS781	58M/S01		9:10	10:10				良景邨	葵芳鐵路站	53211	53211	58M/S				
58M	JT1189	JT1189	58M/S15	(私)	9:10	9:45				葵芳鐵路站	建生邨	60920	60920	58M/S				
58M	JV6814	JV6814	58M/12		9:15	10:15				良景邨	葵芳鐵路站	62918	62918	58M/				
58M	JT2256	JT2256	58M/S16	(廠)	9:20	10:10				葵芳鐵路站	屯門南廠	65657	65657	58M/S				
58M	欠車	欠車	58M/07	(廠)	9:20	10:10				葵芳鐵路站	屯門南廠	72460	72460	58M/07/早				
58M	KC3555	KC3555	58M/S14		9:20	10:14				葵芳鐵路站	良景邨	87684	87684	58M/S14/早		(膳)		
58M	HJ7491	HJ7491	58M/S03		9:20	10:20				良景邨	葵芳鐵路站	1180	1180	58M/S03/早				
58M	JS7054	JS7054	58M/04	(廠)	9:21	10:11				葵芳鐵路站	屯門南廠	1548	1548	58M/04/早				
58M	JV6501	JV6501	58M/S12		9:26	10:26				良景邨	葵芳鐵路站	78343	78343	58M/S12/早				
58M	KU7538	KU7538	58M/14	(廠)	9:27	10:17				葵芳鐵路站	屯門南廠	欠人	欠人	58M/14/早				
58M	KS709	KS709	58M/96		9:30	10:24				葵芳鐵路站	良景邨	21855	21855	58M/96/早		(膳)		
58M	HN8597	HN8597	58M/S06		9:32	10:32				良景邨	葵芳鐵路站	62539	62539	58M/S06/早		(膳)		
58M	KC3551	KC3551	58M/09	(廠)	9:37	10:27				葵芳鐵路站	屯門南廠	60009	60009	58M/09/早				
58M	KC7617	KC7617	58M/S11		9:38	10:38				良景邨	葵芳鐵路站	66361	66361	58M/S11/早		(茶)		
58M	KU8269	KU8269	58M/13		9:40	10:34				葵芳鐵路站	良景邨	60937	60937	58M/13/早				
58M	JV7178	JV7178	58M/S08		9:44	10:44				良景邨	葵芳鐵路站	66265	66265	58M/S08/早				
58M	JV7191	JV7191	58M/11	(廠)	9:46	10:36				葵芳鐵路站	屯門南廠	71306	71306	58M/11/早		(膳)		
58M	KJ2052	KJ2052	58M/10		9:50	10:44				葵芳鐵路站	良景邨	60804	60804	58M/10/早				
58M	JV6725	JV6725	58M/08		9:50	10:50				良景邨	葵芳鐵路站	65489	65489	58M/08/早				
58M	JX6040	JX6040	58M/S09		9:56	10:56				良景邨	葵芳鐵路站	78573	78573	58M/S09/早				
58M	KP7401	KP7401	58M/16	(廠)	9:58	10:48				葵芳鐵路站	屯門南廠	71496	71496	58M/16/早				
58M	HS1275	HS1275	58M/S04		10:00	10:54				葵芳鐵路站	良景邨	69551	69551	58M/S04/早				
58M	KK3140	KK3140	58M/S07		10:04	11:04				良景邨	葵芳鐵路站	65338	65338	58M/S07/早				
58M	JV6850	JV6850	58M/95	(私)	10:08	10:37				葵芳鐵路站	良景邨	15678	15678	58M/95/早				
58M	HN7582	HN7582	58M/S02		10:10	11:04				葵芳鐵路站	良景邨	53460	53460	58M/S02/早		(膳)		
58M	JT1030	JT1030	58M/15		10:13	11:13				良景邨	葵芳鐵路站	64381	64381	58M/15/早				
58M	KC3555	KC3555	58M/S14	(廠)	10:14	10:34				良景邨	屯門南廠	87684	87684	58M/S14/早				

調度員	事件類別	路線	字軌	車長編號	車輛編號	開出時間	預計到達	實際到達	參考編號	行車概況	行車時間表	折線圖	地圖	受影路線	響班字軌	次(車)開出	受影路線	響班字軌	次(人)開出
張子良	壞車	6D	02	62564	HY754	11:45	12:45		35216					6D	02	15:10	6D	02	15:10
張子良	交通意外	C39A	05	85047	LM2168	07:38	08:20		31353					C39A	05	08:28	C39A	10	08:35
張子良	行車過時	C58M	15	64381	HS 781	09:10	10:10	10:16	34218					C58M	15	10:13	C59M	06	10:13
張子良	失物處理 - 留後	C43A	08	70524	MK5518	07:00	07:48	07:48	31381					C43A	08	07:55	C43A	08	07:55

7.2.2.9.2 Working Timetable – Bus View

車輛: KJ2052 路線: 字軌: 排序: 車輛 / 車長 / 時間

58M/01 JU2409	58M/02 JU3065	58M/03 KV6817	58M/04 JS7054	58M/05 JV6680	58M/06 JS7632	58M/07 欠車	58M/08 JV6725	58M/09 KC3551	58M/10 KJ2052	58M/11 JV7191	58M/12 JV6814	58M/13 KU8269
05:16 66187 廠總修中心天台=>良景邨	05:32 60757 (廠)屯門南廠=>良景邨	05:41 60583 (廠)屯門南廠=>良景邨	05:57 1548 (廠)屯門南廠=>良景邨	05:50 71733 (廠)屯門南廠=>良景邨	06:04 62969 (廠)屯門南廠=>良景邨	06:37 72460 (廠)屯門南廠=>建生邨	06:18 65489 (廠)屯門南廠=>良景邨	06:25 60009 (廠)屯門南廠=>良景邨	06:49 60804 (廠總修中心天台=>良景邨	06:32 71306 (廠)屯門南廠=>良景邨	07:07 62918 (廠總修中心天台=>建生邨	06:47 60937 (廠)屯門南廠=>建生邨
05:25 66187 良景邨=>葵芳鐵路站	05:42 60757 良景邨=>葵芳鐵路站	05:51 60583 良景邨=>葵芳鐵路站	06:07 1548 良景邨=>葵芳鐵路站	06:00 71733 良景邨=>葵芳鐵路站	06:14 62969 良景邨=>葵芳鐵路站	06:50 72460 建生邨=>葵芳鐵路站	06:28 65489 良景邨=>葵芳鐵路站	06:35 60009 良景邨=>葵芳鐵路站	06:58 60804 良景邨=>葵芳鐵路站	06:42 71306 良景邨=>葵芳鐵路站	07:15 62918 建生邨=>葵芳鐵路站	07:00 60937 建生邨=>葵芳鐵路站
06:20 66187 葵芳鐵路站=>良景邨	06:44 60757 葵芳鐵路站=>良景邨	06:56 60583 葵芳鐵路站=>良景邨	07:08 1548 葵芳鐵路站=>良景邨	06:54 71733 (私)葵芳鐵路站=>良景邨	07:08 62969 (私)葵芳鐵路站=>良景邨	07:42 72460 (私)葵芳鐵路站=>寶田	07:22 65489 (私)葵芳鐵路站=>良景邨	07:32 60009 葵芳鐵路站=>良景邨	07:58 60804 (私)葵芳鐵路站=>良景邨	07:44 71306 葵芳鐵路站=>良景邨	08:10 62918 葵芳鐵路站=>良景邨	07:52 60937 (私)葵芳鐵路站=>良景邨
07:16 66187 良景邨=>葵芳鐵路站	07:40 60757 良景邨=>葵芳鐵路站	07:49 60583 良景邨=>葵芳鐵路站	08:11 1548 良景邨=>葵芳鐵路站	07:31 71733 良景邨=>葵芳鐵路站	07:44 62969 良景邨=>葵芳鐵路站	08:20 72460 寶田=>葵芳鐵路站	07:59 65489 良景邨=>葵芳鐵路站	08:29 60009 良景邨=>葵芳鐵路站	08:35 60804 良景邨=>葵芳鐵路站	08:41 71306 良景邨=>葵芳鐵路站	09:15 62918 良景邨=>葵芳鐵路站	08:23 60937 良景邨=>葵芳鐵路站
08:21 66187 廠)葵芳鐵路站=>屯門南廠	08:50 60757 (私)葵芳鐵路站=>良景邨	08:59 60583 (私)葵芳鐵路站=>良景邨	09:21 1548 (廠)葵芳鐵路站=>屯門南廠	08:41 71733 (廠)葵芳鐵路站=>屯門南廠	09:00 62969 葵芳鐵路站=>良景邨	09:20 72460 (廠)葵芳鐵路站=>屯門南廠	09:09 65489 (私)葵芳鐵路站=>良景邨	09:37 60009 (廠)葵芳鐵路站=>屯門南廠	09:50 60804 葵芳鐵路站=>良景邨	09:46 71306 (廠)葵芳鐵路站=>屯門南廠	10:20 62918 葵芳鐵路站=>良景邨	09:40 60937 葵芳鐵路站=>良景邨
10:37 66187(膳) 廠)屯門南廠=>良景邨	10:21 60757(膳) 良景邨=>葵芳鐵路站	10:38 60583(膳) 良景邨=>葵芳鐵路站	11:45 1548(膳) (廠)屯門南廠=>良景邨	11:02 71733(膳) (廠)屯門南廠=>良景邨	11:04 62969(膳) 良景邨=>葵芳鐵路站	12:19 71306(膳) (廠)屯門南廠=>良景邨	09:50 65489 良景邨=>葵芳鐵路站	12:10 60009(膳) (廠)屯門南廠=>良景邨	10:55 78464 良景邨=>葵芳鐵路站	12:02 欠人(膳) (廠)屯門南廠=>良景邨	11:14 62918 (廠)良景邨=>屯門南廠	11:38 60937(膳) 良景邨=>葵芳鐵路站
10:47 66187 良景邨=>葵芳鐵路站	11:30 60757 葵芳鐵路站=>良景邨	11:50 60583 葵芳鐵路站=>良景邨	11:55 1548 良景邨=>葵芳鐵路站	11:12 71733 良景邨=>葵芳鐵路站	12:20 62969 葵芳鐵路站=>良景邨	12:29 71306 良景邨=>葵芳鐵路站	10:50 65489 (廠)葵芳鐵路站=>屯門南廠	12:20 60009 良景邨=>葵芳鐵路站	12:10 78464 葵芳鐵路站=>良景邨	12:12 欠人 良景邨=>葵芳鐵路站	13:27 62918(膳) (廠)屯門南廠=>良景邨	12:50 60937 葵芳鐵路站=>良景邨

調度員事件板:

調度員	事件類別	路線	字軌	車長編號	車輛編號	開出時間	預計到達	實際到達	參考編號	行車概況	行車時間表	折線圖	地圖	受影路線	響班字軌	次(車)開出	受影路線	響班字軌	次(人)開出
張子良	壞車	6D	02	62564	HY754	11:45	12:45		35216					6D	02	15:10	6D	02	15:10
張子良	交通意外	C39A	05	85047	LM2168	07:38	08:20		31353					C39A	05	08:28	C39A	10	08:35
張子良	行車過時	C58M	15	64381	HS 781	09:10	10:10	10:16	34218					C58M	15	10:13	C59M	06	10:13
張子良	失物處理 - 留後	C43A	08	70524	MK5518	07:00	07:48	07:48	31381					C43A	08	07:55	C43A	08	07:55

相關車長崗位

60804 李子光 屯門/月薪:
崗位: 58M/10/ 早
工時: 06:49 - 14:24
工時累積: 3.25 / 連續: 3.25
用膳: 10:10

71306 陳明 屯門/日薪:
崗位: 58M/S13/ 早
工時: 07:52 - 21:06
工時累積: 2.55 / 連續: 2.55
用膳: --

7.2.2.9.3 Working Timetable – BC View

車長: 60804 路線: 字軌: 更份: 排序: 車輛 / 車長 / 時間

58M/01/早 66187	58M/02/早 60757	58M/03/早 60583	58M/04/早 1548	58M/05/早 71733	58M/06/早 62969	58M/07/早 72460	58M/08/早 65489	58M/09/早 60009	58M/10/早 60804	58M/11/早 71306	58M/12/早 62918	58M/13/早 60937	58M/14/早 欠人
05:16 JU2409 廠總修中心天台=>良景郁	05:32 JU3065 (廠)屯門南廠=>良景郁	05:41 KV6817 (廠)屯門南廠=>良景郁	05:57 JS7054 (廠)屯門南廠=>良景郁	05:50 JV6680 (廠)屯門南廠=>良景郁	06:04 JS7632 (廠)屯門南廠=>良景郁	06:37 欠車 (廠)屯門南廠=>建生郁	06:18 JV6725 (廠)屯門南廠=>良景郁	06:25 KC3551 (廠)屯門南廠=>良景郁	06:49 KJ2052 (廠總修中心天台=>良景郁	06:32 JV7191 (廠)屯門南廠=>良景郁	07:07 JV6814 (廠總修中心天台=>建生郁	06:47 KU8269 (廠)屯門南廠=>建生郁	06:11 KU7538 (廠)屯門南廠=>良景郁
05:25 JU2409 良景郁=>葵芳鐵路站	05:42 JU3065 良景郁=>葵芳鐵路站	05:51 KV6817 良景郁=>葵芳鐵路站	06:07 JS7054 良景郁=>葵芳鐵路站	06:00 JV6680 良景郁=>葵芳鐵路站	06:14 JS7632 良景郁=>葵芳鐵路站	06:50 欠車 建生郁=>葵芳鐵路站	06:28 JV6725 良景郁=>葵芳鐵路站	06:35 KC3551 良景郁=>葵芳鐵路站	06:58 KJ2052 良景郁=>葵芳鐵路站	06:42 JV7191 良景郁=>葵芳鐵路站	07:15 JV6814 建生郁=>葵芳鐵路站	07:00 KU8269 建生郁=>葵芳鐵路站	06:21 KU7538 良景郁=>葵芳鐵路站
06:20 JU2409 葵芳鐵路站=>良景郁	06:44 JU3065 葵芳鐵路站=>良景郁	06:56 KV6817 葵芳鐵路站=>良景郁	07:08 JS7054 葵芳鐵路站=>良景郁	06:54 JV6680 (私)葵芳鐵路站=>良景郁	07:08 JS7632 (私)葵芳鐵路站=>良景郁	07:42 欠車 (私)葵芳鐵路站=>寶田	07:22 JV6725 (私)葵芳鐵路站=>良景郁	07:32 KC3551 葵芳鐵路站=>良景郁	07:58 KJ2052 (私)葵芳鐵路站=>良景郁	07:44 JV7191 葵芳鐵路站=>良景郁	08:10 JV6814 葵芳鐵路站=>良景郁	07:52 KU8269 (私)葵芳鐵路站=>良景郁	07:20 KU7538 葵芳鐵路站=>良景郁
07:16 JU2409 良景郁=>葵芳鐵路站	07:40 JU3065 良景郁=>葵芳鐵路站	07:49 KV6817 良景郁=>葵芳鐵路站	08:11 JS7054 良景郁=>葵芳鐵路站	07:31 JV6680 良景郁=>葵芳鐵路站	07:44 JS7632 良景郁=>葵芳鐵路站	08:20 欠車 寶田=>葵芳鐵路站	07:59 JV6725 良景郁=>葵芳鐵路站	08:29 KC3551 良景郁=>葵芳鐵路站	08:35 KJ2052 良景郁=>葵芳鐵路站	08:41 JV7191 良景郁=>葵芳鐵路站	09:15 JV6814 良景郁=>葵芳鐵路站	08:23 KU8269 良景郁=>葵芳鐵路站	08:17 KU7538 良景郁=>葵芳鐵路站
08:21 JU2409 葵)葵芳鐵路站=>屯門南廠	08:50 JU3065 (私)葵芳鐵路站=>良景郁	08:59 KV6817 (私)葵芳鐵路站=>良景郁	09:21 JS7054 (廠)葵芳鐵路站=>屯門南廠	08:41 JV6680 (廠)葵芳鐵路站=>屯門南廠	09:00 JS7632 葵芳鐵路站=>良景郁	09:20 欠車 (廠)葵芳鐵路站=>屯門南廠	09:09 JV6725 (私)葵芳鐵路站=>良景郁	09:37 KC3551 (廠)葵芳鐵路站=>屯門南廠	09:50 KJ2052 葵芳鐵路站=>良景郁	09:46 JV7191 (廠)葵芳鐵路站=>屯門南廠	10:20 JV6814 葵芳鐵路站=>良景郁	09:40 KU8269 葵芳鐵路站=>良景郁	09:27 KU7538 (廠)葵芳鐵路站=>屯門南廠
09:11 (膳) 屯門南廠	09:19 (膳) 良景郁	09:28 (膳) 良景郁	10:11 (膳) 屯門南廠	09:31 (膳) 屯門南廠	09:54 (膳) 良景郁	09:31 (茶) 屯門南廠	09:50 JV6725 良景郁=>葵芳鐵路站	10:27 (膳) 屯門南廠	10:44 (膳) 良景郁	10:36 (膳) 屯門南廠	11:14 JV6814 (廠)良景郁=>屯門南廠	10:34 (膳) 良景郁	10:17 (膳) 屯門南廠
10:37 JU2409 廠)屯門南廠=>良景郁	10:21 JU3065 良景郁=>葵芳鐵路站	10:38 KV6817 良景郁=>葵芳鐵路站	11:45 JS7054 (廠)屯門南廠=>良景郁	11:02 JV6680 (廠)屯門南廠=>良景郁	11:04 JS7632 良景郁=>葵芳鐵路站	11:11 KU7538 (廠)屯門南廠=>良景郁	10:50 JV6725 (廠)葵芳鐵路站=>屯門南廠	12:10 KC3551 (廠)屯門南廠=>良景郁	12:03 KC7617 良景郁=>葵芳鐵路站	12:19 欠車 (廠)屯門南廠=>良景郁	11:34 (膳) 屯門南廠	11:38 KU8269 良景郁=>葵芳鐵路站	12:02 JV7191 (廠)屯門南廠=>良景郁
10:47 JU2409 良景郁=>葵芳鐵路站	11:30 JU3065 葵芳鐵路站=>良景郁	11:50 KV6817 葵芳鐵路站=>良景郁	11:55 JS7054 良景郁=>葵芳鐵路站	11:12 JV6680 良景郁=>葵芳鐵路站	12:20 JS7632 葵芳鐵路站=>良景郁	11:21 KU7538 良景郁=>葵芳鐵路站	11:40 (膳) 屯門南廠	12:20 KC3551 良景郁=>葵芳鐵路站	13:10 KC7617 葵芳鐵路站=>良景郁	12:29 欠車 良景郁=>葵芳鐵路站	13:27 JV6814 (廠)屯門南廠=>良景郁	12:50 KU8269 葵芳鐵路站=>良景郁	12:12 JV7191 良景郁=>葵芳鐵路站
12:00 JU2409	12:37 JU3065		13:00 JS7054	12:25 JV6680		12:30 KU7538	12:53	13:30 KC3551	14:04	13:40 欠車	13:37 JV6814		13:20 JV7191

調度員事件板:

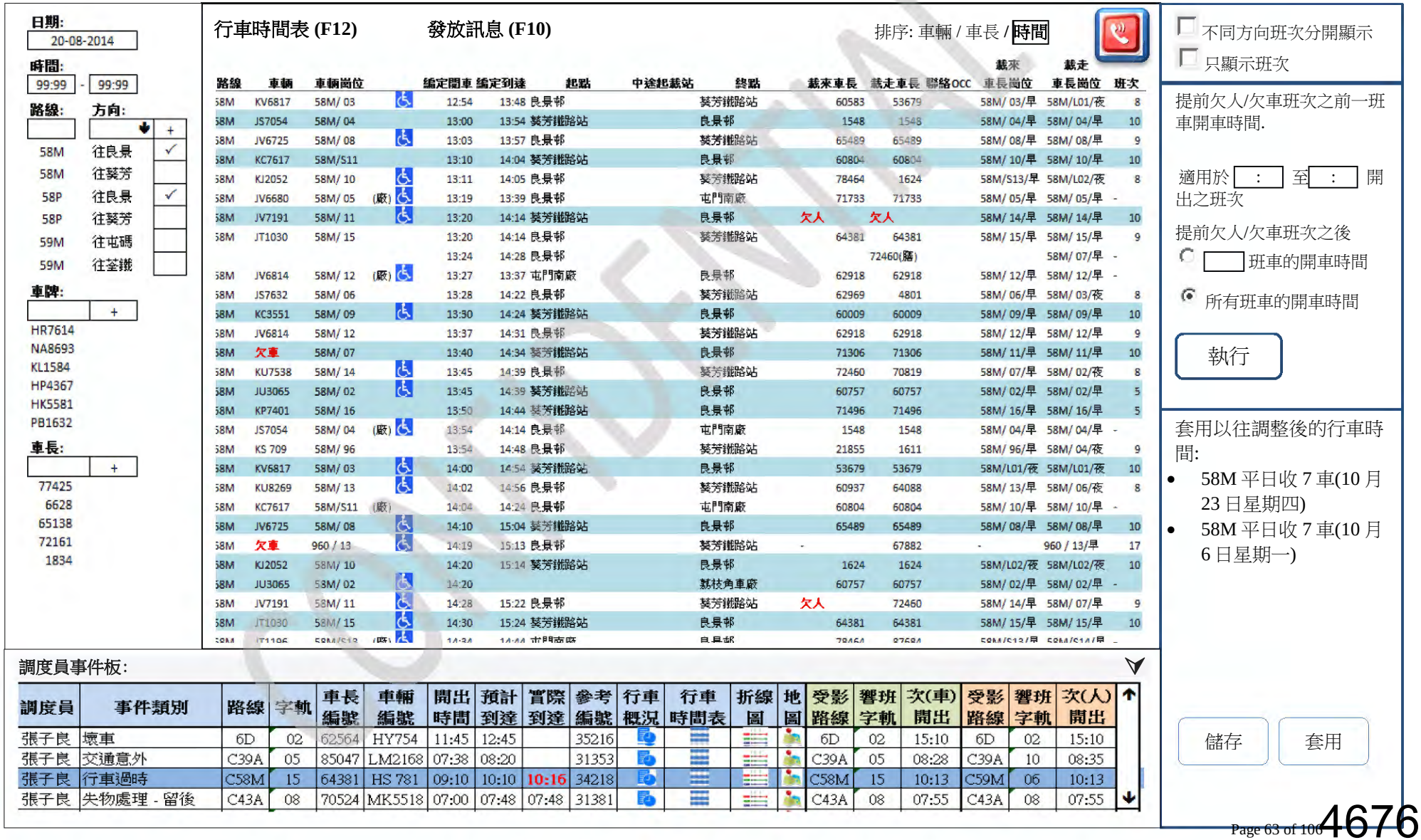
調度員	事件類別	路線	字軌	車長編號	車輛編號	開出時間	預計到達	實際到達	參考編號	行車概況	行車時間表	折線圖	地圖	受影路線	響班字軌	次(車)開出	受影路線	響班字軌	次(人)開出
張子良	壞車	6D	02	62564	HY754	11:45	12:45		35216					6D	02	15:10	6D	02	15:10
張子良	交通意外	C39A	05	85047	LM2168	07:38	08:20		31353					C39A	05	08:28	C39A	10	08:35
張子良	行車過時	C58M	15	64381	HS 781	09:10	10:10	10:16	34218					C58M	15	10:13	C59M	06	10:13
張子良	失物處理 - 留後	C43A	08	70524	MK5518	07:00	07:48	07:48	31381					C43A	08	07:55	C43A	08	07:55

相關車長崗位

KJ2052 / 崗位: 58M/10
上段收工泊:
下段收工泊:
柯打:

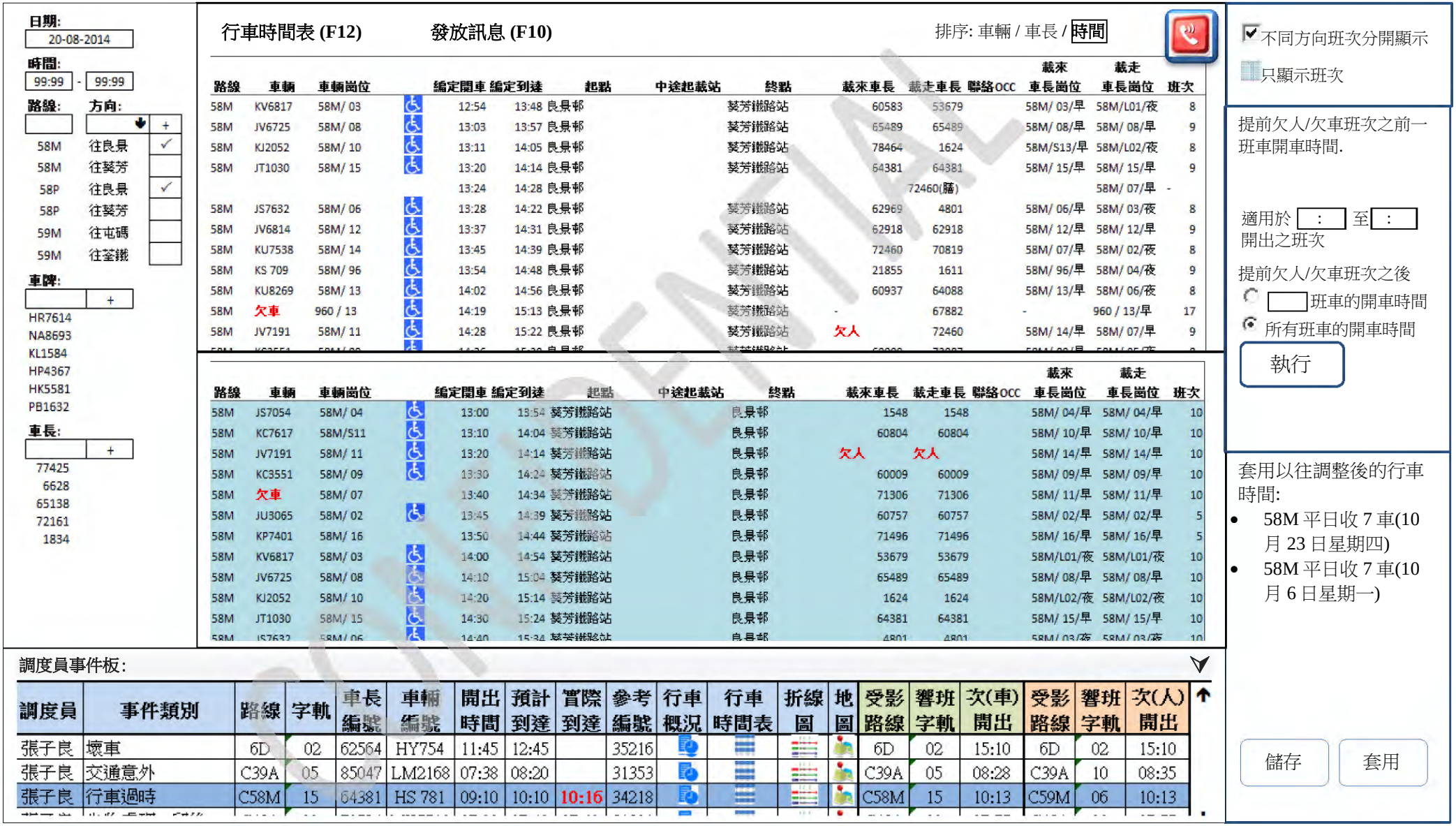
KC7617 / 崗位: 58M/S13
上段收工泊:
下段收工泊:
柯打:

7.2.2.9.4 Working Timetable – Regulation Mode in Time View



路線	車輛	車輛崗位		編定開車	編定到達	起點	中途起截站	終點	截來車長	截走車長	聯絡OCC	截來車長崗位	截走車長崗位	班次
58M	KV6817	58M/ 03		12:54	13:48	良景邨		葵芳鐵路站	60583	53679		58M/ 03/早	58M/L01/夜	8
58M	JS7054	58M/ 04		13:00	13:54	葵芳鐵路站		良景邨	1548	1548		58M/ 04/早	58M/ 04/早	10
58M	JV6725	58M/ 08		13:03	13:57	良景邨		葵芳鐵路站	65489	65489		58M/ 08/早	58M/ 08/早	9
58M	KC7617	58M/S11		13:10	14:04	葵芳鐵路站		良景邨	60804	60804		58M/ 10/早	58M/ 10/早	10
58M	KJ2052	58M/ 10		13:11	14:05	良景邨		葵芳鐵路站	78464	1624		58M/S13/早	58M/L02/夜	8
58M	JV6680	58M/ 05	(廠)	13:19	13:39	良景邨		屯門南廠	71733	71733		58M/ 05/早	58M/ 05/早	-
58M	JV7191	58M/ 11		13:20	14:14	葵芳鐵路站		良景邨	欠人	欠人		58M/ 14/早	58M/ 14/早	10
58M	JT1030	58M/ 15		13:20	14:14	良景邨		葵芳鐵路站	64381	64381		58M/ 15/早	58M/ 15/早	9
				13:24	14:28	良景邨				72460(膳)			58M/ 07/早	-
58M	JV6814	58M/ 12	(廠)	13:27	13:37	屯門南廠		良景邨	62918	62918		58M/ 12/早	58M/ 12/早	-
58M	JS7632	58M/ 06		13:28	14:22	良景邨		葵芳鐵路站	62969	4801		58M/ 06/早	58M/ 03/夜	8
58M	KC3551	58M/ 09		13:30	14:24	葵芳鐵路站		良景邨	60009	60009		58M/ 09/早	58M/ 09/早	10
58M	JV6814	58M/ 12		13:37	14:31	良景邨		葵芳鐵路站	62918	62918		58M/ 12/早	58M/ 12/早	9
58M	欠車	58M/ 07		13:40	14:34	葵芳鐵路站		良景邨	71306	71306		58M/ 11/早	58M/ 11/早	10
58M	KU7538	58M/ 14		13:45	14:39	良景邨		葵芳鐵路站	72460	70819		58M/ 07/早	58M/ 02/夜	8
58M	JU3065	58M/ 02		13:45	14:39	葵芳鐵路站		良景邨	60757	60757		58M/ 02/早	58M/ 02/早	5
58M	KP7401	58M/ 16		13:50	14:44	葵芳鐵路站		良景邨	71496	71496		58M/ 16/早	58M/ 16/早	5
58M	JS7054	58M/ 04	(廠)	13:54	14:14	良景邨		屯門南廠	1548	1548		58M/ 04/早	58M/ 04/早	-
58M	KS 709	58M/ 96		13:54	14:48	良景邨		葵芳鐵路站	21855	1611		58M/ 96/早	58M/ 04/夜	9
58M	KV6817	58M/ 03		14:00	14:54	葵芳鐵路站		良景邨	53679	53679		58M/L01/夜	58M/L01/夜	10
58M	KU8269	58M/ 13		14:02	14:56	良景邨		葵芳鐵路站	60937	64088		58M/ 13/早	58M/ 06/夜	8
58M	KC7617	58M/S11	(廠)	14:04	14:24	良景邨		屯門南廠	60804	60804		58M/ 10/早	58M/ 10/早	-
58M	JV6725	58M/ 08		14:10	15:04	葵芳鐵路站		良景邨	65489	65489		58M/ 08/早	58M/ 08/早	10
58M	欠車	960 / 13		14:19	15:13	良景邨		葵芳鐵路站	-	67882		-	960 / 13/早	17
58M	KJ2052	58M/ 10		14:20	15:14	葵芳鐵路站		良景邨	1624	1624		58M/L02/夜	58M/L02/夜	10
58M	JU3065	58M/ 02		14:20				荔枝角車廠	60757	60757		58M/ 02/早	58M/ 02/早	-
58M	JV7191	58M/ 11		14:28	15:22	良景邨		葵芳鐵路站	欠人	72460		58M/ 14/早	58M/ 07/早	9
58M	JT1030	58M/ 15		14:30	15:24	葵芳鐵路站		良景邨	64381	64381		58M/ 15/早	58M/ 15/早	10

調度員	事件類別	路線	字軌	車長編號	車輛編號	開出時間	預計到達	實際到達	參考編號	行車概況	行車時間表	折線圖	地圖	受影路線	響班字軌	次(車)開出	受影路線	響班字軌	次(人)開出
張子良	壞車	6D	02	62564	HY754	11:45	12:45		35216					6D	02	15:10	6D	02	15:10
張子良	交通意外	C39A	05	85047	LM2168	07:38	08:20		31353					C39A	05	08:28	C39A	10	08:35
張子良	行車過時	C58M	15	64381	HS 781	09:10	10:10	10:16	34218					C58M	15	10:13	C59M	06	10:13
張子良	失物處理 - 留後	C43A	08	70524	MK5518	07:00	07:48	07:48	31381					C43A	08	07:55	C43A	08	07:55

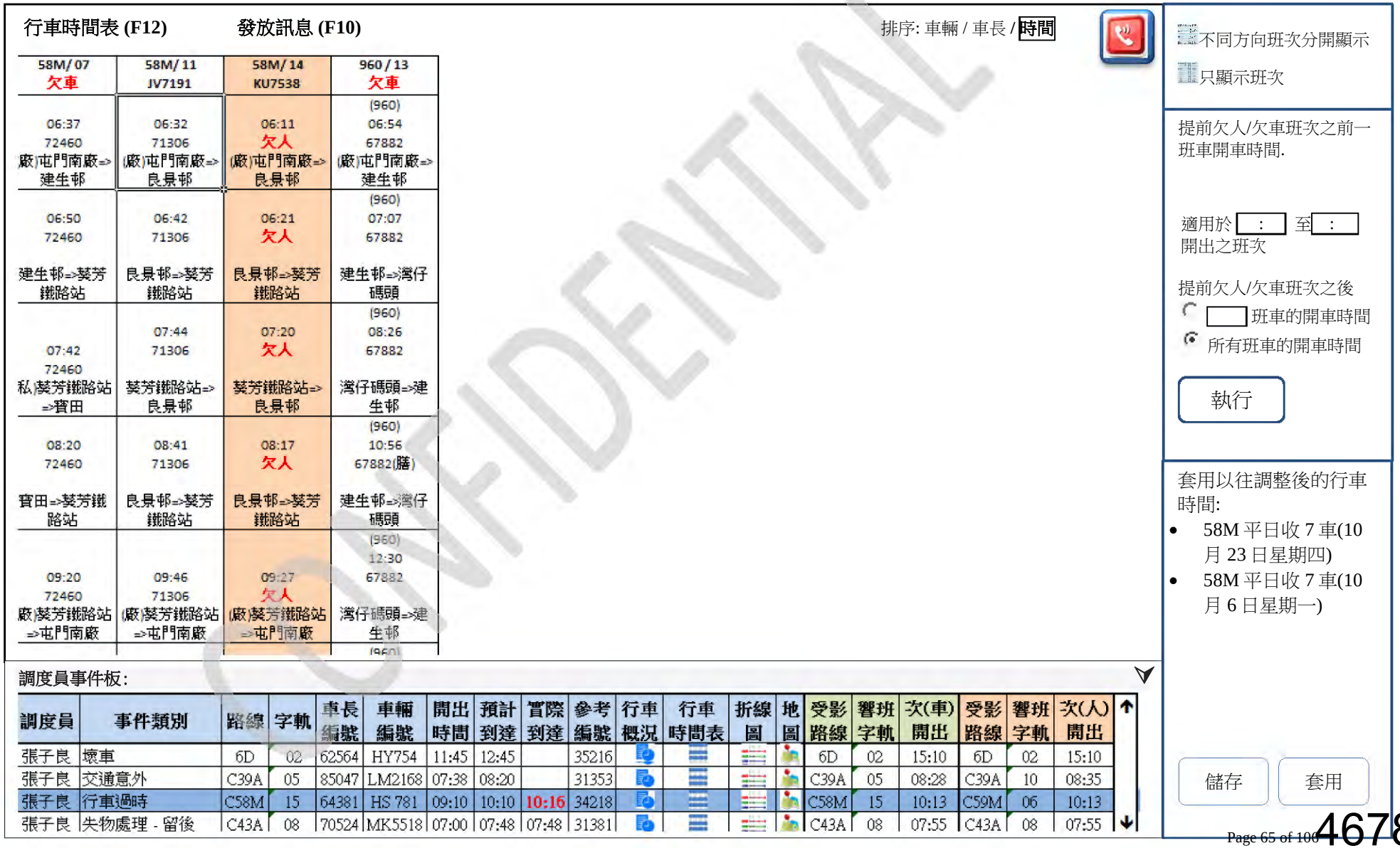


路線	車輛	車輛崗位		編定開車	編定到達	起點	中途起載站	終點	載來車長	載走車長	聯絡OCC	載來車長崗位	載走車長崗位	班次
58M	KV6817	58M/ 03	♿	12:54	13:48	良景邨		葵芳鐵路站	60583	53679		58M/ 03/早	58M/L01/夜	8
58M	JV6725	58M/ 08	♿	13:03	13:57	良景邨		葵芳鐵路站	65489	65489		58M/ 08/早	58M/ 08/早	9
58M	KJ2052	58M/ 10	♿	13:11	14:05	良景邨		葵芳鐵路站	78464	1624		58M/S13/早	58M/L02/夜	8
58M	JT1030	58M/ 15	♿	13:20	14:14	良景邨		葵芳鐵路站	64381	64381		58M/ 15/早	58M/ 15/早	9
				13:24	14:28	良景邨				72460(膳)			58M/ 07/早	-
58M	JS7632	58M/ 06	♿	13:28	14:22	良景邨		葵芳鐵路站	62969	4801		58M/ 06/早	58M/ 03/夜	8
58M	JV6814	58M/ 12	♿	13:37	14:31	良景邨		葵芳鐵路站	62918	62918		58M/ 12/早	58M/ 12/早	9
58M	KU7538	58M/ 14	♿	13:45	14:39	良景邨		葵芳鐵路站	72460	70819		58M/ 07/早	58M/ 02/夜	8
58M	KS 709	58M/ 96	♿	13:54	14:48	良景邨		葵芳鐵路站	21855	1611		58M/ 96/早	58M/ 04/夜	9
58M	KU8269	58M/ 13	♿	14:02	14:56	良景邨		葵芳鐵路站	60937	64088		58M/ 13/早	58M/ 06/夜	8
58M	欠車	960 / 13	♿	14:19	15:13	良景邨		葵芳鐵路站	-	67882	-		960 / 13/早	17
58M	JV7191	58M/ 11	♿	14:28	15:22	良景邨		葵芳鐵路站	欠人	72460		58M/ 14/早	58M/ 07/早	9

路線	車輛	車輛崗位		編定開車	編定到達	起點	中途起載站	終點	載來車長	載走車長	聯絡OCC	載來車長崗位	載走車長崗位	班次
58M	JS7054	58M/ 04	♿	13:00	13:54	葵芳鐵路站		良景邨	1548	1548		58M/ 04/早	58M/ 04/早	10
58M	KC7617	58M/S11	♿	13:10	14:04	葵芳鐵路站		良景邨	60804	60804		58M/ 10/早	58M/ 10/早	10
58M	JV7191	58M/ 11	♿	13:20	14:14	葵芳鐵路站		良景邨	欠人	欠人		58M/ 14/早	58M/ 14/早	10
58M	KC3551	58M/ 09	♿	13:30	14:24	葵芳鐵路站		良景邨	60009	60009		58M/ 09/早	58M/ 09/早	10
58M	欠車	58M/ 07		13:40	14:34	葵芳鐵路站		良景邨	71306	71306		58M/ 11/早	58M/ 11/早	10
58M	JU3065	58M/ 02	♿	13:45	14:39	葵芳鐵路站		良景邨	60757	60757		58M/ 02/早	58M/ 02/早	5
58M	KP7401	58M/ 16		13:50	14:44	葵芳鐵路站		良景邨	71496	71496		58M/ 16/早	58M/ 16/早	5
58M	KV6817	58M/ 03	♿	14:00	14:54	葵芳鐵路站		良景邨	53679	53679		58M/L01/夜	58M/L01/夜	10
58M	JV6725	58M/ 08	♿	14:10	15:04	葵芳鐵路站		良景邨	65489	65489		58M/ 08/早	58M/ 08/早	10
58M	KJ2052	58M/ 10	♿	14:20	15:14	葵芳鐵路站		良景邨	1624	1624		58M/L02/夜	58M/L02/夜	10
58M	JT1030	58M/ 15	♿	14:30	15:24	葵芳鐵路站		良景邨	64381	64381		58M/ 15/早	58M/ 15/早	10
58M	JS7632	58M/ 06	♿	14:40	15:34	葵芳鐵路站		良景邨	4801	4801		58M/ 03/夜	58M/ 03/夜	10

調度員	事件類別	路線	字軌	車長編號	車輛編號	開出時間	預計到達	實際到達	參考編號	行車概況	行車時間表	折線圖	地圖	受影路線	響班字軌	次(車)開出	受影路線	響班字軌	次(人)開出
張子良	壞車	6D	02	62564	HY754	11:45	12:45		35216					6D	02	15:10	6D	02	15:10
張子良	交通意外	C39A	05	85047	LM2168	07:38	08:20		31353					C39A	05	08:28	C39A	10	08:35
張子良	行車過時	C58M	15	64381	HS 781	09:10	10:10	10:16	34218					C58M	15	10:13	C59M	06	10:13

7.2.2.9.5 Working Timetable – Regulation Mode in Bus View



行車時間表 (F12) 發放訊息 (F10) 排序: 車輛 / 車長 / 時間

58M/07 欠車	58M/11 JV7191	58M/14 KU7538	960/13 欠車
			(960)
06:37 72460 廠)屯門南廠=> 建生邨	06:32 71306 (廠)屯門南廠=> 良景邨	06:11 欠人 (廠)屯門南廠=> 良景邨	06:54 67882 (廠)屯門南廠=> 建生邨
			(960)
06:50 72460 建生邨=>葵芳 鐵路站	06:42 71306 良景邨=>葵芳 鐵路站	06:21 欠人 良景邨=>葵芳 鐵路站	07:07 67882 建生邨=>灣仔 碼頭
	07:44	07:20	(960) 08:26
07:42 72460 私)葵芳鐵路站 =>寶田	71306 葵芳鐵路站=> 良景邨	欠人 葵芳鐵路站=> 良景邨	67882 灣仔碼頭=>建 生邨
			(960)
08:20 72460 寶田=>葵芳鐵 路站	08:41 71306 良景邨=>葵芳 鐵路站	08:17 欠人 良景邨=>葵芳 鐵路站	10:56 67882(膳) 建生邨=>灣仔 碼頭
			(960)
			12:30
09:20 72460 廠)葵芳鐵路站 =>屯門南廠	09:46 71306 (廠)葵芳鐵路站 =>屯門南廠	09:27 欠人 (廠)葵芳鐵路站 =>屯門南廠	67882 灣仔碼頭=>建 生邨
			(960)

不同方向班次分開顯示

只顯示班次

提前欠人/欠車班次之前一班車開車時間.

適用於 : 至 :
開出之班次

提前欠人/欠車班次之後
○ 班車的開車時間
◉ 所有班車的開車時間

執行

套用以往調整後的行車時間:

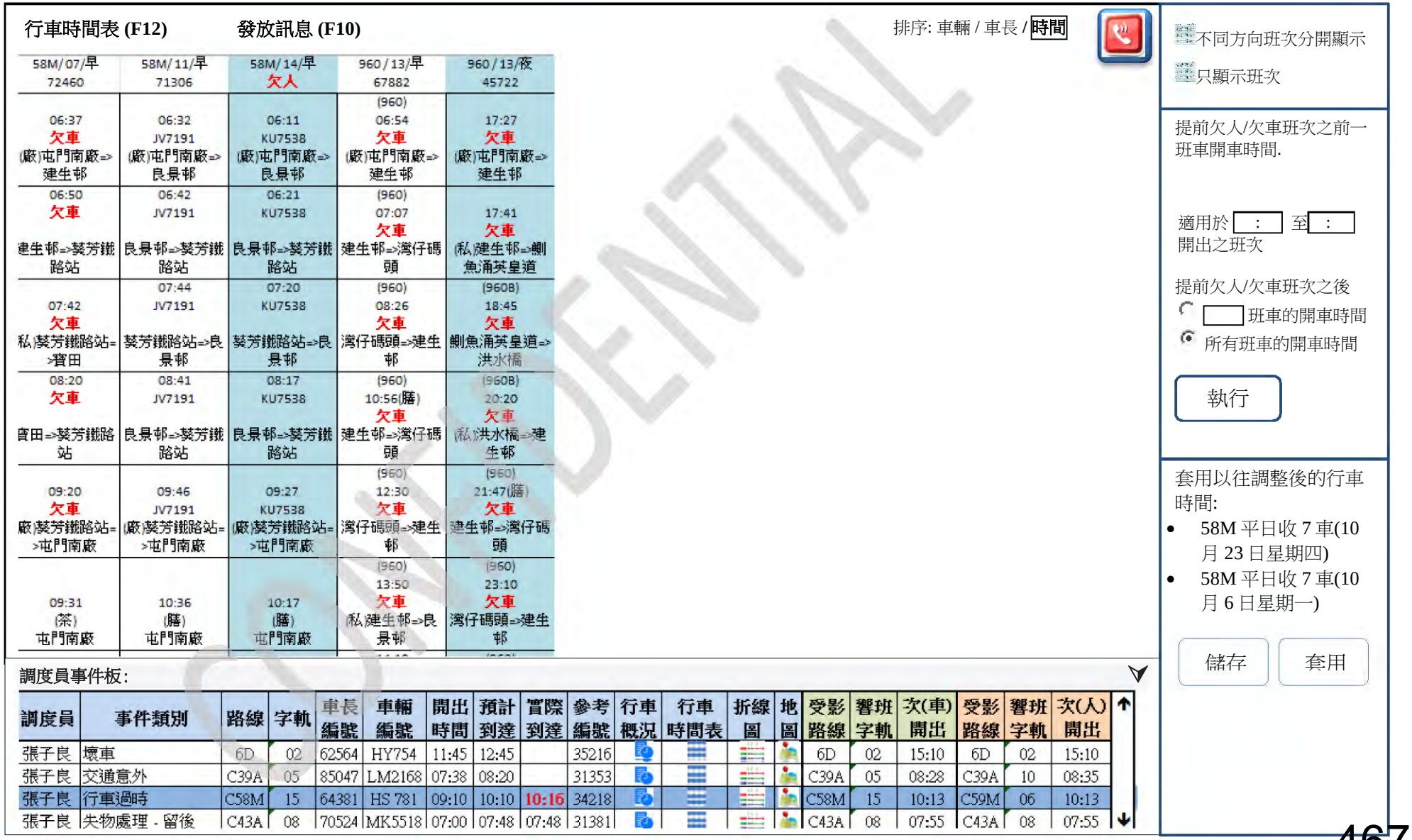
- 58M 平日收 7 車(10 月 23 日星期四)
- 58M 平日收 7 車(10 月 6 日星期一)

儲存 套用

調度員事件板:

調度員	事件類別	路線	字軌	車長編號	車輛編號	開出時間	預計到達	實際到達	參考編號	行車概況	行車時間表	折線圖	地圖	受影路線	響班字軌	次(車)開出	受影路線	響班字軌	次(人)開出
張子良	壞車	6D	02	62564	HY754	11:45	12:45		35216					6D	02	15:10	6D	02	15:10
張子良	交通意外	C39A	05	85047	LM2168	07:38	08:20		31353					C39A	05	08:28	C39A	10	08:35
張子良	行車過時	C58M	15	64381	HS 781	09:10	10:10	10:16	34218					C58M	15	10:13	C59M	06	10:13
張子良	失物處理 - 留後	C43A	08	70524	MK5518	07:00	07:48	07:48	31381					C43A	08	07:55	C43A	08	07:55

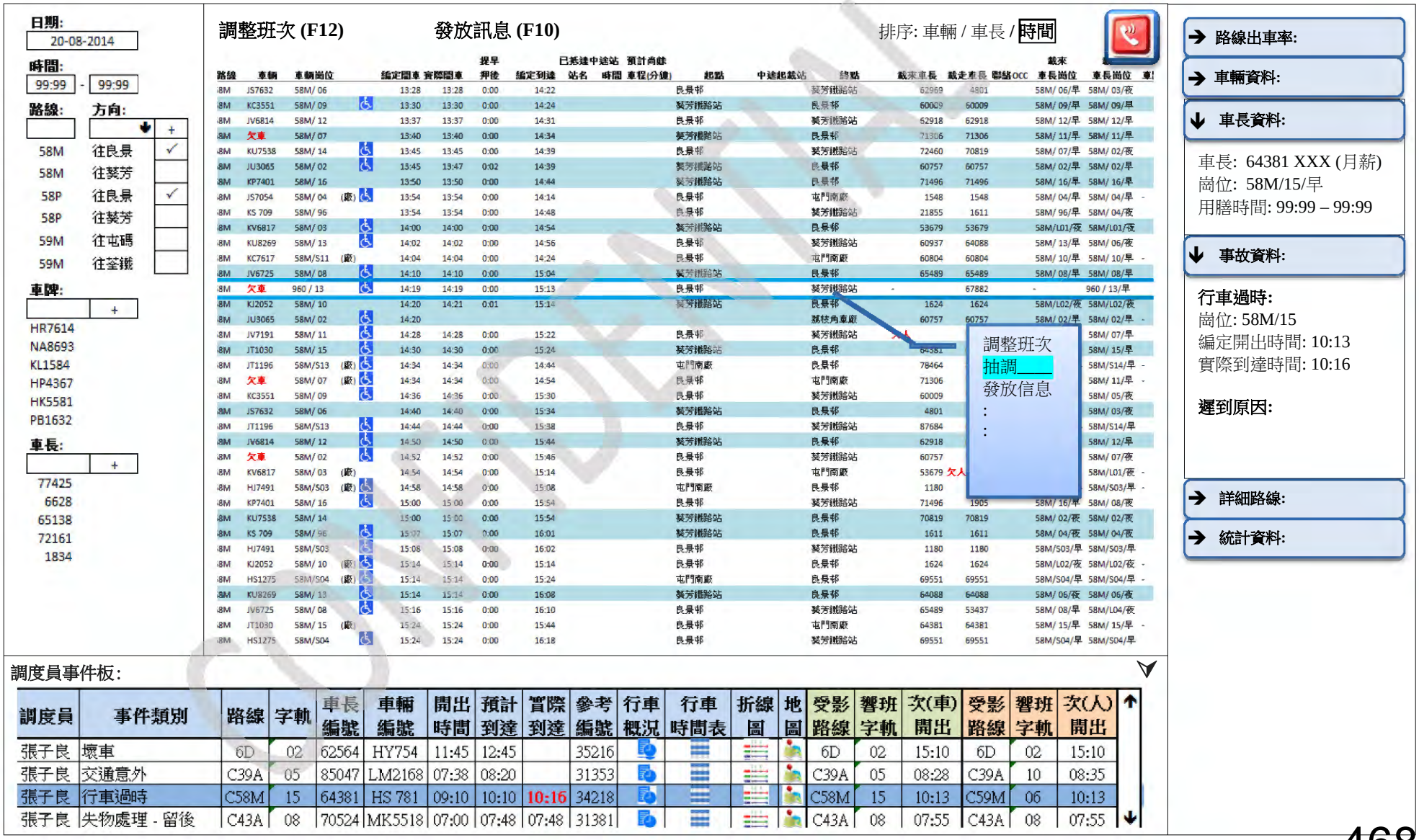
7.2.2.9.6 Working Timetable – Regulation Mode in BCView



58M/07/早 72460	58M/11/早 71306	58M/14/早 欠人	960/13/早 67882	960/13/夜 45722
06:37 欠車 (廠)屯門南廠=>建生邨	06:32 JV7191 (廠)屯門南廠=>良景邨	06:11 KU7538 (廠)屯門南廠=>良景邨	(960) 06:54 欠車 (廠)屯門南廠=>建生邨	17:27 欠車 (廠)屯門南廠=>建生邨
06:50 欠車 建生邨=>葵芳鐵路站	06:42 JV7191 良景邨=>葵芳鐵路站	06:21 KU7538 良景邨=>葵芳鐵路站	(960) 07:07 欠車 建生邨=>灣仔碼頭	17:41 欠車 (私)建生邨=>鰂魚涌英皇道
07:42 欠車 私)葵芳鐵路站=>寶田	07:44 JV7191 葵芳鐵路站=>良景邨	07:20 KU7538 葵芳鐵路站=>良景邨	(960) 08:26 欠車 灣仔碼頭=>建生邨	(960B) 18:45 欠車 鰂魚涌英皇道=>洪水橋
08:20 欠車 寶田=>葵芳鐵路站	08:41 JV7191 良景邨=>葵芳鐵路站	08:17 KU7538 良景邨=>葵芳鐵路站	(960) 10:56(膳) 欠車 建生邨=>灣仔碼頭	(960B) 20:20 欠車 (私)洪水橋=>建生邨
09:20 欠車 廠)葵芳鐵路站=>屯門南廠	09:46 JV7191 (廠)葵芳鐵路站=>屯門南廠	09:27 KU7538 (廠)葵芳鐵路站=>屯門南廠	(960) 12:30 欠車 灣仔碼頭=>建生邨	(960) 21:47(膳) 欠車 建生邨=>灣仔碼頭
09:31 (茶) 屯門南廠	10:36 (膳) 屯門南廠	10:17 (膳) 屯門南廠	(960) 13:50 欠車 私)建生邨=>良景邨	(960) 23:10 欠車 灣仔碼頭=>建生邨

調度員	事件類別	路線	字軌	車長編號	車輛編號	開出時間	預計到達	實際到達	參考編號	行車概況	行車時間表	折線圖	地圖	受影路線	響班字軌	次(車)開出	受影路線	響班字軌	次(人)開出
張子良	壞車	6D	02	62564	HY754	11:45	12:45		35216					6D	02	15:10	6D	02	15:10
張子良	交通意外	C39A	05	85047	LM2168	07:38	08:20		31353					C39A	05	08:28	C39A	10	08:35
張子良	行車過時	C58M	15	64381	HS 781	09:10	10:10	10:16	34218					C58M	15	10:13	C59M	06	10:13
張子良	失物處理 - 留後	C43A	08	70524	MK5518	07:00	07:48	07:48	31381					C43A	08	07:55	C43A	08	07:55

7.2.2.9.7 Working Timetable – Resources Hunting (抽調)



調度員	事件類別	路線	字軌	車長編號	車輛編號	開出時間	預計到達	實際到達	參考編號	行車概況	行車時間表	折線圖	地圖	受影路線	響班字軌	次(車)開出	受影路線	響班字軌	次(人)開出
張子良	壞車	6D	02	62564	HY754	11:45	12:45		35216					6D	02	15:10	6D	02	15:10
張子良	交通意外	C39A	05	85047	LM2168	07:38	08:20		31353					C39A	05	08:28	C39A	10	08:35
張子良	行車過時	C58M	15	64381	HS 781	09:10	10:10	10:16	34218					C58M	15	10:13	C59M	06	10:13
張子良	失物處理 - 留後	C43A	08	70524	MK5518	07:00	07:48	07:48	31381					C43A	08	07:55	C43A	08	07:55

7.2.2.9.8 Resources Available for resources re-allocation

字軌: 74X-17 原編車輛: HK9876 (故障) 原編車長: 56789 (陳勁文) 開車時間: 15:28 起點: 大埔中心

抽調時段: 往後 [ ] 班 抽調範圍: 同時抽調車輛和車長

總站: 大埔中心 | 富善 | 富亨 | 大埔火車站 | 更多...

廠來行車時間: [ ] 私牌行車時間: [ ]

與下一班出車時間相距最少: [ ]

不能違反工作指引: ☐A ☐B ☐C ☐D ☐E

路線失車 [ ]
載客比例 [ ]
投訴比例 [ ]

☐跨廠
☐跨控制中心
☐跨控制中心
☐顯示調走/接車
☐中段泊廠 只顯示同線/所有線
☐中段泊站

地點	車牌	車廠	字軌	車長編號及崗位	聯絡電話	工作安排	實際/預計到站時間	編定開車時間	調走/接車	抽調車長違反工作指引 A	B	C	D	E	原路線失車率	載客比例	投訴比例	備注
大埔中心	HK1234	SWH		—		士啤												74X-10 收車 違反夜泊
大埔廠	HK2345	SWH	74X-S10	1234 74X-S10-早		74X 中段回廠		17:54										下段17:10 出廠 違反夜泊
大埔廠	HK3456	SWH				士啤												73X-03 收車 違反夜泊
大埔中心	HK4567	SWH	72X-03	2345 73X-L01-早	98765432	72X	15:20	15:28	調						3.70%	0.95	1.3	違反夜泊
大埔中心 (途中)	HK5678	SWH	74X-06	3456 74X-S02-早		74X	預計15:28	15:38			B			E				違反夜泊
富亨	HK6789	SWH	71B-03	67890 71B-03-早	2[illegible]944	71B	15:21	15:29							1.00%	1.4	1.85	違反夜泊
大埔火車站		SWH		65432 72X-06-夜	65432100	站頭候命						C						違反夜泊
富善	HK7890	SWH	73X-S10	76543 73X-L[illegible]-夜	26610142	73X 中段泊站		16:48	接						3.30%	1.13	0.82	中段泊站 違反夜泊

Double click to select swapping Bus and/or BC

Remarks:

- System already ruled out :
  - Routes or runs not available for redeploying out (e.g. low frequency routes, first/last departure trips)
  - Incompatible route training or bus type
- Assume BC required to tap card after meal break and at the start of 2nd piece duty
- 實際到站時間 = time BC tap card or Wi-Fi detection time (show Wi-Fi icon if the latter, Wi-Fi icon disappears upon BC tap card)
- Allow user to redeploy till end of day or for one or a few trips only
- 載客比例 = average no. of passengers per trip of route A in that hour / that of route B in the same hour (where redeployment is from route B to A)
- 投訴比例 = no. of complaints on route A in the past 30 days / that of route B (where redeployment is from route B to A)
- Need consider how to inform the re-arrangements to affected BCs
- Guidelines on Bus Captain (refer appendix A.4 for details):
  - Guideline A: Bus Captains should have a rest time of at least 30 minutes after 6 hours of duty and within that 6-hour duty, they should have rest times of 20 minutes of which not less than 12 minutes should be within the first 4 hours of duty.
  - Guideline B: Maximum duty in a working day should not exceed 14 hours
  - Guideline C: Driving duty in a working day should not exceed 11 hours
  - Guideline D: The break between successive working days should not be less than 10 hours
  - Guideline E: Bus Captains working for a duty of not less than 8 hours in a working day should have a meal break which no less than 45 minutes.

7.2 Sample of System Functions
7.2.1 Real-time Bus Monitoring
7.2.1.1 Bus Display on map view
7.2.1.1.1 General View

Time:

Route: Direction:
1A TST Ferry Pier
7 TST Ferry Pier

Arrival time for each route:

Route	Previous trip	Next trip

(Click the bus station with mouse)

Date:

Licence plate:

Bus captain:

Bus captain: 77425 Chan Kwok Ming
Duty: 1A/05/morning

Driving speed: 68 km/hr (recording time: 09:02)
Estimated time for arrival at Cameron Road: 09:05

The bus is equipped with: , ultra low floor

(Click the bus with mouse)

1. Disseminate message (Right click with mouse)

各路線到站時間:

路線	前一班	下一班
1	09/ 09:01	13/ 09:21
2	05/ 08:55	03/ 09:10
234X	11/ 09:08	17/ 09:18
:	:	:

(滑鼠點擊巴士站)

Information of telecommunications team

Traffic news

Information of temporary diversion:
1. Temporary closure of Canton Road:
   2014-08-11 10:30-17:00
   Routes affected: 271
   Via: Kowloon Park Drive, Canton Road, Jordan Road, D3E Road, Jordan Road, Nga Cheung Road and Station Perimeter Road
   Via: Station Perimeter Road, Nga Cheung Road, Austin Road West [illegible]

This bus has been delayed for 4 minutes

This bus has deviated from the originally designated route

Private licence plate

Estimated arrival time for each route:

Route	Previous trip

Spare bus: Spare captain:
--- 70135, 75386

(Click the terminus with mouse)

預計各路線到站時間:

路線	下一班
1	03/ 09:21
234X	08/ 09:18
5A	09/ 09:11
:	:

士啤車: 士啤車長:
—— 70135, 75386
(滑鼠點擊巴士總站)

The departure of this bus has been delayed

Delayed/overdue buses

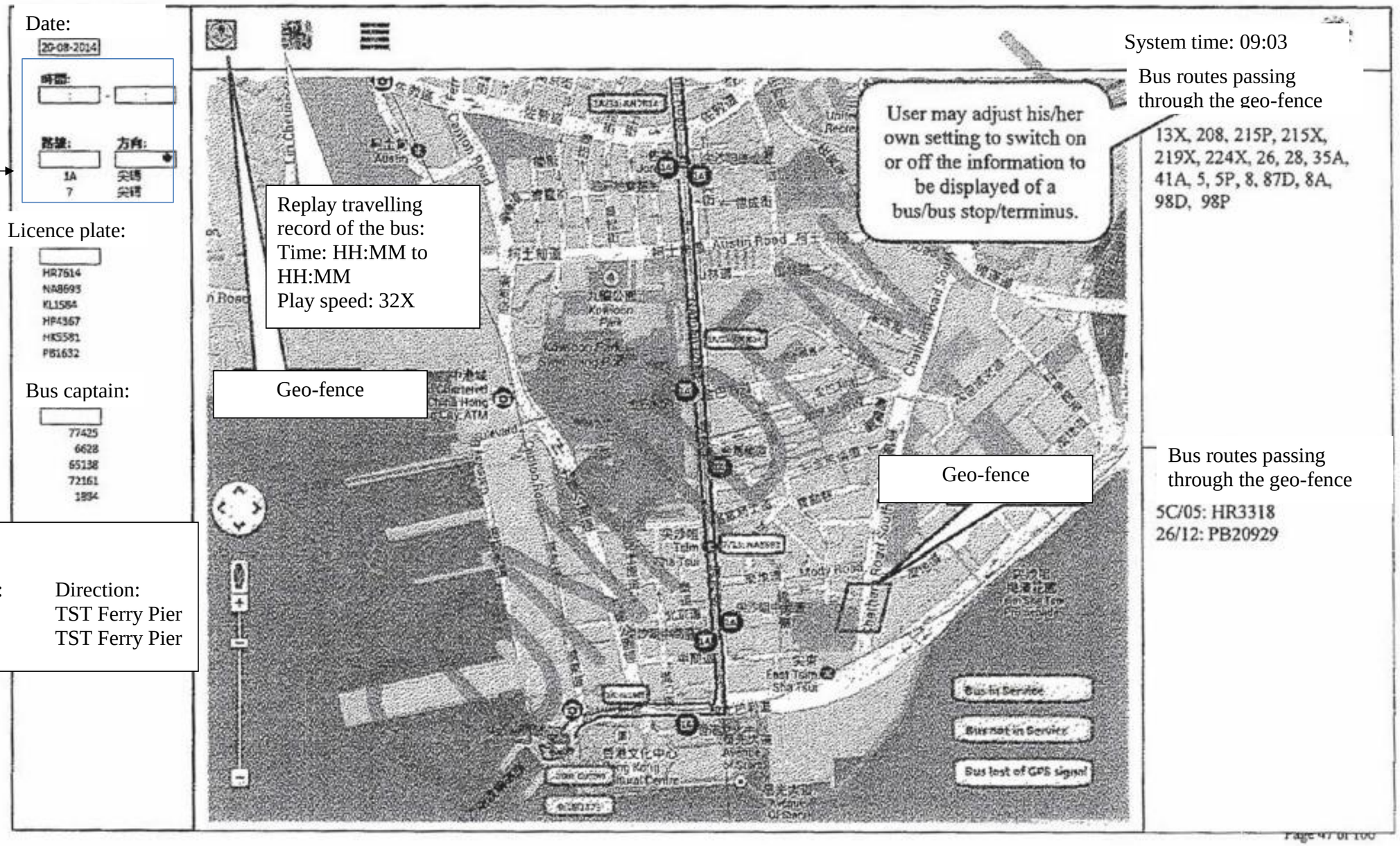
Bus in Service
Bus not in Service
Buses off-track
Bus lost of GPS signal

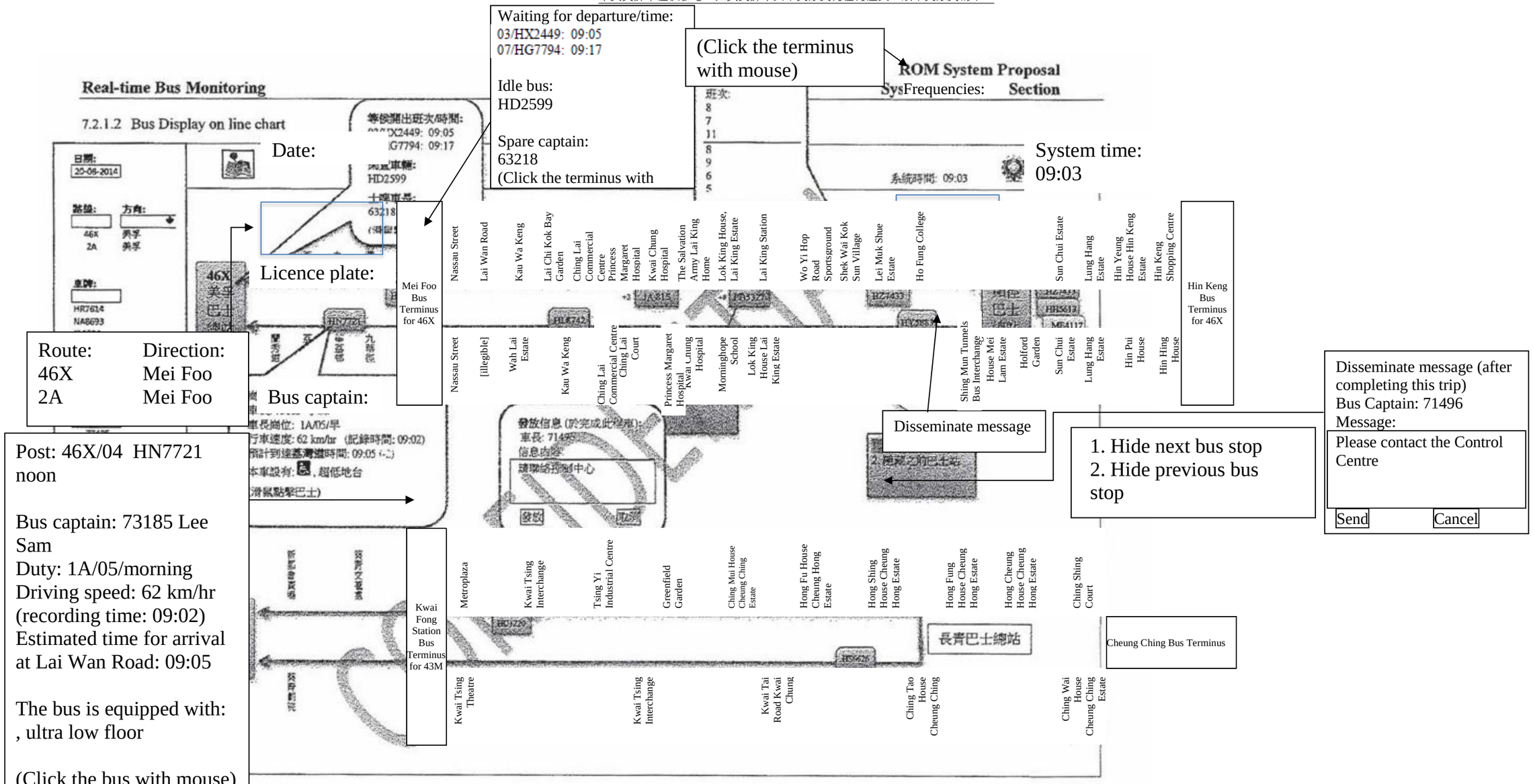
Message delivery (after completing this trip)

Bus Captain:
Message:

Send Cancel

7.2.1.1.1 Geo-fencing





7.2.2 Departure Management
7.2.2.1 Incident Board – Incident Board shown on OCC Display

Bus Operations Control Centre: Lai Chi Kok **System time**: 2014-08-01 09:34:12

ispatcher	Type of incident	Route	Running number	Captain number	Bus number	Inputter	Input time	Reference number
Vong Tai Tung	Arrival will be delayed	C 8A	01	1155	RJ6184	ROM	09:32:47	31668
heung Chi Leung	Late arrival without reason	C46	05	65325	KL6385	ROM	09:33:51	31675
ee Chiu	Staff unavailable	C12	05	66421	GZ4853	TOM	08:45:20	31523
Vong Tai Tung	Bus unavailable	C 2A	06	65658	KR4350	TOM	08:45:20	31513
o Siu Ming	Not yet arrived Affecting future departure	C40	03	65318	KW3187	Wong Tai Tung	09:18:05	31608
heung Chi Leung	Bus breakdown	C108	02	73493	MM2038	Lee Chiu	08:12:16	31468
ee Chiu	Early leave of captain	C42A	07	77251	JK1583	Ho Siu Ming	09:12:06	31594
heung Chi Leung	Traffic accident	C39A	05	85047	LM2168	OCM	07:45:20	31353
Vong Tai Tung	Handling lost property – keep for future handling	C43A	08	70524	MK5518	Wong Tai Tung	07:50:10	31381
ee Chiu	Deviated from driving route	C35A	04	73914	ND6181	ROM	09:28:20	31618
						:		
						:		
						:		

Incidents not yet confirmed for handling by

Outstanding incidents on display
1. Automatic detection by the system
2. Input by dispatcher

7.2.2.2 Route Performance Board

Bus Operations Control Centre: Lai Chi Kok

Route	To	Late Early	-/0/+	Longest delay		Longest ahead of time		Accumulated this month	Cumulative same-day lost trips rate			
				Minutes	Running number	Minutes	Running number	Lost trips rate	0500-1000	1000-1500	1500-2000	2000-0200
2A	Mei Foo		0/3/2	-8	06	+5	05	1.24%	2/59 (3.51%)	2/59 (3.51%)	2/59 (3.51%)	2/59 (3.51%
	Lok Wah		2/3/2	-4	06	+9	05					
6	Mei Foo		2/8/0	-9	03	+5	07	1.11%	1/51 (1.96%)	1/51 (1.96%)	1/51 (1.96%)	1/51 (1.96%
	Lai Chi Kok		3/6/2	-9	03	+5	07					
6C	Mei Foo		5/6/2	-13	504	+8	06	2.18%	3/71 (4.23%)	3/71 (4.23%)	3/71 (4.23%)	3/71 (4.23%
	Kowloon City Ferry Pier		3/10/2	-12	504	+8	06					
6D	Mei Foo		3/3/2	-8	09	+9	02	1.87%	0/39 (0%)	0/39 (0%)	0/39 (0%)	0/39 (0%)
6X	Ngau Tau Kok		1/5/2	-8	09	+6	02					
	Middle Road		0/4/1			+3	03	0	0/8 (0%)	-	-	-
28	Mody Road		1/6/2	-4	05	+6	01	1.34%	2/47 (4.26%)	2/47 (4.26%)	2/47 (4.26%)	2/47 (4.26%
	Mody Road		2/6/0	-4	05	+6	01					
30	Cheung Sha Wan		4/2/2	-6	07	+5	03	1.84%	2/24 (8.33%)	2/24 (8.33%)	2/24 (8.33%)	2/24 (8.33%
	Allway Garden		2/7/0	-6	07	+5	03					
38A	Mei Foo		0/4/0					0.8%	1/8 (0%)	1/8 (0%)	1/8 (0%)	1/8 (0%)
	Riviera Gardens		0/4/0									
46X	Mei Foo		3/10/2	-5	S11	+9	08	1.78%	4/84 (4.76%)	4/84 (4.76%)	4/84 (4.76%)	4/84 (4.76%
	Hin Keng		2/14/1	-9	S11	+9	08					
72	Cheung Sha Wan		3/5/1	-8	05	+11	09	2.55%	1/29 (3.45%)	1/29 (3.45%)	1/29 (3.45%)	1/29 (3.45%
	Tai Wo		1/3/4	-4	05	+11	09					
85	Mei Foo		2/3/2	-5	02	+7	S07	1.61%	0/36 (0%)	0/36 (0%)	0/36 (0%)	0/36 (0%)
	Wong Nai Tau		0/3/2	-5	02	+7	S07					
86A	Kom Tsun Street		0/5/3			+6	103	1.91%	2/49 (4.08%)	2/49 (4.08%)	2/49 (4.08%)	2/49 (4.08%)
	Sha Tin Wai		3/4/2			+4	103					
102	Mei Foo		3/13/0	-4	08	+9	S05	1.58%	3/36 (8.33%)	3/36 (8.33%)	3/36 (8.33%)	3/36 (8.33%)
	Shau Kei Wan		1/8/2	-6	08	+3	S05					
102P	Shau Kei Wan		4/12/3	-6	S13	+4	06	1.91%	2/49 (4.08%)	2/49 (4.08%)	2/49 (4.08%)	2/49 (4.08%)

7.2.2.3 Dispatcher Monitor Board

The system displays all incidents each dispatcher is responsible for.
(Including accidents confirmed/unconfirmed)

Dispatcher [ ] Status of the incident [In process/Unconfirmed/Completed/All]

Dispatcher: 20646 (Cheung Chi Leung) System time: 2014-08-01 09:34:12

Dispatcher	Type of incident	Route	Running number	Captain number	Bus number	Departure time	Expected arrival time	Actual arrival time	Reference number	Overview of the travelling	Driving schedule	Line chart	Map	Trips affected (bus)	Running number	Departed	Trips affected (bus)	Running number	Departed
Cheung Chi Leung	Late arrival without reason					5325	KL6385	08:25	09:20	09:28	31675				--	--	--	--	--	--
Cheung Chi Leung	Bus broken					2564	HY754	11:45	12:45		35216				6D	02	15:10	6D	02	15:10
Cheung Chi Leung	Traffic accident					5047	LM2168	07:38	08:20		31353				C39A	05	08:28	C39A	10	08:35
Cheung Chi Leung	Overtime travelling																			
Cheung Chi Leung	Handling lost property – keep for future handling					0524	MK5518	07:00	07:40	07:46	31291									

Confirm handling of the incident
Referral to dispatcher
Objection to handling the incident
Need not handle the incident
Completion of the incident
Handle the incident

Route	To	Late Early	-/0/+	Longest delay		Longest ahead of time		Accumulated this month	Cumulative same-day lost trips rate			
				Minutes	Running number	Minutes	Running number	Lost trips rate	0500-1000	1000-1500	1500-2000	2000-0200
2A	Mei Foo		0/3/2	-4	06	+9	L05	1.24%	2/59 (3.51%)	2/59 (3.51%)	2/59 (3.51%)	2/59 (3.51%)
	Lok Wah		2/3/2	-4	06	+9	L05					
6	Mei Foo		2/8/0	-9	03	+5	07	1.11%	1/51 (1.96%)	1/51 (1.96%)	1/51 (1.96%)	1/51 (1.96%)
	Lai Chi Kok		3/6/2	-9	03	+5	07					
6C	Mei Foo		3/3/2	-8	09	+6	02	1.87%	0/39 (0%)	0/39 (0%)	0/39 (0%)	0/39 (0%)
	Kowloon City Ferry Pier		1/5/2	-8	09	+6	02					
6D	Mei Foo		0/4/1			+3	03	0	0/8 (0%)	-	-	-
6X	Ngau Tau Kok		1/6/2	-4	05	+6	01	1.34%	2/47		2/47 (4.26%)	2/47 (4.26%)
	Middle Road		2/6/0	-4	05	+6	01					
28	Mody Road		0/4/0					0.8%	1/8 (0%)	1/8 (0%)	1/8 (0%)	1/8 (0%)
	Mody Road		0/4/0									
30	Cheung Sha Wan		2/5/1	-4	05	+11	09	2.55%	1/29 (3.45%)	1/29 (3.45%)	1/29 (3.45%)	1/29 (3.45%)
	Allway Garden		2/5/1	-4	05	+11	09					
			0/5/0	-5	02	+7	S02	1.61%	0/36 (0%)	0/36 (0%)	0/36 (0%)	0/36 (0%)
			0/5/0	-5	02	+7	S02					
			3/12/0	-12	S04	+4	06	2.18%	3/71 (4.23%)	3/71 (4.23%)	3/71 (4.23%)	3/71 (4.23%)
			3/12/0	-12	S04	+4	06					
			4/2/2	-6	07	+5	03	1.84%			2/24 (8.33%)	2/24 (8.33%)
			2/7/0	-6	07	+5	03					

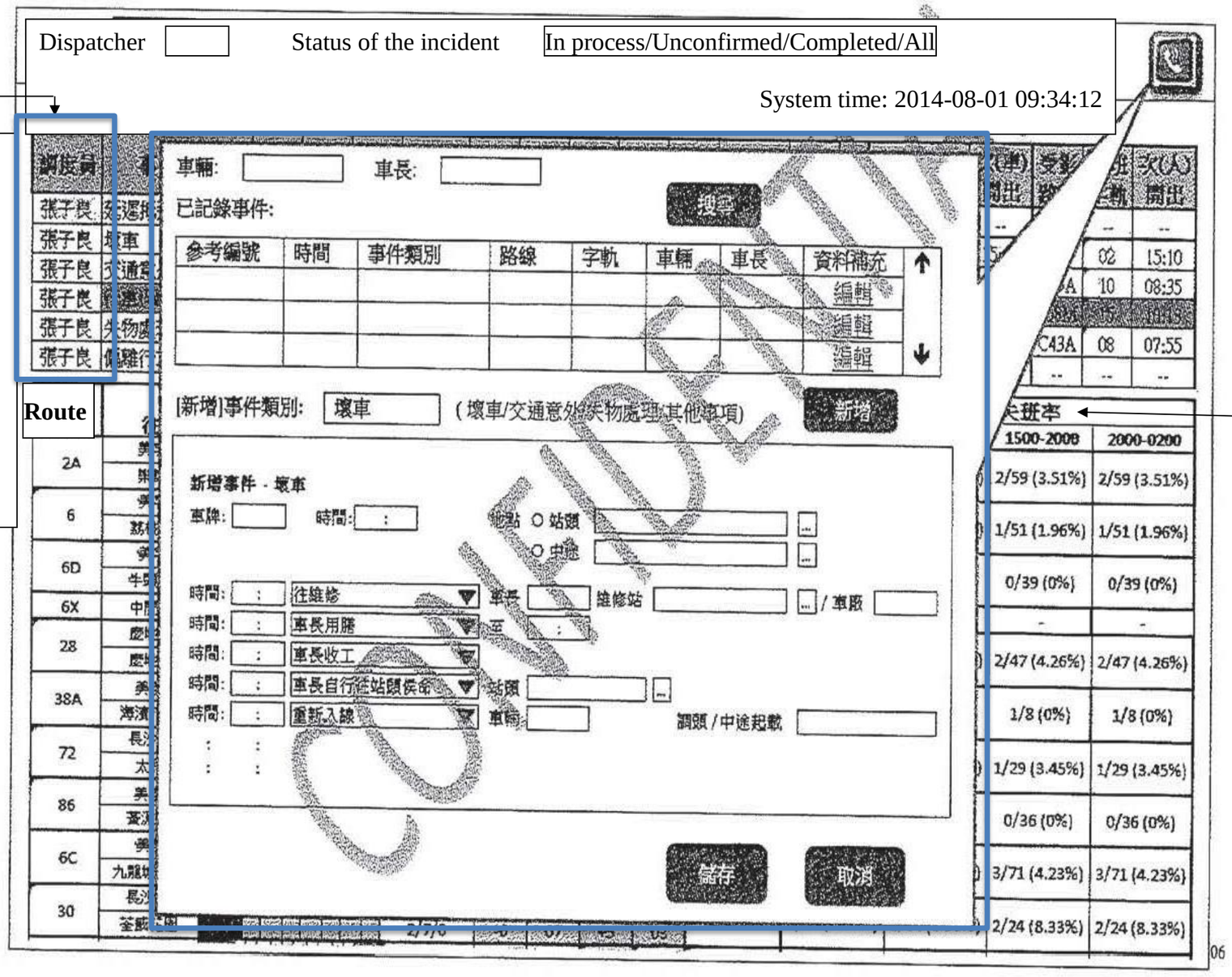
The system will be switched to detailed driving schedule

The system will assign the incident to the dispatcher of this route/trip. If no dispatcher is available, the incident will be arranged/handled by the chief instructor of the control centre.

Main routes for handling

Auxiliary routes for handling

7.2.2.3.1 Record call-in incident



Dispatcher
Cheung Chi Leung
Cheung Chi Leung
Cheung Chi Leung
Cheung Chi Leung
Cheung Chi Leung
Cheung Chi Leung
Cheung Chi Leung
Cheung Chi Leung

(Translation of the form in next page)

Bus [ ] Captain [ ]
Recorded incident [Search]

Reference number	Time	Type of incident	Route	Running number	Bus	Captain	Supplementary data
							Edit
							Edit
							Edit

[Add] Type of incident : [Bus broken] (Bus broken/traffic accident/Handling lost property/Other matters) [Add]

New incident - Bus broken
Licence plate [ ] Time [:] Location Stop flag [ ]
Halfway [ ]

Time	:	For repair	Captain		Service centre		__	Bus depot	
Time	:	Captain for meal	To	:					
Time	:	Captain off duty							
Time	:	Captain to standby at stop	Stop flag			__			
Time	:	Re-entering the route	Bus		Reversed/boarding midway				

[Save] [Cancel]

7.2.2.4 Message dissemination to OCC

Scope for message dissemination

Route	Direction	Select all
2A	To Mei Foo	✓
2A	To Lok Wah	✓
6	To TST Ferry Pier	
6	To Lai Chi Kok	
6D	To Ngau Tau Kok	✓
6D	To Mei Foo	✓
6X	To Middle Road	✓
6X	To Mei Foo	✓
905	To Lai Chi Kok	✓
905	To Wan Chai Ferry Pier	✓

System will display all routes for user selection

Allow user to select affected route(s) by specifing a geofence on the map.

Date of dissemination	/ /	**Captain number**		**Bus number**		**Message status:**	**Current message / Completed message / All messages**

Date of message dissemination	**Disseminate to**	**Message**	Sender	
	All routes	Due to the water main burst across Lei On Court, Kwun Tong Road (Yau Tong bound) is congested with the end of the queue at: Kowloon Bay MTR Station	Company radio	Edit/copy
04/09/2014 18:20	All routes	Due to the water main burst on Lei Yue Mun Road near Lei On Court, only one lane is opened to Yau Tong. Tseung Kwan O Road to Kwun Tong has many vehicles near Tsui Ping South Estate with slow moving traffic. (HKT 18:20)	Company radio	Edit/copy
04/09/2014 18:05	107, 170, 671	Canal Road Flyover to the Aberdeen Tunnel near bridge surface at Hennessy Road has a broken car blocking, with the end of the queue at: Wan Chai Interchange. (HKT 18:05)	Company radio	Edit/copy
04/09/2014 18:00	6X, 258P, 258D, 259D,	All vehicles have a U-turn at the Kwun Tong Road Roundabout.	Tuen Mun Bus Operations	Edit/copy
04/09/2014 17:55				

Message dissemination

Sender or sending group		
Recipient	Dispatcher	
Date	88/88/88 -	88/88/88
Time slot	99:99 -	99:99
Type of message	Traffic accident / Bus breakdown / Road construction / Water main burst / Bus operations information	
Content		

Status: New/Clear/Follow

Send

Dispatchers who confirmed the message

Dispatcher	**Time of confirmation**	OCC
Lee Chiu	20-09-2014 10:24	Lai Chi Kok
Wong Tai Tung	20-09-2014 10:24	Lai Chi Kok
Ho Siu Ming	20-09-2014 10:24	Lai Chi Kok
Cheung Chi Leung	20-09-2014 10:24	Lai Chi Kok

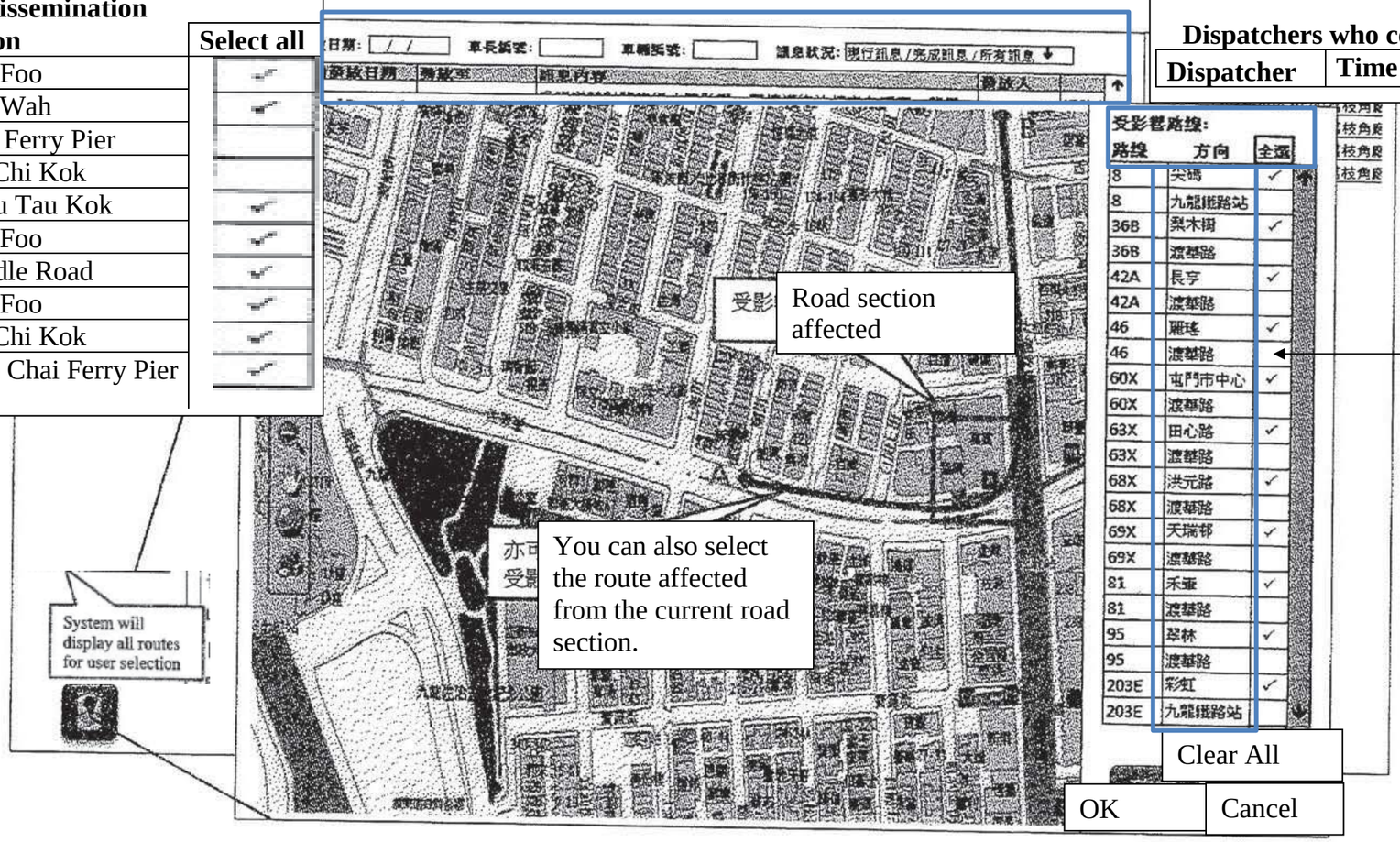
Date of dissemination	/ /	Captain number		Bus number		Message status:	Current message / Completed message / All messages
Date of message dissemination		Disseminate to	Message			Sender	

Departure Management

ROM System Proposal
System Fucntions Section

Scope for message dissemination

Route	Direction	Select all
2A	To Mei Foo	✓
2A	To Lok Wah	✓
6	To TST Ferry Pier	
6	To Lai Chi Kok	
6D	To Ngau Tau Kok	✓
6D	To Mei Foo	✓
6X	To Middle Road	✓
6X	To Mei Foo	✓
905	To Lai Chi Kok	✓
905	To Wan Chai Ferry Pier	✓



Dispatchers who confirmed the message

Dispatcher	Time of confirmation	OCC

Route affected

Route	Direction	Select all
TST Ferry Pier		
Kowloon Station		
Lei Muk Shue		
To Wah Road		
Cheung Hang		
To Wah Road		
Lai Yiu		
To Wah Road		
Tuen Mun Town Centre		
To Wah Road		
Tin Sam Road		
To Wah Road		
Hung Yuen Road		
To Wah Road		
Tin Shui Road		
To Wah Road		
Wo Che		
To Wah Road		
Tsui Lam		
To Wah Road		
Choi Hung		
Kowloon Station		

7.2.2.5 OCC Message dissemination

Scope for message dissemination

Route	Direction	Select all
2A	To Mei Foo	✓
2A	To Lok Wah	✓
6	To TST Ferry Pier	
6	To Lai Chi Kok	
6D	To Ngau Tau Kok	✓
6D	To Mei Foo	✓
6X	To Middle Road	✓
6X	To Mei Foo	✓
905	To Lai Chi Kok	✓
905	To Wan Chai Ferry Pier	✓

System will display all routes for user selection

Date of dissemination	/ /	**Captain number**		**Bus number**		**Message status:**	**Current message / Completed message / All messages**

Date of message dissemination	Disseminate to	Message	Sender	
	All routes	Due to the water main burst across Lei On Court, Kwun Tong Road (Yau Tong bound) is congested with the end of the queue at: Kowloon Bay MTR Station	Company radio	Edit/copy
04/09/2014 18:20	All routes	Due to the water main burst on Lei Yue Mun Road near Lei On Court, only one lane is opened to Yau Tong. Tseung Kwan O Road to Kwun Tong has many vehicles near Tsui Ping South Estate with slow moving traffic. (HKT 18:20)	Company radio	Edit/copy
04/09/2014 18:05	107, 170, 671, 62X, 258P, 258D, 259D,	Canal Road Flyover to the Aberdeen Tunnel near bridge surface at Hennessy Road has a broken car blocking, with the end of the queue at: Wan Chai Interchange. (HKT 18:05)	Company radio	Edit/copy
04/09/2014 18:00		All vehicles have a U-turn at the Kwun Tong Road Roundabout.	Tuen Mun Bus Operations	Edit/copy
04/09/2014 17:55				

Message dissemination

Recipient	Captain		Bus			
Date	88/88/88	-	88/88/88			
Time slot	Instant display /					
	departure time 99:99	-	99:99			
Displayed on	Upon arrival/ /		Display when delay?		Yes/No	
	before departure					
Degree of importance of the message						
Display times	Next trip/Each future trip			Display Mode	Single/Combined	
	First trip of the captain after each shift change					
	Last trip of the captain on each shift					
	First trip of the previous shift/last trip of the previous shift					
	First trip of the next shift/last trip of the next shift					
	First trip/last trip of the captain for the day					
Type of message	Task indication/temporary message/					
	Data collection/safety information					
Request response	Need/No need		Duration of display		seconds	

	Message	Respond to previous message Confirmation button	Options		Options	
Message 1	Please enter the number of passengers	Enter		1		
Message 2	Is there any damage of equipment on the bus?			1	Yes	
				2	No	
Message 3	What equipment is damaged?	Enter	1	1	XXXX	
				2	XXXX	Disseminate

Board of Dispatcher

Dispatcher	Type of incident	Route	Running number	Captain number	Bus number	Departure time	Expected arrival time	Actual arrival time	Reference number	Overview of the travelling	Driving schedule	Line chart	Map	Trips affected (bus)	Running number	Departed	Trips affected (bus)	Running number	Departed
Cheung Chi Leung	Late arrival without reason	C45	05	65325	KL6385	08:15	09:20	09:28	31675					--	--	--	--	--	--
Cheung Chi Leung	Bus broken	6D	02	62564	HY754	11:45	12:45		35216					6D	02	15:10	6D	02	15:10
Cheung Chi Leung	Traffic accident	C39A	05	85047	LM2168	07:38	08:[illegible]		31353					C39A	05	08:28	C39A	10	08:35
Cheung Chi Leung	Overtime travelling																		
Cheung Chi Leung	Handling lost property – keep for future handling																		

Information of telecommunications team

Type	Content	Route affected	Status	Time
Traffic accident	Gloucester Road to Central	101, 107, 10	New	12:47
Road construction	Prince Edward Road West to Mong Kok	1, 1A, 2, 2A,	New	12:25
Traffic accident	Waterloo Road to Yau Ma Tei	3C, 7, 21C, 2	Clear	11:09
Traffic accident	Salisbury Road to Hung Hom	5, 5A, 5C, 6,	Clear	10:35
Traffic accident	Route 3 to Tsim Sha Tsui		Clear	10:08
Traffic accident	Salisbury Road to Hung Hom		New	10:06
Busy traffic	School region of Ho Man Tin		Clear	09:39
Busy traffic	School region of Kowloon Tong		Clear	09:38
Busy traffic	School region in Mid-levels of North Point, Hong Kong Island		Clear	09:37
Traffic accident	Waterloo Road to Yau Ma Tei		Clear	09:32
Traffic accident	Route 3 to Tsim Sha Tsui		New	09:20
Traffic accident	Gascoigne Road Flyover to Hung Hom		Clear	09:00
Traffic accident	Tolo Highway to Kowloon		Clear	08:51
Traffic accident	Gascoigne Road Flyover to Hung Hom		New	08:27
Car broken	Lion Rock Tunnel Road to Kowloon		Clear	08:05
Traffic accident	Tai Po Road to Tai Wai		Follow-up	08:03
Car broken	Lung Cheung Road to Tsuen Wan		New	07:55
Busy traffic	School region of Kowloon Tong		New	07:49
Busy traffic	School region of Ho Man Tin		New	07:46
Traffic accident	Tai Po Road to Tai Wai		New	07:45
Busy traffic	School region in Mid-levels of North Point, Hong Kong Island		New	07:34
Car broken	Lion Rock Tunnel Road to Kowloon		Follow-up	07:20
Car broken	Lion Rock Tunnel Road to Kowloon		New	06:58
Water main burst	Lei Yue Mun Road to Yau Tong		Clear	05:00

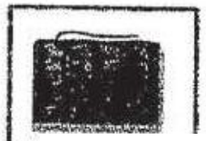
7.2.2.6 Arrival Reporting by Bus Captain

Captain 5021
Completed
46X/07/09:10
Tap the card

Captain of 46X please be aware: traffic congestion/road closure
Traffic accident outside the Lai King Station leads to closure of all lanes, please change the route to Kwai Chung Road.

Please enter the number of passengers 12

Captain number	Captain name	Route	Running number	Arrival	Bus number
5021	Lam Kwok Kei	46X	7	9:40	HX2449



Input (12)

Captain of 46X please be aware: traffic congestion/road closure
Traffic accident outside the Lai King Station leads to closure of all lanes, please change the route to Kwai Chung Road.

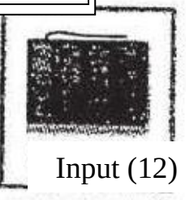
46X departed 1:00 HX 859

Captain number	Captain name	Route	Running number	Arrival	Bus number
5021	Lam Kwok Kei	46X	7	9:40	HX2449

Captain of 46X please be aware: traffic congestion/road closure
Traffic accident outside the Lai King Station leads to closure of all lanes, please change the route to Kwai Chung Road.

Is there any damage of equipment on the bus?
1. Yes 2. No

Captain number	Captain name	Route	Running number	Arrival	Bus number
5021	Lam Kwok Kei	46X	7	9:40	HX2449



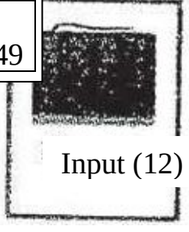
Input (12)

Captain of 46X please be aware: traffic congestion/road closure
Traffic accident outside the Lai King Station leads to closure of all lanes, please change the route to Kwai Chung Road.

What equipment is damaged?

1. MMOB
2. Stop reporter
3. Rearview mirror
4. Seat
5. XXX
6. XXX
7. XXX
8. XXX
9. XXX
10. XXX

Captain number	Captain name	Route	Running number	Arrival	Bus number
5021	Lam Kwok Kei	46X	7	9:40	HX2449



Input (12)

2.2.7 Multiple Arrival and Departure Board

Route 14 To Yau Tong Terminus

Captain

Bus number

System time: 10:00

Time slot	Number of lost trips/total trips

Licence plate and Running number	Mei Foo => Ngau Tau Kok	Ngau Tau Kok => Mei Foo
		(Bus breakdown)
	(Meal)	
	(Meal)	
	(Crew shortage)	
	(Meal)	
	(Meal)	
	(Meal)	
	(Tea)	

Licence plate and Running number	Mei Foo => Hang Hau (North)	Hang Hau (North) => Mei Foo
		(Meal)
		(Meal)
		(Meal)
		(Meal)
		(Meal)
		(Meal)
		(Meal)
		(Meal)
		(Meal)

Licence plate and Running number	Mei Foo => Hin Keng	Hin Keng => Mei Foo
		(Depot)
		(Depot)
		Depot)
		Depot)

Mei Foo => Sha Tin Depot

Hang Hau (North) => Mei Foo

Licence plate and Running number	Mei Foo => Hang Hau (North)	Hang Hau (North) => Mei Foo
		Central Ferry Pier => Sau Mau Ping (Private)
		Central Ferry Pier => Ping Tin (Private)
		Central Ferry Pier => Kowloon Bay (Depot)
		Central Ferry Pier => Kennedy Twon (Depot)
		(Private)
		(Private)
		(Private)
		(Private)

Central Ferry Pier => Ping Tin

Connaught Road Central => Ping Tin

Licence plate and Running number	Tai Po Centre => Kwun Tong Ferry Pier)	Kwun Tong Ferry Pier => Tai Po Centre

Licence plate and Running number	Cheung Ching => Shun Lee	Shun Lee => Cheung Ching

Pak Tin => Kennedy Town

Licence plate and Running number	Pak Tin => Kennedy Town	Kennedy Town => Pak Tin	Admiralty Station (East) Bus Terminus => Pak Tin	Gloucester Road => Pak Tin	Admiralty Station (East) Bus Terminus => Mong Kok Grand Plaza	Gloucester Road => Mong Kok Grand Plaza
	(Meal)					
	(Meal)					
	(Meal)					

Pak Tin=> Whampoa Garden

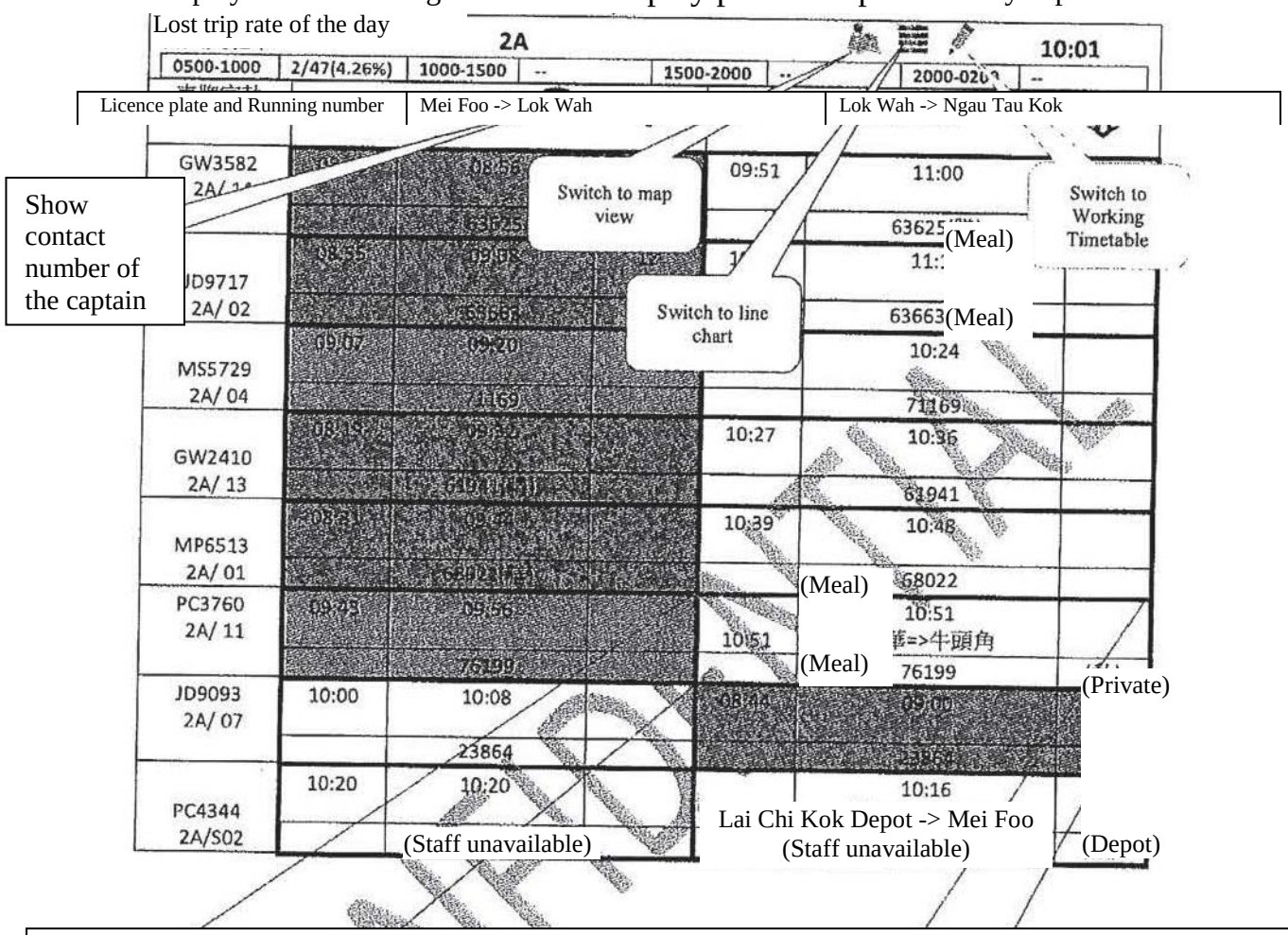
7.2.2.8 Single Arrival and Departure Monitoring

當天失班率: Lost trip rate of the day 2A 10:01

0500-1000	2/47(4.26%)	1000-1500	--	1500-2000	--	2000-0200	--

Licence plate and Running number	Mei Foo -> Lok Wah			Lok Wah -> Ngau Tau Kok		
GW3582 2A/ 14	09:43	09:56	6	09:51	11:00	
	63625				63625	(Meal)
JD9717 2A/ 02	09:57	10:08	12	10:03	11:1	
	63637				63663	(Meal)
MS5729 2A/ 04	09:07	09:20	12	10:15	10:24	
	71162				71169	
GW2410 2A/ 13	09:19	09:32	12	10:27	10:36	
	61931	(Meal)			61941	
MP6513 2A/ 01	09:31	09:3	12	10:39	10:48	
	68021	(Meal)			68022	
PC3760 2A/ 11	09:45	09:56	6	10:51	10:51	
	76199			10:51	荔莊=>牛頭角	Lok Wah -> Mei Foo
JD9093 2A/ 07	10:00	10:08	12		76199	(Private)
	23864			11:00	09:00	
PC4344 2A/S02	10:20	10:20	12		23864	
		(Staff unavailable)			10:16	
LF3614 2A/ 03	09:19	10:32	12		Lai Chi Kok Depot -> Mei Foo	
	74658	(Meal)			(Staff unavailable)	(Depot)
KR4350 2A/ 06	09:25	10:	12	11:32	11:36	
	69965	(Meal)			74658	
NE 714 2A/ 05	09:31	10:	12	11:44	11:48	
	78695	(Meal)			69966	
GW2556 2A/ 16	11:00	11:08	12	11:56	12:00	
	18635				78696	
JA9579 2A/S01	11:12	11:20	12	09:45	10:00	
	73252			10:12	18635	
PC3112 2A/ 15	10:12	11:30	10		10:12	
	68802	(Meal)		09:03	73252	
RE 508 2A/ 08	10:24	11:4	10	09:15	09:12	
	28476	(Meal)			09:24	
PC3522 2A/ 12	10:36	11:5	15	09:27	28476	
	69800	(Meal)			09:36	
MZ2851 2A/ 09	10:48	12:0	5	09:39	69800	
	63665	(Meal)			09:48	
					63665	

✓ Display closed Running number ✓ Display private/depot ✓ Only departure from terminus



Scheduled/estimated/actual arrival time of the previous trip	Scheduled/actual departure time Display start point => end point (if different from the end point indicated at the title)	The time gap with departure of previous bus
Travelling route of the bus (if it is different from the route indicated by the title)	Captain number, meal condition (meal, tea)	Display nature of the trip (private, depot)

Background colors indicate:

Previous trip has arrived
Previous trip has departed but not yet arrived
Previous trip has not departed

7.2.2.9 Maintain Working Timetable

7.2.2.9.1 Working Timetable – Time View

Date: 20-08-2014

Time: 99:99 - 99:99

Route	Direction
58M	To Leung King
58M	To Kwai Fong
58P	To Leung King
58P	To Kwai Fong
59M	To Tuen Mun Ferry Pier
59M	To Tsuen Wan

Licence plate: +

HR7614
NA8698
KL1584
HP4367
HK5581
FB1632

Captain: +

77425
6528
65138
72161
1834

Working timetable (F12) Message dissemination (F10) Sort by: Vehicle / Bus Length / Time

Route	Vehicle carried in	Vehicle carried away	Vehicle duty	Scheduled departure	Scheduled arrival	Arrival at midway station	Arrival time	ETA	Start point	End point	Captain carried in	Captain carried away	Captain duty	Cumulative/continuous working time	Meal	Bus break down	Accident
58M	JV6850	JV6850	58M/95	9:05	10:05	Leung King Estate			Kwai Fong Station	Leung King Estate		Morning			(Meal)		
58M	HS781	HS781	58M/501	9:10	10:10	Leung King Estate			Kwai Fong Station	Leung King Estate		Morning			(Meal)		
58M	JV6814	JV6814	58M/12	9:15	10:15	Kwai Fong Station			Leung King Estate	Leung King Estate		Morning					
58M	HJ7491	HJ7491	58M/503	9:20	10:20	Leung King Estate			Kwai Fong Station	Kwai Fong Station		Morning					
58M	JV6501	JV6501	58M/512	9:26	10:26	Leung King Estate			Kwai Fong Station	Kwai Fong Station		Morning					
58M	KC7617	KC7617	58M/511	9:32	10:32	Leung King Estate			Kwai Fong Station	Kwai Fong Station		Morning					
58M	JV7178	JV7178	58M/503	9:38	10:38	Leung King Estate			Kwai Fong Station	Kwai Fong Station		Morning					
58M	JV6725	JV6725	58M/08	9:42	10:42	Leung King Estate			Kwai Fong Station	Kwai Fong Station		Morning					
58M	JV6040	JV6040	58M/509	9:50	10:55	Leung King Estate			Kwai Fong Station	Kwai Fong Station		Morning					
58M	KC3140	KC3140	58M/507	10:04	11:04	Leung King Estate			Kwai Fong Station	Kwai Fong Station		Morning					
58M	JV2555	JV2555	58M/514	10:14	10:34	Leung King Estate			Kwai Fong Station	Kwai Fong Station		Morning					

Cumulative lost trip rate of this route for the month
Cumulative lost trip rate of this route for the day

(0500-1000; 1000-1500; 1500-2000; 2000-0200)

Board of Dispatcher

Dispatcher	Type of incident	Route	Running number	Captain number	Bus number	Departure time	Expected arrival time	Actual arrival time	Reference number	Overview of the travelling	Driving schedule	Line chart	Map	Trips affected (bus)	Running number	Departed	Trips affected (bus)	Running number	Departed
Cheung Chi Leung	Bus broken	6D	02	62564	HY754	11:45	12:45		35216					6D	02	15:10	6D	02	15:10
Cheung Chi Leung	Traffic accident	C39A	05	85047	LM2168	07:38	08:20		31353					C39A	05	08:28	C39A	10	08:35
Cheung Chi Leung	Overtime travelling																		
Cheung Chi Leung	Handling lost property – keep for future handling	C43A	08	70524	MK5518	07:00	07:48	07:48	31381					C43A	08	07:55	C43A	08	07:55

Departure rate of the route:
Vehicle information:
Captain Information:
Captain: 64381 XXX (monthly salary)
Duty: 58M/15/morning
Meal time: 99:99 – 99:99
Data of accidents:
Overtime travelling:
Position: 58M/15
Scheduled departure time: 10:13
Actual arrival time: 10:16
Reasons for being late:
Route details:
Statistical information:

Resources re-allocation
Disseminate message
Adjust frequencies
Stop delivery of the captain's message

7.2.2.9.2 Working Timetable – Bus View

Bus: KJ2052 Route: [ ] Running number [ ]

Sort by: Vehicle / Bus Length / Time

SBM/01 JU2809	SBM/02 EV6617	SBM/03 JV6680	SBM/04	SBM/05	SBM/06	SBM/07	SBM/08	SBM/09 KC9591	SBM/10	SBM/11	SBM/12	SBM/13
05:10 66187	05:32	05:41 62583	05:52	06:00 71739	06:09	06:37 72468	Bus unavailable	06:35		06:32	07:-	05:47
(Depot) Roof of General Repair Centre => Leung King Estate	(Depot) Tuen Mun (South) Depot => Leung King Estate	(Depot) Tuen Mun (South) Depot => Leung King Estate	(Depot) Tuen Mun (South) Depot => Leung King Estate	(Depot) Tuen Mun (South) Depot => Leung King Estate	(Depot) Tuen Mun (South) Depot => Leung King Estate	(Depot) Tuen Mun (South) Depot => Kin Sang Estate	(Depot) Tuen Mun (South) Depot => Leung King Estate	(Depot) Roof of General Repair Centre => Leung King Estate	(Depot) Tuen Mun (South) Depot => Leung King Estate	(Depot) Tuen Mun (South) Depot => Leung King Estate	(Depot) Roof of General Repair Centre => Kin Sang Estate	(Depot) Tuen Mun (South) Depot => Kin Sang Estate
05:25 66187	05:51	06:00 62583	06:07	06:00 71739	06:24	06:50 72468	06:48	06:35	06:48	06:47 71306	07:15	07:00
Leung King Estate => Kwai Fong Station	Leung King Estate => Kwai Fong Station	Leung King Estate => Kwai Fong Station	Leung King Estate => Kwai Fong Station	Leung King Estate => Kwai Fong Station	Leung King Estate => Kwai Fong Station	Kin Sang Estate => Kwai Fong Station	Leung King Estate => Kwai Fong Station	Leung King Estate => Kwai Fong Station	Leung King Estate => Kwai Fong Station	Leung King Estate => Kwai Fong Station	Kin Sang Estate => Kwai Fong Station	Kin Sang Estate => Kwai Fong Station
06:20 66187	06:45	06:55 62583	07:01	06:54 71739	07:04	07:42 72468	07:21	07:25	07:-	07:44 71306	08:10	07:51
Kwai Fong Station => Leung King Estate	Kwai Fong Station => Leung King Estate	Kwai Fong Station => Leung King Estate	Kwai Fong Station => Leung King Estate	(Private) Kwai Fong Station => Leung King Estate	(Private) Kwai Fong Station => Leung King Estate	(Private) Kwai Fong Station => Po Tin	(Private) Kwai Fong Station => Leung King Estate	Kwai Fong Station => Leung King Estate	Kwai Fong Station => Leung King Estate	Kwai Fong Station => Leung King Estate	Kwai Fong Station => Leung King Estate	(Private) Kwai Fong Station => Leung King Estate
07:10 66187	07:45	07:49 62583	08:11	07:31 71739	07:47	08:20 72468	07:52	08:22	08:19	08:41 71306	08:35	08:21
Leung King Estate => Kwai Fong Station	Leung King Estate => Kwai Fong Station	Leung King Estate => Kwai Fong Station	Leung King Estate => Kwai Fong Station	Leung King Estate => Kwai Fong Station	Leung King Estate => Kwai Fong Station	Po Tin => Kwai Fong Station	Leung King Estate => Kwai Fong Station	Leung King Estate => Kwai Fong Station	Leung King Estate => Kwai Fong Station	Leung King Estate => Kwai Fong Station	Leung King Estate => Kwai Fong Station	Leung King Estate => Kwai Fong Station
08:21 66187	08:45	09:19 62583	09:21	08:41 71739	09:30 72468	09:30	09:37	09:39	09:46 71306	09:57	10:16	09:40
(Depot) Kwai Fong Station => Tuen Mun (South) Depot	(Private) Kwai Fong Station => Leung King Estate	(Private) Kwai Fong Station => Leung King Estate	(Depot) Kwai Fong Station => Tuen Mun (South) Depot	(Depot) Kwai Fong Station => Tuen Mun (South) Depot	Kwai Fong Station => Leung King Estate	(Depot) Kwai Fong Station => Tuen Mun (South) Depot	(Private) Kwai Fong Station => Leung King Estate	(Depot) Kwai Fong Station => Tuen Mun (South) Depot	Kwai Fong Station => Leung King Estate	(Depot) Kwai Fong Station => Tuen Mun (South) Depot	Kwai Fong Station => Leung King Estate	Kwai Fong Station => Leung King Estate
10:37 66187	(Meal)	(Meal) 62583	(Meal)	71739	(Meal)	12:18 72468	(Meal)	(Meal)	Staff unavailable (Meal)	12:02	(Meal)	11:36 60937
(Depot) Tuen Mun (South) Depot => Leung King Estate	Leung King Estate => Kwai Fong Station	Leung King Estate => Kwai Fong Station	(Depot) Tuen Mun (South) Depot => Leung King Estate	(Depot) Tuen Mun (South) Depot => Leung King Estate	Leung King Estate => Kwai Fong Station	(Depot) Tuen Mun (South) Depot => Leung King Estate	Leung King Estate => Kwai Fong Station	(Depot) Tuen Mun (South) Depot => Leung King Estate	Leung King Estate => Kwai Fong Station	(Depot) Tuen Mun (South) Depot => Leung King Estate	(Depot) Leung King Estate => Tuen Mun (South) Depot	Leung King Estate => Kwai Fong Station
12:47 66187	12:57	11:50 62583	12:40	12:12 71739	12:30	12:19 71306	11:50	12:20 60937	12:20	Staff unavailable	12:12	12:50 60937
Leung King Estate => Kwai Fong Station	Kwai Fong Station => Leung King Estate	Kwai Fong Station => Leung King Estate	Leung King Estate => Kwai Fong Station	Leung King Estate => Kwai Fong Station	Kwai Fong Station => Leung King Estate	Leung King Estate => Kwai Fong Station	(Depot) Kwai Fong Station => Tuen Mun (South) Depot	Leung King Estate => Kwai Fong Station	Kwai Fong Station => Leung King Estate	Leung King Estate => Kwai Fong Station	(Depot) Tuen Mun (South) Depot => Leung King Estate	Kwai Fong Station => Leung King Estate

Board of Dispatcher

Dispatcher	Type of incident	Route	Running number	Captain number	Bus number	Departure time	Expected arrival time	Actual arrival time	Reference number	Overview of the travelling	Driving schedule	Line chart	Map	Trips affected (bus)	Running number	Departed	Trips affected (bus)	Running number	Departed
Cheung Chi Leung	Bus broken	6D	02	62554	HY754	11:45	12:45		35216					6D	02	15:10	6D	02	15:10
Cheung Chi Leung	Traffic accident	C39A	05	85047	LM2108	07:38	08:20		31353					C39A	05	08:28	C39A	10	08:35
Cheung Chi Leung	Overtime travelling																		
Cheung Chi Leung	Handling lost property – keep for future handling	C43A	08	70524	MK5518	07:00	07:48	07:48	31381					C43A	08	07:55	C43A	08	07:55

Duties for related captain

60804 Lee Chi Kwong Tuen Mun / monthly salary:
Duty: 58M/10/morning
Working hours: 06:49 - 14:24
Working hours cumulative: 3.25 / continuous: 3.25
Meal: 10:10

71306 Chan Ming Tuen Mun / daily salary:
Duty: 58M/S13/morning
Working hours: 07:52 - 21:06
Working hours cumulative: 2.55 / continuous: 2.55
Meal: --

7.2.2.9.3 Working Timetable – BC View

Captain: 60804 Route [ ] Running number: [ ] Shift: [ ]

Sort by: Vehicle/ [Bus Length] /Time

Staff unavailable

Bus unavailable

Bus unavailable

Bus unavailable

Bus unavailable

Bus unavailable

Bus unavailable

Bus unavailable

Duties for related captain

KJ2052/Duty: 58M/10
Parking location after first session of work:
Parking location after second session of work:
Order:

KC7617/Duty: 58M/S13
Parking location after first session of work:
Parking location after second session of work:
Order:

Board of Dispatcher

Dispatcher	Type of incident	Route	Running number	Captain number	Bus number	Departure time	Expected arrival time	Actual arrival time	Reference number	Overview of the travelling	Driving schedule	Line chart	Map	Trips affected (bus)	Running number	Departed	Trips affected (bus)	Running number	Departed
Cheung Chi Leung	Bus broken	6D	02	62564	HB754	11:45	12:45		35216					6D	02	15:10	6D	02	15:10
Cheung Chi Leung	Traffic accident	C39A	05	60047	KW2168	07:38	08:20		31353					C39A	05	08:28	C39A	10	08:35
Cheung Chi Leung	Overtime travelling																		
Cheung Chi Leung	Handling lost property – keep for future handling	C43A	08	70524	MR3518	07:00	07:48	07:48	31381					C43A	08	07:55	C43A	08	07:55

7.2.2.9.4 Working Timetable – Regulation Mode in Time View

Working timetable (F12) Message dissemination (F10) Sort by: Vehicle / Bus Length / Time

Date: 20-08-2014

Time: 99:99 - 99:99

Route | Direction

58M To Leung King
58M To Kwai Fong
58P To Leung King
58P To Kwai Fong
59M To Tuen Mun Ferry Pier
59M To Tsuen Wan

Licence plate

HR7614
NA8693
KL1584
HP4367
HK5581
FB1632

Captain

77425
6528
65138
72161
1834

Route	Bus	Vehicle position	Scheduled departure	Scheduled arrival	Start point	Midway boarding station	End point	Captain carried in	Captain carried away	Contact OCC	Duties of captain carried in	Duties of captain carried away	Frequency
58M	KV6817	58M/ 03		12:54	13:48	Leung King Estate		Kwai Fong Station					
58M	JV6715	58M/ 08		13:03	13:57	Leung King Estate		Kwai Fong Station					
58M	KJ2052	58M/ 10		13:11	14:05	Leung King Estate		Kwai Fong Station					
58M	JV5680	58M/ 05	(Depot)	13:29	13:39	Leung King Estate		Tuen Mun (South) Depot					
58M	JT1030	58M/ 15		13:20	14:14	Leung King Estate		Kwai Fong Station					
58M	JV6814	58M/ 12	(Depot)	13:27	13:37	Tuen Mun (South) Depot		Leung King Estate					
58M	JS7832	58M/ 06		13:25	14:22	Leung King Estate		Kwai Fong Station					
58M	JV6814	58M/ 12		13:37	14:31	Kwai Fong Station		Leung King Estate					
58M	KU7538	58M/ 14		13:45	14:39	Leung King Estate		Kwai Fong Station					
58M	JS7054	58M/ 04	(Depot)	13:52	14:14	Kwai Fong Station		Leung King Estate					
58M	KS 709	58M/ 96		13:54	14:48	Kwai Fong Station		Leung King Estate					
58M	KU8259	58M/ 13		13:57	14:56	Leung King Estate		Kwai Fong Station					
58M	KC7617	58M/S1	(Depot)	14:40	15:23	Leung King Estate		Tuen Mun (South) Depot					
58M	JV7191	58M/ 11		14:58	15:22	Kwai Fong Station		Leung King Estate					
58M	KV6817	58M/ 03		12:54	13:48	Leung King Estate		Kwai Fong Station					
58M	JV6715	58M/ 08		13:03	13:57	Leung King Estate		Kwai Fong Station					
58M	KJ2052	58M/ 10		13:11	14:05	Leung King Estate		Kwai Fong Station					
58M	JV5680	58M/ 05	(Depot)	13:29	13:39	Leung King Estate		Tuen Mun (South) Depot					
58M	JT1030	58M/ 15		13:20	14:14	Leung King Estate		Kwai Fong Station					
58M	JV6814	58M/ 12	(Depot)	13:27	13:37	Tuen Mun (South) Depot		Leung King Estate					
58M	JS7832	58M/ 06		13:25	14:22	Leung King Estate		Kwai Fong Station					
58M	JV6814	58M/ 12		13:37	14:31	Kwai Fong Station		Leung King Estate					
58M	KU7538	58M/ 14		13:45	14:39	Leung King Estate		Kwai Fong Station					
58M	JS7054	58M/ 04	(Depot)	13:52	14:14	Kwai Fong Station		Leung King Estate					
58M	KS 709	58M/ 96		13:54	14:48	Kwai Fong Station		Leung King Estate					
58M	KU8259	58M/ 13		13:57	14:56	Leung King Estate		Kwai Fong Station					
58M	KC7617	58M/S1	(Depot)	14:40	15:23	Leung King Estate		Tuen Mun (South) Depot					
58M	JV7191	58M/ 11		14:58	15:22	Kwai Fong Station		Leung King Estate					

Staff unavailable

Staff unavailable

Separate display for different directions
Display only trips

Departure time of previous trip prior to the trip involving unavailable staff/bus

Applicable to trip departed from : to :
After advancing the trip involving unavailable staff/bus
☐ Departure time of next trip
Departure time of all trips afterwards

Execute

Apply formerly adjusted travelling time:
58M closed with 7 buses on weekdays (Thursday, 23 October)
58M closed with 7 buses on weekdays (Monday, 6 October)

Save Apply

Dispatcher incident dashboard

Dispatcher	Type of incident	Route	Running number	Captain number	Bus number	Departure time	Expected arrival time	Actual arrival time	Reference number	Overview of the travelling	Driving schedule	Line chart	Map	Trips affected (bus)	Running number	Departed	Trips affected (person)	Running number
Cheung Chi Leung	Bus broken	6D	02	68534	HY754	11:45	12:45		35216					6D	02	15:10	6D	02	15:10
Cheung Chi Leung	Traffic accident	C39A	05	85047	LM2168	07:38	08:20		31353					C39A	05	08:28	C39A	10	08:35
Cheung Chi Leung	Overtime travelling																		
Cheung Chi Leung	Handling lost property – keep for future handling	C43A	08	70524	MK5518	07:00	07:48	07:48	31381					C43A	08	07:55	C43A	08	07:55

Departure Management

Date
20-08-2014

Time
99:99 - 99:99

Route | Direction

58M To Leung King
58M To Kwai Fong
58P To Leung King
58P To Kwai Fong
59M To Tuen Mun Ferry Pier
59M To Tsuen Wan

Licence plate

HR7614
NA3693
KL1584
HP4367
HK5581
FB1632

Captain

77425
6528
65138
72161
1894

Working timetable (F12) | Message dissemination (F10) | Sort by: Vehicle / Bus Length / Time

Route	Bus	Vehicle position	Scheduled departure	Scheduled arrival	Start point	Midway boarding station	End point	Captain carried in	Captain carried away	Contact OCC	Duties of captain carried in	Duties of captain carried away	Frequency
	KV6817	58M/ 03	12:54	13:48	Leung King Estate		Kwai Fong Station	60583	53679		Morning	58M/LG1/夜	Night
	JV6725	58M/ 08	13:03	13:57	Leung King Estate		Kwai Fong Station	65483	65482		Morning	58M/ 08/早	Morning
	KJ2052	58M/ 10	13:11	14:05	Leung King Estate		Kwai Fong Station	78452	1524		Morning	58M/LD2/夜	Night
	JT1030	58M/ 15	13:20	14:14	Leung King Estate		Kwai Fong Station	64381	64381		Morning	58M/ 15/早	Morning
			13:24	14:28	Leung King Estate			72460	((Meal			58M/ 07/早	Morning
	JS7632	58M/ 06	13:28	14:22	Leung King Estate		Kwai Fong Station	62959	4801		Morning	58M/ 03/夜	Night
	JV5814	58M/ 12	13:37	14:31	Leung King Estate		Kwai Fong Station	62918	62918		Morning	58M/ 12/早	Morning
	KU7538	58M/ 14	13:45	14:39	Leung King Estate		Kwai Fong Station	72950	70819		Morning	58M/ 02/夜	Night
8M	KS 709	58M/ 96	13:54	14:48	Leung King Estate		Kwai Fong Station	21855	1611		Morning	58M/ 04/夜	Night
8M	KU8269	58M/ 13	14:02	14:56	Leung King Estate		Kwai Fong Station	60937	64089		Morning	58M/ 06/夜	Night
8M	Bus unavailable		14:19	15:13	Leung King Estate		Kwai Fong Station		67882			960 / 13/早	Morning
8M	JV7191	58M/ 11	14:28	15:22	Leung King Estate		Kwai Fong Station	Staff unavailable	460			58M/ 07/早	Morning
											Morning		Morning

Route	Bus	Vehicle position	Scheduled departure	Scheduled arrival	Start point	Midway boarding station	End point	Captain carried in	Captain carried away	Contact OCC	Duties of captain carried in	Duties of captain carried away	Frequency
					Kwai Fong Station		Leung King Estate				Morning		Morning
					Kwai Fong Station		Leung King Estate		Staff unavailable		Morning		Morning
	Bus unavailable				Kwai Fong Station		Leung King Estate				Morning		Morning
					Kwai Fong Station		Leung King Estate				Morning		Morning
					Kwai Fong Station		Leung King Estate				Morning		Morning
					Kwai Fong Station		Leung King Estate				Morning		Morning
					Kwai Fong Station		Leung King Estate				Morning		Morning
					Kwai Fong Station		Leung King Estate				Morning		Morning
					Kwai Fong Station		Leung King Estate				Morning		Night
					Kwai Fong Station		Leung King Estate				Morning		Morning
					Kwai Fong Station		Leung King Estate				Night		Night
					Kwai Fong Station		Leung King Estate				Morning		Morning

Dispatcher incident dashboard

Dispatcher	Type of incident	Route	Running number	Captain number	Bus number	Departure time	Expected arrival time	Actual arrival time	Reference number	Overview of the travelling	Driving schedule	Line chart	Map	Trips affected (bus)	Running number	Departed	Trips affected (bus)	Running number	Departed
Cheung Chi Leung	Bus broken	6D	02	62564	HY754	11:45	12:45		35216					6D	02	15:10	6D	02	15:10
Cheung Chi Leung	Traffic accident	C39A	05	85[illegible]7	LM2168	07:38	08:20		31353					C39A	05	08:28	C39A	10	08:35
Cheung Chi Leung	Overtime travelling	[illegible]																	

Separate display for different directions
Display only trips

Departure time of previous trip prior to the trip involving unavailable staff/bus

Applicable to trip departed from : to :
After advancing the trip involving unavailable staff/bus
☐ Departure time of next trip
Departure time of all trips afterwards
Execute

Apply formerly adjusted travelling time:
58M closed with 7 buses on weekdays (Thursday, 23 October)
58M closed with 7 buses on weekdays (Monday, 6 October)

Save Apply

7.2.2.9.5 Working Timetable – Regulation Mode in Bus View

行車時間 Working timetable (F12) Message dissemination (F10) Sort by: Vehicle / Bus Length / Time

58M/07	58M/11	58M/14 KU7538	960/13
欠車 Bus unavailable			欠 Bus unavailable
06:37 72460	06:32 71306	Staff unavailable	(960) 06:54
(Depot) Tuen Mun (South) Depot => Kin Sang Estate	(Depot) Tuen Mun (South) Depot => Kin Sang Estate	(Depot) Tuen Mun (South) Depot => Kin Sang Estate	(Depot) Tuen Mun (South) Depot => Kin Sang Estate
06:50 72460	06:42 71306	08:21 Staff unavailable	(960) 07:07 57882
Kin Sang Estate => Kwai Fong Station	Leung King Estate => Kwai Fong Station	Leung King Estate => Kwai Fong Station	Kin Sang Estate => Wan Chai Ferry Pier
07:42 72460	07:44 71306	07:20 Staff unavailable	(960) 08:26 57882
e(Private) Kwai Fong Station => Po Tin	Kwai Fong Station => Leung King Estate	Kwai Fong Station => Leung King Estate	Wan Chai Ferry Pier => Kin Sang Estate
08:20 72460	08:41 71306	08:17 Staff unavailable	(960) 10:56 57882 (Meal)
Po Tin => Kwai Fong Station	Leung King Estate => Kwai Fong Station	Leung King Estate => Kwai Fong Station	Kin Sang Estate => Wan Chai Ferry Pier
09:20 72460	09:46 71306	Staff unavailable	67882
(Depot) Kwai Fong Station => Tuen Mun (South) Depot	(Depot) Kwai Fong Station => Tuen Mun (South) Depot	(Depot) Kwai Fong Station => Tuen Mun (South) Depot	Wan Chai Ferry Pier => Kin Sang Estate

Separate display for different directions
Display only trips

Departure time of previous trip prior to the trip involving unavailable staff/bus

Applicable to trip departed from : to :
After advancing the trip involving unavailable staff/bus
☐ Departure time of next trip
Departure time of all trips afterwards
Execute

Apply formerly adjusted travelling time:
58M closed with 7 buses on weekdays (Thursday, 23 October)
58M closed with 7 buses on weekdays (Monday, 6 October)

Save Apply

Dispatcher incident dashboard

Dispatcher	Type of incident	Route	Running number	Captain number	Bus number	Departure time	Expected arrival time	Actual arrival time	Reference number	Overview of the travelling	Driving schedule	Line chart	Map	Trips affected (bus)	Running number	Departed	Trips affected (bus)	Running number	Departed
02	62564	HY754	11:45	12:45		35216								6D	02	15:10	6D	02	15:10
05	85047	LM2168	07:38	08:20		31353								C39A	05	08:28	C39A	10	08:35
08	70524	MK5518	07:00	07:48	07:48	31381								C43A	08	07:55	C43A	08	07:55

Cheung Chi Leung	Bus broken
Cheung Chi Leung	Traffic accident
Cheung Chi Leung	Overtime travelling
Cheung Chi Leung	Handling lost property – keep for future handling

7.2.2.9.6 Working Timetable – Regulation Mode in BCView

Working timetable (F12) Message dissemination (F10) Sort by: Vehicle / Bus Length / Time

58M/07/Morning 72460	58M/11/Morning 71306	58M/Morning Staff unavailable	960/13/Morning 67882	960/15/Night
06:37 Bus unavailable	06:32 JV7191	06:42 KU7538	(960) 06:54 Bus unavailable	12:27 Bus unavailable
(Depot) Tuen Mun (South) Depot => Kin Sang Estate	(Depot) Tuen Mun (South) Depot => Kin Sang Estate	(Depot) Tuen Mun (South) Depot => Kin Sang Estate	(Depot) Tuen Mun (South) Depot => Kin Sang Estate	(Depot) Tuen Mun (South) Depot => Kin Sang Estate
06:50 Bus unavailable	06:42 JV7191	06:52 KU7538	(960) 07:07 Bus unavailable	17:27 Bus unavailable
Kin Sang Estate => Kwai Fong Station	Leung King Estate => Kwai Fong Station	Leung King Estate => Kwai Fong Station	Kin Sang Estate => Wan Chai Ferry Pier	King's Road at Quarry Bay
07:42 Bus unavailable	07:44 JV7191	07:52 KU7538	(960) 08:26 Bus unavailable	(960) 18:45 Bus unavailable
e(Private) Kwai Fong Station => Po Tin	Kwai Fong Station => Leung King Estate	Kwai Fong Station => Leung King Estate	Wan Chai Ferry Pier => Kin Sang Estate	King's Road at Quarry Bay => Hung Shui Kiu
08:20 Bus unavailable	08:41 JV7191	08:51 KU7538	(960) 10:56 (Meal) Bus unavailable	19:20 Bus unavailable
Po Tin => Kwai Fong Station	Leung King Estate => Kwai Fong Station	Leung King Estate => Kwai Fong Station	Kin Sang Estate => Wan Chai Ferry Pier	(Private) Hung Shui Kiu => Kin Sang Estate
09:20 Bus unavailable	09:46 JV7191	09:57 KU7538	12:30 (Meal) Bus unavailable	1:47 Bus unavailable
(Depot) Kwai Fong Station => Tuen Mun (South) Depot	(Depot) Kwai Fong Station => Tuen Mun (South) Depot	(Depot) Kwai Fong Station => Tuen Mun (South) Depot	Wan Chai Ferry Pier => Kin Sang Estate	Kin Sang Estate => Wan Chai Ferry Pier
09:31	10:36	10:47	13:50 Bus unavailable	23:10 Bus unavailable
(Tea) Tuen Mun (South) Depot	(Meal) Tuen Mun (South) Depot	(Meal) Tuen Mun (South) Depot	(Private) Kin Sang Estate => Leung King Estate	Wan Chai Ferry Pier => Kin Sang Estate

Separate display for different directions
Display only trips

Departure time of previous trip prior to the trip involving unavailable staff/bus

Applicable to trip departed from : to :
After advancing the trip involving unavailable staff/bus
☐ Departure time of next trip
Departure time of all trips afterwards
Execute

Apply formerly adjusted travelling time:
58M closed with 7 buses on weekdays (Thursday, 23 October)
58M closed with 7 buses on weekdays (Monday, 6 October)

Save Apply

Dispatcher incident dashboard

Dispatcher	Type of incident
Cheung Chi Leung	Bus broken
Cheung Chi Leung	Traffic accident
Cheung Chi Leung	Overtime travelling
Cheung Chi Leung	Handling lost property – keep for future handling

Route	Running number	Captain number	Bus number	Departure time	Expected arrival time	Actual arrival time	Reference number	Overview of the travelling	Driving schedule	Line chart	Map	Trips affected (bus)	Running number	Departed	Trips affected (bus)	Running number	Departed
6D	02	62564	HY754	11:45	12:45		35216					6D	02	15:10	6D	02	15:10
C39A	05	85047	LM2168	07:38	08:20		31353					C39A	05	08:28	C39A	10	08:35
C43A	08	70524	MK5518	07:00	07:48	07:48	31381					C43A	08	07:55	C43A	08	07:55

7.2.2.9.7 Working Timetable – Resources Hunting (Resources re-allocation)

Date: 20-08-2014

Time: 99:99 - 99:99

Route | Direction

58M To Leung King
58M To Kwai Fong
58P To Leung King
58P To Kwai Fong
59M To Tuen Mun Ferry Pier
59M To Tsuen Wan

Licence plate

HR7614
NA8695
KL1584
HP4367
HK5581
FB1632

Captain

77425
6528
65138
72161
1834

Working timetable (F12) Message dissemination (F10) Sort by: Vehicle / Bus Length / Time

Route	Bus	Vehicle duty	Scheduled departure	Actual departure	In advance Delayed	Scheduled arrival	Arrival at midway station Stop name Time	Expected remaining travelling time (minutes)	Start point	Midway boarding station	End point	Captain carried in	Captain carried away	Contact OCC	Duty of captain carried in	Duty of captain carried away
8M	JS7652	58M/06	13:28	13:28	0:00	14:22		Leung King Estate		Kwai Fong Station				Morning	58M/06	58M/08 Night
8M	JV6814	58M/12	13:37	13:37	0:00	14:31		Kwai Fong Station		Leung King Estate				Morning	58M/12	58M/11 Morning
8M	KU7538	58M/14	13:45	13:45	0:00	14:39		Leung King Estate		Kwai Fong Station				Morning	58M/11	58M/11 Morning
								Kwai Fong Station		Leung King Estate				Morning	58M/07	58M/07 Night
								Leung King Estate		Kwai Fong Station				Morning		Morning
8M	JS7054	58M/08	13:54	13:54	0:00	14:44		Kwai Fong Station		Leung King Estate				Morning		Morning
	KS7002	58M/06	13:54	13:54	0:00	14:48		Kwai Fong Station		Leung King Estate				Morning		Morning
8M	KU8289	58M/13	14:02	14:02	0:00	14:56		Leung King Estate		Tuen Mun (South) Depot	(Depot)			Morning	58M/05	58M/04 Morning
8M	KC7617	58M/511	14:04	14:04	0:00	14:24		Leung King Estate		Kwai Fong Station				Morning	58M/06	58M/04 Night
8M	JC8	58M/13	14:19	14:19	0:00	15:13		Kwai Fong Station		Leung King Estate				Night		Night
8M	JV7391	58M/11	14:28	14:28	0:00	15:22		Leung King Estate		Kwai Fong Station				Morning	58M/12	58M/06 Night
8M	JT7196	58M/515	14:36	14:36	0:00	14:42		Leung King Estate		Kwai Fong Station				Morning	58M/10	58M/10 Morning
8M	JC8	58M/07	14:36	14:36	0:00	14:54		Kwai Fong Station		Leung King Estate				Morning		Morning
8M	KC3551	58M/09	14:36	14:36	0:00	15:30		Tuen Mun (South) Depot		Leung King Estate				Night		Morning
								Leung King Estate		Tuen Mun (South) Depot				Morning		Morning
								Leung King Estate		Kwai Fong Station				Morning		Morning
8M	JT7196	58M/515	14:42	14:42	0:00	14:58		Kwai Fong Station		Leung King Estate				Night		Night
8M	JC8	58M/07	14:52	14:52	0:00	15:46		Leung King Estate		Kwai Fong Station				Morning		Morning
8M	KW8817	58M/09	14:54	14:54	0:00	15:14		Kwai Fong Station		Leung King Estate				Morning		Night
8M	HU7491	58M/505	14:58	14:58	0:00	15:08		Leung King Estate		Tuen Mun (South) Depot				Night		Night
8M	KP7401	58M/10	13:00	13:00	0:00	15:56		Tuen Mun (South) Depot		Leung King Estate				Night		Morning
								Leung King Estate		Kwai Fong Station				Morning		Night
								Kwai Fong Station		Leung King Estate				Night		Night
8M	HU7491	58M/503	15:08	15:08	0:00	16:02		Kwai Fong Station		Leung King Estate				Night		Night
8M	KU2057	58M/15	15:24	15:24	0:00	15:24		Leung King Estate		Kwai Fong Station				Morning		Morning
8M	HS1279	58M/506	15:24	15:24	0:00	15:24		Leung King Estate		Leung King Estate				Night		Night
8M	JV8115	58M/08	15:16	15:16	0:00	16:10		Tuen Mun (South) Depot		Leung King Estate				Morning		Morning
8M	JT7050	58M/15	15:24	15:24	0:00	15:44		Kwai Fong Station		Leung King Estate				Night		Night
8M	HS1355	58M/504	15:24	15:24	0:00	16:18		Leung King Estate		Kwai Fong Station				Morning		Morning
								Leung King Estate		Tuen Mun (South) Depot				Morning		Morning
								Leung King Estate		Kwai Fong Station				Morning		Morning

Adjust frequencies

Resources re-allocation ____

Disseminate message

Departure rate of the route:

Vehicle information:

Captain Information:

Captain: 64381 XXX (monthly salary)
Duty: 58M/15/morning
Meal time: 99:99 – 99:99

Data of accidents:

Overtime travelling:
Position: 58M/15
Scheduled departure time: 10:13
Actual arrival time: 10:16

Reasons for being late:

Route details:

Statistical information:

Dispatcher incident dashboard

Dispatcher	Type of incident	Route	Running number	Captain number	Bus number	Departure time	Expected arrival time	Actual arrival time	Reference number	Overview of the travelling	Driving schedule	Line chart	Map	Trips affected (bus)	Running number	Departed	Trips affected (bus)	Running number	Departed
Cheung Chi Leung	Bus broken	6D	02	62564	HY754	11:45	12:45		35216					6D	02	15:10	6D	02	15:10
Cheung Chi Leung	Traffic accident	C39A	05	85047	LM2168	07:38	08:20		31353					C39A	05	08:28	C39A	10	08:35
Cheung Chi Leung	Overtime travelling																		
Cheung Chi Leung	Handling lost propert future handling	C43A	08	70524	MK5518	07:00	07:48	07:48	31381					C43A	08	07:55	C43A	08	07:55

7.2.2.9.8 Resources Available for resources re-allocation

Running number	74x17	Scheduled bus:	HK9876 (fault)	Scheduled captain:	56789 (Chan King Man)	Departure time	15:28	Start point:	Tai Po Centre
Re-allocated time slot		trips afterwards		**Re-allocation scope:**	both the vehicle and the captain				
Terminus:	**Tai Po Centre**	**Fu Shin**	**Fu HengTai Po Market Station**	**Tai Po Market Station**		More…			

Travelling time from depot: ☐A ☐B ☐C ☐D ☐E

Travelling time for private purpose

☐ Cross-depots
☐ Cross control centres
☐ Cross control centres
☐ Display transfer / pick up
☐ Stop at depot midway

Display only the same route / all routes

Minimum time gap with departure time of next trip

Missing bus for the route

Passenger ratio

No violation of work guidelines ☐A ☐B ☐C ☐D ☐E

Complaint ratio

Location	Licence plate	Depot	Running number	Captain number and duties	Contact number	Working arrangements	Actual/estimated arrival time	Scheduled departure	Transfer/ pick up	Re-allocation of captain violating the work guidelines A	B	C	D	E	Missing rate for the original route	Passenger ratio	Complaint ratio	Remark
Tai Po Centre	HK1234	SWH		—		Spare												74X withdrawn from service due to night parking violation
Tai Po Market	HK2345	SWH	74X-S10	1234 74X-S10-1 Morning		74X returned to depot midway		17:54										Departed depot in second half at 17:10 and violated night parking
Tai Po Market	HK3456	SWH				Spare												
Tai Po Centre	HK4567	SWH	72X-03	2345 72X-01 **Morning**	65432	72X	15:20	15:28	Transfer						3.70%	0.95	1.3	73X-03 withdrawn from service due to night parking violation
Tai Po Centre (Midway)	HK5678	SWH	74X-06	3456 74X-S02-1 Morning		74X	Expected 15:28	15:38			■			■				Night parking violation
Fu Heng	HK6789	SWH	71B-03	67890 71B-03-1 Morning	44944	71B	15:21	15:29							1.00%	1.4	1.85	Night parking violation
Tai Po Market Station		SWH		65432 72X-03-1 Night	65432100	Standby at stop						■						Night parking violation
Fu Shin	HK7890	SWH	73X-S10	76543 73X-L01-1 Night	76610142	73X parked midway		16:48	Pick up						3.30%	1.13	0.82	Night parking violation Parking midway and night parking violation

Double click to select swapping Bus and/or BC

[Blank Page]

8. Control Center Operation

8.1 Illustration by examples

Control center operation under ROM is illustrated by the following examples:

Example	Scenario	Illustrating Route
1	Bus breakdown + resource hunting	6D
2	Crew Shortage + automatic departure regulation	98C
3	Delayed of Arrival + departure regulation	58M

8.1.1 – Handling bus breakdown + redeployment (route 6D)

➔ Dispatcher receives a call from bus captain 62564 that bus HY 754 broke down at 12:45.
➔ He presses the "phone" icon at the top right corner and a form appears for filling the details of the breakdown.

➔ A new incident of type “bus breakdown” will be created in both incident board of OCC TV and dispatcher monitoring board

車務控制中心: 荔枝角 **系統時間:** 2014-08-01 09:34:12

調度員	事件類別	路線	字軌	車長編號	車輛編號	輸入者	輸入時間	參考編號
張子良	壞車	6D	02	62564	HY754	張子良	12:45:00	35216
李超	欠人	[illegible]	[illegible]	[illegible]21	GZ4853	TOM	08:45:20	31523
王大同	欠車	C 2A	加入壞車事件	[illegible]58	KR4350	TOM	08:45:20	31513
何小明	尚未抵達 影響往後出車	C40	03	65318	KW3187	王大同	09:18:05	31608
張子良	壞車	C108	02	73493	MM20[illegible]	李超	08:12:16	31468
李超	劈車	C42A	07	77251	JK1583	何小明	09:12:06	31594
張子良	交通意外	C39A	05	[illegible]5047	LM2168	OCM	07:45:20	31353
王大同	失物處理 - 留後	C43A	08	70524	MK3516	王大同	07:50:10	31381
王大同	預計延遲到達	C 8A	01	[illegible]153	PI6184	ROM	09:32:47	31668
李超	偏離行車路線	C35A	04	73914	ND6181	ROM	09:28:20	31618
張子良	延遲抵達沒有原因	C46	05	65325	KL6385	ROM	09:33:51	31675
	:					:		
	:					:		
	:					:		

➔ A new incident of type “bus breakdown” being created to the dispatcher’s monitoring board

調度員: 張子良　　事件狀況: 處理中/ 未確認 / 處理完畢 / 所有

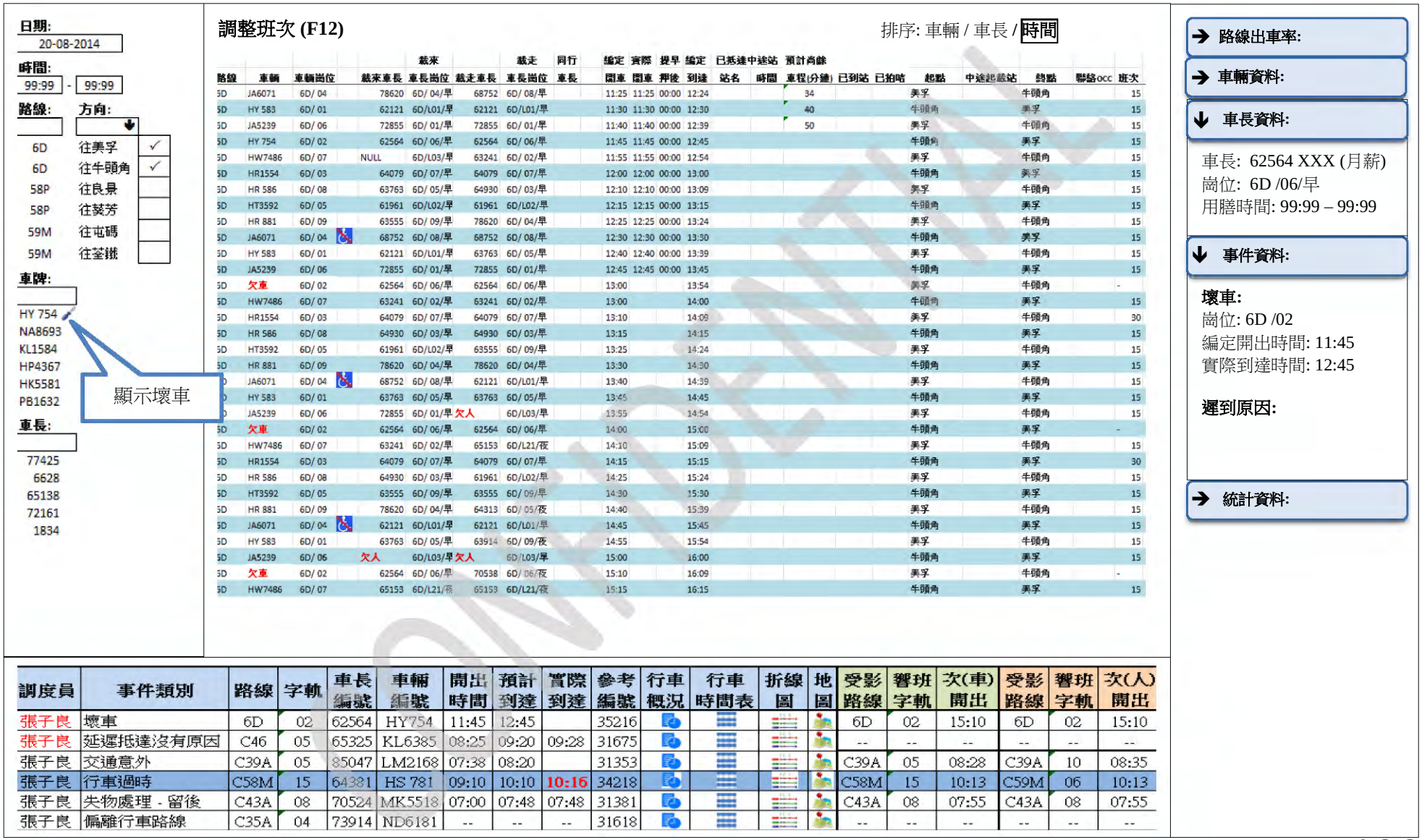
加入壞車事件

系統時間: 2014-08-01 12:50:12

調度員	事件類別	路線	字軌	車長編號	車輛編號	開出時間	預計到達	實際到達	參考編號	行車概況	行車時間表	折線圖	地圖	受影路線	響班字軌	次(車)開出	受影路線	響班字軌	次(人)開出
張子良	壞車	6D	02	62564	HY754	11:45	12:45		35216					6D	02	15:10	6D	02	15:10
張子良	延遲抵達沒有原因	C46	05	65325	KL6385	08:25	09:20	09:28	31675					--	--	--	--	--	--
張子良	交通意外	C39A	05	85047	LM2168	07:38	08:20		31353					C39A	05	08:28	C39A	10	08:35
張子良	行車過時	C58M	15	64381	HS 781	09:10	10:10	10:16	34218					C58M	15	10:13	C59M	06	10:13
張子良	失物處理 - 留後	C43A	08	70524	MK5518	07:00	07:48	07:48	31381					C43A	08	07:55	C43A	08	07:55
張子良	偏離行車路線	C35A	04	73914	ND6181	--	--	--	31618					--	--	--	--	--	--

路線	往	遲 ... 早	-/0/+	最長延誤 分鐘	最長延誤 字軌	最長提早 分鐘	最長提早 字軌	本月累積 失班率	當天累積失班率 0500-1000	1000-1500	1500-2000	2000-0200
2A	美孚		0/3/2	-4	06	+9	L05	1.24%	2/59 (3.51%)	2/59 (3.51%)	2/59 (3.51%)	2/59 (3.51%)
	樂華		2/3/2	-4	06	+9	L05					
6	美孚		2/8/0	-9	03	+5	07	1.11%	1/51 (1.96%)	1/51 (1.96%)	1/51 (1.96%)	1/51 (1.96%)
	荔枝角		3/6/2	-9	03	+5	07					
6D	美孚		3/3/2	-8	09	+6	02	1.87%	0/39 (0%)	0/39 (0%)	0/39 (0%)	0/39 (0%)
	牛頭角		1/5/2	-8	09	+6	02					
6X	中間道		0/4/1	-		+3	03	0	0/8 (0%)	-	-	-
28	慶地道		1/6/2	-4	05	+6	01	1.34%	2/47 (4.26%)	2/47 (4.26%)	2/47 (4.26%)	2/47 (4.26%)
	慶地道		2/6/0	-4	05	+6	01					
38A	美孚		0/4/0	-		-		0.8%	1/8 (0%)	1/8 (0%)	1/8 (0%)	1/8 (0%)
	海濱花園		0/4/0	-		-						
72	長沙灣		3/5/1	-4	05	+11	09	2.55%	1/29 (3.45%)	1/29 (3.45%)	1/29 (3.45%)	1/29 (3.45%)
	太和		1/3/4	-4	05	+11	09					
86	美孚		2/3/2	-5	02	+7	S02	1.61%	0/36 (0%)	0/36 (0%)	0/36 (0%)	0/36 (0%)
	黃泥頭		1/4/2	-5	02	+7	S02					
6C	美孚		5/6/2	-12	S04	+4	06	2.18%	3/71 (4.23%)	3/71 (4.23%)	3/71 (4.23%)	3/71 (4.23%)
	九龍城碼頭		3/10/2	-12	S04	+4	06					
30	長沙灣		4/2/2	-6	07	+5	03	1.84%	2/24 (8.33%)	2/24 (8.33%)	2/24 (8.33%)	2/24 (8.33%)
	荃威花園		2/7/0	-6	07	+5	03					

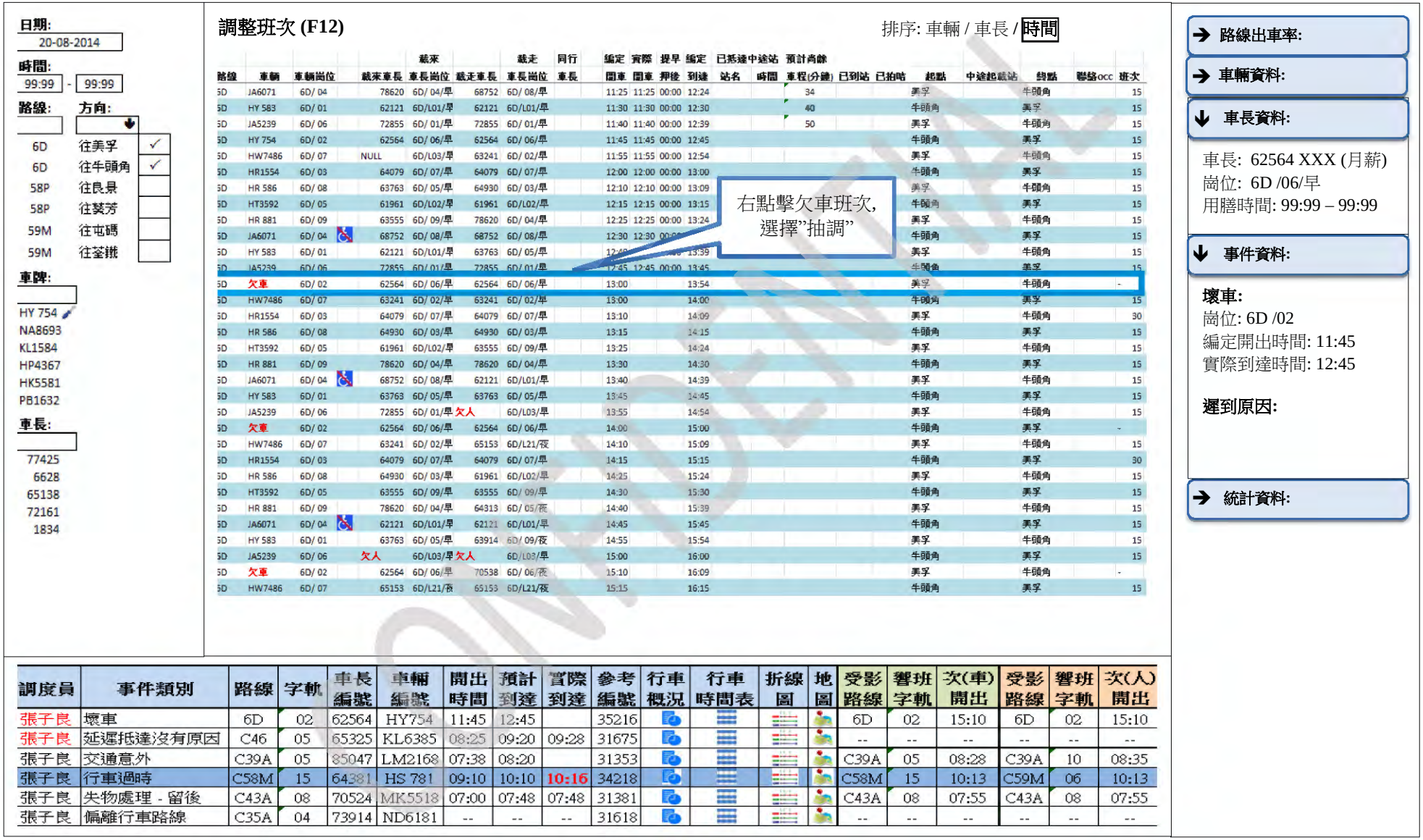
- ➔ On the working time table, a screw driver icon will appear next to the bus number of the bus which has broken down.
- ➔ A word "欠車" will be displayed in departures that involve the bus.



路線	車輛	車輛崗位	載來車長	載來車長崗位	載走車長	載走車長崗位	同行車長	編定開車	實際開車	提早/押後	編定到達	已抵達中途站站名	已抵達中途站時間	預計肩餘車程(分鐘)	已到站	已拍咭	起點	中途起載站	終點	聯絡occ	班次
6D	JA6071	6D/ 04	78620	6D/ 04/早	68752	6D/ 08/早		11:25	11:25	00:00	12:24			34			美孚		牛頭角		15
6D	HY 583	6D/ 01	62121	6D/L01/早	62121	6D/L01/早		11:30	11:30	00:00	12:30			40			牛頭角		美孚		15
6D	JA5239	6D/ 06	72855	6D/ 01/早	72855	6D/ 01/早		11:40	11:40	00:00	12:39			50			美孚		牛頭角		15
6D	HY 754	6D/ 02	62564	6D/ 06/早	62564	6D/ 06/早		11:45	11:45	00:00	12:45						牛頭角		美孚		15
6D	HW7486	6D/ 07	NULL	6D/L03/早	63241	6D/ 02/早		11:55	11:55	00:00	12:54						美孚		牛頭角		15
6D	HR1554	6D/ 03	64079	6D/ 07/早	64079	6D/ 07/早		12:00	12:00	00:00	13:00						牛頭角		美孚		15
6D	HR 586	6D/ 08	63763	6D/ 05/早	64930	6D/ 03/早		12:10	12:10	00:00	13:09						美孚		牛頭角		15
6D	HT3592	6D/ 05	61961	6D/L02/早	61961	6D/L02/早		12:15	12:15	00:00	13:15						牛頭角		美孚		15
6D	HR 881	6D/ 09	63555	6D/ 09/早	78620	6D/ 04/早		12:25	12:25	00:00	13:24						美孚		牛頭角		15
6D	JA6071	6D/ 04	68752	6D/ 08/早	68752	6D/ 08/早		12:30	12:30	00:00	13:30						牛頭角		美孚		15
6D	HY 583	6D/ 01	62121	6D/L01/早	63763	6D/ 05/早		12:40	12:40	00:00	13:39						美孚		牛頭角		15
6D	JA5239	6D/ 06	72855	6D/ 01/早	72855	6D/ 01/早		12:45	12:45	00:00	13:45						牛頭角		美孚		15
6D	欠車	6D/ 02	62564	6D/ 06/早	62564	6D/ 06/早		13:00			13:54						美孚		牛頭角	-	
6D	HW7486	6D/ 07	63241	6D/ 02/早	63241	6D/ 02/早		13:00			14:00						牛頭角		美孚		15
6D	HR1554	6D/ 03	64079	6D/ 07/早	64079	6D/ 07/早		13:10			14:09						美孚		牛頭角		30
6D	HR 586	6D/ 08	64930	6D/ 03/早	64930	6D/ 03/早		13:15			14:15						牛頭角		美孚		15
6D	HT3592	6D/ 05	61961	6D/L02/早	63555	6D/ 09/早		13:25			14:24						美孚		牛頭角		15
6D	HR 881	6D/ 09	78620	6D/ 04/早	78620	6D/ 04/早		13:30			14:30						牛頭角		美孚		15
6D	JA6071	6D/ 04	68752	6D/ 08/早	62121	6D/L01/早		13:40			14:39						美孚		牛頭角		15
6D	HY 583	6D/ 01	63763	6D/ 05/早	63763	6D/ 05/早		13:45			14:45						牛頭角		美孚		15
6D	JA5239	6D/ 06	72855	6D/ 01/早	欠人	6D/L03/早		13:55			14:54						美孚		牛頭角		15
6D	欠車	6D/ 02	62564	6D/ 06/早	62564	6D/ 06/早		14:00			15:00						牛頭角		美孚	-	
6D	HW7486	6D/ 07	63241	6D/ 02/早	65153	6D/L21/夜		14:10			15:09						美孚		牛頭角		15
6D	HR1554	6D/ 03	64079	6D/ 07/早	64079	6D/ 07/早		14:15			15:15						牛頭角		美孚		30
6D	HR 586	6D/ 08	64930	6D/ 03/早	61961	6D/L02/早		14:25			15:24						美孚		牛頭角		15
6D	HT3592	6D/ 05	63555	6D/ 09/早	63555	6D/ 09/早		14:30			15:30						牛頭角		美孚		15
6D	HR 881	6D/ 09	78620	6D/ 04/早	64313	6D/ 05/夜		14:40			15:39						美孚		牛頭角		15
6D	JA6071	6D/ 04	62121	6D/L01/早	62121	6D/L01/早		14:45			15:45						牛頭角		美孚		15
6D	HY 583	6D/ 01	63763	6D/ 05/早	63914	6D/ 09/夜		14:55			15:54						美孚		牛頭角		15
6D	JA5239	6D/ 06	欠人	6D/L03/早	欠人	6D/L03/早		15:00			16:00						牛頭角		美孚		15
6D	欠車	6D/ 02	62564	6D/ 06/早	70538	6D/ 06/夜		15:10			16:09						美孚		牛頭角	-	
6D	HW7486	6D/ 07	65153	6D/L21/夜	65153	6D/L21/夜		15:15			16:15						牛頭角		美孚		15

調度員	事件類別	路線	字軌	車長編號	車輛編號	開出時間	預計到達	實際到達	參考編號	行車概況	行車時間表	折線圖	地圖	受影路線	響班字軌	次(車)開出	受影路線	響班字軌	次(人)開出
張子良	壞車	6D	02	62564	HY754	11:45	12:45		35216					6D	02	15:10	6D	02	15:10
張子良	延遲抵達沒有原因	C46	05	65325	KL6385	08:25	09:20	09:28	31675					--	--	--	--	--	--
張子良	交通意外	C39A	05	85047	LM2168	07:38	08:20		31353					C39A	05	08:28	C39A	10	08:35
張子良	行車過時	C58M	15	64381	HS 781	09:10	10:10	10:16	34218					C58M	15	10:13	C59M	06	10:13
張子良	失物處理 - 留後	C43A	08	70524	MK5518	07:00	07:48	07:48	31381					C43A	08	07:55	C43A	08	07:55
張子良	偏離行車路線	C35A	04	73914	ND6181	--	--	--	31618					--	--	--	--	--	--

➔ Select the trip with missing bus and select "resource hunting"

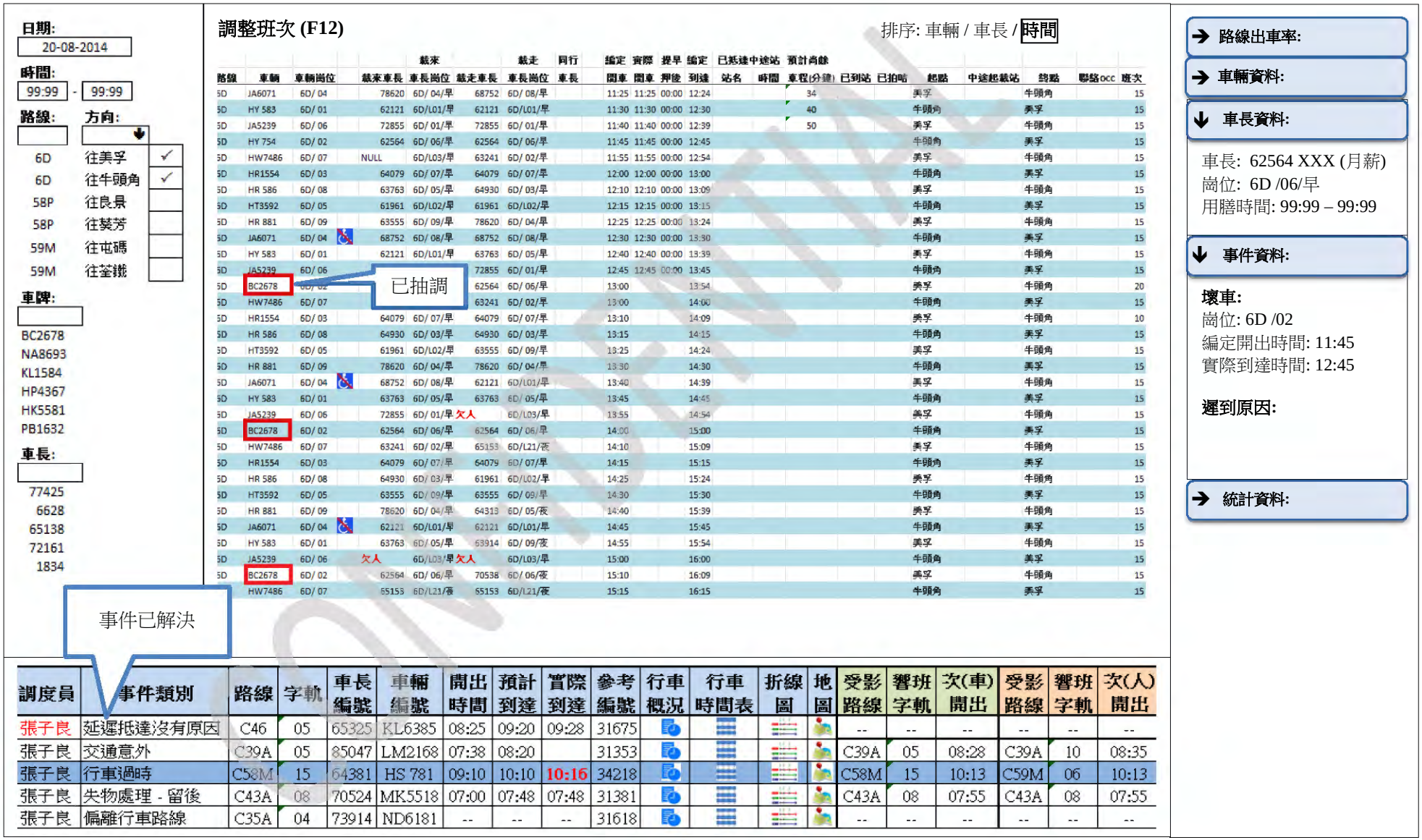


路線	車輛	車輛崗位	載來車長	載來車長崗位	載走車長	載走車長崗位	同行車長	編定開車	實際開車	提早/押後	編定到達	已抵達中途站站名	時間	預計尚餘車程(分鐘)	已到站	已拍咭	起點	中途起載站	終點	聯絡OCC	班次
6D	JA6071	6D/ 04	78620	6D/ 04/早	68752	6D/ 08/早		11:25	11:25	00:00	12:24			34			美孚		牛頭角		15
6D	HY 583	6D/ 01	62121	6D/L01/早	62121	6D/L01/早		11:30	11:30	00:00	12:30			40			牛頭角		美孚		15
6D	JA5239	6D/ 06	72855	6D/ 01/早	72855	6D/ 01/早		11:40	11:40	00:00	12:39			50			美孚		牛頭角		15
6D	HY 754	6D/ 02	62564	6D/ 06/早	62564	6D/ 06/早		11:45	11:45	00:00	12:45						牛頭角		美孚		15
6D	HW7486	6D/ 07	NULL	6D/L03/早	63241	6D/ 02/早		11:55	11:55	00:00	12:54						美孚		牛頭角		15
6D	HR1554	6D/ 03	64079	6D/ 07/早	64079	6D/ 07/早		12:00	12:00	00:00	13:00						牛頭角		美孚		15
6D	HR 586	6D/ 08	63763	6D/ 05/早	64930	6D/ 03/早		12:10	12:10	00:00	13:09						美孚		牛頭角		15
6D	HT3592	6D/ 05	61961	6D/L02/早	61961	6D/L02/早		12:15	12:15	00:00	13:15						牛頭角		美孚		15
6D	HR 881	6D/ 09	63555	6D/ 09/早	78620	6D/ 04/早		12:25	12:25	00:00	13:24						美孚		牛頭角		15
6D	JA6071	6D/ 04	68752	6D/ 08/早	68752	6D/ 08/早		12:30	12:30	00:00							牛頭角		美孚		15
6D	HY 583	6D/ 01	62121	6D/L01/早	63763	6D/ 05/早					13:39						美孚		牛頭角		15
6D	JA5239	6D/ 06	72855	6D/ 01/早	72855	6D/ 01/早		12:45	12:45	00:00	13:45						牛頭角		美孚		15
6D	欠車	6D/ 02	62564	6D/ 06/早	62564	6D/ 06/早		13:00			13:54						美孚		牛頭角		-
6D	HW7486	6D/ 07	63241	6D/ 02/早	63241	6D/ 02/早		13:00			14:00						牛頭角		美孚		15
6D	HR1554	6D/ 03	64079	6D/ 07/早	64079	6D/ 07/早		13:10			14:09						美孚		牛頭角		30
6D	HR 586	6D/ 08	64930	6D/ 03/早	64930	6D/ 03/早		13:15			14:15						牛頭角		美孚		15
6D	HT3592	6D/ 05	61961	6D/L02/早	63555	6D/ 09/早		13:25			14:24						美孚		牛頭角		15
6D	HR 881	6D/ 09	78620	6D/ 04/早	78620	6D/ 04/早		13:30			14:30						牛頭角		美孚		15
6D	JA6071	6D/ 04	68752	6D/ 08/早	62121	6D/L01/早		13:40			14:39						美孚		牛頭角		15
6D	HY 583	6D/ 01	63763	6D/ 05/早	63763	6D/ 05/早		13:45			14:45						牛頭角		美孚		15
6D	JA5239	6D/ 06	72855	6D/ 01/早	欠人	6D/L03/早		13:55			14:54						美孚		牛頭角		15
6D	欠車	6D/ 02	62564	6D/ 06/早	62564	6D/ 06/早		14:00			15:00						牛頭角		美孚		-
6D	HW7486	6D/ 07	63241	6D/ 02/早	65153	6D/L21/夜		14:10			15:09						美孚		牛頭角		15
6D	HR1554	6D/ 03	64079	6D/ 07/早	64079	6D/ 07/早		14:15			15:15						牛頭角		美孚		30
6D	HR 586	6D/ 08	64930	6D/ 03/早	61961	6D/L02/早		14:25			15:24						美孚		牛頭角		15
6D	HT3592	6D/ 05	63555	6D/ 09/早	63555	6D/ 09/早		14:30			15:30						牛頭角		美孚		15
6D	HR 881	6D/ 09	78620	6D/ 04/早	64313	6D/ 05/夜		14:40			15:39						美孚		牛頭角		15
6D	JA6071	6D/ 04	62121	6D/L01/早	62121	6D/L01/早		14:45			15:45						牛頭角		美孚		15
6D	HY 583	6D/ 01	63763	6D/ 05/早	63914	6D/ 09/夜		14:55			15:54						美孚		牛頭角		15
6D	JA5239	6D/ 06	欠人	6D/L03/早	欠人	6D/L03/早		15:00			16:00						牛頭角		美孚		15
6D	欠車	6D/ 02	62564	6D/ 06/早	70538	6D/ 06/夜		15:10			16:09						美孚		牛頭角		-
6D	HW7486	6D/ 07	65153	6D/L21/夜	65153	6D/L21/夜		15:15			16:15						牛頭角		美孚		15

調度員	事件類別	路線	字軌	車長編號	車輛編號	開出時間	預計到達	實際到達	參考編號	行車概況	行車時間表	折線圖	地圖	受影路線	響班字軌	次(車)開出	受影路線	響班字軌	次(人)開出
張子良	壞車	6D	02	62564	HY754	11:45	12:45		35216					6D	02	15:10	6D	02	15:10
張子良	延遲抵達沒有原因	C46	05	65325	KL6385	08:25	09:20	09:28	31675					--	--	--	--	--	--
張子良	交通意外	C39A	05	85047	LM2168	07:38	08:20		31353					C39A	05	08:28	C39A	10	08:35
張子良	行車過時	C58M	15	64381	HS 781	09:10	10:10	10:16	34218					C58M	15	10:13	C59M	06	10:13
張子良	失物處理 - 留後	C43A	08	70524	MK5518	07:00	07:48	07:48	31381					C43A	08	07:55	C43A	08	07:55
張子良	偏離行車路線	C35A	04	73914	ND6181	--	--	--	31618					--	--	--	--	--	--

➔ Select the bus to be re-allocated

地點	車牌	車廠	字軌	車長編號及崗位	聯絡電話	工作安排	實際/預計到站時間	編定開車時間	調走/接車	抽調車長違反工作指引 A	B	C	D	E	原路線失車率 0	載客比例	投訴比例	備注
美孚	BC2678	LCK		—		士啤												
美孚	HK2345	LCK	86-04	1234 86-04 早		中段回廠		14:12										



調度員	事件類別	路線	字軌	車長編號	車輛編號	開出時間	預計到達	實際到達	參考編號	行車概況	行車時間表	折線圖	地圖	受影路線	響班字軌	次(車)開出	受影路線	響班字軌	次(人)開出
張子良	延遲抵達沒有原因	C46	05	65325	KL6385	08:25	09:20	09:28	31675					--	--	--	--	--	--
張子良	交通意外	C39A	05	85047	LM2168	07:38	08:20		31353					C39A	05	08:28	C39A	10	08:35
張子良	行車過時	C58M	15	64381	HS 781	09:10	10:10	10:16	34218					C58M	15	10:13	C59M	06	10:13
張子良	失物處理 - 留後	C43A	08	70524	MK5518	07:00	07:48	07:48	31381					C43A	08	07:55	C43A	08	07:55
張子良	偏離行車路線	C35A	04	73914	ND6181	--	--	--	31618					--	--	--	--	--	--

➔ New item will be added to the incident board of OCC automatically

車務控制中心: 荔枝角　　系統時間: 2014-08-01 05:00:00

調度員	事故類別	路線	字軌	車長編號	車輛編號	輸入者	輸入時間	參考編號
張子良	欠人收車	98C	05	70603	SH9990	ROM	05:00:00	35216
李超	欠人	C12	05	66421	GZ4853	TOM	08:45:20	31523
王大同	欠車		06	65658	KR4350	TOM	08:45:20	31513
何小明	尚未抵達影響往後出車			18	KW3187	王大同	09:18:05	31608
張子良	壞車			93	MM2033	李超	08:12:16	31468
李超	劈車			251	JK1583	何小明	09:12:06	31594
張子良	交通意外	C39A	05	85047	LM2168	OCM	07:45:20	31353
王大同	失物處理 - 留後	C43A	08	70524	MK5518	王大同	07:50:10	31381
王大同	預計延遲到達	C 8A	01	1155	RJ6184	ROM	09:32:47	31668
李超	偏離行車路線	C35A	04	73914	ND6181	ROM	09:28:20	31618
張子良	延遲抵達沒有原因	C46	05	65325	KL6385	ROM	09:33:51	31675
	:					:		
	:					:		
	:					:		

自動顯示欠人收車事件

➔ New item will be added to the incident board on dispatcher's monitoring board

調度員: 張子良　　事件狀況: 處理中/ 處理完畢 / 所有

系統時間: 2014-08-01 05:00:00

調度員	事故類別	路線	字軌	車長編號	車輛編號	開出時間	預計到達	實際到達	參考編號	行車概況	行車時間表	折線圖	地圖	受影路線	響班字軌	次(車)開出	受影路線	響班字軌	次(人)開出
張子良	欠人收車	98C	05	70603	SH9990	13:45	14:45		35216					98C	05	06:12	98C	05	06:12
張子良	延遲抵達沒有原因	C	05	65325	KL6385	08:25	09:20	09:28	31675					--	--	--	--	--	--
張子良	壞車	6		754		11:45	12:45		34516					6D	02	15:10	6D	02	15:10
張子良	交通意外	C3		2168		07:38	08:20		31353					C39A	05	08:28	C39A	10	08:35
張子良	行車過時	C58M	15	04581	HS 781	09:10	10:10	10:16	34218					C58M	15	10:13	C59M	06	10:13
張子良	失物處理 - 留後	C43A	08	70524	MK5518	07:00	07:48	07:48	31381					C43A	08	07:55	C43A	08	07:55

自動顯示欠人收車事件

路線	往	遲 ... 早	-/0/+	最長延誤 分鐘	最長延誤 字軌	最長提早 分鐘	最長提早 字軌	本月累積 失班率	當天累積失班率 0500-1000	1000-1500	1500-2000	2000-0200
2A	美孚		0/3/2	-4	06	+9	L05	1.24%	2/59 (3.51%)	2/59 (3.51%)	2/59 (3.51%)	2/59 (3.51%)
	樂華		2/3/2	-4	06	+9	L05					
6	美孚		2/8/0	-9	03	+5	07	1.11%	1/51 (1.96%)	1/51 (1.96%)	1/51 (1.96%)	1/51 (1.96%)
	荔枝角		3/6/2	-9	03	+5	07					
6D	美孚		3/3/2	-8	09	+6	02	1.87%	0/39 (0%)	0/39 (0%)	0/39 (0%)	0/39 (0%)
	牛頭角		1/5/2	-8	09	+6	02					
6X	中間道		0/4/1	-		+3	03	0	0/8 (0%)	-	-	-
28	廈地道		1/6/2	-4	05	+6	01	1.34%	2/47 (4.26%)	2/47 (4.26%)	2/47 (4.26%)	2/47 (4.26%)
	廈地道		2/6/0	-4	05	+6	01					
38A	美孚		0/4/0	-		-		0.8%	1/8 (0%)	1/8 (0%)	1/8 (0%)	1/8 (0%)
	海濱花園		0/4/0	-		-						
72	長沙灣		3/5/1	-4	05	+11	09	2.55%	1/29 (3.45%)	1/29 (3.45%)	1/29 (3.45%)	1/29 (3.45%)
	太和		1/3/4	-4	05	+11	09					
86	美孚		2/3/2	-5	02	+7	S02	1.61%	0/36 (0%)	0/36 (0%)	0/36 (0%)	0/36 (0%)
	黃泥頭		1/4/2	-5	02	+7	S02					
6C	美孚		5/6/2	-12	S04	+4	06	2.18%	3/71 (4.23%)	3/71 (4.23%)	3/71 (4.23%)	3/71 (4.23%)
	九龍城碼頭		3/10/2	-12	S04	+4	06					

➔ Departures affected will have the word "欠人收車" displayed in the BC columns

日期: 20-08-2014
時間: 99:99 - 99:99
路線: **方向:**

58M	往良景	✓
58M	往葵芳	✓
58P	往良景	
58P	往葵芳	
59M	往屯碼	
59M	往荃鐵	

車牌:
JU3065
NA8693
KL1584
HP4367
HK5581
PB1632

車長:
77425
6628
65138
72161
1834

調整班次 (F12)

排序: 車輛 / 車長 / **時間**

路線	車輛	車輛崗位		截來 截來車長	截來 車長崗位	截走 截走車長	截走 車長崗位	同行 車長	編定 開車	實際 開車	提早 押後	編定 到達	已抵達中途站 站名	時間	預計尚餘 車程(分鐘)	已到站	已拍時	起點	中途起截站	終點	聯路occ	班次
8C	SJ 709	98C/01	(廠)	-	-	78777	98C/01/早		5:29			5:30						坑口(北)		坑口(北)		-
8C	SJ 709	98C/01		78777	98C/01/早	78777	98C/01/早		5:30			6:25						坑口(北)		美孚		-
8C	SJ 571	98C/04	(私)	-	-	62860	98C/04/早		5:39			5:40						坑口(北)		坑口(北)		-
8C	SJ6462	98C/02	(廠)	-	-	73119	98C/02/早		5:44			5:45						坑口(北)		坑口(北)		-
8C	SJ6462	98C/02		73119	98C/02/早	73119	98C/02/早		5:45			6:40						坑口(北)		美孚		15
8C	SH9990	98C/05	(私)	-	-	欠人收車	98C/05/早		5:54			5:55						坑口(北)		坑口(北)		-
8C	SJ 571	98C/04		62860	98C/04/早	62860	98C/04/早		6:00			6:55						坑口(北)		美孚		15
8C	SH9990	98C/05		欠人收車	98C/05/早	欠人收車	98C/05/早		6:12			7:07						坑口(北)		美孚		12
8C	SJ4110	98C/15	(廠)	-	-	78334	98C/15/早		6:15			6:24						將軍澳廠		坑口(北)		-
8C	SH8461	98C/06	(廠)	-	-	73893	98C/06/早		6:20			6:36						駿宏街C行		坑口(北)		-
8C	SJ4110	98C/15		78334	98C/15/早	78334	98C/15/早		6:24			7:24						坑口(北)		美孚		12
8C	SH9233	98C/08	(廠)	-	-	77234	98C/08/早		6:32			6:48						駿宏街C行		坑口(北)		-
8C	SH7944	98C/09	(私)	-	-	70074	98C/09/早		6:34			6:35						坑口(北)		坑口(北)		-
8C	SH8461	98C/06		73893	98C/06/早	73893	98C/06/早		6:36			7:36						坑口(北)		美孚		12
8C	SJ 709	98C/01		78777	98C/01/早	78777	98C/01/早		6:40			7:40						美孚		坑口(北)		-
8C	SH9233	98C/08		77234	98C/08/早	77234	98C/08/早		6:48			7:48						坑口(北)		美孚		12
8C	SJ6462	98C/02		73119	98C/02/早	73119	98C/02/早		6:55			7:55						美孚		坑口(北)		15
8C	SJ3942	98C/03	(廠)	-	-	77977	98C/03/早		6:58			6:59						坑口(北)		坑口(北)		-
8C	SJ3942	98C/03		77977	98C/03/早	77977	98C/03/早		6:59			7:59						坑口(北)		美孚		11
8C	SJ4443	98C/07	(廠)	-	-	70461	98C/07/早		7:00			7:09						將軍澳廠		坑口(北)		-
8C	SJ4443	98C/07		70461	98C/07/早	70461	98C/07/早		7:09			8:09						坑口(北)		美孚		10
8C	SJ 571	98C/04		62860	98C/04/早	62860	98C/04/早		7:10			8:10						美孚		坑口(北)		15
8C	SH8404	98C/10	(廠)	-	-	63253	98C/10/早		7:14			7:30						駿宏街C行		坑口(北)		-
8C	SH7944	98C/09		70074	98C/09/早	70074	98C/09/早		7:20			8:20						坑口(北)		美孚		11
8C	SH9990	98C/05		欠人收車	98C/05/早	欠人收車	98C/05/早		7:22			8:22						美孚		坑口(北)		12
8C	SJ 227	98C/11	(廠)	-	-	75263	98C/11/早		7:25			7:41						駿宏街C行		坑口(北)		-
8C	SH8404	98C/10		63253	98C/10/早	63253	98C/10/早		7:30			8:30						坑口(北)		美孚		10
8C	SJ4110	98C/15		78334	98C/15/早	78334	98C/15/早		7:33			8:33						美孚		坑口(北)		11
8C	SJ 227	98C/11		75263	98C/11/早	75263	98C/11/早		7:41			8:41						坑口(北)		美孚		11
8C	SH8461	98C/06		73893	98C/06/早	73893	98C/06/早		7:44			8:44						美孚		坑口(北)		11

➔ **路線出車率:**

➔ **車輛資料:**

➔ **車長資料:**

車長: 70603 XXX (月薪)
崗位: 98C/05/早
用膳時間: 99:99 – 99:99

➔ **事件資料:**

欠人收車:
崗位: 98C /05
編定開出時間: 06:12
實際到達時間: -

➔ **統計資料:**

調度員	事故類別	路線	字軌	車長編號	車輛編號	開出時間	預計到達	實際到達	參考編號	行車概況	行車時間表	折線圖	地圖	受影路線	響班字軌	次(車)開出	受影路線	響班字軌	次(人)開出
張子良	欠人收車	98C	05	70603	SH9990	13:45	14:45		35216					98C	05	06:12	98C	05	06:12
張子良	延遲抵達沒有原因	C46	05	65325	KL6385	08:25	09:20	09:28	31675					--	--	--	--	--	--
張子良	壞車	6D	02	62564	HY754	11:45	12:45		34516					6D	02	15:10	6D	02	15:10
張子良	交通意外	C39A	05	85047	LM2168	07:38	08:20		31353					C39A	05	08:28	C39A	10	08:35
張子良	行車過時	C58M	15	64381	HS 781	09:10	10:10	10:16	34218					C58M	15	10:13	C59M	06	10:13
張子良	失物處理 - 留後	C43A	08	70524	MK5518	07:00	07:48	07:48	31381					C43A	08	07:55	C43A	08	07:55

Illustration by Examples –
Crew Shortage + Automatic Departure Regulation

ROM System Proposal
Control Center Operation

➔ Regulate departures to evenly distribute the departure times

日期: 20-08-2014
時間: 99:99 - 99:99
路線: 方向:

98C	往美孚	✓
98C	往坑口(北)	✓
58P	往良景	
58P	往葵芳	
59M	往屯碼	
59M	往荃鐵	

車牌:
3C2678
NA8693
KL1584
HP4367
HK5581
PB1632

車長:
77425
6628
65138
72161
1834

行車時間表 (F12) **發放訊息 (F10)** 排序: 車輛 / 車長 / 時間

路線	車輛	車輛崗位		載來車長	載來車長崗位	載走車長	載走車長崗位	編定開車	編定到達	已到站	已拍咭	起點	中途起載站	終點	聯絡OCC	班次
8C	SJ6462	98C/02		73119	98C/02/早	73119	98C/02/早	5:45	6:40			坑口(北)		美孚		15
8C	SH9990	98C/05	(私)	-	-	欠人收車	98C/05/早	5:54	5:55			坑口(北)		坑口(北)	-	
8C	SJ 571	98C/04		62860	98C/04/早	62860	98C/04/早	6:00	6:55			坑口(北)		美孚		15
8C	SH9990	98C/05		欠人收車	98C/05/早	欠人收車	98C/05/早	6:12	7:07			坑口(北)		美孚	-	
8C	SJ4110	98C/15	(廠)	-	-	78334	98C/15/早	6:15	6:24			將軍澳廠		坑口(北)	-	
8C	SH8461	98C/06	(廠)	-	-	73893	98C/06/早	6:20	6:36			駿宏街c行		坑口(北)	-	
8C	SJ4110	98C/15		78334	98C/15/早	78334	98C/15/早	6:24	7:24			坑口(北)		美孚		24
8C	SH9233	98C/08	(廠)	-	-	77234	98C/08/早	6:32	6:48			駿宏街c行		坑口(北)	-	
8C	SH7944	98C/09	(私)	-	-	70074	98C/09/早	6:34	6:35			坑口(北)		坑口(北)	-	
8C	SH8461	98C/06		73893	98C/06/早	73893	98C/06/早	6:36	7:36			坑口(北)		美孚		12
8C	SJ 709	98C/01		78777	98C/01/早	78777	98C/01/早	6:40	7:40			美孚		坑口(北)	-	
8C	SH9233	98C/08		77234	98C/08/早	77234	98C/08/早	6:48	7:48			坑口(北)		美孚		12
8C	SJ6462	98C/02		73119	98C/02/早	73119	98C/02/早	6:55	7:55			美孚		坑口(北)		15
8C	SJ3942	98C/03	(廠)	-	-	77977	98C/03/早	6:58	6:59			坑口(北)		坑口(北)	-	
8C	SJ3942	98C/03		77977	98C/03/早	77977	98C/03/早	6:59	7:59			坑口(北)		美孚		11
8C	SJ4443	98C/07	(廠)	-	-	70461	98C/07/早	7:00	7:09			將軍澳廠		坑口(北)	-	
8C	SJ4443	98C/07		70461	98C/07/早	70461	98C/07/早	7:09	8:09			坑口(北)		美孚		10
8C	SJ 571	98C/04		62860	98C/04/早	62860	98C/04/早	7:10	8:10			美孚		坑口(北)		15
8C	SH8404	98C/10	(廠)	-	-	63253	98C/10/早	7:14	7:30			駿宏街c行		坑口(北)	-	
8C	SH7944	98C/09		70074	98C/09/早	70074	98C/09/早	7:20	8:20			坑口(北)		美孚		11
8C	SH9990	98C/05		欠人收車	98C/05/早	欠人收車	98C/05/早	7:22	8:22			美孚		坑口(北)	-	
8C	SJ 227	98C/11	(廠)	-	-	75263	98C/11/早	7:25	7:41			駿宏街c行		坑口(北)	-	
8C	SH8404	98C/10		63253	98C/10/早	63253	98C/10/早	7:30	8:30			坑口(北)		美孚		10
8C	SJ4110	98C/15		78334	98C/15/早	78334	98C/15/早	7:33	8:33			美孚		坑口(北)		23
8C	SJ 227	98C/11		75263	98C/11/早	75263	98C/11/早	7:41	8:41			坑口(北)		美孚		11
8C	SH8461	98C/06		73893	98C/06/早	73893	98C/06/早	7:44	8:44			美孚		坑口(北)		11
8C	SJ 709	98C/01		78777	98C/01/早	78777	98C/01/早	7:51	8:51			坑口(北)		美孚		10
8C	SH9233	98C/08		77234	98C/08/早	77234	98C/08/早	7:55	8:55			美孚		坑口(北)		11

☐ 不同方向班次分開顯示
☐ 只顯示班次

提前欠人/欠車班次之後一班車開車時間.

適用於 : 至 : 開出之班次

提前欠人/欠車班次之後
◉ [ ] 班車的開車時間
○ 所有班車的開車時間

執行

套用以往調整後的行車時間:

- 58M 平日收 7 車(10 月 23 日星期四)
- 58M 平日收 7 車(10 月 6 日星期一)

調度員事件板:

調度員	事故類別	路線	字軌	車長編號	車輛編號	開出時間	預計到達	實際到達	參考編號	行車概況	行車時間表	折線圖	地圖	受影路線	響班字軌	次(車)開出	受影路線	響班字軌	次(人)開出
張子良	欠人收車	98C	05	70603	SH9990	13:45	14:45		35216					98C	05	06:12	98C	05	06:12
張子良	延遲抵達沒有原因	C46	05	65325	KL6385	08:25	09:20	09:28	31675					--	--	--	--	--	--
張子良	壞車	6D	02	62564	HY754	11:45	12:45		34516					6D	02	15:10	6D	02	15:10
張子良	交通意外	C39A	05	85047	LM2168	07:38	08:20		31353					C39A	05	08:28	C39A	10	08:35
張子良	行車過時	C58M	15	64381	HS 781	09:10	10:10	10:16	34218					C58M	15	10:13	C59M	06	10:13
張子良	失物處理 - 留後	C43A	08	70524	MK5518	07:00	07:48	07:48	31381					C43A	08	07:55	C43A	08	07:55

➔ Select first departure with missing BC and input departure regulating instructions, and then click "Execute 執行"

日期: 20-08-2014
時間: 99:99 - 99:99
路線: 方向:

98C	往美孚	✓
98C	往坑口(北)	✓
58P	往良景	
58P	往葵芳	
59M	往屯門	
59M	往荃鐵	

車牌: BC2678, NA8693, KL1584, HP4367, HK5581, PB1632

車長: 77425, 6628, 65138, 72161, 1834

行車時間表 (F12) **發放訊息 (F10)** 排序: 車輛 / 車長 / 時間

路線	車輛	車輛崗位		載來車長	載來車長崗位	載走車長	載走車長崗位	編定開車	編定到達	已到站	已拍咭	起點	中途起載站	終點	聯絡OCC	班次
98C	SJ6462	98C/02		73119	98C/02/早	73119	98C/02/早	5:45	6:40			坑口(北)		美孚		15
98C	SH9990	98C/05	(私)	-	-	欠人收車	98C/05/早	5:54	5:55			坑口(北)		坑口(北)	-	
98C	SJ 571	98C/04		62860	98C/04/早	62860	98C/04/早	6:00	6:55			坑口(北)		美孚		15
98C	SH9990	98C/05		欠人收車	98C/05/早	欠人收車	98C/05/早	6:12	7:07			坑口(北)		美孚	-	
98C	SJ4110	98C/15	(廠)	-	-	78334	98C/15/早	6:15	6:24			將軍澳廠		坑口(北)	-	
98C	SH8461	98C/06	(廠)	-	-	73893	98C/06/早	6:20	6:36			駿宏街c行		坑口(北)	-	
98C	SJ4110	98C/15		78334	98C/15/早	78334	98C/15/早	6:24	7:24			坑口(北)		美孚		24
98C	SH9233	98C/08	(廠)	-	-	77234	98C/08/早	6:32	6:48			駿宏街c行		坑口(北)	-	
98C	SH7944	98C/09	(私)	-	-	70074	98C/09/早	6:34	6:35			坑口(北)		坑口(北)	-	
98C	SH8461	98C/06		73893	98C/06/早	73893	98C/06/早	6:36	7:36			坑口(北)		美孚		12
98C	SJ 709	98C/01		78777	98C/01/早	78777	98C/01/早	6:40	7:40			美孚		坑口(北)	-	
98C	SH9233	98C/08		77234	98C/08/早	77234	98C/08/早	6:48	7:48			坑口(北)		美孚		12
98C	SJ6462	98C/02		73119	98C/02/早	73119	98C/02/早	6:55	7:55			美孚		坑口(北)		15
98C	SJ3942	98C/03	(廠)	-	-	77977	98C/03/早	6:58	6:59			坑口(北)		坑口(北)	-	
98C	SJ3942	98C/03		77977	98C/03/早	77977	98C/03/早	6:59	7:59			坑口(北)		美孚		11
98C	SJ4443	98C/07	(廠)	-	-	70461	98C/07/早	7:00	7:09			將軍澳廠		坑口(北)	-	
98C	SJ4443	98C/07		70461	98C/07/早	70461	98C/07/早	7:09	8:09			坑口(北)		美孚		10
98C	SJ 571	98C/04		62860	98C/04/早	62860	98C/04/早	7:10	8:10			美孚		坑口(北)		15
98C	SH8404	98C/10	(廠)	-	-	63253	98C/10/早	7:14	7:30			駿宏街c行		坑口(北)	-	
98C	SH7944	98C/09		70074	98C/09/早	70074	98C/09/早	7:20	8:20			坑口(北)		美孚		11
98C	SH9990	98C/05		欠人收車	98C/05/早	欠人收車	98C/05/早	7:22	8:22			美孚		坑口(北)	-	
98C	SJ 227	98C/11	(廠)	-	-	75263	98C/11/早	7:25	7:41			駿宏街c行		坑口(北)	-	
98C	SH8404	98C/10		63253	98C/10/早	63253	98C/10/早	7:30	8:30			坑口(北)		美孚		10
98C	SJ4110	98C/15		78334	98C/15/早	78334	98C/15/早	7:33	8:33			美孚		坑口(北)		23
98C	SJ 227	98C/11		75263	98C/11/早	75263	98C/11/早	7:41	8:41			坑口(北)		美孚		11
98C	SH8461	98C/06		73893	98C/06/早	73893	98C/06/早	7:44	8:44			美孚		坑口(北)		11
98C	SJ 709	98C/01		78777	98C/01/早	78777	98C/01/早	7:51	8:51			坑口(北)		美孚		10
98C	SH9233	98C/08		77234	98C/08/早	77234	98C/08/早	7:55	8:55			美孚		坑口(北)		11

☐ 不同方向班次分開顯示
☐ 只顯示班次

提前欠人/欠車班次之後一班車開車時間.

適用於 06 :00 至 15 :30 開出之班次

提前欠人/欠車班次之後
◉ 2 班車的開車時間
○ 所有班車的開車時間

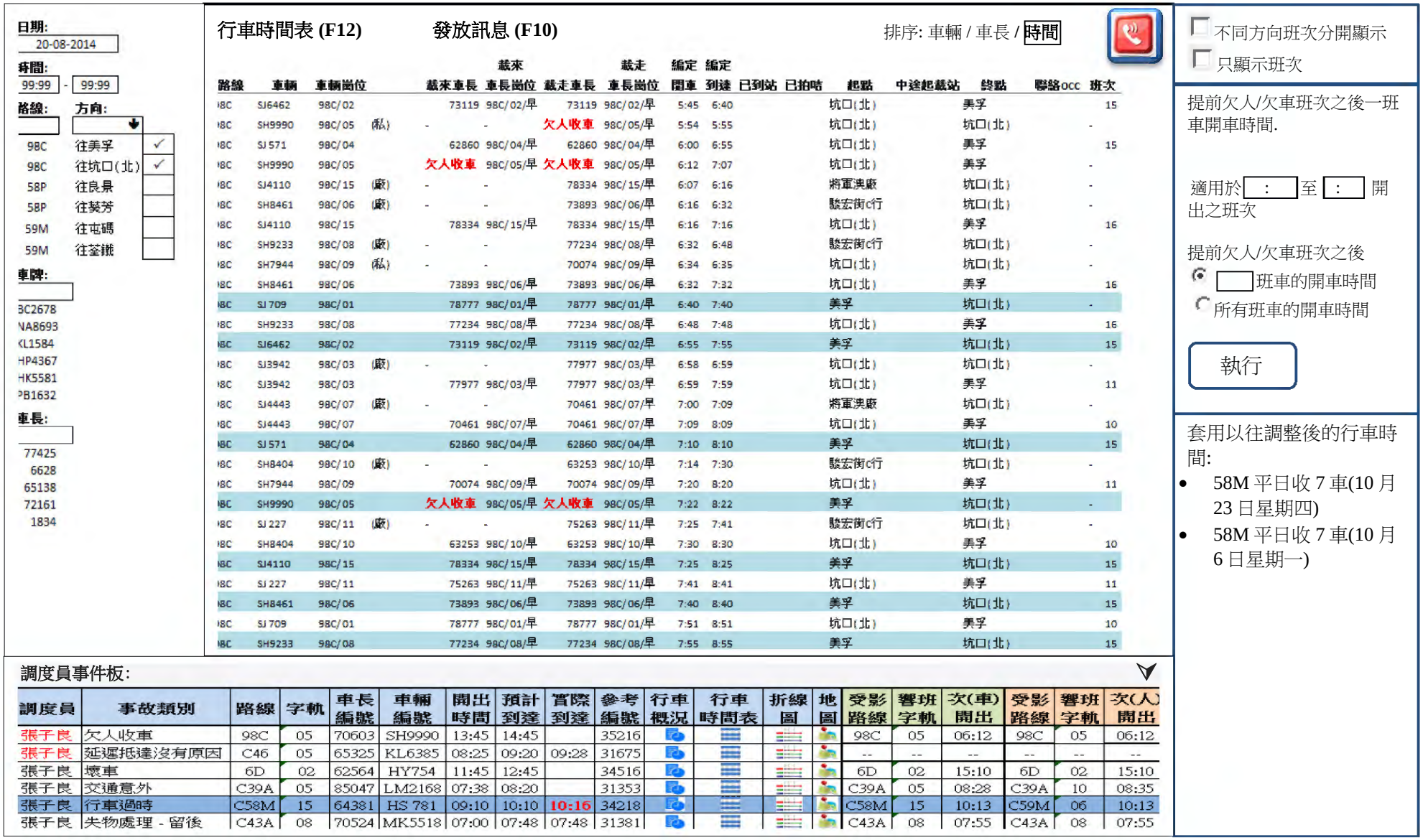
執行

套用以往調整後的行車時間:
- 58M 平日收 7 車(10 月 23 日星期四)
- 58M 平日收 7 車(10 月 6 日星期一)

調度員事件板:

調度員	事故類別	路線	字軌	車長編號	車輛編號	開出時間	預計到達	實際到達	參考編號	行車概況	行車時間表	折線圖	地圖	受影路線	響班字軌	次(車)開出	受影路線	響班字軌	次(人)開出
張子良	欠人收車	98C	05	70603	SH9990	13:45	14:45		35216					98C	05	06:12	98C	05	06:12
張子良	延遲抵達沒有原因	C46	05	65325	KL6385	08:25	09:20	09:28	31675					--	--	--	--	--	--
張子良	壞車	6D	02	62564	HY754	11:45	12:45		34516					6D	02	15:10	6D	02	15:10
張子良	交通意外	C39A	05	85047	LM2168	07:38	08:20		31353					C39A	05	08:28	C39A	10	08:35
張子良	行車過時	C58M	15	64381	HS 781	09:10	10:10	10:16	34218					C58M	15	10:13	C59M	06	10:13
張子良	失物處理 - 留後	C43A	08	70524	MK5518	07:00	07:48	07:48	31381					C43A	08	07:55	C43A	08	07:55

➔ Departure regulation complete



路線	車輛	車輛崗位		載來車長	載來車長崗位	載走車長	載走車長崗位	編定開車	編定到達	已到站	已拍咭	起點	中途起載站	終點	聯絡OCC	班次
8C	SJ6462	98C/02		73119	98C/02/早	73119	98C/02/早	5:45	6:40			坑口(北)		美孚		15
8C	SH9990	98C/05	(私)	-	-	欠人收車	98C/05/早	5:54	5:55			坑口(北)		坑口(北)	-	
8C	SJ 571	98C/04		62860	98C/04/早	62860	98C/04/早	6:00	6:55			坑口(北)		美孚		15
8C	SH9990	98C/05		欠人收車	98C/05/早	欠人收車	98C/05/早	6:12	7:07			坑口(北)		美孚	-	
8C	SJ4110	98C/15	(廠)	-	-	78334	98C/15/早	6:07	6:16			將軍澳廠		坑口(北)	-	
8C	SH8461	98C/06	(廠)	-	-	73893	98C/06/早	6:16	6:32			駿宏街c行		坑口(北)	-	
8C	SJ4110	98C/15		78334	98C/15/早	78334	98C/15/早	6:16	7:16			坑口(北)		美孚		16
8C	SH9233	98C/08	(廠)	-	-	77234	98C/08/早	6:32	6:48			駿宏街c行		坑口(北)	-	
8C	SH7944	98C/09	(私)	-	-	70074	98C/09/早	6:34	6:35			坑口(北)		坑口(北)	-	
8C	SH8461	98C/06		73893	98C/06/早	73893	98C/06/早	6:32	7:32			坑口(北)		美孚		16
8C	SJ 709	98C/01		78777	98C/01/早	78777	98C/01/早	6:40	7:40			美孚		坑口(北)	-	
8C	SH9233	98C/08		77234	98C/08/早	77234	98C/08/早	6:48	7:48			坑口(北)		美孚		16
8C	SJ6462	98C/02		73119	98C/02/早	73119	98C/02/早	6:55	7:55			美孚		坑口(北)		15
8C	SJ3942	98C/03	(廠)	-	-	77977	98C/03/早	6:58	6:59			坑口(北)		坑口(北)	-	
8C	SJ3942	98C/03		77977	98C/03/早	77977	98C/03/早	6:59	7:59			坑口(北)		美孚		11
8C	SJ4443	98C/07	(廠)	-	-	70461	98C/07/早	7:00	7:09			將軍澳廠		坑口(北)	-	
8C	SJ4443	98C/07		70461	98C/07/早	70461	98C/07/早	7:09	8:09			坑口(北)		美孚		10
8C	SJ 571	98C/04		62860	98C/04/早	62860	98C/04/早	7:10	8:10			美孚		坑口(北)		15
8C	SH8404	98C/10	(廠)	-	-	63253	98C/10/早	7:14	7:30			駿宏街c行		坑口(北)	-	
8C	SH7944	98C/09		70074	98C/09/早	70074	98C/09/早	7:20	8:20			坑口(北)		美孚		11
8C	SH9990	98C/05		欠人收車	98C/05/早	欠人收車	98C/05/早	7:22	8:22			美孚		坑口(北)	-	
8C	SJ 227	98C/11	(廠)	-	-	75263	98C/11/早	7:25	7:41			駿宏街c行		坑口(北)	-	
8C	SH8404	98C/10		63253	98C/10/早	63253	98C/10/早	7:30	8:30			坑口(北)		美孚		10
8C	SJ4110	98C/15		78334	98C/15/早	78334	98C/15/早	7:25	8:25			美孚		坑口(北)		15
8C	SJ 227	98C/11		75263	98C/11/早	75263	98C/11/早	7:41	8:41			坑口(北)		美孚		11
8C	SH8461	98C/06		73893	98C/06/早	73893	98C/06/早	7:40	8:40			美孚		坑口(北)		15
8C	SJ 709	98C/01		78777	98C/01/早	78777	98C/01/早	7:51	8:51			坑口(北)		美孚		10
8C	SH9233	98C/08		77234	98C/08/早	77234	98C/08/早	7:55	8:55			美孚		坑口(北)		15

調度員	事故類別	路線	字軌	車長編號	車輛編號	開出時間	預計到達	實際到達	參考編號	行車概況	行車時間表	折線圖	地圖	受影路線	響班字軌	次(車)開出	受影路線	響班字軌	次(人)開出
張子良	欠人收車	98C	05	70603	SH9990	13:45	14:45		35216					98C	05	06:12	98C	05	06:12
張子良	延遲抵達沒有原因	C46	05	65325	KL6385	08:25	09:20	09:28	31675					--	--	--	--	--	--
張子良	壞車	6D	02	62564	HY754	11:45	12:45		34516					6D	02	15:10	6D	02	15:10
張子良	交通意外	C39A	05	85047	LM2168	07:38	08:20		31353					C39A	05	08:28	C39A	10	08:35
張子良	行車過時	C58M	15	64381	HS 781	09:10	10:10	10:16	34218					C58M	15	10:13	C59M	06	10:13
張子良	失物處理 - 留後	C43A	08	70524	MK5518	07:00	07:48	07:48	31381					C43A	08	07:55	C43A	08	07:55

8.1.3 – Handling delay of arrival + departure time regulation (route 42)

➔ When the system detects that the bus cannot arrive on time and the next departure will be delayed, new item will be added to the incident board of OCC automatically

車務控制中心: 荔枝角　　系統時間: 2014-08-01 14:56:00

調度員	事故類別	路線	字軌	車長編號	車輛編號	輸入者	輸入時間	參考編號
張子良	行車過時	58M	02	60757	JU3065	ROM	12:45:00	35216
李超	欠人	C12	05	66421	GZ4853	TOM	08:45:20	31523
王大同	欠車		06	65658	KR4350	TOM	08:45:20	31513
何小明	尚未抵達 影響往後出車			8	KW3187	王大同	09:18:05	31608
張子良	壞車			93	MM2038	李超	08:12:16	31468
李超	劈車			1	JK1583	何小明	09:12:06	31594
張子良	交通意外	C39A	05	35047	LM2168	OCM	07:45:20	31353
王大同	失物處理 - 留後	C43A	08	0524	MK5518	王大同	07:50:10	31381
王大同	預計延遲到達	C8A	01	1155	RJ6184	ROM	09:32:47	31668
李超	偏離行車路線	C35A	04	73914	ND6181	ROM	09:28:20	31618
張子良	延遲抵達沒有原因	C46	05	65325	KL6385	ROM	09:33:51	31675
	:					:		
	:					:		
	:					:		

自動顯示行車過時事件

➔ New item will be created to the incident board on dispatcher's screen

調度員: 張子良　　事件狀況: 處理中/ 處理完畢 / 所有

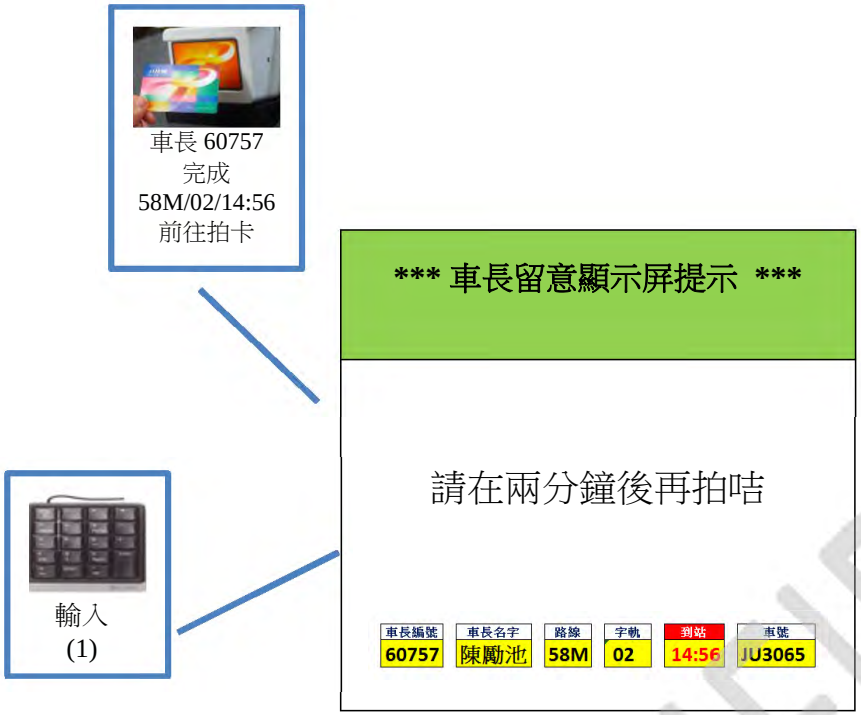
系統時間: 2014-08-01 14:56:12

自動顯示行車過時事件

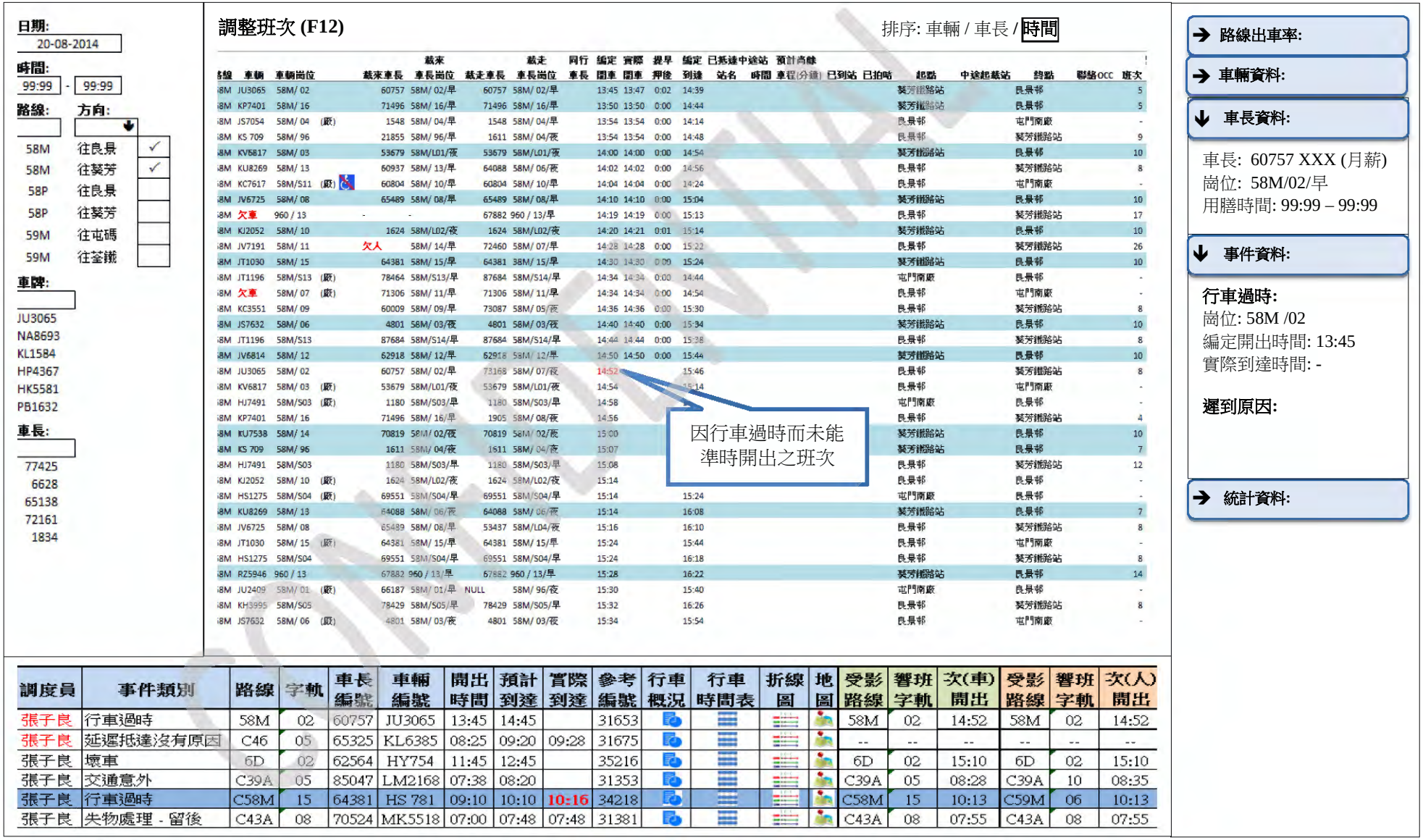
調度員	事件類別	路線	字軌	車長編號	車輛編號	開出時間	預計到達	實際到達	參考編號	行車概況	行車時間表	折線圖	地圖	受影路線	響班字軌	次(車)開出	受影路線	響班字軌	次(人)開出
張子良	行車過時	58M	02	60757	JU3065	13:45	14:45		31653					58M	02	14:52	58M	02	14:52
張子良	延遲抵達沒有原因	C[illegible]	[illegible]5	65325	KL6385	08:25	09:20	09:28	31675					--	--	--	--	--	--
張子良	壞車	6[illegible]		[illegible]754		11:45	12:45		35216					6D	02	15:10	6D	02	15:10
張子良	交通意外	C3[illegible]		[illegible]2168		07:38	08:20		31353					C39A	05	08:28	C39A	10	08:35
張子良	行車過時	C58M	15	04381	HS 781	09:10	10:10	10:16	34218					C58M	15	10:13	C59M	06	10:13
張子良	失物處理 - 留後	C43A	08	70524	MK5518	07:00	07:48	07:48	31381					C43A	08	07:55	C43A	08	07:55

路線	往	遲 ... 早	-/0/+	最長延誤 分鐘	最長延誤 字軌	最長提早 分鐘	最長提早 字軌	本月累積 失班率	當天累積失班率 0500-1000	1000-1500	1500-2000	2000-0200
2A	美孚		0/3/2	-4	06	+9	L05	1.24%	2/59 (3.51%)	2/59 (3.51%)	2/59 (3.51%)	2/59 (3.51%)
	樂華		2/3/2	-4	06	+9	L05					
6	美孚		2/8/0	-9	03	+5	07	1.11%	1/51 (1.96%)	1/51 (1.96%)	1/51 (1.96%)	1/51 (1.96%)
	荔枝角		3/6/2	-9	03	+5	07					
6D	美孚		3/3/2	-8	09	+6	02	1.87%	0/39 (0%)	0/39 (0%)	0/39 (0%)	0/39 (0%)
	牛頭角		1/5/2	-8	09	+6	02					
6X	中間道		0/4/1	-		+3	03	0	0/8 (0%)	-	-	-
28	慶地道		1/6/2	-4	05	+6	01	1.34%	2/47 (4.26%)	2/47 (4.26%)	2/47 (4.26%)	2/47 (4.26%)
	慶地道		2/6/0	-4	05	+6	01					
38A	美孚		0/4/0	-		-		0.8%	1/8 (0%)	1/8 (0%)	1/8 (0%)	1/8 (0%)
	海濱花園		0/4/0	-		-						
72	長沙灣		3/5/1	-4	05	+11	09	2.55%	1/29 (3.45%)	1/29 (3.45%)	1/29 (3.45%)	1/29 (3.45%)
	太和		1/3/4	-4	05	+11	09					
86	美孚		2/3/2	-5	02	+7	S02	1.61%	0/36 (0%)	0/36 (0%)	0/36 (0%)	0/36 (0%)
	黃泥頭		1/4/2	-5	02	+7	S02					
6C	美孚		5/6/2	-12	S04	+4	06	2.18%	3/71 (4.23%)	3/71 (4.23%)	3/71 (4.23%)	3/71 (4.23%)
	九龍城碼頭		3/10/2	-12	S04	+4	06					

➔ After the BC has finished the trip and presents the driver CSC card, the system will prompt the BC to present the driver card again in 2 minutes



➔ Departures affected will have the scheduled departure time displayed in red



調度員	事件類別	路線	字軌	車長編號	車輛編號	開出時間	預計到達	實際到達	參考編號	行車概況	行車時間表	折線圖	地圖	受影路線	響班字軌	次(車)開出	受影路線	響班字軌	次(人)開出
張子良	行車過時	58M	02	60757	JU3065	13:45	14:45		31653					58M	02	14:52	58M	02	14:52
張子良	延遲抵達沒有原因	C46	05	65325	KL6385	08:25	09:20	09:28	31675					--	--	--	--	--	--
張子良	壞車	6D	02	62564	HY754	11:45	12:45		35216					6D	02	15:10	6D	02	15:10
張子良	交通意外	C39A	05	85047	LM2168	07:38	08:20		31353					C39A	05	08:28	C39A	10	08:35
張子良	行車過時	C58M	15	64381	HS 781	09:10	10:10	10:16	34218					C58M	15	10:13	C59M	06	10:13
張子良	失物處理 - 留後	C43A	08	70524	MK5518	07:00	07:48	07:48	31381					C43A	08	07:55	C43A	08	07:55

Illustration by Examples –
Delay of Arrival + Departure Regulation

ROM System Proposal
Control Center Operation

➔ Departure regulation is selected and the departures with different destinations are sorted separately

日期:
20-08-2014
時間:
99:99 - 99:99
路線: 方向:

58M	往良景	✓
58M	往葵芳	✓
58P	往良景	
58P	往葵芳	
59M	往屯碼	
59M	往荃鐵	

車牌:
JU3065
NA8693
KL1584
HP4367
HK5581
PB1632

車長:
77425
6628
65138
72161
1834

路線	車輛	車輛崗位	截來車長	截來車長崗位	截走車長	截走車長崗位	同行車長	編定開車	實際開車	提早押後	編定到達	已抵達中途站站名	預計尚餘時間	車程(分鐘)	已到站	已拍時	起點	中途起載站	終點	聯絡OCC	班次
8M	JV7191	58M/ 11	欠人	58M/ 14/早	72460	58M/ 07/早		14:28	14:28	0:00	15:22						良景邨		葵芳鐵路站		26
8M	JT1196	58M/S13 (廠)	78464	58M/S13/早	87684	58M/S14/早		14:34	14:34	0:00	14:44						屯門南廠		良景邨		-
8M	欠車	58M/ 07 (廠)	71306	58M/ 11/早	71306	58M/ 11/早		14:34	14:34	0:00	14:54						良景邨		屯門南廠		-
8M	KC3551	58M/ 09	60009	58M/ 09/早	73087	58M/ 05/夜		14:36	14:36	0:00	15:30						良景邨		葵芳鐵路站		8
8M	JT1196	58M/S13	87684	58M/S14/早	87684	58M/S14/早		14:44	14:44	0:00	15:38						良景邨		葵芳鐵路站		8
8M	JU3065	58M/ 02	60757	58M/ 02/早	73168	58M/ 07/夜		14:52			15:46						良景邨		葵芳鐵路站		8
8M	KV6817	58M/ 03 (廠)	53679	58M/L01/夜	53679	58M/L01/夜		14:54			15:14						良景邨		屯門南廠		-
8M	HJ7491	58M/S03 (廠)	1180	58M/S03/早	1180	58M/S03/早		14:58			15:08						屯門南廠		良景邨		-
8M	KP7401	58M/ 16	71496	58M/ 16/早	1905	58M/ 08/夜		14:56			15:54						良景邨		葵芳鐵路站		4
8M	HJ7491	58M/S03	1180	58M/S03/早	1180	58M/S03/早		15:08			16:02						良景邨		葵芳鐵路站		12
8M	KJ2052	58M/ 10 (廠)	1624	58M/L02/夜	1624	58M/L02/夜		15:14			15:14						良景邨		良景邨		-
8M	HS1275	58M/S04 (廠)	69551	58M/S04/早	69551	58M/S04/早		15:14			15:24						屯門南廠		良景邨		-
8M	JV6725	58M/ 08	65489	58M/ 08/早	53437	58M/L04/夜		15:16			16:10						良景邨		葵芳鐵路站		8
8M	JT1030	58M/ 15 (廠)	64381	58M/ 15/早	64381	58M/ 15/早		15:24			15:44						良景邨		屯門南廠		-
8M	HS1275	58M/S04	69551	58M/S04/早	69551	58M/S04/早		15:24			16:18						良景邨		葵芳鐵路站		8
8M	JU2409	58M/ 01 (廠)	66187	58M/ 01/早	NULL	58M/ 96/夜		15:30			15:40						屯門南廠		良景邨		-
8M	KH3995	58M/S05	78429	58M/S05/早	78429	58M/S05/早		15:32			16:26						良景邨		葵芳鐵路站		8

路線	車輛	車輛崗位	截來車長	截來車長崗位	截走車長	截走車長崗位	同行車長	編定開車	實際開車	提早押後	編定到達	已抵達中途站站名	預計尚餘時間	車程(分鐘)	已到站	已拍時	起點	中途起載站	終點	聯絡OCC	班
8M	KJ2052	58M/ 10	1624	58M/L02/夜	1624	58M/L02/夜		14:20	14:21	0:01	15:14						葵芳鐵路站		良景邨		
8M	JT1030	58M/ 15	64381	58M/ 15/早	64381	58M/ 15/早		14:30	14:30	0:00	15:24						葵芳鐵路站		良景邨		
8M	JS7632	58M/ 06	4801	58M/ 03/夜	4801	58M/ 03/夜		14:40	14:40	0:00	15:34						葵芳鐵路站		良景邨		
8M	JV6814	58M/ 12	62918	58M/ 12/早	62918	58M/ 12/早		14:50	14:50	0:00	15:44						葵芳鐵路站		良景邨		
8M	KU7538	58M/ 14	70819	58M/ 02/夜	70819	58M/ 02/夜		15:00	15:00	0:00	15:54						葵芳鐵路站		良景邨		
8M	KS 709	58M/ 96	1611	58M/ 04/夜	1611	58M/ 04/夜		15:07	15:07	0:00	16:01						葵芳鐵路站		良景邨		
8M	KU8269	58M/ 13	64088	58M/ 06/夜	64088	58M/ 06/夜		15:14	15:14	0:00	16:08						葵芳鐵路站		良景邨		
8M	RZ5946	960 / 13	67882	960 / 13/早	67882	960 / 13/早		15:28	15:28	0:00	16:22						葵芳鐵路站		良景邨		
8M	JV7191	58M/ 11	72460	58M/ 07/早	72460	58M/ 07/早		15:35	15:35	0:00	16:33						葵芳鐵路站		良景邨		
8M	KC3551	58M/ 09	73087	58M/ 05/夜	73087	58M/ 05/夜		15:42	15:42	0:00	16:40						葵芳鐵路站		良景邨		
8M	JT1196	58M/S13	87684	58M/S14/早	87684	58M/S14/早		15:49	15:49	0:00	16:47						葵芳鐵路站		良景邨		
8M	欠車	58M/ 02	73168	58M/ 07/夜	73168	58M/ 07/夜		15:56	15:56	0:00	16:54						葵芳鐵路站		良景邨		
8M	KP7401	58M/ 16	1905	58M/ 08/夜	1905	58M/ 08/夜		16:03	16:03	0:00	17:06						葵芳鐵路站		良景邨		
8M	HJ7491	58M/S03	1180	58M/S03/早	1180	58M/S03/早		16:10	16:10	0:00	17:13						葵芳鐵路站		良景邨		
8M	JV6725	58M/ 08	53437	58M/L04/夜	53437	58M/L04/夜		16:17	16:17	0:00	17:20						葵芳鐵路站		良景邨		
8M	HS1275	58M/S04	69551	58M/S04/早	69551	58M/S04/早		16:25	16:25	0:00	17:28						葵芳鐵路站		良景邨		

調度員事件板:

調度員	事件類別	路線	字軌	車長編號	車輛編號	開出時間	預計到達	實際到達	參考編號	行車概況	行車時間表	折線圖	地圖	受影路線	響班字軌	次(車)開出	受影路線	響班字軌	次(人)開出
張子良	行車過時	58M	02	60757	JU3065	13:45	14:45		31653					58M	02	14:52	58M	02	14:52
張子良	延遲抵達沒有原因	C46	05	65325	KL6385	08:25	09:20	09:28	31675					--	--	--	--	--	--
張子良	壞車	6D	02	62564	HY754	11:45	12:45		35216					6D	02	15:10	6D	02	15:10
張子良	交通意外	C39A	05	85047	LM2168	07:38	08:20		31353					C39A	05	08:28	C39A	10	08:35
張子良	行車過時	C58M	15	64381	HS 781	09:10	10:10	10:16	34218					C58M	15	10:13	C59M	06	10:13
張子良	失物處理 - 留後	C43A	08	70524	MK5518	07:00	07:48	07:48	31381					C43A	08	07:55	C43A	08	07:55

☑ 不同方向班次分開顯示
☑ 只顯示班次

提前欠人/欠車班次之後一班車開車時間.

適用於 : 至 : 開出之班次

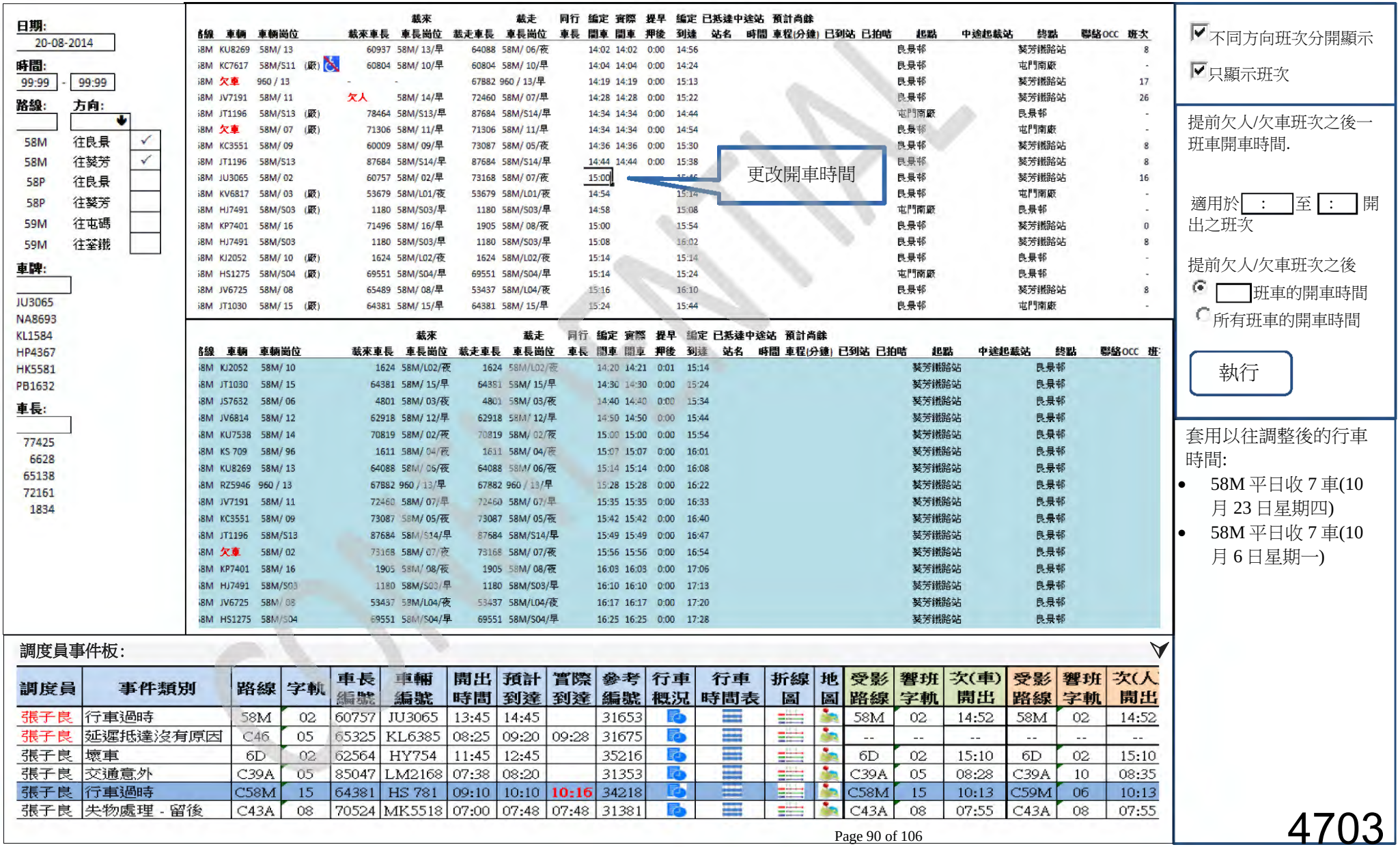
提前欠人/欠車班次之後
◉ ☐ 班車的開車時間
○ 所有班車的開車時間

執行

套用以往調整後的行車時間:

- 58M 平日收 7 車(10 月 23 日星期四)
- 58M 平日收 7 車(10 月 6 日星期一)

➔ Manually change the departure time and location of mid-way departure

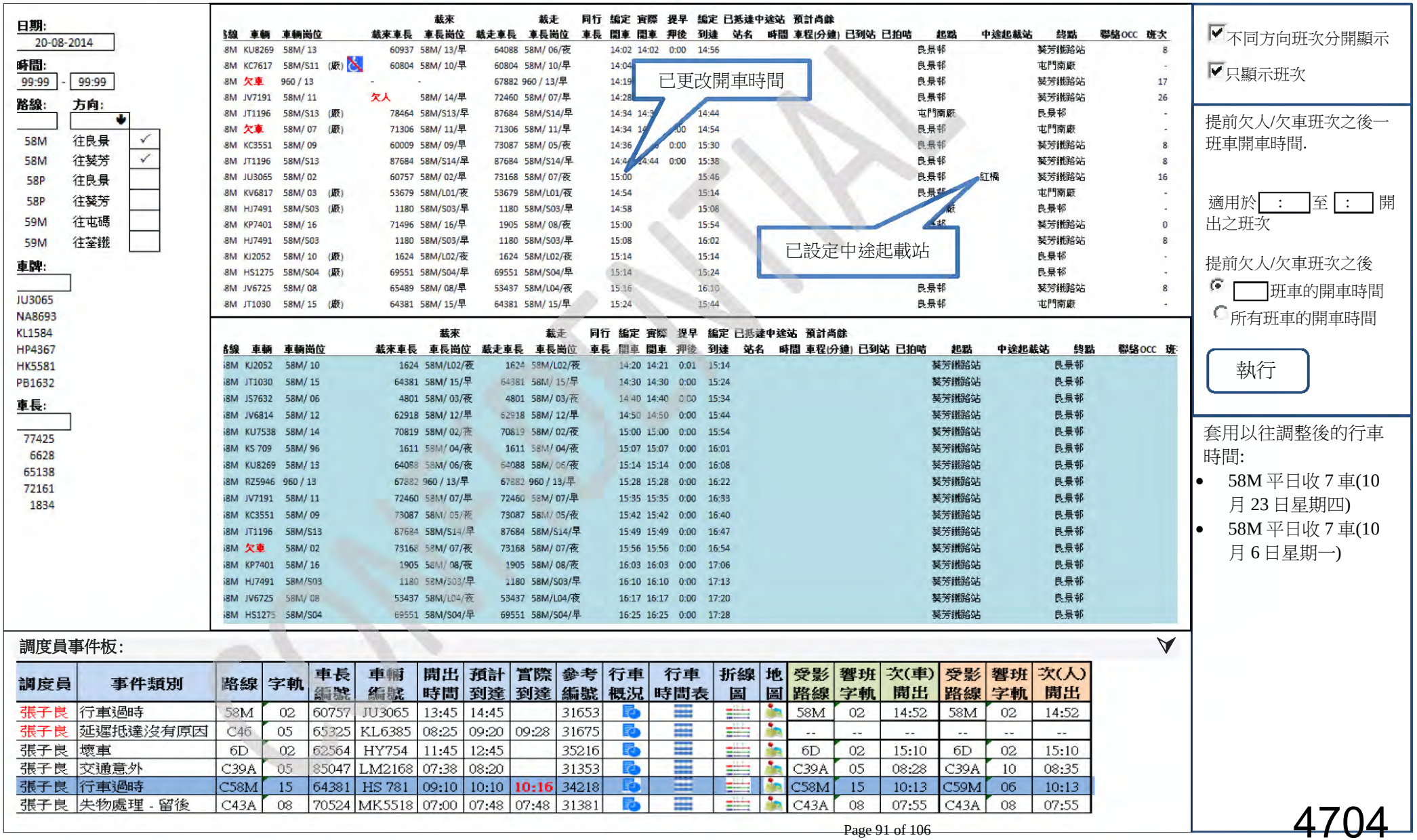


調度員	事件類別	路線	字軌	車長編號	車輛編號	開出時間	預計到達	實際到達	參考編號	行車概況	行車時間表	折線圖	地圖	受影路線	響班字軌	次(車)開出	受影路線	響班字軌	次(人)開出
張子良	行車過時	58M	02	60757	JU3065	13:45	14:45		31653					58M	02	14:52	58M	02	14:52
張子良	延遲抵達沒有原因	C46	05	65325	KL6385	08:25	09:20	09:28	31675					--	--	--	--	--	--
張子良	壞車	6D	02	62564	HY754	11:45	12:45		35216					6D	02	15:10	6D	02	15:10
張子良	交通意外	C39A	05	85047	LM2168	07:38	08:20		31353					C39A	05	08:28	C39A	10	08:35
張子良	行車過時	C58M	15	64381	HS 781	09:10	10:10	10:16	34218					C58M	15	10:13	C59M	06	10:13
張子良	失物處理 - 留後	C43A	08	70524	MK5518	07:00	07:48	07:48	31381					C43A	08	07:55	C43A	08	07:55

Illustration by Examples –
Delay of Arrival + Departure Regulation

ROM System Proposal
Control Center Operation

➔ Modified departure time and location of mid-way departure



調度員事件板:

調度員	事件類別	路線	字軌	車長編號	車輛編號	開出時間	預計到達	實際到達	參考編號	行車概況	行車時間表	折線圖	地圖	受影路線	響班字軌	次(車)開出	受影路線	響班字軌	次(人)開出
張子良	行車過時	58M	02	60757	JU3065	13:45	14:45		31653					58M	02	14:52	58M	02	14:52
張子良	延遲抵達沒有原因	C46	05	65325	KL6385	08:25	09:20	09:28	31675					--	--	--	--	--	--
張子良	壞車	6D	02	62564	HY754	11:45	12:45		35216					6D	02	15:10	6D	02	15:10
張子良	交通意外	C39A	05	85047	LM2168	07:38	08:20		31353					C39A	05	08:28	C39A	10	08:35
張子良	行車過時	C58M	15	64381	HS 781	09:10	10:10	10:16	34218					C58M	15	10:13	C59M	06	10:13
張子良	失物處理 - 留後	C43A	08	70524	MK5518	07:00	07:48	07:48	31381					C43A	08	07:55	C43A	08	07:55

4704

➔ When the BC presents the driver card again, information of next departure including departure time and location of mid-way departure will be shown

➔ After the BC has presented the driver card and obtain the departure information, the incident will be removed

調度員: 張子良　　事件狀況: 處理中/ 處理完畢 / 所有

系統時間: 2014-08-01 14:56:12

調度員	事件類別	路線	字軌	車長編號	車輛編號	開出時間	預計到達	實際到達	參考編號	行車概況	行車時間表	折線圖	地圖	受影路線	響班字軌	次(車)開出	受影路線	響班字軌	次(人)開出
張子良	延遲抵達沒有原因	C46	05	65325	KL6385	08:25	09:20	09:28	31675					--	--	--	--	--	--
張子良	壞車	6D		62564	HY754	11:45	12:45		35216					6D	02	15:10	6D	02	15:10
張子良	交通意外	C39A	05			:38	08:20		31353					C39A	05	08:28	C39A	10	08:35
張子良	行車過時	C58M	15			:10	10:10	10:16	34218					C58M	15	10:13	C59M	06	10:13
張子良	失物處理 - 留後	C43A	08			:00	07:48	07:48	31381					C43A	08	07:55	C43A	08	07:55

車長拍咭後事件會被移除

路線	往	遲 ... 早	-/0/+	最長延誤 分鐘	最長延誤 字軌	最長提早 分鐘	最長提早 字軌	本月累積 失班率	當天累積失班率 0500-1000	1000-1500	1500-2000	2000-0200
2A	美孚		0/3/2	-4	06	+9	L05	1.24%	2/59 (3.51%)	2/59 (3.51%)	2/59 (3.51%)	2/59 (3.51%)
	樂華		2/3/2	-4	06	+9	L05					
6	美孚		2/8/0	-9	03	+5	07	1.11%	1/51 (1.96%)	1/51 (1.96%)	1/51 (1.96%)	1/51 (1.96%)
	荔枝角		3/6/2	-9	03	+5	07					
6D	美孚		3/3/2	-8	09	+6	02	1.87%	0/39 (0%)	0/39 (0%)	0/39 (0%)	0/39 (0%)
	牛頭角		1/5/2	-8	09	+6	02					
6X	中間道		0/4/1	-		+3	03	0	0/8 (0%)	-	-	-
28	慶地道		1/6/2	-4	05	+6	01	1.34%	2/47 (4.26%)	2/47 (4.26%)	2/47 (4.26%)	2/47 (4.26%)
	慶地道		2/6/0	-4	05	+6	01					
38A	美孚		0/4/0	-		-		0.8%	1/8 (0%)	1/8 (0%)	1/8 (0%)	1/8 (0%)
	海濱花園		0/4/0	-		-						
72	長沙灣		3/5/1	-4	05	+11	09	2.55%	1/29 (3.45%)	1/29 (3.45%)	1/29 (3.45%)	1/29 (3.45%)
	太和		1/3/4	-4	05	+11	09					
86	美孚		2/3/2	-5	02	+7	S02	1.61%	0/36 (0%)	0/36 (0%)	0/36 (0%)	0/36 (0%)
	黃泥頭		1/4/2	-5	02	+7	S02					
6C	美孚		5/6/2	-12	S04	+4	06	2.18%	3/71 (4.23%)	3/71 (4.23%)	3/71 (4.23%)	3/71 (4.23%)
	九龍城碼頭		3/10/2	-12	S04	+4	06					
30	長沙灣		4/2/2	-6	07	+5	03	1.84%	2/24 (8.33%)	2/24 (8.33%)	2/24 (8.33%)	2/24 (8.33%)
	荃威花園		2/7/0	-6	07	+5	03					

Illustration by Examples –
Bus Breakdown + Redeployment

ROM System Proposal
Control Center Operation

8.1.1 – Handling bus breakdown + redeployment (route 6D)

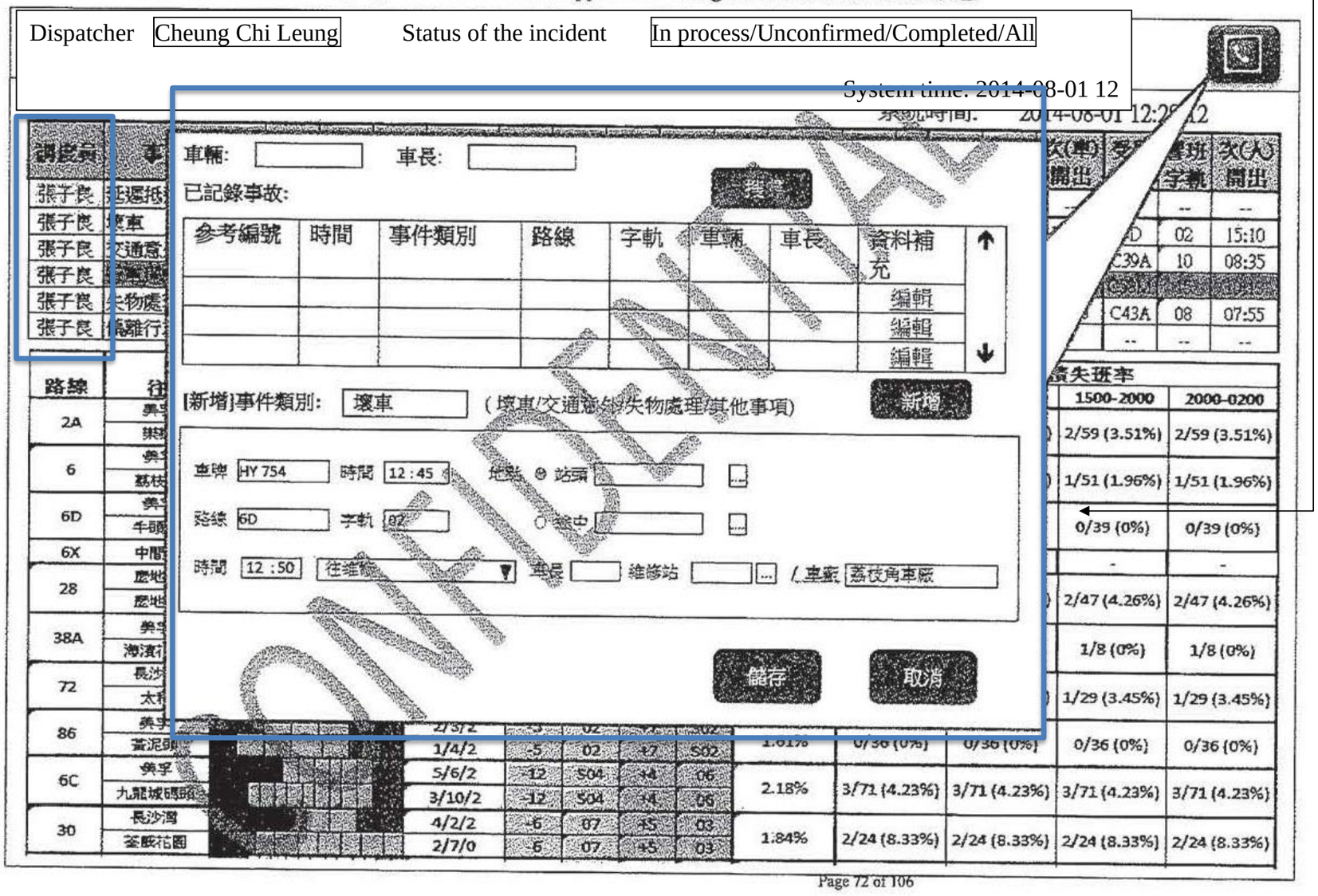
- Dispatcher receives a call from bus captain 62564 that bus HY 754 broke down at 12:45.
- He presses the "phone" icon at the top right corner and a form appears for filling the details of the breakdown.

(Translation of the form in next page)

Dispatcher
Cheung Chi Leung
Cheung Chi Leung
Cheung Chi Leung
Cheung Chi Leung
Cheung Chi Leung
Cheung Chi Leung
Cheung Chi Leung

Dispatcher Cheung Chi Leung Status of the incident In process/Unconfirmed/Completed/All

System time: 2014-08-01 12



Bus [ ] Captain [ ]
Recorded incident [Search]

Reference number	Time	Type of incident	Route	Running number	Bus	Captain	Supplementary data
							Edit
							Edit
							Edit

[Add] Type of incident : [Bus broken] (Bus broken/traffic accident/Handling lost property/Other matters) [Add]

New incident - Bus broken
Licence plate [ ] Time [:] Location Stop flag [ ]
Halfway [ ]

Time	:	For repair	Captain		Service centre		__	Bus depot	
Time	:	Captain for meal	To	:					
Time	:	Captain off duty							
Time	:	Captain to standby at stop	Stop flag			__			
Time	:	Re-entering the route	Bus		Reversed/boarding midway				

[Save] [Cancel]

Illustration by Examples –
Bus Breakdown + Redeployment

ROM System Proposal
Control Center Operation

➔ A new incident of type "bus breakdown" will be created in both incident board of OCC TV and dispatcher monitoring board

Bus Operations Control Centre: Lai Chi Kok **System time**: 2014-08-01 09:34:12

atcher	**Type of incident**	**Route**	**Running number**	**Captain number**	**Bus number**	**Inputter**	**Input time**	**Reference numb**
Cheung Chi Leung	Bus breakdown	6D	02	62564	HY754	Cheung Chi Leung	12:45:00	35216
Lee Chiu	Staff unavailable			421	GZ4853	TOM	08:45:20	31523
Wong Tai Tung	Bus unavailable	C 2A		658	KB4350		08:45:20	31513
Ho Siu Ming	Not yet arrived Affecting future departure	C40	03	65318	KW3187	Wong Tai Tung	09:18:05	31608
Cheung Chi Leung	Bus breakdown	C108	02	73493	MM2038	Lee Chiu	08:12:16	31468
Lee Chiu	Early leave of captain	C42A	07	7726[illegible]	UK1583	Ho Siu Ming	09:12:06	31594
Cheung Chi Leung	Traffic accident	C39A	05	65047	LM2168	OCM	07:45:20	31353
Wong Tai Tung	Handling lost property – keep for future handling	C43A	08	70524	MK5518	Wong Tai Tung	07:50:10	31381
Wong Tai Tung	Arrival will be delayed	C 8A	01	6156[illegible]	RJ6184	ROM	09:32:47	31668
Lee Chiu	Deviated from driving route	C35A	04	7391[illegible]	ND6181	ROM:	09:28:20	31618
Cheung Chi Leung	Late arrival without reason	C46	05	69325	KL6385	ROM	09:33:51	31675
						:		
						:		

"Bus breakdown" was created

➔ A new incident of type "bus breakdown" being created to the dispatcher's monitoring board

Dispatcher Cheung Chi Leung Status of the incident In process/Unconfirmed/Completed/All

Bus breakdown incident with additional staff System time: 2014-08-01 05:00:00

Dispatcher	Type of incident
Cheung Chi Leung	Bus broken
Cheung Chi Leung	Late arrival without reason
Cheung Chi Leung	Traffic accident
Cheung Chi Leung	Overtime travelling
Cheung Chi Leung	Handling lost property – keep for future handling
Cheung Chi Leung	Deviated from driving route

Route	Running number	Captain number	Bus number	Departure time	Expected arrival time	Actual arrival time	Reference number	Overview of the travelling	Driving schedule	Line chart	Map	Trips affected (bus)	Running number	Departed	Trips affected (bus)	Running number	Departed
6D	02	62564	HY754	11:45	12:45		35216					6D	02	15:10	6D	02	15:10
C46	05	65325	KL6385	08:25	09:20	09:28	31675					--	--	--	--	--	--
C39A	05	85047	LM2168	07:38	08:20		31353					C39A	05	08:28	C39A	10	08:35
C43A	08	70524	MK5518	07:00	07:48	07:48	31561					C43A	08	07:55	C43A	08	07:55
C35A	04	73914	ND6181	--	--	--	31618					--	--	--	--	--	--

Route	To	Late	Early	-/0/+	Longest delay		Longest ahead of time		Accumulated this month	Cumulative same-day lost trips rate			
					Minutes	Running number	Minutes	Running number	Lost trips rate	0500-1000	1000-1500	1500-2000	2000-0200
2A	Mei Foo			0/3/2	-1	06	+9	05	1.24%	2/59 (3.51%)	2/59 (3.51%)	2/59 (3.51%)	2/59 (3.51%)
	Lok Wah			2/3/2	-4	06	+9	05					
6	Mei Foo			2/8/0	-9	03	+5	07	1.11%	1/51 (1.96%)	1/51 (1.96%)	1/51 (1.96%)	1/51 (1.96%)
	Lai Chi Kok			3/5/2	-9	06	+5	07					
6D	Mei Foo			3/5/2	-8	09	+6	02	1.87%	0/39 (0%)	0/39 (0%)	0/39 (0%)	0/39 (0%)
	Ngau Tau Kok			1/5/	-8	09	+6	02					
6X	Middle Road			0/4/1			+3	03	0	0/8 (0%)	-	-	-
28	Mody Road			1/6/2	-4	05	+6	01	1.34%	2/47 (4.26%)	2/47 (4.26%)	2/47 (4.26%)	2/47 (4.26%)
	Mody Road			2/6/0	-4	05	+6	01					
38A	Mei Foo			0/4/0					0.8%	1/8 (0%)	1/8 (0%)	1/8 (0%)	1/8 (0%)
	Riviera Gardens			0/4/0									
72	Cheung Sha Wan			3/5/1	-4	05	+11	09	2.55%	1/29 (3.45%)	1/29 (3.45%)	1/29 (3.45%)	1/29 (3.45%)
	Tai Wo			1/3/2	-4	05	+11	09					
86	Mei Foo			2/3/2	-5	02	+7	S02	1.61%	0/36 (0%)	0/36 (0%)	0/36 (0%)	0/36 (0%)
	Wong Nai Tau			1/4/2	-5	02	+7	S02					
6C	Mei Foo			5/6/2	-12	S04	+4	06	2.18%	3/71 (4.23%)	3/71 (4.23%)	3/71 (4.23%)	3/71 (4.23%)
	Kowloon City Ferry Pier			3/10/2	-12	S04	+4	06					
30	Cheung Sha Wan			4/2/2	-6	07	+5	03	1.84%	2/24 (8.33%)	2/24 (8.33%)	2/24 (8.33%)	2/24 (8.33%)
	Allway Garden			2/7/0	-6	07	+5	03					

Illustration by Examples – Bus Breakdown + Redeployment

ROM System Proposal
Control Center Operation

- On the working time table, a screw driver icon will appear next to the bus number of the bus which has broken down.
- A word "Bus unavailable" will be displayed in departures that involve the bus.

Date: 20-08-2014

Time: 99:99 - 99:99

Route	Direction	
	To Mei Foo	✓
6D	To Ngau Tau Kok	✓
6D	To Leung King	
58P	To Kwai Fong	
58P	To Tuen Mun Ferry Pier	
59M	To Tsuen Wan	
59M		

Licence plate

HY 754
NA8693
KL1584
HP4367
HK5581
PB1632

Captain

77425
6528
65138
72161
1834

Working timetable (F12)

Sort by: Vehicle / Bus Length / Time

Route Bus	Vehicle duty	Captain	Duty of captain carried in	Captain carried away	Duty of captain carried away	Companion captain	Scheduled departure	Actual departure	In advance Delayed	Scheduled arrival	Arrival at midway station	Stop name	Expected remaining travelling time (minutes)Time	Arrived	Clocked-in	Start point	Midway boarding station	End point	Contact OCC	Frequency
6D	6D/04	Morning	78620	6D/01	68752	6D/08	Morning	11:25	11:25	00:00	12:24	54	Mei Foo			Ngau Tau Kok			15	
6D	6D/05	Morning	62121	6D/101	62121	6D/101	Morning	11:40	11:40	00:00	12:39	60	Ngau Tau Kok			Mei Foo			15	
6D	6D/06	Morning	72855	6D/01	72855	6D/01	Morning	11:45	11:45	00:00	12:59	90	Mei Foo			Ngau Tau Kok			15	
6D	6D/07	Morning	63241	6D/02	63241	6D/02	Morning	11:55	11:55	00:00	12:54		Ngau Tau Kok			Mei Foo			15	
6D	6D/08	Morning	63763	6D/05	64930	6D/03	Morning	12:05	12:05	00:00	13:04		Mei Foo			Ngau Tau Kok			15	
6D	6D/09	Morning	63555	6D/09	78620	6D/04	Morning	12:10	12:10	00:00	13:09		Ngau Tau Kok			Mei Foo			15	
6D	6D/01	Morning	62121	6D/101	63763	6D/05	Morning	12:25	12:25	00:00	13:25		Mei Foo			Ngau Tau Kok			15	
6D	6D/02	Morning	62564	6D/06	62564	6D/06	Morning	12:40	12:40	00:00	13:39		Ngau Tau Kok			Mei Foo			15	
6D	6D/03	Morning	64079	6D/07	64079	6D/07	Morning	13:00	13:54				Mei Foo			Ngau Tau Kok			15	
6D	6D/05	Morning	63961	6D/102	63555	6D/09	Morning	13:15	14:09				Ngau Tau Kok			Mei Foo			30	
6D	6D/04	Morning	68752	6D/02	62121	6D/101	Morning	13:25	13:24				Mei Foo			Ngau Tau Kok			15	
6D	6D/06	Morning	72855	6D/01	交入	6D/128	Morning	13:40	15:09				Ngau Tau Kok			Mei Foo			15	
6D	6D/07	Morning	63241	6D/02	63153	6D/121	Night	14:10	15:09				Mei Foo			Ngau Tau Kok			15	
6D	6D/08	Morning	64930	6D/03	61961	6D/102	Morning	14:25	15:25				Ngau Tau Kok			Mei Foo			15	
6D	6D/09	Morning	78620	6D/04	64930	6D/03	Morning	14:40	15:39				Mei Foo			Ngau Tau Kok			15	
6D	6D/01	Morning	63763	6D/05	63555	6D/09	Night	14:55	15:54				Ngau Tau Kok			Mei Foo			15	
6D	交車	Morning	62564	6D/06	交車		Morning	15:10	16:09				Mei Foo			Ngau Tau Kok			15	
		Night					Night						Ngau Tau Kok			Mei Foo			-	

Staff unavailable

Staff unavailable

arture rate of the
e:

Vehicle information:

Captain Information:

Captain: 62564 XXX (monthly salary)
Duty: 6D/06/morning
Meal time: 99:99 – 99:99

Data of accidents:

Overtime travelling:
Position: 6D/02
Scheduled departure time: 11:45
Actual arrival time: 12:45

Reasons for being late:

Statistical information:

Dispatcher	Type of incident	Route	Running number	Captain number	Bus number	Departure time	Expected arrival time	Actual arrival time	Reference number	Overview of the travelling	Driving schedule	Line chart	Map	Trips affected (bus)	Running number	Departed	Trips affected (bus)	Running number	Departed
Cheung Chi Leung	Bus broken	6D	02	62564	HY754	11:45	12:45		35216					6D	02	15:10	6D	02	15:10
Cheung Chi Leung	Late arrival without reason	C46	05	65325	KL6385	08:25	09:20	09:28	31675					--	--	--	--	--	--
Cheung Chi Leung	Traffic accident	C39A	05	65047	LM2168	07:38	08:20		31353					C39A	05	08:28	C39A	10	08:35
Cheung Chi Leung	Overtime travelling	[illegible]																	
Cheung Chi Leung	Handling lost property – keep for future handling	C43A	08	70524	AK550	07:00	07:48	07:48	31381					C43A	08	07:55	C43A	08	07:55
Cheung Chi Leung	Deviated from driving route	C35A	04	73914	ND6181	--	--	--	31618					--	--	--	--	--	--

Illustration by Examples –
Bus Breakdown + Redeployment

→ Select the trip with missing bus and select "resource hunting"

ROM System Proposal
Control Center Operation

Date
20-08-2014

Time
99:99 - 99:99

Route | Direction

6D	To Mei Foo ✓
6D	To Ngau Tau Kok ✓
58P	To Leung King
58P	To Kwai Fong
59M	To Tuen Mun Ferry Pier
59M	To Tsuen Wan

Licence plate
HY 754
NA8693
KL1584
HP4367
HK5581
PB1632

Captain
77425
6528
65138
72161
1834

Working timetable (F12)

Sort by: Vehicle / Bus Length / Time

Route Bus	Vehicle duty	Captain carried in	Duty of captain carried in	Captain carried away	Duty of captain carried away	Companion captain	Scheduled departure	Actual departure	In advance Delayed	Scheduled arrival	Arrival at midway station	Stop name	Expected remaining travelling time (minutes)Time	Arrived	Clocked-in	Start point	Midway boarding station	End point	Contact OCC	Frequency
6D	JA6071	Morning	78620 6D/04/單		68752 6D/03/單	Morning	11:25	11:25	00:00	12:24			34	Mei Foo			Ngau Tau Kok			15
6D	JA5239	Morning	72855 6D/01/單		72855 6D/01/單	Morning	11:40	11:40	00:00	12:39			50	Ngau Tau Kok			Mei Foo			15
6D	HW7496	Morning	65763 6D/05/單		63251 6D/03/單	Morning	11:55	12:35	00:00	12:54				Mei Foo			Ngau Tau Kok			15
6D	HR586	Morning	63555 6D/09/單		78820 6D/04/單	Morning	12:10	12:10	00:00	13:09				Ngau Tau Kok			Mei Foo			15
6D	HR881	Morning	62121 6D/101/單		63763 6D/05/單	Morning	12:25	12:25	00:00	13:24				Mei Foo			Ngau Tau Kok			15
6D	HY583	Morning	62564 6D/06/單		62564 6D/06/單	Morning	12:40	12:40	00:00	13:39				Ngau Tau Kok			Mei Foo			15
6D	文章	Morning	64079 6D/07/單		64079 6D/07/單	Morning	12:55	12:55	00:00	13:54				Mei Foo			Ngau Tau Kok			15
6D	HR1554	Morning	61961 6D/102/單		63555 6D/09/單	Morning	13:10	13:10	00:00	14:09				Ngau Tau Kok			Mei Foo			15
6D	HT3592	Morning	72855 6D/01/單文A		6D/103/單	Morning	13:25	13:34	00:00	14:24				Mei Foo			Ngau Tau Kok			15
6D	JA6071	Morning	68752 6D/03/單		62121 6D/101/單	Morning	13:40	13:39	00:00	14:39				Ngau Tau Kok			Mei Foo			15
6D	JA5239	Morning	72855 6D/01/單文A		6D/103/單	Morning	13:55	13:54	00:00	14:54				Mei Foo			Ngau Tau Kok			15
6D	HW7496	Morning	63241 6D/02/單		65153 6D/121/單	Night	14:10	14:09	00:00	15:09				Ngau Tau Kok			Mei Foo			15
6D	HR586	Morning	64930 6D/02/單		61961 6D/102/單	Morning	14:25	14:24	00:00	15:24				Mei Foo			Ngau Tau Kok			15
6D	HR881	Morning	78820 6D/04/單		64319 6D/12/單	Night	14:40	14:39	00:00	15:39				Ngau Tau Kok			Mei Foo			15
6D	HY583	Morning	62121 6D/101/單		63763 6D/05/單	Morning	14:55	14:54	00:00	15:54				Mei Foo			Ngau Tau Kok			15
6D	文章	Morning	62564 6D/06/單		64319 6D/05/單	Night	15:10	15:09	00:00	16:09				Ngau Tau Kok			Mei Foo			15
6D	HR1554	Morning	64079 6D/07/單		64079 6D/07/單	Night														
6D	HT3592	Morning	61961 6D/102/單		63555 6D/09/單	Night														
6D	JA6071	Morning	68752 6D/03/單		62121 6D/101/單	Night														
6D	JA5239	Morning	72855 6D/01/單文A		6D/103/單	Night														
6D	HW7496	Morning	63241 6D/02/單		65153 6D/121/單	Night														
6D	HR586	Morning	64930 6D/02/單		61961 6D/102/單	Night														
6D	HR881	Morning	78820 6D/04/單		64319 6D/12/單	Night														
6D	HY583	Morning	62121 6D/101/單		63763 6D/05/單	Night														
6D	文章	Morning	62564 6D/06/單		62564 6D/06/單	Night														

Right click the trip involving unavailable bus, select "Re-allocation"

Staff unavailable

Staff unavailable

Departure rate of the route:

Vehicle information:

Captain Information:

Captain: 62564 XXX (monthly salary)
Duty: 6D/06/morning
Meal time: 99:99 – 99:99

Data of accidents:

Overtime travelling:
Position: 6D/02
Scheduled departure time: 11:45
Actual arrival time: 12:45

Reasons for being late:

Statistical information:

Dispatcher	Type of incident	Route	Running number	Captain number	Bus number	Departure time	Expected arrival time	Actual arrival time	Reference number	Overview of the travelling	Driving schedule	Line chart	Map	Trips affected (bus)	Running number	Departed	Trips affected (bus)	Running number	Departed
Cheung Chi Leung	Bus broken	6D	02	62564	HY754	11:45	12:45		35216					6D	02	15:10	6D	02	15:10
Cheung Chi Leung	Late arrival without reason	C46	05	65325	KL6385	09:25	09:20	09:28	31675					--	--	--	--	--	--
Cheung Chi Leung	Traffic accident	C39A	05	65047	LM2168	07:38	08:20		31353					C39A	05	08:28	C39A	10	08:35
Cheung Chi Leung	Overtime travelling																		
Cheung Chi Leung	Handling lost property – keep for future handling	C43A	08	70524	MK5513	07:00	07:48	07:48	31381					C43A	08	07:55	C43A	08	07:55
Cheung Chi Leung	Deviated from driving route	C35A	04	73914	ND6181	--	--	--	31618					--	--	--	--	--	--

➔ Select the bus to be re-allocated

Running number	6D-02	Scheduled bus:	HK9876 (fault)	Scheduled captain:	62564 (Chan King Man)	Departure time	11:45	Start point:	Ngau Tau Kok
Re-allocated time slot		trips afterwards		**Re-allocation scope:**	both the vehicle and the captain				
Terminus:	**Mei Foo**	**Lai Chi Kok**	**Hoi Lai Estate**	**Kwai Fong Station**		More…			
Travelling time from depot:		☐A ☐B ☐C ☐D ☐E		Travelling time for private purpose					
Minimum time gap with departure time of next trip				Missing bus for the route					
No violation of work guidelines				Passenger ratio					
				Complaint ratio					

☐ Cross-depots
☐ Cross control centres
☐ Cross control centres
☐ Display transfer / pick up
☐ Stop at depot midway

Display only the same route / all routes

Bus selected for re-allocation

Location	Licence plate	Depot	Running number	Captain number and duties	Contact number	Working arrangements	Actual/estimated arrival time	Scheduled departure time	Transfer/ pick up	Re-allocation of captain violating the work guidelines					Missing rate for the original route	Passenger ratio	Complaint ratio	Remark
										A	B	C	D	E				
Mei Foo	BC2578	LCK		—		Spare												
Mei Foo	HK2345	LCK	86-04	1234 86-04		Morning		14:12										86 returned to depot midway

Illustration by Examples – Bus Breakdown + Redeployment

ROM System Proposal
Control Center Operation

Working timetable (F12)

Sort by: Vehicle / Bus Length / Time

Date: 20-08-2014

Time: 99:99 - 99:99

Route: 6D, 6D, 58P, 58P, 59M, 59M

Direction: To Mei Foo ✓; To Ngau Tau Kok ✓; To Leung King; To Kwai Fong; To Tuen Mun Ferry Pier; To Tsuen Wan

Licence plate: HY 754, NA8693, KL1584, HP4367, HK5581, PB1632

Captain: 77425, 6528, 65138, 72161, 1834

Route	Bus	Vehicle duty	Captain carried in	Duty of captain carried in	Captain carried away	Duty of captain carried away	Companion captain	Scheduled departure	Actual departure	In advance / Delayed	Scheduled arrival	Arrival at midway station	Stop name	Expected remaining travelling time (minutes)	Time Arrived	Clocked in	Start point	Midway boarding station	End point	Contact OCC	Frequency
6D	JA6071	60/04		Morning	78620	6D/04/早	66752	Morning	11:25	11:25	00:00	12:24		59	Mei Foo			Ngau Tau Kok			15
6D	HY 754	60/01		Morning	63121	6D/01/早	63793	Morning	11:30	11:30	00:00	12:29		59	Ngau Tau Kok			Mei Foo			15
6D	JA5219	60/03		Morning	72855	6D/01/早	72855	Morning	11:40	11:40	00:00	12:39		59	Mei Foo			Ngau Tau Kok			15
6D	[illegible]	60/01		Morning	[illegible]	6D/01/早	[illegible]	Morning	11:45	11:45	00:00	12:45		60	Ngau Tau Kok			Mei Foo			15
6D	HW7286	60/07		Morning	[illegible]	6D/03/早	63241	Morning	11:55	11:55	00:00	12:54		59	Mei Foo			Ngau Tau Kok			15
6D	HR555	60/08		Morning	63793	6D/07/早	63793	Morning	12:00	12:00	00:00	13:00		60	Ngau Tau Kok			Mei Foo			15
6D	HR 586	60/09		Morning	63763	6D/05/早	64938	Morning	12:10	12:10	00:00	13:09		59	Mei Foo			Ngau Tau Kok			15
6D	HR582	60/06		Morning	61961	6D/02/早	61961	Morning	12:15	12:15	00:00	13:14		59	Ngau Tau Kok			Mei Foo			15
6D	HR 581	60/05		Morning	63555	6D/09/早	78620	Morning	12:25	12:25	00:00	13:24		59	Mei Foo			Ngau Tau Kok			15
6D	[illegible]	60/02		Morning	[illegible]	6D/08/早	[illegible]	Morning	12:30	12:30	00:00	13:29		59	Ngau Tau Kok			Mei Foo			15
6D	HY 583	60/08		Morning	63121	6D/01/早	63793	Morning	12:40	12:40	00:00	13:39		59	Mei Foo			Ngau Tau Kok			15
6D	[illegible]	60/03		Morning	[illegible]	[illegible]	[illegible]	Morning	12:45	[illegible]		[illegible]		60	Ngau Tau Kok			Mei Foo			15
6D	5C2678	60/06		Morning	[illegible]	[illegible]	62564	Morning	13:00	[illegible]		[illegible]		60	Mei Foo			Ngau Tau Kok			20
6D	[illegible]	60/04		Morning	[illegible]	[illegible]	[illegible]	Morning	[illegible]	[illegible]		[illegible]		60	Ngau Tau Kok			Mei Foo			15
6D	HR1354	60/03		Morning	64079	6D/07/早	64079	Morning	13:10	[illegible]		14:09		59	Mei Foo			Ngau Tau Kok			20
6D	[illegible]	60/01		Morning	[illegible]	[illegible]	[illegible]	Morning	13:15	[illegible]		[illegible]		60	Ngau Tau Kok			Mei Foo			15
6D	HT3982	60/05		Morning	61961	6D/02/早	63555	Morning	13:25	[illegible]		14:24		59	Mei Foo			Ngau Tau Kok			15
6D	[illegible]	60/01		Morning	[illegible]	[illegible]	[illegible]	Morning	13:30	[illegible]		[illegible]		60	Ngau Tau Kok			Mei Foo			15
6D	JA6071	60/04		Morning	63752	6D/08/早	62121	Morning	13:40	[illegible]		14:39		59	Mei Foo			Ngau Tau Kok			15
6D	[illegible]	60/02		Morning	[illegible]	[illegible]	[illegible]	Morning	13:45	[illegible]		[illegible]		60	Ngau Tau Kok			Mei Foo			15
6D	HR 586	60/09		Morning	64938	6D/07/早	61961	Morning	13:55	[illegible]		14:54		59	Mei Foo			Ngau Tau Kok			15
6D	[illegible]	60/06		Morning	[illegible]	[illegible]	[illegible]	Night	14:00	[illegible]		[illegible]		60	Ngau Tau Kok			Mei Foo			15
6D	HR 581	60/05		Morning	78620	6D/04/早	64938	Morning	14:10	[illegible]		15:09		59	Mei Foo			Ngau Tau Kok			15
6D	[illegible]	60/08		Morning	[illegible]	[illegible]	[illegible]	Night	14:15	[illegible]		[illegible]		60	Ngau Tau Kok			Mei Foo			15
6D	HY 583	60/01		Morning	63763	6D/05/早	62121	Night	14:25	[illegible]		15:24		59	Mei Foo			Ngau Tau Kok			15
6D	[illegible]	60/03		Morning	[illegible]	[illegible]	[illegible]	Morning	14:30	[illegible]		[illegible]		60	Ngau Tau Kok			Mei Foo			15
6D	5C2678	60/06		Morning	[illegible]	[illegible]	78620	Night	14:40	[illegible]		15:39		59	Mei Foo			Ngau Tau Kok			15
6D	[illegible]	60/04		Morning	[illegible]	[illegible]	[illegible]	Night	14:55	[illegible]		15:54		59	Mei Foo			Ngau Tau Kok			15
6D	[illegible]	60/02		Morning	[illegible]	[illegible]	[illegible]	Morning	15:00	[illegible]		[illegible]		60	Ngau Tau Kok			Mei Foo			15
6D	[illegible]	60/07		Morning	[illegible]	[illegible]	[illegible]	Night	15:10	[illegible]		16:09		59	Mei Foo			Ngau Tau Kok			15
6D	[illegible]	60/05		Morning	[illegible]	[illegible]	[illegible]	Night	15:20	[illegible]		16:19		59	Ngau Tau Kok			Mei Foo			15

Re-allocated

Incident solved

Staff unavailable

Staff unavailable

Dispatcher	Type of incident
Cheung Chi Leung	Bus broken
Cheung Chi Leung	Late arrival without reason
Cheung Chi Leung	Traffic accident
Cheung Chi Leung	Overtime travelling
Cheung Chi Leung	Handling lost property – keep for future handling
Cheung Chi Leung	Deviated from driving route

Route	Running number	Captain number	Bus number	Departure time	Expected arrival time	Actual arrival time	Reference number	Overview of the travelling	Driving schedule	Line chart	Map	Trips affected (bus)	Running number	Departed	Trips affected (bus)	Running number	Departed
05	65325	KC6385	08:25	09:20	09:28	31675					--	--	--	--	--	--	--
05	85047	LM2168	07:38	08:20		31353					C39A	05	08:28	C39A	10	08:35	
[illegible]																	
03	70524	MK5518	07:00	07:48	07:48	31381					C43A	08	07:55	C43A	08	07:55	
04	73914	ND6181	--	--	--	31618					--	--	--	--	--	--	--

Departure rate of the route:

Vehicle information:

Captain Information:

Captain: 62564 XXX (monthly salary)
Duty: 6D/06/morning
Meal time: 99:99 – 99:99

Data of accidents:

Overtime travelling:
Position: 6D/02
Scheduled departure time: 11:45
Actual arrival time: 12:45

Reasons for being late:

Statistical information:

Illustration by Examples –
Crew Shortage + Automatic Departure Regulation

ROM System Proposal
Control Center Operation

8.1.2 – Handling Crew Shortage + automatic departure time regulation (route 98C)

➔ New item will be added to the incident board of OCC automatically

Bus Operations Control Centre: Lai Chi Kok **System time**: 2014-08-01 05:00:00

atcher	Type of incident	Route	Running number	Captain number	Bus number	Inputter	Input time	Reference numb
Cheung Chi Leung	Withdrawn from service due to Staff unavailable :	98C	05	70603	SH9990	ROM	05:00:00	35216
Lee Chiu	Staff unavailable	C12	05	66421	GZ4853	TOM	08:45:20	31523
Wong Tai Tung	Bus unavailable		06	65658	KR4350		08:45:20	31513
Ho Siu Ming	Not yet arrived Affecting future departure					Wong Tai Tung	09:18:05	31608
Cheung Chi Leung	Bus breakdown			18	KW3187	Lee Chiu	08:12:16	31468
Lee Chiu	Early leave of captain			93	MM2038	Ho Siu Ming	09:12:06	31594
Cheung Chi Leung	Traffic accident			7851	JK1583	OCM	07:45:20	31353
Wong Tai Tung	Handling lost property – keep for future handling	C39A	05	85047	LM2168	Wong Tai Tung	07:50:10	31381
Wong Tai Tung	Arrival will be delayed	C43A	08	70524	MK5518	ROM	09:32:47	31668
Lee Chiu	Deviated from driving route	C 8A	01	1155	RJ6184	ROM:	09:28:20	31618
Cheung Chi Leung	Late arrival without reason	C35A	04	73914	ND6181	ROM	09:33:51	31675
		C46	05	65325	KL6385			
						:		
						:		

Automatic display of the incident: Withdrawn from service due to Staff unavailable

Illustration by Examples –
Crew Shortage + Automatic Departure Regulation

ROM System Proposal
Control Center Operation

➔ New item will be added to the incident board on dispatcher's monitoring board

Dispatcher Cheung Chi Leung Status of the incident In process/Unconfirmed/Completed/All

System time: 2014-08-01 05:00:00

Dispatcher	Type of incident
Cheung Chi Leung	Staff unavailable to pick up bus
Cheung Chi Leung	Late arrival without reason
Cheung Chi Leung	Traffic accident
Cheung Chi Leung	Overtime travelling
Cheung Chi Leung	Handling lost property – keep for future handling
Cheung Chi Leung	Deviated from driving route

Automatic display of the incident: Withdrawn from service due to Staff unavailable

Dispatcher	Type of incident	Route	Running number	Captain number	Bus number	Departure time	Expected arrival time	Actual arrival time	Reference number	Overview of the travelling	Driving schedule	Line chart	Map	Trips affected (bus)	Running number	Departed	Trips affected (bus)	Running number	Departed
		98C	05	70603	SH9990	13:45	14:45		35216					98C	05	06:12	98C	05	06:12
		[illegible]	05	65325	KJ6385	08:25	09:20	09:28	31675					--	--	--	--	--	--
		6[illegible]			754	11:45	12:45		34516					6D	02	15:10	6D	02	15:10
		C[illegible]			2168	07:38	08:20		31353					C39A	05	08:28	C39A	10	08:35
		C43A	08	70524	MK5518	07:00	07:48	07:48	31381					C43A	08	07:55	C43A	08	07:55

Route	To	Late	Early	-/0/+	Longest delay		Longest ahead of time		Accumulated this month	Cumulative same-day lost trips rate			
					Minutes	Running number	Minutes	Running number	Lost trips rate	0500-1000	1000-1500	1500-2000	2000-0200
2A	Mei Foo			0/3/2	-4	06	+9	105					
	Lok Wah			2/3/2	-4	06	+9	105	1.24%	2/59 (3.51%)	2/59 (3.51%)	2/59 (3.51%)	2/59 (3.51%)
6	Mei Foo			2/8/0	-9	03	+5	07					
	Lai Chi Kok			3/6/2	-9	03	+5	07	1.11%	1/51 (1.96%)	1/51 (1.96%)	1/51 (1.96%)	1/51 (1.96%)
6D	Mei Foo			3/3/2	-8	09	+6	02					
	Ngau Tau Kok			1/5/2	-8	09	+6	02	1.87%	0/39 (0%)	0/39 (0%)	0/39 (0%)	0/39 (0%)
6X	Middle Road			0/4/1			+3	03	0	0/8 (0%)	-	-	-
28	Mody Road			1/6/2	-4	05	+5	01					
	Mody Road			2/6/0	-4	05	+5	01	1.34%	2/47 (4.26%)	2/47 (4.26%)	2/47 (4.26%)	2/47 (4.26%)
38A	Mei Foo			0/4/0	-		-						
	Riviera Gardens			0/4/0	-		-		0.8%	1/8 (0%)	1/8 (0%)	1/8 (0%)	1/8 (0%)
72	Cheung Sha Wan			3/5/1	-4	05	+11	09					
	Tai Wo			1/3/4	-4	05	+11	09	2.55%	1/29 (3.45%)	1/29 (3.45%)	1/29 (3.45%)	1/29 (3.45%)
86	Mei Foo			2/3/2	-5	02	+9	502					
	Wong Nai Tau			1/4/2	-5	02	+7	502	1.61%	0/36 (0%)	0/36 (0%)	0/36 (0%)	0/36 (0%)
6C	Mei Foo			5/6/2	-12	504	+4	06					
	Kowloon City Ferry Pier			3/10/2	-12	504	+4	06	2.18%	3/71 (4.23%)	3/71 (4.23%)	3/71 (4.23%)	3/71 (4.23%)

Illustration by Examples – Crew Shortage + Automatic Departure Regulation

ROM System Proposal
Control Center Operation

→ Departures affected will have the word "Withdrawn from service due to crew shortage" displayed in the BC columns

Working timetable (F12)

Sort by: Vehicle / Bus Length / Time

Date: 20-08-2014

Time: 99:99 - 99:99

Route | Direction

5BM To Leung King
5BM To Kwai Fong
5BP To Leung King
5BP To Kwai Fong
59M To Tuen Mun Ferry Pier
59M To Tsuen Wan

Licence plate

JU3065
NA8693
KL1584
HP4367
HK5581
PB1632

Captain

77425
6628
65138
72161
1834

Route Bus	Vehicle duty	Captain carried in	Duty of captain carried in	Captain carried away	Duty of captain carried away	Companion captain	Scheduled departure	Actual departure	In advance Delayed	Scheduled arrival	Arrival at midway station	Stop name	Expected remaining travelling time (minutes)Time	Arrived	Clocked-in	Start point	Midway boarding station	End point	Contact OCC	Frequency
BC	SI709	98C/01	(Depot)	-	-		98C/01	Morning	5:29	5:30				Hang Hau (North)			Hang Hau (North)			
BC	SI709	98C/01		76777	98C/01	Morning	98C/01	Morning	5:29	6:25				Hang Hau (North)			Mei Foo			-
BC	SI571	98C/04	(Private)	-	-		36C/04	Morning	5:38	5:45				Hang Hau (North)			Hang Hau (North)			-
BC	SH6462	98C/02	(Depot)	-	-		98C/02	Morning	5:44	5:45				Hang Hau (North)			Hang Hau (North)			-
BC	SH6462	98C/02		72119	98C/02	Morning								Hang Hau (North)			Mei Foo			15
BC	SH9990	98C/05	(Private)	-	-		Withdrawn from service due to crew shortage													
BC	SI671	98C/04				Morning	98C/04	Morning	6:00	6:55				Hang Hau (North)			Hang Hau (North)			-
BC	SH9990	98C	Withdrawn from service due to crew shortage																	
BC	SH4110	98C/15	(Depot)	-	-		Withdrawn from service due to crew shortage													
BC	SH8461	98C/06	(Depot)	-	-		98C/06	Morning	6:20	6:36				Tseung Kwan O Depot			Hang Hau (North)			15
BC	SH4110	98C/15		78334	98C/15	Morning	98C/15	Morning	6:24	7:06				Chun Wang Street lane C			Hang Hau (North)			-
BC	SH9133	98C/08	(Depot)	-	-		98C/08	Morning	6:34	6:48				Hang Hau (North)			Mei Foo			12
BC	SH7944	98C/09	(Private)	-	-		98C/09	Morning	6:34	7:06				Chun Wang Street lane C			Hang Hau (North)			-
BC	SH8461	98C/06		73895	98C/06	Morning	98C/06	Morning	6:36	7:06				Hang Hau (North)			Hang Hau (North)			-
BC	SH9133	98C/08		77234	98C/08	Morning	98C/08	Morning	6:38	6:48				Mei Foo			Mei Foo			12
BC	SI3942	98C/03	(Depot)	-	-		98C/03	Morning	6:38	6:59				Hang Hau (North)			Hang Hau (North)			-
BC	SI3942	98C/03		77977	98C/03	Morning	98C/03	Morning	6:58	7:59				Mei Foo			Mei Foo			12
BC	SI4443	98C/07	(Depot)	-	-		98C/07	Morning	7:00	7:09				Hang Hau (North)			Hang Hau (North)			-
BC	SH6404	98C/10	(Depot)	-	-		98C/07	Morning	7:09	8:09				Tseung Kwan O Depot			Hang Hau (North)			-
BC	SH7944	98C/09		70481	98C/07	Morning	98C/10	Morning	7:14	7:30				Hang Hau (North)			Mei Foo			10
BC	SI227	98C/11	(Depot)	-	-		98C/09	Morning	7:20	8:20				Mei Foo			Hang Hau (North)			12
BC	SH8404	98C/10		77074	98C/10	Morning	98C/11	Morning	7:25	7:41				Tseung Kwan O Depot			Hang Hau (North)			-
BC	SI227	98C/11				Morning	Withdrawn from service due to crew shortage													
							98C/11	Morning	7:30	8:30				Hang Hau (North)			Mei Foo			10
								Morning	7:41	8:41				Mei Foo			Hang Hau (North)			11
								Morning						Hang Hau (North)			Mei Foo			11
								Morning						Mei Foo			Hang Hau (North)			

Departure rate of the route:

Vehicle information:

Captain Information:

Captain: 70603 XXX (monthly salary)
Duty: 98C/05/morning
Meal time: 99:99 – 99:99

Data of accidents:

Overtime travelling:
Position: 98C/05
Scheduled departure time: 06:12
Actual arrival time: -
Reasons for being late:

Statistical information:

Dispatcher	Type of incident	Route	Running number	Captain number	Bus number	Departure time	Expected arrival time	Actual arrival time	Reference number	Overview of the travelling	Driving schedule	Line chart	Map	Trips affected (bus)	Running number	Departed	Trips affected (bus)	Running number	Departed
Cheung Chi Leung	Staff unavailable to pick up bus	98C	05	70603	SH9990	13:45	14:45		35216					98C	05	06:12	98C	05	06:12
Cheung Chi Leung	Late arrival without reason	C46	05	65325	KL6385	08:25	09:20	09:28	31675					--	--	--	--	--	--
Cheung Chi Leung	Bus broken	6D	02	62564	HY754	11:45	12:45		34516					6D	02	15:10	6D	02	15:10
Cheung Chi Leung	Traffic accident	C39A	05	85047	LM2168	07:38	08:20		31353					C39A	05	08:28	C39A	10	08:35
Cheung Chi Leung	Overtime travelling	C43A	08	70524	MK5518	07:00	07:48	07:48	31381					C43A	08	07:55	C43A	08	07:55
Cheung Chi Leung	Handling lost property – keep for future handling																		

Illustration by Examples –
Crew Shortage + Automatic Departure Regulation

→ Regulate departures to evenly distribute the departure times

ROM System Proposal
Control Center Operation

Date: 20-08-2014

Time: 99:99 - 99:99

Route	Direction
98C	To Mei Foo
98C	Hang Hau (North)
58P	To Leung King
58P	To Kwai Fong
59M	To Tuen Mun Ferry Pier
59M	To Tsuen Wan

Licence plate

3C2678
VA8693
KL1584
HP4367
HK5581
PB1632

Captain

77425
6528
65138
72161
1834

Working timetable (F12)

Sort by: Vehicle / Bus Length / Time

Bus	Vehicle duty	Captain carried in	Duty of captain carried in	Captain carried away	Duty of captain carried away	Companion captain	Scheduled departure	Actual departure	In advance Delayed	Scheduled arrival	Arrival at midway station	Stop name	Expected remaining travelling time (minutes)Time	Arrived	Clocked-in	Start point	Midway boarding station	End point	Contact OCC	Frequency
8C	SJ6462	98C/02			73119	98C/02	Morning	73119	98C/02	Morning	6:45	6:40		Hang Hau (North)		Mei Foo			15	
8C	SH9990	98C/05		(Private)	Withdrawn from service due to crew shortage					Morning	6:54	6:55		Hang Hau (North)		Hang Hau (North)			-	
8C	SJ571	98C/04			62860	98C/04	Morning	62860	98C/04	Morning	7:05	6:55		Hang Hau (North)		Mei Foo			15	
8C	SH9990			Withdrawn from service due to crew shortage			Morning	数据	98C/05	Morning	7:12	7:07		Hang Hau (North)		Mei Foo			-	
8C	SJ4110	98C/15		(Depot)	-	-		78334	98C/15	Morning	7:15	6:24		Hang Hau (North)		Hang Hau (North)			-	
8C	SH8451	98C/06		(Depot)	-	-		73893	98C/06	Morning	7:20	6:36		Tseung Kwan O Depot		Hang Hau (North)			-	
8C	SJ4110	98C/15			78334	98C/15	Morning	78334	98C/15	Morning	7:24	7:24		Chun Wang Street lane C		Mei Foo			14	
8C	SH9233	98C/08		(Depot)	-	-		77234	98C/08	Morning	7:32	6:48		Hang Hau (North)		Hang Hau (North)			-	
8C	SH7944	98C/09		(Private)	-	-		70074	98C/09	Morning	7:34	6:35		Chun Wang Street lane C		Hang Hau (North)			-	
8C	SH8461	98C/06			73693	98C/06	Morning	73693	98C/06	Morning	7:36	7:36		Hang Hau (North)		Mei Foo			12	
8C	[illegible]	98C/03			[illegible]		Morning	[illegible]		Morning	[illegible]			Hang Hau (North)		Hang Hau (North)			[illegible]	
8C	SH9233	98C/08			77234	98C/08	Morning	77234	98C/08	Morning	7:48	7:48		Mei Foo		Mei Foo			12	
8C	[illegible]	98C/03			[illegible]		Morning	[illegible]		Morning	[illegible]			Hang Hau (North)		Hang Hau (North)			[illegible]	
8C	SJ3942	98C/03		(Depot)	-	-		77977	98C/03	Morning	7:58	6:59		Mei Foo		Mei Foo			15	
8C	SJ3942	98C/03			77977	98C/03	Morning	77977	98C/03	Morning	7:59	7:59		Hang Hau (North)		Hang Hau (North)			-	
8C	SJ4443	98C/07		(Depot)	-	-		70461	98C/07	Morning	8:00	7:09		Hang Hau (North)		Mei Foo			11	
8C	SJ4443	98C/07			70461	98C/07	Morning	70461	98C/07	Morning	8:05	8:05		Tseung Kwan O Depot		Hang Hau (North)			-	
8C	[illegible]	98C/04			[illegible]		Morning	[illegible]		Morning	[illegible]			Hang Hau (North)		Mei Foo			10	
8C	SH8405	98C/10		(Depot)	-	-		73253	98C/10	Morning	8:14	7:30		Mei Foo		Hang Hau (North)			[illegible]	
8C	SH7944	98C/09			70074	98C/09	Morning	70074	98C/09	Morning	8:20	8:20		Chun Wang Street lane C		Hang Hau (North)			-	
8C	Withdrawn from service due to crew shortage									Morning	[illegible]	[illegible]		Hang Hau (North)		Mei Foo			21	
8C	SJ227	98C/11		Withdrawn from service due to crew shortage						Morning	8:25	7:41		Mei Foo		Hang Hau (North)			[illegible]	
8C	SH8404	98C/10		(Depot)	-	-		73253	98C/10	Morning	8:30	8:30		Chun Wang Street lane C		Hang Hau (North)			-	
8C	[illegible]	98C/15			[illegible]		Morning	[illegible]		Morning	[illegible]			Hang Hau (North)		Mei Foo			10	
8C	SJ227	98C/11			75263	98C/11	Morning	75263	98C/11	Morning	8:41	8:41		Mei Foo		Hang Hau (North)			[illegible]	
8C	[illegible]	98C/05			[illegible]		Morning	[illegible]		Morning	[illegible]			Hang Hau (North)		Mei Foo			11	
8C	SJ709	98C/01			78777	98C/01	Morning	78777	98C/01	Morning	8:51	8:51		Mei Foo		Hang Hau (North)			10	
8C	[illegible]	[illegible]			[illegible]		Morning	[illegible]		Morning	[illegible]			Hang Hau (North)		Mei Foo			[illegible]	

Separate display for different directions
Display only trips

Departure time of previous trip prior to the trip involving unavailable staff/bus

Applicable to trip departed from : to :
After advancing the trip involving unavailable staff/bus
☐ Departure time of next trip
Departure time of all trips afterwards
Execute

Apply formerly adjusted travelling time:
58M closed with 7 buses on weekdays (Thursday, 23 October)
58M closed with 7 buses on weekdays (Monday, 6 October)

Board of Dispatcher

Dispatcher	Type of incident	Route	Running number	Captain number	Bus number	Departure time	Expected arrival time	Actual arrival time	Reference number	Overview of the travelling	Driving schedule	Line chart	Map	Trips affected (bus)	Running number	Departed	Trips affected (bus)	Running number	Departed
Cheung Chi Leung	Staff unavailable to pick up bus	98C	05	70603	SH9990	13:45	14:45		35216					98C	05	06:12	98C	05	06:12
Cheung Chi Leung	Late arrival without reason	C46	05	65325	KL6385	08:25	09:20	09:28	31675					--	--	--	--	--	--
Cheung Chi Leung	Bus broken	6D	02	62564	HY7754	11:45	12:45		34516					6D	02	15:10	6D	02	15:10
Cheung Chi Leung	Traffic accident	C39A	05	85047	LM2168	07:38	08:20		31353					C39A	05	08:28	C39A	10	08:35
Cheung Chi Leung	Overtime travelling	[illegible]																	
Cheung Chi Leung	Handling lost property – keep for future handling	C43A	08	70524	MK5518	07:00	07:48	07:48	31381					C43A	08	07:55	C43A	08	07:55

Illustration by Examples –
Crew Shortage + Automatic Departure Regulation

ROM System Proposal
Control Center Operation

➔ Select first departure with missing BC and input departure regulating instructions, and then click "Execute "Execute"

Date
20-08-2014
Time
99:99 - 99:99
Route | Direction
98C To Mei Foo
98C Hang Hau (North)
58P To Leung King
58P To Kwai Fong
59M To Tuen Mun Ferry Pier
59M To Tsuen Wan
Licence plate
3C2678
VA8693
CL1584
HP4367
HK5581
JB1632
Captain
77425
6528
65138
72161
1834

Working timetable (F12)

Sort by: Vehicle / Bus Length / Time

Bus	Vehicle duty	Captain carried in	Duty of captain carried in	Captain carried away	Duty of captain carried away	Companion captain	Scheduled departure	Actual departure	In advance Delayed	Scheduled arrival	Arrival at midway station	Stop name	Expected remaining travelling time (minutes)Time	Arrived	Clocked-in	Start point	Midway boarding station	End point	Contact OCC	Frequency
98C	SJ5462	98C/02			73119 98C/	Morning	73119 98C/		Morning	6:40			Hang Hau (North)			Mei Foo			15
98C	SH9990	98C/05								5:55			Hang Hau (North)			Hang Hau (North)			-
98C	SJ571	98C/04	(Private)		Withdrawn from service due to crew shortage	Morning	52850 98C/04		Morning	6:55			Hang Hau (North)			Mei Foo			15
98C	SH9990	98C/05			Withdrawn from service due to crew shortage			98C/05	Morning	7:07			Hang Hau (North)			Mei Foo			-
98C	SJ4110	98C/15			-	-	78334 98C/15		Morning	6:24			Hang Hau (North)			Hang Hau (North)			-
98C	SH8461	98C/06	(Depot)		-	-	73893 98C/06		Morning	6:36			Tseung Kwan O Depot			Hang Hau (North)			-
98C	SJ4110	98C/15	(Depot)		78334 98C/	Morning	78334 98C/15		Morning	7:24			XXX			Mei Foo			24
98C	SH9233	98C/08			-	-	77234 98C/08		Morning	6:48			Hang Hau (North)			Hang Hau (North)			-
98C	SH7944	98C/09	(Depot)		-	-	70074 98C/09		Morning	6:35			XXX			Hang Hau (North)			-
98C	SH8461	98C/06	(Private)		73893 98C/	Morning	73893 98C/06		Morning	7:36			Hang Hau (North)			Mei Foo			12
98C	[illegible]	98C/01				Morning	[illegible]		Morning	[illegible]			Hang Hau (North)			Hang Hau (North)			
98C	SH9233	98C/08			77134 98C/	Morning	77234 98C/08		Morning	7:48			Mei Foo			Mei Foo			12
98C	[illegible]	98C/01			[illegible]	Morning	[illegible]		Morning	[illegible]			Hang Hau (North)			Hang Hau (North)			
98C	SJ3942	98C/03			-	-	77977 98C/03		Morning	6:59			Mei Foo			Hang Hau (North)			-
98C	SJ3942	98C/03	(Depot)		77977 98C/	Morning	77977 98C/03		Morning	7:59			Hang Hau (North)			Mei Foo			11
98C	SJ4443	98C/07			-	-	70461 98C/07		Morning	7:09			Hang Hau (North)			Hang Hau (North)			-
98C	SJ4443	98C/07	(Depot)		70461 98C/	Morning	70461 98C/07		Morning	8:09			Tseung Kwan O Depot			Mei Foo			10
98C	[illegible]	98C/10			-	Morning	63253 98C/10		Morning	7:30			Hang Hau (North)			Hang Hau (North)			15
98C	SH7944	98C/09	(Depot)		70074 98C/	Morning	70074 98C/09		Morning	8:20			Mei Foo			Hang Hau (North)			-
98C	SJ227	98C/11			Withdrawn from service due to crew shortage								XXX			Mei Foo			11
98C	SH8404	98C/10	(Depot)		63253 98C/	Morning	75263 98C/11		Morning	7:41			Hang Hau (North)			Hang Hau (North)			-
98C	[illegible]	98C/11			75263 98C/	Morning	63253 98C/10		Morning	8:30			Mei Foo			Mei Foo			10
98C	SJ709	98C/01			78777 98C/	Morning	78777 98C/01		Morning	8:51			XXX			Hang Hau (North)			23
98C	[illegible]	98C/08			[illegible]	Morning	[illegible]		Morning	[illegible]			Hang Hau (North)			Mei Foo			11
													Mei Foo			Hang Hau (North)			11
													Hang Hau (North)			Mei Foo			10

Separate display for different directions
Display only trips

Departure time of previous trip prior to the trip involving unavailable staff/bus

Applicable to trip departed from 06:00 to 15:30
After advancing the trip involving unavailable staff/bus
2 Departure time of next trip
Departure time of all trips afterwards
Execute

Apply formerly adjusted travelling time:
58M closed with 7 buses on weekdays (Thursday, 23 October)
58M closed with 7 buses on weekdays (Monday, 6 October)

Board of Dispatcher

Dispatcher	Type of incident	Route	Running number	Captain number	Bus number	Departure time	Expected arrival time	Actual arrival time	Reference number	Overview of the travelling	Driving schedule	Line chart	Map	Trips affected (bus)	Running number	Departed	Trips affected (bus)	Running number	Departed
Cheung Chi Leung	Staff unavailable to pick up bus	98C	05	70603	SH9990	13:45	14:45		35216										
Cheung Chi Leung	Late arrival without reason	C46	05	65325	KL6385	08:25	09:20	09:28	31675					98C	05	06:12	98C	05	06:12
Cheung Chi Leung	Bus broken	6D	02	62564	HY754	11:45	12:45		34516					--	--	--	--	--	--
Cheung Chi Leung	Traffic accident	C39A	05	85047	LM2168	07:38	08:20		31353					6D	02	15:10	6D	02	15:10
Cheung Chi Leung	Overtime travelling	[illegible]												C39A	05	08:28	C39A	10	08:35
Cheung Chi Leung	Handling lost property – keep for future handling	C43A	08	70524	MK5518	07:00	07:48	07:48	31381					C43A	08	07:55	C43A	08	07:55

Illustration by Examples –
Crew Shortage + Automatic Departure Regulation
→ Departure regulation complete

ROM System Proposal
Control Center Operation

Date
20-08-2014
Time
99:99 - 99:99
Route | Direction

98C	To Mei Foo
98C	Hang Hau (North)
58P	To Leung King
58P	To Kwai Fong
59M	To Tuen Mun Ferry Pier
59M	To Tsuen Wan

Licence plate
3C2678
YA8693
KL1584
HP4367
HK5581
JB1632

Captain
77425
6628
65138
72161
1834

Working timetable (F12)

Sort by: Vehicle / Bus Length / Time

Route Bus	Vehicle duty	Captain carried in	Duty of captain carried in	Captain carried away	Duty of captain carried away	Companion captain	Scheduled departure	Actual departure	In advance Delayed	Scheduled arrival	Arrival at midway station	Stop name	Expected remaining travelling time (minutes)Time	Arrived	Clocked-in	Start point	Midway boarding station	End point	Contact OCC	Frequency
8C	SJ6462	98C/02			73119 98C/	Morning	73119	98C/0	Morning	5:45	6:40	Hang Hau (North)			Mei Foo				15
8C	SH9990	98C/05	(Private)	Withdrawn from service due to crew shortage					ing	5:54	5:55	Hang Hau (North)			Hang Hau (North)				-
8C	SJ571	98C/04			62860 98C/	Morning	62860	98C/0	Morning	6:00	6:55	Hang Hau (North)			Mei Foo				15
8C	SH9990	98C/05		Withdrawn from service due to crew shortage				C/0	Morning	6:12	7:07	Hang Hau (North)			Mei Foo				-
8C	SJ4110	98C/15	(Depot)	-	-		78334	98C/1	Morning	6:07	6:16	Hang Hau (North)			Hang Hau (North)				-
8C	SH8461	98C/06	(Depot)	-	-		73893	98C/0	Morning	6:16	6:32	Tseung Kwan O Depot			Hang Hau (North)				-
8C	SJ4110	98C/15		78334	98C/1	Morning	78334	98C/1	Morning	6:16	7:16	XXX			Mei Foo				16
8C	SH9233	98C/08	(Depot)	-	-		77234	98C/0	Morning	6:32	6:48	Hang Hau (North)			Hang Hau (North)				-
8C	SH7944	98C/09	(Private)	-	-		70074	98C/0	Morning	6:34	6:35	XXX			Hang Hau (North)				-
8C	SH8461	98C/06		73893	98C/0	Morning	73893	98C/0	Morning	6:32	7:32	Hang Hau (North)			Mei Foo				16
8C	SJ709	98C/01		78777	98C/0	Morning	78777	98C/0	Morning	6:40	7:40	Hang Hau (North)			Hang Hau (North)				-
8C	SH9233	98C/08		77234	98C/0	Morning	77234	98C/0	Morning	6:48	7:48	Mei Foo			Mei Foo				16
8C	SJ709	98C/02		78119	98C/0	Morning	78119	98C/0	Morning	6:55	7:55	Hang Hau (North)			Hang Hau (North)				-
8C	SJ3942	98C/03		-	-		77977	98C/0	Morning	6:58	6:59	Mei Foo			Hang Hau (North)				-
8C	SJ3942	98C/03	(Depot)	77977	98C/0	Morning	77977	98C/0	Morning	6:59	7:59	Hang Hau (North)			Mei Foo				11
8C	SJ4443	98C/07		-	-		70461	98C/0	Morning	7:00	7:09	Hang Hau (North)			Hang Hau (North)				-
8C	SJ4443	98C/07	(Depot)	70461	98C/0	Morning	70461	98C/0	Morning	7:09	8:09	Tseung Kwan O Depot			Mei Foo				10
8C	SJ571	98C/04		62860	98C/0	Morning	62860	98C/0	Morning	7:14	7:30	Hang Hau (North)			Hang Hau (North)				15
8C	SH8404	98C/10		-	-		63253	98C/1	Morning	7:20	8:20	Mei Foo			Hang Hau (North)				-
8C	SH7944	98C/09	(Depot)	70074	98C/0	Morning	70074	98C/0	Morning	7:21		XXX			Mei Foo				11
8C	SH9233	98C/05		Withdrawn from service due to crew shortage					Morning	7:25	7:41	Hang Hau (North)			Hang Hau (North)				-
8C	SJ227	98C/11		-	-		75263	98C/1	Morning	7:30	8:30	Mei Foo			Mei Foo				10
8C	SH8404	98C/10	(Depot)	63253	98C/1	Morning	63253	98C/1	Morning	7:41		XXX			Hang Hau (North)				15
8C	SH9233	98C/08		77234	98C/0	Morning	77234	98C/0	Morning	7:48	8:48	Hang Hau (North)			Mei Foo				11
8C	SH8461	98C/06		73893	98C/0	Morning	73893	98C/0	Morning	7:50		Mei Foo			Hang Hau (North)				15
8C	SJ709	98C/01		78777	98C/0	Morning	78777	98C/0	Morning	8:00	8:51	Hang Hau (North)			Mei Foo				10

Separate display for different directions
Display only trips

Departure time of previous trip prior to the trip involving unavailable staff/bus

Applicable to trip departed from : to :
After advancing the trip involving unavailable staff/bus
☐ Departure time of next trip
Departure time of all trips afterwards
Execute

Apply formerly adjusted travelling time:
58M closed with 7 buses on weekdays (Thursday, 23 October)
58M closed with 7 buses on weekdays (Monday, 6 October)

Board of Dispatcher

Dispatcher	Type of incident	Route	Running number	Captain number	Bus number	Departure time	Expected arrival time	Actual arrival time	Reference number	Overview of the travelling	Driving schedule	Line chart	Map	Trips affected (bus)	Running number	Departed	Trips affected (bus)	Running number	Departed
Cheung Chi Leung	Staff unavailable to pick up bus	98C	05	70603	SH9990	13:45	14:45		35216					98C	05	06:12	98C	05	06:12
Cheung Chi Leung	Late arrival without reason	C46	05	65325	KL6385	08:25	09:20	09:28	31675					--	--	--	--	--	--
Cheung Chi Leung	Bus broken	6D	02	62564	HY754	11:45	12:45		34516					6D	02	15:10	6D	02	15:10
Cheung Chi Leung	Traffic accident	C39A	05	85047	LM2168	07:38	08:20		31353					C39A	05	08:28	C39A	10	08:35
Cheung Chi Leung	Overtime travelling																		
Cheung Chi Leung	Handling lost property – keep for future handling	C43A	08	70524	MK3518	07:00	07:48	07:48	31381					C43A	08	07:55	C43A	08	07:55

4706-14

8.1.3 – Handling delay of arrival + departure time regulation (route 42)

➔ When the system detects that the bus cannot arrive on time and the next departure will be delayed, new item will be added to the incident board of OCC automatically

Bus Operations Control Centre: Lai Chi Kok **System time**: 2014-08-01 14:56:00

Dispatcher	Type of incident	Route	Running number	Captain number	Bus number	Inputter	Input time	Reference
Cheung Chi Leung	Overtime travelling:	38M	02	60757	JU3665	ROM	12:45:00	35216
Lee Chiu	Staff unavailable	C12	05	68421	GZ4853	TOM	08:45:20	31523
Wong Tai Tung	Bus unavailable		06	65038	KR4350	TOM	08:45:20	31513
Ho Siu Ming	Not yet arrived Affecting future departure					Wong Tai Tung		
Cheung Chi Leung	Bus breakdown			18	KW3187	Lee Chiu	09:18:05	31608
Lee Chiu	Early leave of captain			93	MM2038	Ho Siu Ming	08:12:16	31468
Cheung Chi Leung	Traffic accident			91	JK1583	OCM	09:12:06	31594
Wong Tai Tung	Handling lost property – keep for future handling	C29A	05	65047	LM2168	Wong Tai Tung	07:45:20	31353
Wong Tai Tung	Arrival will be delayed	C43A	08	70524	MK5518		07:50:10	31381
Lee Chiu	Deviated from driving route	C8A	01	1155	RJ6184	ROM	09:32:47	31668
Cheung Chi Leung	Late arrival without reason	C35A	04	73914	ND6181	ROM:	09:28:20	31618
		C46	05	65325	KL6385	ROM	09:33:51	31675
						:		
						:		

Automatic display of the incident: overtime travelling

Illustration by Examples –
Delay of Arrival + Departure Regulation

ROM System Proposal
Control Center Operation

➔ New item will be created to the incident board on dispatcher's screen

Dispatcher Cheung Chi Leung Status of the incident In process/Unconfirmed/Completed/All

System time: 2014-08-01 14:56:12

Dispatcher	Type of incident
Cheung Chi Leung	Overtime travelling
Cheung Chi Leung	Late arrival without reason
Cheung Chi Leung	Bus breakdown
Cheung Chi Leung	Traffic accident
Cheung Chi Leung	Overtime travelling
Cheung Chi Leung	Handling lost property – keep for future handling

Automatic display of the incident: overtime travelling

Route	Running number	Captain number	Bus number	Departure time	Expected arrival time	Actual arrival time	Reference number	Overview of the travelling	Driving schedule	Line chart	Map	Trips affected (bus)	Running number	Departed	Trips affected (bus)	Running number	Departed
[illegible]	02	60757	JU3065	13:45	14:45		31653					58M	02	14:52	58M	02	14:52
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	09:20	09:28	31675					[illegible]	--	--	--	--	--
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	12:45		35216					6D	02	15:10	6D	02	15:10
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	08:20		31353					C39A	05	08:28	C39A	10	08:35
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]					[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
A	08	70524	MK5518	07:00	07:48	07:48	31381					C43A	08	07:55	C43A	08	07:55

Route	To	Late	Early	-/0/+	Longest delay Minutes	Longest delay Running number	Longest ahead of time Minutes	Longest ahead of time Running number	Accumulated this month Lost trips rate	Cumulative same-day lost trips rate 0500-1000	1000-1500	1500-2000	2000-0200
2A	Mei Foo			0/3/2	-4	05	+9	[illegible]	1.24%	2/59 (3.51%)	2/59 (3.51%)	2/59 (3.51%)	2/59 (3.51%)
	Lok Wah			2/3/2	-4	05	+9	L05					
6	Mei Foo			2/8/0	-9	03	+5	07	1.11%	1/51 (1.96%)	1/51 (1.96%)	1/51 (1.96%)	1/51 (1.96%)
	Lai Chi Kok			3/6/2	-9	03	+5	07					
6D	Mei Foo			3/3/2	-8	09	+6	02	1.87%	0/39 (0%)	0/39 (0%)	0/39 (0%)	0/39 (0%)
	Ngau Tau Kok			1/5/2	-8	09	+6	02					
6X	Middle Road			0/4/3			+3	03	0	0/8 (0%)	-	-	-
28	Mody Road			1/6/2	-4	05	+6	01	1.34%	2/47 (4.26%)	2/47 (4.26%)	2/47 (4.26%)	2/47 (4.26%)
	Mody Road			3/8/0	-4	05	+6	01					
38A	Mei Foo			0/1/0					0.8%	1/8 (0%)	1/8 (0%)	1/8 (0%)	1/8 (0%)
	Riviera Gardens			0/4/0									
72	Cheung Sha Wan			3/5/1	-4	05	+11	09	2.55%	1/29 (3.45%)	1/29 (3.45%)	1/29 (3.45%)	1/29 (3.45%)
	Tai Wo			1/3/3	-4	05	+11	09					
86	Mei Foo			2/3/2	-5	02	+7	S02	1.61%	0/36 (0%)	0/36 (0%)	0/36 (0%)	0/36 (0%)
	Wong Nai Tau			4/4/2	-5	02	+7	S02					
6C	Mei Foo			5/6/2	-12	S04	+4	06	2.18%	3/71 (4.23%)	3/71 (4.23%)	3/71 (4.23%)	3/71 (4.23%)
	Kowloon City Ferry Pier			3/10/2	-12	S04	+4	06					

Illustration by Examples –
Delay of Arrival + Departure Regulation

➔ After the BC has finished the trip and presents the driver CSC card, the system will prompt the BC to present the driver card again in 2 minutes

Captain 60757
Completed
58M/02/14:56
Tap the card

Captain please pay attention to the reminder on the screen

Please wait for two minutes and tap again

Input
(1)

Captain number	Captain name	Route	Running number	Arrival	Bus number
60757	Chan Lai Chi	58M	02	14:56	JU3065

Illustration by Examples – Delay of Arrival + Departure Regulation

→ Departures affected will have the scheduled departure time displayed in red

ROM System Proposal
Control Center Operation

Date: 20-08-2014

Time: 99:99 - 99:99

Route | Direction

58M	To Leung King
58M	To Kwai Fong
58P	To Leung King
58P	To Kwai Fong
59M	To Tuen Mun Ferry Pier
59M	To Tsuen Wan

Licence plate

JU3065
NA8693
KL1584
HP4367
HK5581
PB1632

Captain

77425
6628
65138
72161
1834

Working timetable (F12)

Sort by: Vehicle / Bus Length / Time

Bus	Vehicle duty	Captain carried in	Duty of captain carried in	Captain carried away	Duty of captain carried away	Companion captain	Scheduled departure	Actual departure	In advance Delayed	Scheduled arrival	Arrival at midway station	Stop name	Expected remaining travelling time (minutes)Time	Arrived	Clocked-in	Start point	Midway boarding station	End point	Contact OCC	Frequency
			Morning		Morning		Morning							Kwai Fong Station			Leung King Estate			
			Morning		Morning		Morning							Kwai Fong Station			Leung King Estate			
		(Depot)	Morning	3548	58M/ 02/	548	58M/ 02/	Morning	13:54	13:54	0:00	14:14		Leung King Estate			Tuen Mun (South) Depot			-
			Night	22853	58M/ 95/	813	58M/ 08/	Night	13:54	13:54	0:00	14:42		Leung King Estate			Kwai Fong Station			9
			Night					Night						Kwai Fong Station			Leung King Estate			
		(Depot)	Morning	60937	58M/ 13/	082	58M/ 05/	Night	14:02	14:02	0:00			Leung King Estate			Kwai Fong Station			8
			Morning	60324	58M/ 10/	958	58M/ 10/	Morning	14:04	14:04	0:00	14:21		Leung King Estate			Tuen Mun (South) Depot			-
			Night			465	58M/ 11/	Morning						Kwai Fong Station			Leung King Estate			
		Bus unavailable				582 960 / 13/		Morning	14:19	14:19	0:00	15:13		Leung King Estate			Kwai Fong Station			17
			Night					Night						Kwai Fong Station			Leung King Estate			
		Staff unavailable	Morning			460	58M/ 07/	Morning	14:29	14:29	0:00			Leung King Estate			Kwai Fong Station			26
			Morning					Night						Kwai Fong Station			Leung King Estate			
		(Depot)	Morning	72464	58M/ 13/	684	58M/ 12/	Morning	14:34	14:34	0:00			Tuen Mun (South) Depot			Leung King Estate			-
		Bus unavailable (Depot)	Morning	71306	58M/ 11/	906	58M/ 11/	Morning	14:34	14:34	0:00	14:50		Leung King Estate			Tuen Mun (South) Depot			-
			Morning	60059	58M/ 09/	587	58M/ 09/	Night	14:36	14:36	0:00	15:30		Leung King Estate			Kwai Fong Station			8
			Night					Morning						Kwai Fong Station			Leung King Estate			
			Morning	37684	58M/ 14/	684	58M/ 14/	Morning	14:44	14:44	0:00	15:38		Leung King Estate			Kwai Fong Station			8
			Morning					Morning						Kwai Fong Station			Leung King Estate			
		(Depot)	Morning	60757	58M/ 02/	193	58M/ 07/	Night	14:52	14:52	0:00	15:42		Leung King Estate			Kwai Fong Station			8
		(Depot)	Night	55679	58M/L01/	679	58M/L01/	Night	14:54	14:54	0:00	15:46		Leung King Estate			Tuen Mun (South) Depot			-
			Morning	3150	58M/503/	150	58M/503/	Morning	14:58	14:58	0:00	15:58		Tuen Mun (South) Depot			Leung King Estate			-
			Night	73496	58M/ 18/	923	58M/ 08/	Night	15:06	15:06	0:00	16:06		Leung King Estate			Kwai Fong Station			4
			Night					Morning						Kwai Fong Station			Leung King Estate			
			Night					Morning						Kwai Fong Station			Leung King Estate			
			Morning					Night						Leung King Estate			Kwai Fong Station			12
		(Depot)	Night	74	58M/L02/	674	58M/L02/	Night	15:24					Leung King Estate			Leung King Estate			-
		(Depot)	Morning	69551	58M/504/	551	58M/504/	Morning	15:34	15:34				Tuen Mun (South) Depot			Leung King Estate			-
			Night					Night						Kwai Fong Station			Leung King Estate			
		(Depot)	Morning	69138	58M/ 08/	437	58M/104/	Night	15:16	15:10				Leung King Estate			Kwai Fong Station			8
			Morning	67350	58M/ 15/	381	58M/ 15/	Morning	15:24	15:24				Leung King Estate			Tuen Mun (South) Depot			-
			Morning	69551	58M/504/	551	58M/504/	Morning	15:24	16:18				Leung King Estate			Kwai Fong Station			8
		(Depot)	Morning					Morning	15:28					Kwai Fong Station			Leung King Estate			
			Night	66187	58M/ 96/		58M/ 96/	Night	15:30	15:40				Tuen Mun (South) Depot			Leung King Estate			-
		(Depot)	Morning	68629	58M/505/	439	58M/505/	Morning	15:32	16:26				Leung King Estate			Kwai Fong Station			8
			Night		58M/ 03/	801	58M/ 03/	Night	15:34	15:51				Leung King Estate			Tuen Mun (South) Depot			-

Trip that cannot be departed on time due to overtime of travelling

Departure rate of the route:	
Vehicle information:	
Captain Information:	
Captain: 70603 XXX (monthly salary) Duty: 98C/05/morning Meal time: 99:99 – 99:99	
Data of accidents:	
Overtime travelling: Position: 98C/05 Scheduled departure time: 06:12 Actual arrival time: - Reasons for being late:	
Statistical information:	

Dispatcher	Type of incident	Route	Running number	Captain number	Bus number	Departure time	Expected arrival time	Actual arrival time	Reference number	Overview of the travelling	Driving schedule	Line chart	Map	Trips affected (bus)	Running number	Departed	Trips affected (bus)	Running number	Departed
Cheung Chi Leung	Staff unavailable to pick up bus	58M	02	60757	JU3065	13:45	14:45		31653				58M	02	14:52	58M	02	14:52	
Cheung Chi Leung	Late arrival without reason	C46	05	65325	KL6385	08:25	09:20	09:28	31675				--	--	--	--	--	--	
Cheung Chi Leung	Bus broken	6D	02	62564	HY754	11:45	12:45		35216				6D	02	15:10	6D	02	15:10	
Cheung Chi Leung	Traffic accident	C39A	05	85047	LM2168	07:38	08:20		31353				C39A	05	08:28	C39A	10	08:35	
Cheung Chi Leung	Overtime travelling																		
Cheung Chi Leung	Handling lost property – keep for future handling	C43A	08	70524	MK5518	07:00	07:48	07:48	31381				C43A	08	07:55	C43A	08	07:55	

4706-18

Illustration by Examples –
Delay of Arrival + Departure Regulation

➔ Departure regulation is selected and the departures with different destinations are sorted separately

ROM System Proposal
Control Center Operation

Date
20-08-2014
Time
99:99 - 99:99
Route | Direction
58M To Leung King ✓
58M To Kwai Fong ✓
58P To Leung King
58P To Kwai Fong
59M To Tuen Mun Ferry Pier
59M To Tsuen Wan
Licence plate
JU3065
NA8693
KL1584
HP4367
HK5581
PB1632
Captain
77425
6628
65138
72161
1834

Staff unavailable
Bus unavailable

Route Bus	Vehicle duty	Captain carried in	Duty of captain carried in	Captain carried away	Duty of captain carried away	Companion captain	Scheduled departure	Actual departure	In advance Delayed	Scheduled arrival	Arrival at midway station	Stop name	Expected remaining travelling time (minutes)Time	Arrived	Clocked-in	Start point	Midway boarding station	End point	Contact OCC	Frequency
58M	JV7191	58M/		58M/ 14/早		Morning	58M/ 07/	Morning	14:28	14:28	0:00	15:22		Leung King Estate		Kwai Fong Station			
58M	JT1196	58M/	(Depot)	58M/515/早		Morning	58M/514	Morning	14:34	14:34	0:00	14:44		Tuen Mun (South) Depot		Leung King Estate			
58M	JU3065	58M/ 02	(Depot)	71906 58M/ 11/早		Morning	58M/ 11/	Morning	14:54	14:54	0:00	14:54		Leung King Estate		Tuen Mun (South) Depot			
58M	KV6817	58M/ 03		60009 58M/ 09/早		Morning	58M/ 09/	Night	14:36	14:36	0:00	15:30		Leung King Estate		Kwai Fong Station			
58M	HJ7491	58M/503	(Depot)	87684 58M/514/早		Morning	58M/514	Morning	14:44	14:44	0:00	15:38		Leung King Estate		Kwai Fong Station			
58M	KP7401	58M/ 16		66757 58M/ 02/早		Morning	58M/ 07/	Night	14:52			15:46		Leung King Estate		Kwai Fong Station			
58M	HJ7491	58M/503	(Depot)	53679 58M/L01/夜		Night	58M/L01/	Night	14:54			15:16		Leung King Estate		Tuen Mun (South) Depot			
58M	KP7401	58M/ 16	(Depot)	1180 58M/503/早		Morning	58M/503/	Morning	14:58			15:08		Tuen Mun (South) Depot		Leung King Estate			
58M	HJ7491	58M/503		71496 58M/ 16/早		Morning	58M/ 05/	Night	14:56			15:54		Leung King Estate		Kwai Fong Station			
58M	KJ7052	58M/ 10	(Depot)	1180 58M/503/早		Morning	58M/503/	Morning	15:08			16:02		Leung King Estate		Kwai Fong Station			
58M	HS1275	58M/504	(Depot)	1624 58M/L02/夜		Night	58M/L02/	Night	15:14			15:14		Leung King Estate		Leung King Estate			
58M	JV6725	58M/ 08		69551 58M/504/早		Morning	58M/504/	Morning	15:14					Tuen Mun (South) Depot		Leung King Estate			
58M	JT1936	58M/ 15	(Depot)	65489 58M/ 08/早		Morning	58M/L04/	Night	15:16			16:10		Leung King Estate		Kwai Fong Station			
58M	HS1275	58M/504		64871 58M/ 15/早		Morning	58M/ 15/	Morning	15:24			15:44		Leung King Estate		Tuen Mun (South) Depot			
58M	JU2409	58M/ 01	(Depot)	69551 58M/504/早		Morning	58M/504/	Morning	15:24			15:48		Leung King Estate		Kwai Fong Station			
58M	KH5995	58M/505		66187 58M/ 01/早		Morning	58M/ 96/	Night	15:40			15:40		Tuen Mun (South) Depot		Leung King Estate			
				78429 58M/505/早		Morning	58M/505/	Morning											

Bus unavailable

Route Bus	Vehicle duty	Captain carried in	Duty of captain carried in	Captain carried away	Duty of captain carried away	Companion captain	Scheduled departure	Actual departure	In advance Delayed	Scheduled arrival	Arrival at midway station	Stop name	Expected remaining travelling time (minutes)Time	Arrived	Clocked-in	Start point	Midway boarding station	End point	Contact OCC	Frequency
							Night	Night						Kwai Fong Station			Leung King Estate			
							Morning	Morning						Kwai Fong Station			Leung King Estate			
							Night	Night						Kwai Fong Station			Leung King Estate			
							Morning	Morning						Kwai Fong Station			Leung King Estate			
							Night	Night						Kwai Fong Station			Leung King Estate			
							Night	Night						Kwai Fong Station			Leung King Estate			
							Night	Night						Kwai Fong Station			Leung King Estate			
							Morning	Morning						Kwai Fong Station			Leung King Estate			
							Morning	Morning						Kwai Fong Station			Leung King Estate			
							Night	Night						Kwai Fong Station			Leung King Estate			
							Morning	Morning						Kwai Fong Station			Leung King Estate			
							Night	Night						Kwai Fong Station			Leung King Estate			
							Night	Night						Kwai Fong Station			Leung King Estate			
							Morning	Morning						Kwai Fong Station			Leung King Estate			
							Night	Night						Kwai Fong Station			Leung King Estate			
							Morning	Morning						Kwai Fong Station			Leung King Estate			

Board of Dispatcher

Dispatcher	Type of incident	Route	Running number	Captain number	Bus number	Departure time	Expected arrival time	Actual arrival time	Reference number	Overview of the travelling	Driving schedule	Line chart	Map	Trips affected (bus)	Running number	Departed	Trips affected (bus)	Running number	Departed
Cheung Chi Leung	Staff unavailable to pick up bus	58M	02	60757	JU3065	13:45	14:45		31653					58M	02	14:52	58M	02	14:52
Cheung Chi Leung	Late arrival without reason	C46	05	65325	KL6385	08:25	09:20	09:28	31675					--	--	--	--	--	--
Cheung Chi Leung	Bus broken	6D	02	62564	HY754	11:45	12:45		35216					6D	02	15:10	6D	02	15:10
Cheung Chi Leung	Traffic accident	C39A	05	85047	LM2168	07:38	08:20		31353					C39A	05	08:28	C39A	10	08:35
Cheung Chi Leung	Overtime travelling																		
Cheung Chi Leung	Handling lost property – keep for future handling	C43A	08	70524	MK5518	07:00	07:48	07:48	31381					C43A	08	07:55	C43A	08	07:55

Separate display for different directions
Display only trips

Departure time of previous trip prior to the trip involving unavailable staff/bus

Applicable to trip departed from : to :
After advancing the trip involving unavailable staff/bus
☐ Departure time of next trip
Departure time of all trips afterwards
Execute

Apply formerly adjusted travelling time:
58M closed with 7 buses on weekdays (Thursday, 23 October)
58M closed with 7 buses on weekdays (Monday, 6 October)

Illustration by Examples – Delay of Arrival + Departure Regulation

ROM System Proposal
Control Center Operation

➔ Manually change the departure time and location of mid-way departure

Date: 20-08-2014

Time: 99:99 - 99:99

Route	Direction	
58M	To Leung King	✓
58M	To Kwai Fong	✓
58P	To Leung King	
58P	To Kwai Fong	
59M	To Tuen Mun Ferry Pier	
59M	To Tsuen Wan	

Licence plate

JU3065
NA8693
KL1584
HP4367
HK5581
PB1632

Captain

77425
6528
65138
72161
1834

Route	Bus	Vehicle duty	Captain carried in	Duty of captain carried in	Captain carried away	Duty of captain carried away	Companion captain	Scheduled departure	Actual departure	In advance Delayed	Scheduled arrival	Start point	End point	Frequency
58M	KU8269	58M/15		60937	58M/13/	Morning	086 58M/06	Night	14:02 14:02	0:00	14:56	Leung King Estate	Kwai Fong Station	6
58M	[illegible]	58M/S11	(Depot)	60804	58M/10/	Morning	904 58M/10	Morning	14:04 14:04	0:00	14:24	Leung King Estate	Tuen Mun (South) Depot	-
Bus unavailable		?/13		-	-		382 960/13/	Morning	14:19 14:19	0:00	15:13	Leung King Estate	Kwai Fong Station	17
58M	JV7191	58M/11		Staff unavailable			160 58M/07/	Morning	14:28 14:28	0:00	15:22	Leung King Estate	Kwai Fong Station	25
58M	JT1196	58M/S13	(Depot)	76464	58M/S13	Morning	584 58M/S14	Morning	14:34 14:34	0:00	14:44	Tuen Mun (South) Depot	Leung King Estate	-
Bus unavailable		07	(Depot)	71306	58M/11/	Morning	309 58M/11/	Morning	14:34 14:34	0:00	14:54	Leung King Estate	Tuen Mun (South) Depot	-
58M	KL3551	58M/09		60009	58M/09/	Morning	087 58M/05	Morning	14:36 14:36	0:00	15:30	Leung King Estate	Kwai Fong Station	2
58M	JT1196	58M/S13		87654	58M/S12	Morning	581 58M/S14	Morning	14:44 14:44	0:00	15:38	Leung King Estate	Kwai Fong Station	8
58M	JU3065	58M/02	(Depot)	60757	58M/02	Morning	168 58M/07	Night	15:00		[illegible]	Leung King Estate	Kwai Fong Station	15
58M	KV8817	58M/03	(Depot)	53679	58M/L01	Night	679 58M/L01	Night	14:54		15:[illegible]	Leung King Estate	Tuen Mun (South) Depot	-
58M	HJ7491	58M/S05		1180	58M/S03	Morning	180 58M/S03	Morning	14:55		15:08	Tuen Mun (South) Depot	Leung King Estate	-
58M	KP7401	58M/16		72496	58M/16	Morning	705 58M/08	Night	15:00		15:54	Leung King Estate	Kwai Fong Station	0
58M	HJ7491	58M/S09	(Depot)	1180	58M/S03	Morning	180 58M/S03	Morning	15:08		15:02	Leung King Estate	Kwai Fong Station	8
58M	KJ2052	58M/10	(Depot)	1624	58M/L02	Night	524 58M/L02	Night	15:14		15:34	Leung King Estate	Leung King Estate	-
58M	HS1275	58M/S04		69551	58M/S04	Morning	531 58M/S04	Morning	15:14		15:24	Tuen Mun (South) Depot	Leung King Estate	-
58M	JV6725	58M/08		65489	58M/06	Morning	437 58M/L04	Night	15:16		[illegible]	Leung King Estate	Kwai Fong Station	8
58M	JT1030	58M/15	(Depot)	64381	58M/15	Morning	561 58M/15	Morning	15:24		15:4[illegible]	Leung King Estate	Tuen Mun (South) Depot	-

Change departure time

Bus unavailable

Route Bus / Vehicle duty / Captain carried in / Duty of captain carried in / Captain carried away	Duty of captain carried away	Companion captain	Scheduled departure	Actual departure / In advance Delayed / Scheduled arrival / Arrival at midway station / Stop name / Expected remaining travelling time (minutes) Time / Arrived / Clocked-in	Start point	Midway boarding station	End point	Contact OCC / Frequency
[illegible]	Night	[illegible]	Night	[illegible]	Kwai Fong Station	[illegible]	Leung King Estate	[illegible]
[illegible]	Morning	[illegible]	Morning	[illegible]	Kwai Fong Station	[illegible]	Leung King Estate	[illegible]
[illegible]	Night	[illegible]	Night	[illegible]	Kwai Fong Station	[illegible]	Leung King Estate	[illegible]
[illegible]	Morning	[illegible]	Morning	[illegible]	Kwai Fong Station	[illegible]	Leung King Estate	[illegible]
[illegible]	Night	[illegible]	Night	[illegible]	Kwai Fong Station	[illegible]	Leung King Estate	[illegible]
[illegible]	Night	[illegible]	Night	[illegible]	Kwai Fong Station	[illegible]	Leung King Estate	[illegible]
[illegible]	Night	[illegible]	Night	[illegible]	Kwai Fong Station	[illegible]	Leung King Estate	[illegible]
[illegible]	Morning	[illegible]	Morning	[illegible]	Kwai Fong Station	[illegible]	Leung King Estate	[illegible]
[illegible]	Morning	[illegible]	Morning	[illegible]	Kwai Fong Station	[illegible]	Leung King Estate	[illegible]
[illegible]	Night	[illegible]	Night	[illegible]	Kwai Fong Station	[illegible]	Leung King Estate	[illegible]
[illegible]	Morning	[illegible]	Morning	[illegible]	Kwai Fong Station	[illegible]	Leung King Estate	[illegible]
[illegible]	Night	[illegible]	Night	[illegible]	Kwai Fong Station	[illegible]	Leung King Estate	[illegible]
[illegible]	Night	[illegible]	Night	[illegible]	Kwai Fong Station	[illegible]	Leung King Estate	[illegible]
[illegible]	Morning	[illegible]	Morning	[illegible]	Kwai Fong Station	[illegible]	Leung King Estate	[illegible]
[illegible]	Night	[illegible]	Night	[illegible]	Kwai Fong Station	[illegible]	Leung King Estate	[illegible]
[illegible]	Morning	[illegible]	Morning	[illegible]	Kwai Fong Station	[illegible]	Leung King Estate	[illegible]
[illegible]		[illegible]		[illegible]	Kwai Fong Station	[illegible]	Leung King Estate	[illegible]

Board of Dispatcher

Dispatcher	Type of incident	Route	Running number	Captain number	Bus number	Departure time	Expected arrival time	Actual arrival time	Reference number	Overview of the travelling	Driving schedule	Line chart	Map	Trips affected (bus)	Running number	Departed	Trips affected (bus)	Running number	Departed
Cheung Chi Leung	Staff unavailable to pick up bus	58M	02	60757	JU3065	13:45	14:45		31653					58M	02	14:52	58M	02	14:52
Cheung Chi Leung	Late arrival without reason	C46	05	65325	KL6385	08:25	09:20	09:28	31675					--	--	--	--	--	--
Cheung Chi Leung	Bus broken	6D	02	62564	HY754	11:45	12:45		35216					6D	02	15:10	6D	02	15:10
Cheung Chi Leung	Traffic accident	C39A	05	85047	LM2168	07:38	08:20		31353					C39A	05	08:28	C39A	10	08:35
Cheung Chi Leung	Overtime travelling	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]					[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Cheung Chi Leung	Handling lost property – keep for future handling	C43A	08	70524	MK5518	07:00	07:48	07:48	31381					C43A	08	07:55	C43A	08	07:55

Separate display for different directions
Display only trips

Departure time of previous trip prior to the trip involving unavailable staff/bus

Applicable to trip departed from : to :
After advancing the trip involving unavailable staff/bus
☐ Departure time of next trip
Departure time of all trips afterwards
[Execute]

Apply formerly adjusted travelling time:
58M closed with 7 buses on weekdays (Thursday, 23 October)
58M closed with 7 buses on weekdays (Monday, 6 October)

Illustration by Examples – Delay of Arrival + Departure Regulation

→ Modified departure time and location of mid-way departure

ROM System Proposal
Control Center Operation

Date
20-08-2014
Time
99:99 - 99:99
Route | Direction

58M To Leung King
58M To Kwai Fong
58P To Leung King
58P To Kwai Fong
59M To Tuen Mun Ferry Pier
59M To Tsuen Wan

Licence plate

JU3065
NA8693
KL1584
HP4367
HK5581
PB1632

Captain

77425
6528
65138
72161
1834

Bus unavailable

Staff unavailable

Bus unavailable

Bus unavailable

Change departure time

A midway boarding station is added

Hung Kiu

Route Bus	Vehicle duty	Captain carried in	Duty of captain carried in	Captain carried away	Duty of captain carried away	Companion captain	Scheduled departure	Actual departure	In advance Delayed	Scheduled arrival	Arrival at midway station	Stop name	Expected remaining travelling time (minutes)Time	Arrived	Clocked-in	Start point	Midway boarding station	End point	Contact OCC	Frequency
58M	KU5289	58M/	60957	58M/ 13/	Morning	58M/ 06/	Night	14:02	14:02	0:00	14:56			Leung King Estate			Kwai Fong Station			8
58M	KU5289	58M/	60804	58M/ 10/	Morning	58M/ 10/	Morning	14:04						Leung King Estate			Tuen Mun (South) Depot			-
8M	JV7191	58M/				982 960 / 13/	Morning	14:19						Leung King Estate			Kwai Fong Station			17
8M	JT1195	58M/			Morning	58M/ 07/	Morning	14:25						Leung King Estate			Kwai Fong Station			25
8M	JT1195	58M/	75464	58M/ 512/	(Depot)	584 58M/ 514/	Morning	14:34						Tuen Mun (South) Depot			Leung King Estate			-
8M	KC3551	58M/	71506	58M/ 11/	Morning	106 58M/ 12/	Morning	14:34	14:34	0:00	14:54			Leung King Estate			Tuen Mun (South) Depot			-
8M	JT1195	58M/	60009	58M/ 09/	Morning	587 58M/ 05/	Morning	14:56		0:00	15:30			Leung King Estate			Kwai Fong Station			8
8M	JU3065	58M/	87564	58M/ 512/	Morning	586 58M/ 516/	Morning	14:44	14:44	0:00	15:38			Leung King Estate			wai Fong Station			8
8M	XV6817	58M/	60757	58M/ 02/	(Depot)	168 58M/ 07/	Night	15:00			15:52			Leung King Estate			wai Fong Station			15
8M	KJ7491	58M/	53679	58M/101/	Night	579 58M/101/	Night	14:54			15:54			Tuen Mun (South) Depot			uen Mun (South) Depot			-
8M	KP7401	58M/	1180	58M/508/	(Depot)	180 58M/505/	Morning	14:58			15:58			Leung King Estate			Leung King Estate			-
8M	KJ7491	58M/	71495	58M/ 15/	Morning	105 58M/ 08/	Night	15:00			15:34			Tuen Mun (South) Depot			Kwai Fong Station			0
8M	XJ2052	58M/	1180	58M/505/	Morning	180 58M/505/	Morning	15:08			16:02			Leung King Estate			Kwai Fong Station			8
8M	HS1275	58M/	1624	58M/102/	(Depot)	126 58M/102/	Night	15:14			15:14			Leung King Estate			Leung King Estate			-
8M	JV6725	58M/	69551	58M/506/	(Depot)	151 58M/505/	Morning	15:20			15:20			Leung King Estate			Leung King Estate			-
8M	JT1030	58M/	65489	58M/ 05/	Morning	152 58M/104/	Night	15:00			16:00			Tuen Mun (South) Depot			Kwai Fong Station			8
8M			64381	58M/ 15/	Morning	181 58M/ 15/	Morning	15:24			15:44			Leung King Estate			Tuen Mun (South) Depot			-
					(Depot)									Leung King Estate						

Route Bus	Vehicle duty	Captain carried in	Duty of captain carried in	Captain carried away	Duty of captain carried away	Companion captain	Scheduled departure	Actual departure	In advance Delayed	Scheduled arrival	Arrival at midway station	Stop name	Expected remaining travelling time (minutes)Time	Arrived	Clocked-in	Start point	Midway boarding station	End point	Contact OCC	Frequency
					Night		Night							Kwai Fong Station			Leung King Estate			
					Morning		Morning							Kwai Fong Station			Leung King Estate			
					Night		Night							Kwai Fong Station			Leung King Estate			
					Morning		Morning							Kwai Fong Station			Leung King Estate			
					Night		Night							Kwai Fong Station			Leung King Estate			
					Night		Night							Kwai Fong Station			Leung King Estate			
					Night		Night							Kwai Fong Station			Leung King Estate			
					Morning		Morning							Kwai Fong Station			Leung King Estate			
					Morning		Morning							Kwai Fong Station			Leung King Estate			
					Morning		Morning							Kwai Fong Station			Leung King Estate			
					Night		Night							Kwai Fong Station			Leung King Estate			
					Morning		Morning							Kwai Fong Station			Leung King Estate			
					Night		Night							Kwai Fong Station			Leung King Estate			
					Night		Night							Kwai Fong Station			Leung King Estate			
					Morning		Morning							Kwai Fong Station			Leung King Estate			
					Night		Night							Kwai Fong Station			Leung King Estate			
					Morning		Morning							Kwai Fong Station			Leung King Estate			

Bus unavailable

Separate display for different directions
Display only trips

Departure time of previous trip prior to the trip involving unavailable staff/bus

Applicable to trip departed from : to :
After advancing the trip involving unavailable staff/bus
☐ Departure time of next trip
Departure time of all trips afterwards
Execute

Apply formerly adjusted travelling time:
58M closed with 7 buses on weekdays (Thursday, 23 October)
58M closed with 7 buses on weekdays (Monday, 6 October)

Board of Dispatcher

Dispatcher	Type of incident	Route	Running number	Captain number	Bus number	Departure time	Expected arrival time	Actual arrival time	Reference number	Overview of the travelling	Driving schedule	Line chart	Map	Trips affected (bus)	Running number	Departed	Trips affected (bus)	Running number	Departed
Cheung Chi Leung	Staff unavailable to pick up bus	58M	02	60757	JU3065	13:45	14:45		31653					58M	02	14:52	58M	02	14:52
Cheung Chi Leung	Late arrival without reason	05	05	65325	KL6385	08:25	09:20	09:28	31675					--	--	--	--	--	--
Cheung Chi Leung	Bus broken	6D	02	62564	HY754	11:45	12:45		35216					6D	02	15:10	6D	02	15:10
Cheung Chi Leung	Traffic accident	C39A	05	65047	LM2168	07:38	08:20		31353					C39A	05	08:28	C39A	10	08:35
Cheung Chi Leung	Overtime travelling																		
Cheung Chi Leung	Handling lost property – keep for future handling	C43A	08	70524	MK5518	07:00	07:48	07:48	31381					C43A	08	07:55	C43A	08	07:55

➔ When the BC presents the driver card again, information of next departure including departure time and location of mid-way departure will be shown

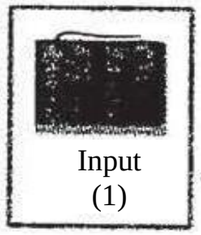
Captain 60757
Completed
58M/02/14:58

Tap the card again

Captain please pay attention to the reminder on the screen

58M departed 15:00 JU3065

(midway to Hung Kiu)



Input (1)

Captain number	Captain name	Route	Running number	Arrival	Bus number
60757	Chan Lai Chi	58M	02	14:56	JU3065

Illustration by Examples –
Delay of Arrival + Departure Regulation

ROM System Proposal
Control Center Operation

➔ After the BC has presented the driver card and obtain the departure information, the incident will be removed

Dispatcher Cheung Chi Leung Status of the incident In process/Unconfirmed/Completed/All

System time: 2014-08-01 14:56:12

Board of Dispatcher

Dispatcher	Type of incident
Cheung Chi Leung	Staff unavailable to pick up bus
Cheung Chi Leung	Late arrival without reason
Cheung Chi Leung	Bus broken
Cheung Chi Leung	Traffic accident
Cheung Chi Leung	Overtime travelling
Cheung Chi Leung	Handling lost property – keep for future handling

The incident will be removed after the captain taps the card

Route	Running number	Captain number	Bus number	Departure time	Expected arrival time	Actual arrival time	Reference number	Overview of the travelling	Driving schedule	Line chart	Map	Trips affected (bus)	Running number	Departed	Trips affected (bus)	Running number	Departed
05	65325	KL6385	08:25	09:20	09:28	31675						--	--	--	--	--	--
[illegible]	62564	HY754	11:45	12:45		35216						6D	02	15:10	6D	02	15:10
05			:38	08:20		31353						C39A	05	08:28	C39A	10	08:35
[illegible]																	
08			:00	07:48	07:48	31381						C43A	08	07:55	C43A	08	07:55

Route	To	Late	Early	-/0/+	Longest delay		Longest ahead of time		Accumulated this month	Cumulative same-day lost trips rate			
					Minutes	Running number	Minutes	Running number	Lost trips rate	0500-1000	1000-1500	1500-2000	2000-0200
2A	Mei Foo			0/3/2	-4	06	+9	L05	1.24%	2/59 (3.51%)	2/59 (3.51%)	2/59 (3.51%)	2/59 (3.51%)
	Lok Wah			2/3/2	-4	06	+2	L05					
6	Mei Foo			2/8/0	-9	03	+5	07	1.11%	1/51 (1.96%)	1/51 (1.96%)	1/51 (1.96%)	1/51 (1.96%)
	Lai Chi Kok			3/6/2	-9	03	+5	07					
6D	Mei Foo			3/3/2	-8	09	+8	02	1.87%	0/39 (0%)	0/39 (0%)	0/39 (0%)	0/39 (0%)
	Ngau Tau Kok			1/5/2	-8	09	+6	02					
6X	Middle Road			0/4/1			+3	03	0	0/8 (0%)	-	-	-
28	Mody Road			1/6/2	-4	05	+6	01	1.34%	2/47 (4.26%)	2/47 (4.26%)	2/47 (4.26%)	2/47 (4.26%)
	Mody Road			2/6/0	-4	05	+6	01					
38A	Mei Foo			0/4/0	-				0.8%	1/8 (0%)	1/8 (0%)	1/8 (0%)	1/8 (0%)
	Riviera Gardens			0/4/0	-								
72	Cheung Sha Wan			3/5/1	-4	05	+11	09	2.55%	1/29 (3.45%)	1/29 (3.45%)	1/29 (3.45%)	1/29 (3.45%)
	Tai Wo			1/3/4	-4	05	+11	09					
86	Mei Foo			2/3/2	-5	02	+7	S02	1.61%	0/36 (0%)	0/36 (0%)	0/36 (0%)	0/36 (0%)
	Wong Nai Tau			1/4/2	-5	02	+7	S02					
6C	Mei Foo			5/6/2	-12	S04	+4	06	2.18%	3/71 (4.23%)	3/71 (4.23%)	3/71 (4.23%)	3/71 (4.23%)
	Kowloon City Ferry Pier			3/10/2	-12	S04	+4	06					
30	Cheung Sha Wan			4/2/2	-6	07	+5	03	1.84%	2/24 (8.33%)	2/24 (8.33%)	2/24 (8.33%)	2/24 (8.33%)
	Allway Garden			2/7/0	-6	07	+5	03					

[Blank Page]

9. Contingency Measures

9.1 Operational Crisis

Operational crisis occurs under the situation such as typhoon when the demand pattern is distorted from normal to a very large extent but the system itself is fully operational.

The contingency measures against operational crisis are:

9.1.1 Departures will not be operated according to the timetable
9.1.2 The system will be switched to the "operational crisis" mode
9.1.3 BC still need to tap card at terminus
9.1.4 The departure time will be obtained from the telematics data
9.1.5 Dispatchers manually prepare a plan to restore the bus operation to adhere back to timetable
9.1.6 Disseminate the arrangement to BC via tap card or phone call

System aids for steps 10.1.5 and 10.1.6 will be provided in phase 2. These provisions must be in place before expanding the scale of ROM after phase 1 roll-out.

9.2 System Failure

ROM will adopt a distributed architecture so that bus captains can still obtain the next departure instructions when they tap card at the terminus PC to report arrival even if the host is encountering problem. The limitation is that information is only base on the schedule timetable plus any modifications made prior to the host failure time. It is so designed to maintain smooth bus operation even when the host is encountering problem.

We plan the contingency measures against system failure as follows:

A. Failure of terminus PC

Phase 1

- Bus captains call back OCC to obtain next departure instructions
- Assign an inspector to monitor at the terminus if necessary
- Issue heat call to replace the terminus PC

Phase 2

- Bus captains obtain next departure instructions via mobile app or phone call
- Assign an inspector to monitor at the terminus if necessary
- Issue heat call to replace the terminus PC

B. Failure of host system

B.1 ROM is not operational at an OCC only

Phase 1

- Print out the working timetable and give instructions to bus captains via phone
- Assign an inspectors to monitor at the termini if necessary
- Input back the updates into ROM from hard-copy after system resumes normal

Phase 2

- The problem OCC can switch to operate in stand-alone mode at the local site or be relocated to operate at a backup site. To be further discussed in phase 2 development

B.2 ROM is not operational at all OCC

Phase 1

Same as B.1

Phase 2

- OCC can switch to operate in stand-alone mode
- Dispatcher gives instructions to bus captains via phone and input changes in stand-alone mode
- Assign an inspector to monitor at the termini if necessary
- Data captured under stand-alone mode will be pushed back to host when it resumes normal

B.3 Telematics and ETA information is not available

- ETA will not be shown
- Buses with out-dated position will be dimmed
- Bus arrivals and departures will not be deduced from telematics data

10. Development Schedule

10.1 Development Schedule and Description

ROM Phase 1 development schedule is proposed as follows:

Task	Schedule
1. Software Development	Sep 2014 – 22nd May 2015
2. Define and Build System Interfaces	Sep 2014 – 31st Jan 2015
3. Pre-UAT Inspection by Users	Dec 2014 – Apr 2015
4. User Training	27th Apr 2015 – 30th Apr 2015
5. UAT at LCK	4th May 2015 – 12th Jun 2015
6. Pilot Run at LCK	Start 15th Jun 2015
7. Pilot Run at Other Depots	TBD

Remarks:

1. For task 3 - Pre-UAT inspection by users, project team will demonstrate the system functions to users periodically to ensure the future system is in line with users' expectation

2. User training will be conducted at OCC

3. At UAT stage, departures are still managed by the terminus supervisors. During pilot run, departure management will be taken up by OCC

Appendix

A.1 Glossary

BPS
Stand for Best Practise Scheduling for bus operation. Generally bus hopping would be employed to a large extent under this practise

Dispatcher
The person who operates at the control centre and takes the current responsibilities of a terminus supervisor

ETA
Estimated time of arrival of the bus at a specific location

Headway
The time interval between successive departures of a route at a terminus

OCC
Operation Control Center

A.2 Severity Score on Incident Board

Incident(s) displayed in incident board shall be in descending order of priority score where the scoring method shall be calculated as followed:

$$\text{Priority Score} = \text{Score } \mathbf{A} + \text{Delay Time} + \text{Score}_{\text{Acknowledgment}}$$

$$\text{Where Score } \mathbf{A} = \text{Score}_{\text{route}} + (\text{Score}_{\text{Demand}} \text{ X } \text{Score}_{\text{Frequency}})$$

Formula of each scoring elements:

Scoring Elements	Formula
Score **A**	➢ A score will be assigned to an incident based on its affected route ➢ $\text{Score}_{\text{route}} + \text{Score}_{\text{Demand}}$ X $\text{Score}_{\text{Frequency}}$
$\text{Score}_{\text{route}}$	➢ Different score will be assigned to different route category o Route category shall classified as user defined and auto detect o User defined route category – corresponding route shall defined and provided by user o Auto detect route category – system shall auto detect corresponding route. (eg. Trip with fixed departure, first or last departure trip, BPS route, and vice versa Non-BPS route)
$\text{Score}_{\text{Demand}}$	➢ A score will be assigned to different range of demand. o Demand of a trip to be referenced by the occupancy of historical data.
$\text{Score}_{\text{Frequency}}$	➢ A score will be assigned to different frequency range. o A score will be assigned to different frequency range.
Delay Time	➢ Expected/Actual Time of Delay of affected Bus/BC/Duty in minutes
$\text{Score}_{\text{Acknowledgment}}$	➢ 0: if incident has been acknowledged by dispatcher ➢ 50,000: if incident has not yet been acknowledged by dispatcher

Priority of Routes

Sequence	Routes	Abbreviation	Score
1	Special routes / Fixed departures / First or last departures	SPE	10,000
2	BPS routes	BPS	0.2
3	Non-BPS routes	N-BPS	0.1

Priority of Demand

Sequence	Demand	Score
1	81-100%	10
2	61-80%	4
3	41-60%	3
4	21-40%	2
5	0-20%	1

Priority of Frequency

Sequence	Frequency	Score
1	> 20 mins	3
2	12 - 20 mins	2
3	≦12 mins	1

Illustration of Effect of Severity Score on Incident Board:

➔ Score A = Route + Demand x Frequency

Route	Demand	Frequency	Score (Route)	Score (Demand)	Score (Frequency)	**Score A**
SPE	81-100%	> 20 mins	10,000	10	3	10,030.0
SPE	81-100%	12 - 20 mins	10,000	10	2	10,020.0
SPE	61-80%	> 20 mins	10,000	4	3	10,012.0
SPE	81-100%	≦12 mins	10,000	10	1	10,010.0
SPE	41-60%	> 20 mins	10,000	3	3	10,009.0
SPE	61-80%	12 - 20 mins	10,000	4	2	10,008.0
SPE	41-60%	12 - 20 mins	10,000	3	2	10,006.0
SPE	21-40%	> 20 mins	10,000	2	3	10,006.0
SPE	61-80%	≦12 mins	10,000	4	1	10,004.0
SPE	21-40%	12 - 20 mins	10,000	2	2	10,004.0
SPE	41-60%	≦12 mins	10,000	3	1	10,003.0
SPE	0-20%	> 20 mins	10,000	1	3	10,003.0
SPE	21-40%	≦12 mins	10,000	2	1	10,002.0
SPE	0-20%	12 - 20 mins	10,000	1	2	10,002.0
SPE	0-20%	≦12 mins	10,000	1	1	10,001.0
BPS	81-100%	> 20 mins	0.2	10	3	30.2
N-BPS	81-100%	> 20 mins	0.1	10	3	30.1
BPS	81-100%	12 - 20 mins	0.2	10	2	20.2
N-BPS	81-100%	12 - 20 mins	0.1	10	2	20.1
BPS	61-80%	> 20 mins	0.2	4	3	12.2
N-BPS	61-80%	> 20 mins	0.1	4	3	12.1
BPS	81-100%	≦12 mins	0.2	10	1	10.2
N-BPS	81-100%	≦12 mins	0.1	10	1	10.1
BPS	41-60%	> 20 mins	0.2	3	3	9.2
N-BPS	41-60%	> 20 mins	0.1	3	3	9.1
BPS	61-80%	12 - 20 mins	0.2	4	2	8.2
N-BPS	61-80%	12 - 20 mins	0.1	4	2	8.1
BPS	41-60%	12 - 20 mins	0.2	3	2	6.2
BPS	21-40%	> 20 mins	0.2	2	3	6.2
N-BPS	41-60%	12 - 20 mins	0.1	3	2	6.1
N-BPS	21-40%	> 20 mins	0.1	2	3	6.1
BPS	61-80%	≦12 mins	0.2	4	1	4.2
BPS	21-40%	12 - 20 mins	0.2	2	2	4.2
N-BPS	61-80%	≦12 mins	0.1	4	1	4.1
N-BPS	21-40%	12 - 20 mins	0.1	2	2	4.1
BPS	41-60%	≦12 mins	0.2	3	1	3.2
BPS	0-20%	> 20 mins	0.2	1	3	3.2
N-BPS	41-60%	≦12 mins	0.1	3	1	3.1
N-BPS	0-20%	> 20 mins	0.1	1	3	3.1
BPS	21-40%	≦12 mins	0.2	2	1	2.2
BPS	0-20%	12 - 20 mins	0.2	1	2	2.2
N-BPS	21-40%	≦12 mins	0.1	2	1	2.1
N-BPS	0-20%	12 - 20 mins	0.1	1	2	2.1
BPS	0-20%	≦12 mins	0.2	1	1	1.2
N-BPS	0-20%	≦12 mins	0.1	1	1	1.1

Severity Score on Incident Board

➔ Final Score = Score **A** + Delay Time + $Score_{Acknowledgment}$

Route	Demand	Frequency	Score A	Delay Time (mins)	Acknowledge	Final Score
SPE	0-20%	≦12 mins	10,001.0	12	No	60,013.00
SPE	21-40%	12 - 20 mins	10,004.0	3	No	60,007.00
N-BPS	61-80%	12 - 20 mins	8.1	19	No	50,027.10
BPS	21-40%	> 20 mins	6.2	12	No	50,018.20
BPS	81-100%	≦12 mins	10.2	1	No	50,011.20
BPS	21-40%	≦12 mins	2.2	6	No	50,008.20
SPE	81-100%	> 20 mins	10,030.0	1	Yes	10,031.00
SPE	81-100%	12 - 20 mins	10,020.0	5	Yes	10,025.00
SPE	61-80%	> 20 mins	10,012.0	5	Yes	10,017.00
SPE	41-60%	> 20 mins	10,009.0	8	Yes	10,017.00
SPE	81-100%	≦12 mins	10,010.0	6	Yes	10,016.00
SPE	41-60%	≦12 mins	10,003.0	10	Yes	10,013.00
SPE	61-80%	12 - 20 mins	10,008.0	2	Yes	10,010.00
SPE	41-60%	12 - 20 mins	10,006.0	4	Yes	10,010.00
SPE	21-40%	> 20 mins	10,006.0	2	Yes	10,008.00
SPE	61-80%	≦12 mins	10,004.0	3	Yes	10,007.00
SPE	0-20%	> 20 mins	10,003.0	1	Yes	10,004.00
SPE	21-40%	≦12 mins	10,002.0	1	Yes	10,003.00
SPE	0-20%	12 - 20 mins	10,002.0	1	Yes	10,003.00
BPS	81-100%	> 20 mins	30.2	20	Yes	50.20
N-BPS	81-100%	> 20 mins	30.1	7	Yes	37.10
BPS	41-60%	12 - 20 mins	6.2	20	Yes	26.20
N-BPS	81-100%	12 - 20 mins	20.1	5	Yes	25.10
BPS	81-100%	12 - 20 mins	20.2	3	Yes	23.20
N-BPS	21-40%	≦12 mins	2.1	21	Yes	23.10
N-BPS	41-60%	≦12 mins	3.1	19	Yes	22.10
N-BPS	61-80%	> 20 mins	12.1	9	Yes	21.10
BPS	61-80%	12 - 20 mins	8.2	11	Yes	19.20
N-BPS	21-40%	12 - 20 mins	4.1	15	Yes	19.10
N-BPS	0-20%	≦12 mins	1.1	18	Yes	19.10
N-BPS	81-100%	≦12 mins	10.1	8	Yes	18.10
BPS	0-20%	> 20 mins	3.2	14	Yes	17.20
BPS	61-80%	> 20 mins	12.2	4	Yes	16.20
BPS	41-60%	> 20 mins	9.2	7	Yes	16.20
N-BPS	41-60%	> 20 mins	9.1	7	Yes	16.10
N-BPS	41-60%	12 - 20 mins	6.1	9	Yes	15.10
BPS	41-60%	≦12 mins	3.2	11	Yes	14.20
BPS	0-20%	≦12 mins	1.2	13	Yes	14.20
N-BPS	0-20%	12 - 20 mins	2.1	10	Yes	12.10
BPS	21-40%	12 - 20 mins	4.2	5	Yes	9.20
BPS	0-20%	12 - 20 mins	2.2	7	Yes	9.20
N-BPS	21-40%	> 20 mins	6.1	3	Yes	9.10
N-BPS	0-20%	> 20 mins	3.1	5	Yes	8.10
N-BPS	61-80%	≦12 mins	4.1	3	Yes	7.10
BPS	61-80%	≦12 mins	4.2	1	Yes	5.20

A.3 Priority Score on Resources Availability

According to user selected duty trip and specific selection criteria (if any), system shall nominate a set of feasible resources (Bus Captains and/or Buses) together with supplementary information for dispatchers making their decision. Nominated resources shall be displayed in descending order of a priority score which shall be defined as followed:

Weighting Scheme:

$Score_{\mathbf{bus}} = Score_{Rotue} \sum (quantifier_{Rotue} \text{ X } weight_{Rotue}) + Score_{Bus} \sum (quantifier_{Bus} \text{ X } weight_{Bus})$

$Score_{\mathbf{BC}} = Score_{Rotue} \sum (quantifier_{Rotue} \text{ X } weight_{Rotue}) + Score_{BC} \sum (quantifier_{BC} \text{ X } weight_{BC})$

User shall define a configurable minimum score for both categories
Shall any calculated score which under the minimum score should not be recommended

Route Constrain	Condition	Quantifier	Weight
High freq. Route	If route is high freq. Route	**1**	Configurable
demand	A score will be assigned to different range of demand. Demand of a trip to be referenced by the occupancy of historical data (remarks: highest demand with highest score)	**Average occupancy %**	Configurable (-ve)
Vicinity	If vicinity less than 1 KM	**1 or 0**	Configurable
Lost trip %	Lost trip % of the day	**Lost trip %**	Configurable (-ve)
Complaint figure	complaint figure within one month	**complaint figure of the route / complaint figure of all route**	Configurable (-ve)

Bus Consideration	Condition	Quantifier	Weight
Idle Bus	Bus without assignment	**1**	Configurable
Bus Route feasibility	Bus type/Route feasibility (all routes within duty)	**Nil**	Must comply
Bus Captain feasibility	Bus type/BC feasibility (all BC who operate this bus duty)	**Nil**	Must comply
Affected Duties	no. of affected duties if Bus pull out of original duty	**no. of affected duties**	Configurable
parking violation	Actual Sign-off location un-matched with scheduled parking location	**Nil**	Warning but allow force update
Order violation	Sign-off location violate order location if any	**Nil**	Warning but allow force update

Bus Captain Consideration	Condition	Quantifier	Weight
Idle Bus Captain	Standby BC	**1**	Configurable
Bus Type feasibility	BC / bus type feasibility (all BC who operate this bus duty)	**Nil**	Must Comply
Bus Route feasibility	BC / bus route feasibility (all BC who operate this bus duty)	**Nil**	Must Comply
Working Guidelines (A - E)	Refer to Appendix A.4 for details	**Nil**	Warning but allow force update
Affected Duties	no. of affected duties if BC pull out of original duty	**Nil**	Warning but allow force update

A.4 Guidelines on Bus Captain – Working Hours, Rest Times and Meal Breaks

Guidelines on Bus Captain
Working Hours, Rest Times and Meal Breaks

(Revised in October 2010)

Guideline A – Bus captains should have a ***rest time***[1] of at least 30 minutes after 6 hours of duty and within that 6-hour duty, they should have ***rest times*** of 20 minutes of which no less than 12 minutes should be within the first 4 hours of duty. ***The time bus captains spend at a terminal point preparing for the next departure and monitoring passenger boarding should not be regarded as rest time.***

Guideline B – Maximum duty (including all ***rest times***) in a ***working*** day should not exceed 14 hours.

Guideline C – Driving duty (i.e. maximum duty less all ***rest times*** each of 30 minutes or more) in a ***working*** day should not exceed 11 hours.

Guideline D – The break between successive working days should not be less than 10 hours.

Guideline E – ***Bus captains working for a duty of not less than 8 hours in a working day should have a meal break. Bus companies should complete the improvement of meal breaks to no less than 45 minutes by the third quarter of 2011, and further improvement to no less than one hour in one year thereafter.***

---

1. *Meal break is also regarded as rest time.*

The Kowloon Motor Bus Co. (1933) Ltd.

MEMORANDUM

To : Distribution **Date : 19 December 2014**

From : ROM Project Leader **Ref. : MM/ADD/14017**
Information Technology Department

Real-time Operations Management System (ROM) Project Status

Development of ROM is underway and the progress is on schedule. Projeat Team will invite management and end users in December to have a look and feel on some core functions so that comments can be collected at early stage to ensure the development is on the right track.

Project Team is finishing the capacity planning report. The report will recommend the infrastructure upgrade which is necessary for running ROM. Procurement will start immediately after presentation of the report to management.

Digital Map sourcing is still in progress. We target to start the tendering process in December.

System interfaces are expected to be ready by end of Feb 2015 except TER where the expected completion date is mid Mar 2015.

Should you have any queries, please feel free to contact me at [redacted]

Thank you for your attention.

Chung-lim Chan

Distribution
- Operations Director
- Head of Traffic Department
- Senior Manager, Operations, Kowloon Bay Depot
- Senior Manager, Operations, Lai Chi Kok Depot
- General Manager, Shatin Depot
- General Manager, Tuen Mun Depot
- General Manager, Long Win Bus Co. Ltd.

The Kowloon Motor Bus Co. (1933) Ltd.

MEMORANDUM

To : Distribution **Date : 14 January 2015**

From : ROM Project Leader **Ref. : MM/ADD/15001**
Information Technology Department

Real-time Operations Management System (ROM) Project Status

Project Team had invited management and users to preview some core functions of ROM in December as as to ensure that the future system is in line with user expectation. Project team will invite users to have 2nd preview by end of this month.

Development of the system and the interfaces is underway. The progress is on schedule.

Last month Project Team finalised the requirements on hardware, software and Digital Map which are necessary for ROM. The procurement process already started early this month.

Should you have any queries, please feel free to contact me at [redacted]

Thank you for your attention.

Chung-lim Chan

Distribution
Operations Director
Head of Traffic Department
Senior Manager, Operations, Kowloon Bay Depot
Senior Manager, Operations, Lai Chi Kok Depot
General Manager, Shatin Depot
General Manager, Tuen Mun Depot
General Manager, Long Win Bus Co. Ltd.

The Kowloon Motor Bus Co. (1933) Ltd.

MEMORANDUM

To : Distribution **Date : 13 February 2015**

From : ROM Project Leader **Ref. : MM/ADD/15002**
Information Technology Department

Real-time Operations Management System (ROM) Project Status

Last month Project Team conducted 2nd preview of ROM core functions with users. The preview helps very much to ensure the future system is in line with user expectation.

Development of the system and the interfaces is underway. The progress is on schedule.

Purchasing Department had issued the purchase orders last month for system hardware, software and Digital Map which are required by ROM. The scheduled delivery date fits with ROM project schedule. The Digital Map is acquired from ESRI and is for corporate use, not limited to ROM project.

Should you have any queries, please feel free to contact me at [redacted].

Thank you for your attention.

Chung-lim Chan

Distribution
Operations Director
Head of Traffic Department
Senior Manager, Operations, Kowloon Bay Depot
Senior Manager, Operations, Lai Chi Kok Depot
General Manager, Shatin Depot
General Manager, Tuen Mun Depot
General Manager, Long Win Bus Co. Ltd.

cc Ms. Alice Wong (ODO Office)
Mr. Terry Lo (Traffic Department)
Mr. Yik-sing Kwok (Kowloon Bay Depot)
Mr. Ken Wong (Lai Chi Kok Depot)
Mr. Chris Lo (Shatin Depot)
Mr. Kelvin Yeung (Tuen Mun Depot)
Mr. Kelvin Mak (Long Win Bus Co. Ltd.)
Ms. Catherine Yip (Head of Information Technology Department)
Mr. Michael Lee (Principal Systems Analyst, Information Technology Department)

The Kowloon Motor Bus Co. (1933) Ltd.

MEMORANDUM

To : Distribution **Date : 25 Marc h 2015**

From : ROM Project Leader **Ref. : MM/ADD/15004**
Information Technology Department

Real-time Operations Management System (ROM) Project Status

Development of the system and the interfaces is underway. As a core developer of our team had been assigned to handle other projects since last month, we have to delay the project delivery date for around one month. The revised schedule will be:

User training for LCK	- 1st week of June 2015
UAT at LCK	- 2nd week of June 2015 to end of July 2015
Pilot run at LCK	- Starting from 1st week of August 2015

The system hardware and software had been delivered to us last month. Set up is in progress.

As for Digital Map, user requirements have been finalised. Vendor is carrying out the customization work. Initail load will take place from May to July 2015.

Project Team will conduct 3rd preview of ROM core functions with users at early April.

Should you have any queries, please feel free to contact me at [redacted].

Thank you for your attention.

Lim

Chung-lim Chan

Distribution
Operations Director
Head of Traffic Department
Senior Manager, Operations, Kowloon Bay Depot
Senior Manager, Operations, Lai Chi Kok Depot
General Manager, Shatin Depot
General Manager, Tuen Mun Depot
Operations & Project Director, Long Win Bus Co. Ltd.

cc Ms. Alice Wong (ODO Office)
Mr. Terry Lo (Traffic Department)
Mr. Yik-sing Kwok (Kowloon Bay Depot)
Mr. Ken Wong (Lai Chi Kok Depot)
Mr. Chris Lo (Shatin Depot)
Mr. Kelvin Yeung (Tuen Mun Depot)
Mr. Kelvin Mak (Long Win Bus Co. Ltd.)
Ms. Catherine Yip (Head of Information Technology Department)
Mr. Michael Lee (Principal Systems Analyst, Information Technology Department)

The Kowloon Motor Bus Co. (1933) Ltd.

MEMORANDUM

To : Distribution **Date : 16 April 2015**

From : ROM Project Leader **Ref. : MM/ADD/15005**
Information Technology Department

Real-time Operations Management System (ROM) Project Status

Development of the system and the interfaces is underway but the participation of 2 members of our team is being significantly reduced to take up ETA support. This is due to the resignation of a core member in the ETA project.

The 3rd round of user demo has been conducted early this month. In addition to the discussion on the core functions, Project Leader also proposed a roll-out plan such that ROM will be delivered in 5 stages starting from early July 2015 and become fully operational by the end of October 2015. Non-critical reports will be delivered after October 2015. This is so proposed to minimize the impact on the project schedule due to our manpower shortage. The detailed roll-out plan is still to be worked out by users and Project Team.

As for Digital Map, 30% of API has been delivered to us. We have emphasised to vendor that all API and the map editing tool must be delivered by the end of April 2015.

Project Team will conduct 4th preview of ROM core functions with users in early May.

Should you have any queries, please feel free to contact me at [redacted]

Thank you for your attention.

Chung-lim Chan

Distribution
Operations Director
Head of Traffic Department
Senior Manager, Operations, Kowloon Bay Depot
Senior Manager, Operations, Lai Chi Kok Depot
General Manager, Shatin Depot
General Manager, Tuen Mun Depot
Operations & Project Director, Long Win Bus Co. Ltd.

cc Ms. Alice Wong (ODO Office)
Mr. Terry Lo (Traffic Department)
Mr. Yik-sing Kwok (Kowloon Bay Depot)
Mr. Ken Wong (Lai Chi Kok Depot)
Mr. Chris Lo (Shatin Depot)
Mr. Kelvin Yeung (Tuen Mun Depot)
Mr. Kelvin Mak (Long Win Bus Co. Ltd.)
Ms. Catherine Yip (Head of Information Technology Department)
Mr. Michael Lee (Principal Systems Analyst, Information Technology Department)

The Kowloon Motor Bus Co. (1933) Ltd.

MEMORANDUM

To : Distribution **Date : 13 May 2015**

From : ROM Project Leader **Ref. : MM/ADD/15006**
Information Technology Department

Real-time Operations Management System (ROM) Project Status

The programming work is near completion except the reports which will be delivered in Q4 this year as mentioned last month. Project Team will carry out an integration test on the system in June before roll out in July.

Last round of user demo will be conducted on 21 May 2015. User acceptance test plan and requirements on driver console will also be discussed that day.

As for Digital Map, API has been delivered in April and is under testing by Project Team. The delivery of the map editing module has been overdue for 2 weeks and is still outstanding. Project Team is liaising with vendor to commit on the delivery of the module.

Should you have any queries, please feel free to contact me at [redacted].

Thank you for your attention.

Chung-lim Chan

Distribution
Operations Director
Head of Operations Development Department
Senior Manager, Operations, Kowloon Bay Depot
Senior Manager, Operations, Lai Chi Kok Depot
General Manager, Shatin Depot
General Manager, Tuen Mun Depot
Operations & Project Director, Long Win Bus Co. Ltd.

cc Ms. Alice Wong (Operations Development Department)
Mr. Terry Lo (Operations Development Department)
Mr. Yik-sing Kwok (Kowloon Bay Depot)

Mr. Ken Wong (Lai Chi Kok Depot)
Mr. Chris Lo (Shatin Depot)
Mr. Kelvin Yeung (Tuen Mun Depot)
Mr. Kelvin Mak (Long Win Bus Co. Ltd.)
Ms. Catherine Yip (Head of Information Technology Department)
Mr. Michael Lee (Principal Systems Analyst, Information Technology Department)

The Kowloon Motor Bus Co. (1933) Ltd.

MEMORANDUM

To :	**Distribution**	**Date :**	**15 June 2015**
From :	**ROM Project Leader** **Information Technology Department**	**Ref. :**	**MM/ADD/15007**

Real-time Operations Management System (ROM) Project Status

Project team is carrying out integration test on the system and expect to complete early next month.

Meanwhile Project Team is also planning for UAT (User Acceptance Test) which should start in 2nd week of July. A meeting had been held on 11 June to discuss with users on the first draft of the UAT plan. Project Team will finalise the UAT plan two weeks before the UAT starts.

As for Digital Map, the delivery of the map editing module is still overdue. Project Team is liaising with ESRI to deliver an interim version sufficient for users to perform initial loading so as to avoid further delay on the website route search project which is responsible by the same vendor.

Should you have any queries, please feel free to contact me at [redacted]

Thank you for your attention.

Chung-lim Chan

Distribution

Operations Director
Head of Operations Development Department
Senior Manager, Operations, Kowloon Bay Depot
Senior Manager, Operations, Lai Chi Kok Depot
General Manager, Shatin Depot
General Manager, Tuen Mun Depot
Operations & Project Director, Long Win Bus Co. Ltd.

cc Ms. Alice Wong (Operations Development Department)
Mr. Terry Lo (Operations Development Department)
Mr. Yik-sing Kwok (Kowloon Bay Depot)
Mr. Ken Wong (Lai Chi Kok Depot)
Mr. Chris Lo (Shatin Depot)
Mr. Kelvin Yeung (Tuen Mun Depot)
Mr. Kelvin Mak (Long Win Bus Co. Ltd.)
Ms. Catherine Yip (Head of Information Technology Department)
Mr. Michael Lee (Principal Systems Analyst, Information Technology Department)

The Kowloon Motor Bus Co. (1933) Ltd.

MEMORANDUM

To : **Distribution** **Date :** **16 July 2015**

From : **ROM Project Leader**
Information Technology Department **Ref. :** **MM/ADD/15008**

Real-time Operations Management System (ROM) Project Status

Project Team had completed integration test of the system and finalised the User Acceptance Test (UAT) plan with users in June.

UAT stage 1 is now in progress at the Operation Control Center (OCC) in Lai Chi Kok Depot as planned. Dispatchers now use TER system to manage the operation, assisted by some ROM fucntions.

Stage 2 operation will start on 20 July 2015 where more ROM functions will be released. Stage 3 will start in 2nd week of August 2015 where dispatchers will start the trial on the departure management tools of ROM which target to replace TER system.

As for Digital Map, an interim version of the map editing tool has been delivered to us in 2nd week of July 2015. Depots will confirm by 17 July whether this version is sufficient for initial loading.

Should you have any queries, please feel free to contact me at [redacted]

Thank you for your attention.

Chung-lim Chan

Distribution
Operations Director
Head of Operations Development Department
Senior Manager, Operations, Kowloon Bay Depot
Senior Manager, Operations, Lai Chi Kok Depot
General Manager, Shatin Depot
General Manager, Tuen Mun Depot
Operations & Project Director, Long Win Bus Co. Ltd.

cc Ms. Alice Wong (Operations Development Department)
Mr. Terry Lo (Operations Development Department)
Mr. Yik-sing Kwok (Kowloon Bay Depot)
Mr. Ken Wong (Lai Chi Kok Depot)
Mr. Chris Lo (Shatin Depot)
Mr. Kelvin Yeung (Tuen Mun Depot)
Mr. Kelvin Mak (Long Win Bus Co. Ltd.)
Ms. Catherine Yip (Head of Information Technology Department)
Mr. Michael Lee (Principal Systems Analyst, Information Technology Department)

The Kowloon Motor Bus Co. (1933) Ltd.

MEMORANDUM

To : Distribution **Date : 17 September 2015**

From : ROM Project Leader **Ref. : MM/ADD/15010**
Information Technology Department

Real-time Operations Management System (ROM) Project Status

User Acceptanc Test (UAT) of ROM is proceeding at stage 3 which is the most critical stage in which we are attempting to replace TER for the selected routes. We are now 2.5 weeks behind in the UAT schedule owing to the amount of bug fixes and fine tunings which is quite higher than that we expected. Project Team will strive to prevent further delay in the UAT schedule.

As for Digital Map, ESRI has assisted to draw the routing lines for KMB so as to catch up the delay. The drawing is very near completion (over 99%) and the lines drawn are being verified by Depots. The map editor and Apllication Program Interfaces (API) will be delivered by the end of this month.

Should you have any queries, please feel free to contact me at [redacted].

Thank you for your attention.

Lim

Chung-lim Chan

Distribution
Operations Director
Head of Operations Development Department
Senior Manager, Operations, Kowloon Bay Depot
Senior Manager, Operations, Lai Chi Kok Depot
General Manager, Shatin Depot
General Manager, Tuen Mun Depot
Operations & Project Director, Long Win Bus Co. Ltd.

cc Ms. Alice Wong (Operations Development Department)
Mr. Terry Lo (Operations Development Department)
Mr. Yik-sing Kwok (Kowloon Bay Depot)
Mr. Ken Wong (Lai Chi Kok Depot)

Mr. Chris Lo (Shatin Depot)
Mr. Kelvin Yeung (Tuen Mun Depot)
Mr. Kelvin Mak (Long Win Bus Co. Ltd.)
Ms. Catherine Yip (Head of Information Technology Department)

The Kowloon Motor Bus Co. (1933) Ltd.

MEMORANDUM

To :	**Distribution**	**Date :**	**26 October 2015**
From :	**ROM Project Leader** **Information Technology Department**	**Ref. :**	**MM/ADD/15011**

Real-time Operations Management System (ROM) Project Status

Project Team and LCK Depot have concluded that ROM System is sufficient to replace TER System in departure management for 3 routes: 5A, 108 and 37M. Review meeting will be conducted on 30 Oct to discuss on adding more routes in the UAT to meet the target of having 12 routes managed by ROM by the end of this year.

As requested by ODD, ROM will be shortly deployed to 5 termini to assist terminus supervisors in departure management.

As for digital map, the initial loading of spatial data has been completed early this month. The map editor and Application Program Interfaces (API) are near completion.

Should you have any queries, please feel free to contact me at [redacted]

Thank you for your attention.

Chung-lim Chan

Distribution
Operations Director
Head of Operations Development Department
Senior Manager, Operations, Kowloon Bay Depot
Senior Manager, Operations, Lai Chi Kok Depot
General Manager, Shatin Depot
General Manager, Tuen Mun Depot
Operations & Project Director, Long Win Bus Co. Ltd.

cc Ms. Alice Wong (Operations Development Department)
Mr. Yik-sing Kwok (Kowloon Bay Depot)
Mr. Ken Wong (Lai Chi Kok Depot)
Mr. Chris Lo (Shatin Depot)

Mr. Kelvin Yeung (Tuen Mun Depot)
Mr. Kelvin Mak (Long Win Bus Co. Ltd.)
Ms. Catherine Yip (Head of Information Technology Department)

The Kowloon Motor Bus Co. (1933) Ltd.

MEMORANDUM

To : Distribution **Date : 17 December 2015**

From : ROM Project Leader **Ref. : MM/ADD/15012**
Information Technology Department

Real-time Operations Management System (ROM) Project Status

The bus tracking function of ROM had been released to Customer Service Department in November for Octopus overcharge claim investigation. This month we have enabled 7 termini to view the Line Diagram of ROM so that terminus supervisors can also gain the benefits of ROM.

In addition, a total of 11 tablets will be ready within this month to run the Mapview function of ROM. They will be delivered to inspectors as a mobile aid in monitoring the daily operation. It will help especially when service disruption occurs.

Route 44 had been added to the testing sample in November. Dispatchers are already accustomed to the new system and ready to abandon the old TER system shortly in the management of the selected routes.

As for digital map, the map editor is still pending. Project Team has given final warning to ESRI that penalty action will be taken in case of further delay.

Should you have any queries, please feel free to contact me at [redacted]

Thank you for your attention.

Chung-lim Chan

Distribution

Deputy Operations Director (Mr. Leung Kin Wang)
Head of Operations Development Department
Senior Manager, Operations, Kowloon Bay Depot
Senior Manager, Operations, Lai Chi Kok Depot
General Manager, Shatin Depot
General Manager, Tuen Mun Depot
Operations & Project Director, Long Win Bus Co. Ltd.

cc Ms. Alice Wong (Operations Development Department)
Mr. Terry Lo (Kowloon Bay Depot)
Mr. Ken Wong (Lai Chi Kok Depot)
Mr. Chris Lo (Shatin Depot)
Mr. Kelvin Yeung (Tuen Mun Depot)
Mr. Kelvin Mak (Long Win Bus Co. Ltd.)

From: Louisa Lam ODD
Sent: Wednesday, February 03, 2016 11:16 AM
To: Chung Lim Chan IT; Tak Hung Shum IT
Cc: Kin Wang Leung SER; Jonathan Chiu IT
Subject: Addition of Line Chart, Map and Bus Tracking Functions to TER System

Dear both,

The Line Chart function of Real-time Operations Management System has been deployed to 7 termini since December 2015 and we received very positive feedback from the frontline staff. We concluded that the following benefits are gained from the Line Chart function:

- Better resources utilization – terminus supervisors obtain a better picture of the overall resources and are able to regulate the departures with optimal headway
- Better lost trip control – better knowledge of the overall resources also facilitate terminus supervisors to compensate the lost trip of a time zone by adjusting the departure time

Apart from the Line Chart, it is anticipated that the Map View, Small Map and Bus Tracking functions of the System can further facilitate terminus supervisors' work, as these functions provide real-time bus position and traffic information to help terminus supervisors make the service adjustment decisions. We therefore request the Line Chart function, together with the above-said functions if feasible, be deployed to as many attended TER sites as possible and as soon as practicable.

Please advise the deployment plan for our corresponding briefing and training arrangement. Many thanks for your prompt arrangement.

Regards,
Louisa Lam
Senior Manager, Transport
[redacted]

From: Louisa Lam ODD
Sent: Thursday, February 25, 2016 1:54 PM
To: Chung Lim Chan IT
Subject: FW: Addition of Line Chart, Map and Bus Tracking Functions to TER System

Dear Lim,

Owing to change of scope of the Real-time Operations Management System, we would like to rename the said project to "Fleet Management Information System (FMI)" with immediate effect. Please arrange for the necessary formalities if you have no objection to such renaming.

Regards,
Louisa Lam
Senior Manager, Transport
[redacted]

From: Chung Lim Chan IT
Sent: Thursday, February 25, 2016 2:29 PM
To: Grace Woo IT; Joey Fong IT; Jason Leung IT
Cc: Jonathan Chiu IT; Ivan Lam IT
Subject: FW: Addition of Line Chart, Map and Bus Tracking Functions to TER System

Dear Team

Please arrange to rename the application 'ROM' to 'FMI' as suggested by ODD. Please see attached emails for detail.

Please release the captioned functions to termini after renaming. For map view, please roll out progressively to observe the bandwidth consumption.

Thanks and regards
Lim

TO : Head of Information Technology Department
FROM : Shatin Depot - Operations
DATE : 23/10/2017

Application for Project Production Facilities

Project ID: FMI

1. ☒ Add the following LAN a/cs in accessing the project:

(please also specify employee number of LAN a/c owner)	Endorsed By** (Head of HR Department)
Chak Fung LI (23276)	

** *Remark : Required for Human Resources Management / Payroll projects that relate to personal data privacy.*

2. ☐ Remove the following LAN a/cs from accessing the project:

3. ☐ Assign the Master Password Holder to:

Name:	Title:	Endorsed By (Head of Department)

Project Co-ordinator

For IT internal use only

Project Team

Create/Remove the above accounts in DB Server:_____ with access to database_____

☐ Create/Increase database size with/to_____ Mb on DATA segment and_____ Mb on LOG segment.

☐ Prepare Project Local Deployment (WAL)

☐ Other Requirments:_____

☐ Reset the application password expiry date as___/___/___ (*dd/mm/yy*) (to be performed by project team)

** *Remark : Production and development Databases will be identical in size and structure, unless otherwise specified.*

Effective from_____ _____ _____
Lead Project Manager Date

TSD & Project Team

☐ created production group ☐ created project database ☐ created NAL App. Obj. ☐ increased DB size
☐ added user to production group ☐ added DB Server logins ☐ removed NAL App. Obj. ☐ associated DB server logins to DB
☐ deleted user from production group ☐ removed DB Server logins ☐ assigned master password holder

others:_____

_____ _____
Date Handled By

Form No. IT-F036(06/16)

TO : Head of Information Technology Department
FROM : Shatin Depot - Operations
DATE : 15/9/2017

Application for Project Production Facilities

Project ID: FMI

1. ☒ Add the following LAN a/cs in accessing the project:

(please also specify employee number of LAN a/c owner)	Endorsed By** (Head of HR Department)
Ho Lam Shing (51676)	

** *Remark : Required for Human Resources Management / Payroll projects that relate to personal data privacy.*

2. ☐ Remove the following LAN a/cs from accessing the project:

3. ☐ Assign the Master Password Holder to:

Name:	Title:	Endorsed By (Head of Department)

Project Co-ordinator

For IT internal use only

Project Team

Create/Remove the above accounts in DB Server:_____ with access to database_____

☐ Create/Increase database size with/to_____ Mb on DATA segment and_____ Mb on LOG segment.

☐ Prepare Project Local Deployment (WAL)

☐ Other Requirments:_____

☐ Reset the application password expiry date as___/___/___ (*dd/mm/yy*) (to be performed by project team)

** *Remark : Production and development Databases will be identical in size and structure, unless otherwise specified.*

Effective from_____ _____ _____

Lead Project Manager Date

TSD & Project Team

☐ created production group ☐ created project database ☐ created NAL App. Obj. ☐ increased DB size
☐ added user to production group ☐ added DB Server logins ☐ removed NAL App. Obj. ☐ associated DB server logins to DB
☐ deleted user from production group ☐ removed DB Server logins ☐ assigned master password holder

others:_____

_____ _____

Date Handled By

TO : Head of Information Technology Department
FROM : Shatin Depot, Operations
DATE : 25 August 2017

Application for Project Production Facilities

Project ID: FMI

1. ☒ Add the following LAN a/cs in accessing the project:

(please also specify employee number of LAN a/c owner)	Endorsed By** (Head of HR Department)
51664 Wong Yin Wai (ATS) 51652 Cheng Ka Wing (ATS)	

** *Remark : Required for Human Resources Management / Payroll projects that relate to personal data privacy.*

2. ☐ Remove the following LAN a/cs from accessing the project:

3. ☐ Assign the Master Password Holder to:

Name:	Title:	Endorsed By (Head of Department)

Project Co-ordinator

For IT internal use only

Project Team

Create/Remove the above accounts in DB Server:_____ with access to database_____

☐ Create/Increase database size with/to_____ Mb on DATA segment and_____ Mb on LOG segment.

☐ Prepare Project Local Deployment (WAL)

☐ Other Requirments:_____

☐ Reset the application password expiry date as___/___/___ (*dd/mm/yy*) (to be performed by project team)

** *Remark : Production and development Databases will be identical in size and structure, unless otherwise specified.*

Effective from_____ _____ _____
Lead Project Manager Date

TSD & Project Team

☐ created production group ☐ created project database ☐ created NAL App. Obj. ☐ increased DB size
☐ added user to production group ☐ added DB Server logins ☐ removed NAL App. Obj. ☐ associated DB server logins to DB
☐ deleted user from production group ☐ removed DB Server logins ☐ assigned master password holder

others:_____

_____ _____
Date Handled By

Form No. IT-F036(06/16)

Name	Position at such material time
James Louey CD	Commercial Director
Evan Auyang DMD	Deputy Managing Director
Susanna Wong HR	Head of Human Resources Department
Wendy Siu TR	Head of Traffic Department
Ho Chi Man HD	Head of Depots
Kin Keung Woo TM	General Manager of Tuen Mun Depot
Siu Hung Fung ST	General Manager of Shatin Depot
Andrew Kwan LCK	Senior Manager of Operations, Lai Chi Kok Depot
Andrew Kwan ST	Senior Manager of Operations, Shatin Depot
Catherine Yip IT	Senior Manager of Information Technology Department
Kwok Ho Yeung KB	Senior Manager of Operations, Kowloon Bay Depot
Louisa Lam ODD	Senior Manager of Transport Section, Operations Development Department
Ivan Au Pro	Senior Manager of Procurement Department
Chun Kin Chan SER	Senior Engineer of Engineering Office
Jason Leung IT	Senior programmer Analyst of Information Technology Department
Chung Lim Chan IT	Principal Systems Analyst of Information Technology Department
Joey Fong IT	System Analyst of Information Technology Department
Grace Woo IT	Systems Analyst of Information Technology Department
Alice Wong ODO	Assistant Manager of Projects Section, Operation Director Office
Jeff Poon LWB	Assistant Manager of Transport Operations Section, Long Win Bus
Jeff Poon LCK	Assistant Manager of Traffic Operations, Lai Chi Kok Depot
Terry Lo TR	Assistant Manager of Operations Projects Section, Traffic Department
Virginia Lam PUR	Assistant Manager of Purchasing Department
Winnie SF Ho CFM	Assistant Manager of Administration Section, Commercial and Facilities Management Department
Kelvin Yeung PUR	Assistant officer of Purchasing Department

九龍巴士（一九三三）有限公司
THE KOWLOON MOTOR BUS CO. (1933) LTD.

乘客查詢熱線 Passenger Enquiry Hotline 2745 4466

內部通告

嚴禁擅自加裝、改動或干擾設備

公司一向嚴禁員工擅自在巴士上加裝、改動或干擾任何設備或儀器。車長如發現請通知款待處，並填寫硃車報告以便跟進。站長、車務督察及維修組同事會進行突擊抽查，如有發現違規者，將予以紀律處分。

特此通告

全體車長及有關員工留意及執行

此通告張貼日期
由 5-3-2015
至 20-3-2015
後 [redacted] / 棄置

九龍巴士（一九三三）有限公司
副車務總監
5 MAR 2015

Internal Notice

Prohibition to Install, Modify or Interfere with Equipment without Authorization

The company has always prohibited employees to arbitrarily install, modify or interfere with any equipment on the bus. If the bus captain finds out the same, please inform the hospitality and fill in the complaint report for follow up. Terminus Supervisor, Inspector and colleagues from Maintenance Team will conduct spot-checks, if any violation is found, disciplinary action will be taken.

Hereby notify the above

For the attention and implementation of all bus captains and relevant staff

The Kowloon Motor Bus Co. (1933) Ltd
Vice Operations Director
5 MAR 2015

Posting date of this notice
From 5-3-2015
To 20-3-2015
After [redacted]/dispose

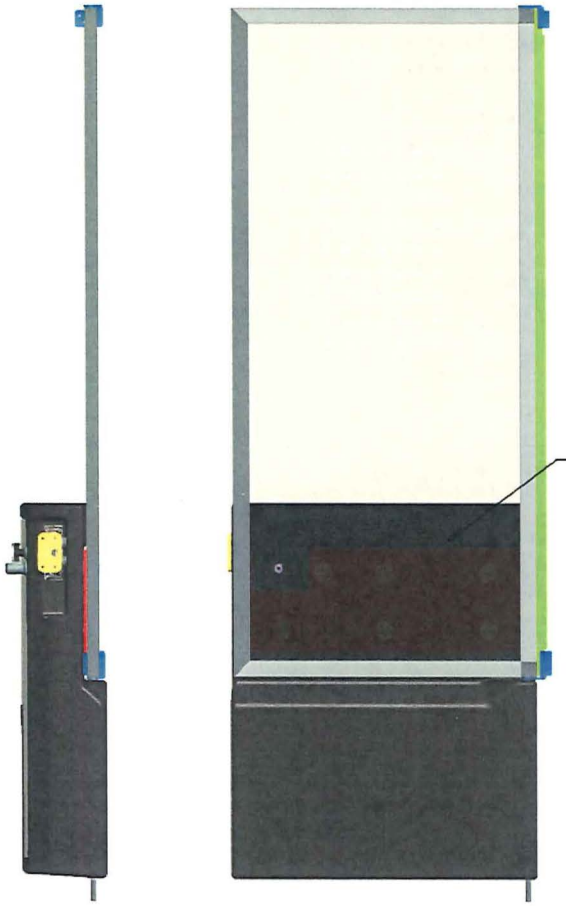
MATERIAL SPECIFICATION
SEE INDIVIDUAL PARTS

Rev.	Revised By	Revised Date	Description	CHANGE
3	James Schofield	27-Feb-18	GROUND M13-05111 REPLACED WITH M13-07200	ECC-26373

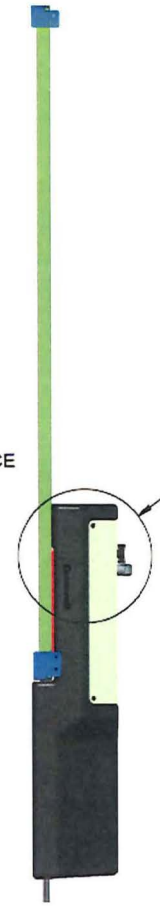
NOTE - REMOVE EXTERIOR HANDLE FROM DEL-00713 AND REPLACE WITH SHORT T KEY M13-03136

ASSEMBLY BILL OF MATERIAL TABLE

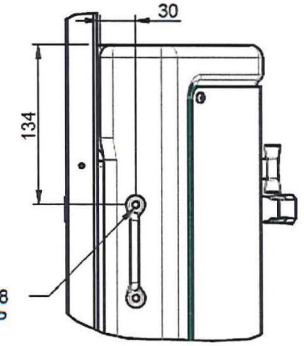
INDEX	PART No.	COMPONENT TYPE	DESCRIPTION	QTY.
1	13M-05117	PART	ACCESS PANEL GROUNDS	6
2	13M-05118	PART	CHECK STRAP GROUND	1
3	15B-01038	PART	CAB DOOR BLACKOUT	1
4	DEL-00713	ASSEMBLY	CAB DOOR LOCK	1
5	DEM-00122	PART	CHECK STRAP STAPLE	2
6	DEM-00276	PART	CAB DOOR CHECKS TRAP 46MM x 134MM BLACK	1
7	FBM-02516	PART	M6x30mm BIG HEAD	6
8	FBM-03019	PART	M5x16 BUTTON SOCKET	6
9	FGG-00263	ASSEMBLY	STEALTH CAB DOOR	1
10	M13-02573	PART	B9TL SURO IV CAB DOOR DOWNWARD PIVOT PIN	1
11	M13-02574	PART	B9TL EURO IV CAB DOOR UPWARD PIVOT PIN	1
12	M13-03136	PART	T-KEY BUSH	1
13	M13-04716	PART	Cab door lock keeper plate	1
14	M13-05015	PART	BOX SECTION	1
15	M13-05501	PART	CAB DOOR LOCK MOUNT	1
16	M13-05503	PART	CAB DOOR KEEPER	1
17	M13-07200	PART	A/FRAME INNER GROUND	1
18	M14-02052	PART	EU4 CAB DOOR BOTTOM PIVOT PIN	1
19	PLA-00640	PART	B9TL EURO IV CAB DOOR BOTTOM BUSHING	1
20	PLA-00641	PART	B9TL EURO IV CAB DOOR MID/UPPER BUSHING	3
21	RSM-00139	PART	BLACK RUBBER BUFFER	2
22	SCG-00035	ASSEMBLY	CAB DOOR ASSAULT	1
23	SCG-00050	ASSEMBLY	TOP HINGE BRKT ASSEM	1
24	SCG-00051	PART	MID HINGE BRACKET	1
25	SCG-00152	PART	ACCESS PANEL	1
26	SCG-00195	PART	STAB GUARD	1
27	SCG-00595	PART	ASSAULT FRAME ATT	1



BLACKOUT FULL BOTTOM PIECE OF PERSPEX



SEE DETAIL F



POSITION GROUND 13M-05118 IN RELATION TO CHECK STRAP

DETAIL F
SCALE 0.250

UNLESS STAMPED "CONTROLLED DOCUMENT" USE FOR REFERENCE PURPOSES ONLY - IF IN DOUBT, LATEST REVISION IS AVAILABLE FROM GLOVEBOX

WRIGHT
BALLYMENA, NORTHERN IRELAND

UNLESS OTHERWISE STATED ALL TOLERANCES TO COMPLY WITH THE RELEVANT SECTION OF WIS-40 (LATEST REVISION)
MUST COMPLY WITH WMR-2040
ALL DIMENSIONS ARE IN mm
ALL BURRS AND SHARP EDGES TO BE REMOVED
DRAWN SCALE DO NOT SCALE OFF DRAWING
0.100
THIRD ANGLE PROJECTION

MATERIAL NAME (as per WIS-40 latest issue): SEE INDIVIDUAL PARTS
CONCEPT CODE: ***
ESTIMATED MASS: 1437227 896.854 Kg
STATUS: Released

DRAWN BY: James Schofield
DRAWING CHECKED BY: Jonny Murphy
DESCRIPTION: STEALTH CAB DOOR FIXED SHORT TKEY
PART NUMBER: W13-05086

DRAWN DATE: 27-Feb-18
DRAWING CHECKED DATE: 27-Feb-18

DOCUMENT TYPE: ASSEMBLY
FINISH/SURFACE TREATMENT: NATURAL

SHEET NO.: 1
OF: 4
SOURCING: MAKE
REVISION: 3

FORMAT NAME: TEMPLATE DRAWING A3

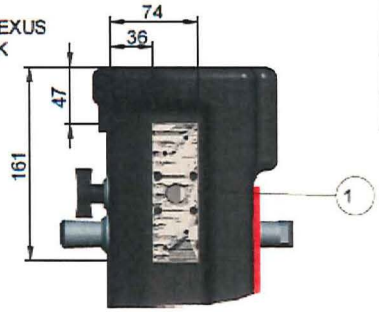
SEE INDIVIDUAL PARTS

Rev.	Revised By	Revised Date	Description	CHANGE
3	James Schofield	27-Feb-18	GROUND M13-05111 REPLACED WITH M13-07200	ECO-26373

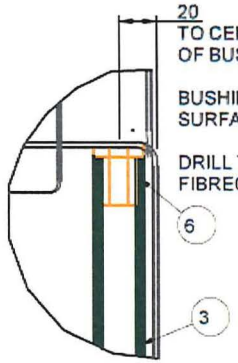
ASSEMBLY BILL OF MATERIAL TABLE

INDEX	PART No.	COMPONENT TYPE	DESCRIPTION	QTY
1	DEL-00713	ASSEMBLY	CAB DOOR LOCK	1
2	FGG-00263	ASSEMBLY	STEALTH CAB DOOR	1
3	M13-05015	PART	BOX SECTION	1
4	M13-05501	PART	CAB DOOR LOCK MOUNT	1
5	PLA-00640	PART	B9TL EURO IV CAB DOOR BOTTOM BUSHING	1
6	PLA-00641	PART .	B9TL EURO IV CAB DOOR MID/UPPER BUSHING	1
7	SCG-00595	PART	ASSAULT FRAME ATT	1

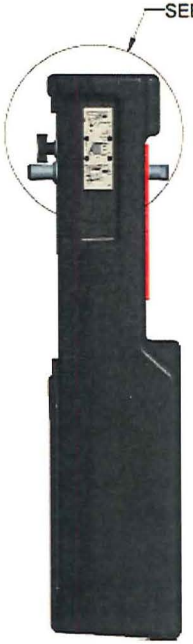
SCALE 0.200

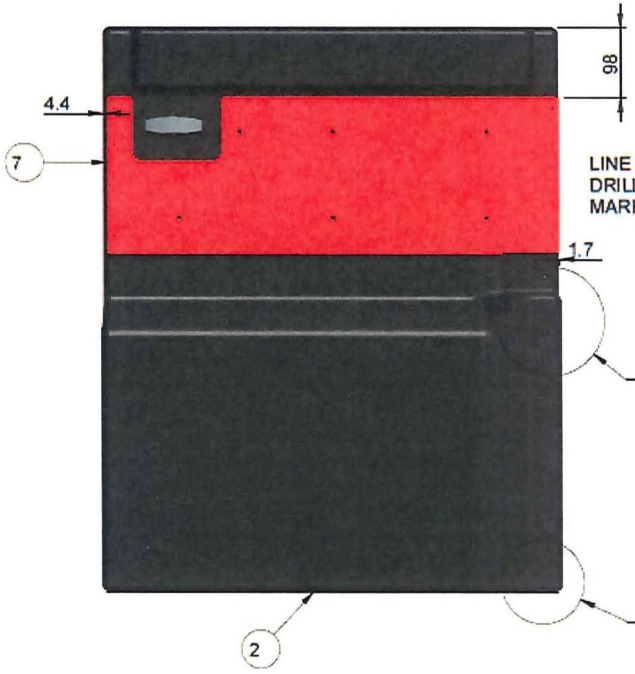


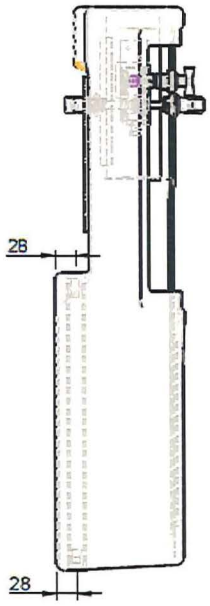
DETAIL D
SCALE 0.250



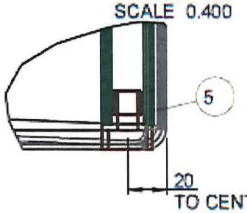
DETAIL A
SCALE 0.400







DETAIL B
SCALE 0.400



UNLESS STAMPED "CONTROLLED DOCUMENT" USE FOR REFERENCE PURPOSES ONLY - IF IN DOUBT, LATEST REVISION IS AVAILABLE FROM GLOVEBOX

WRIGHT
BALLYMENA, NORTHERN IRELAND

UNLESS OTHERWISE STATED ALL TOLERANCES TO COMPLY WITH THE RELEVANT SECTION OF WES-00 (LATEST REVISION)	SEE INDIVIDUAL PARTS	James Schofield	27-Feb-18	ASSEMBLY	2
MUST COMPLY WITH WMP-2040	***	Jonny Murphy	27-Feb-18	NATURAL	4
ALL DIMENSIONS ARE IN mm	1437227898.854 Kg	STEALTH CAB DOOR FIXED SHORT TKEY			MAKE
ALL BURRS AND SHARP EDGES TO BE REMOVED	Released	W13-05086			3
0.150					

SEE INDIVIDUAL PARTS

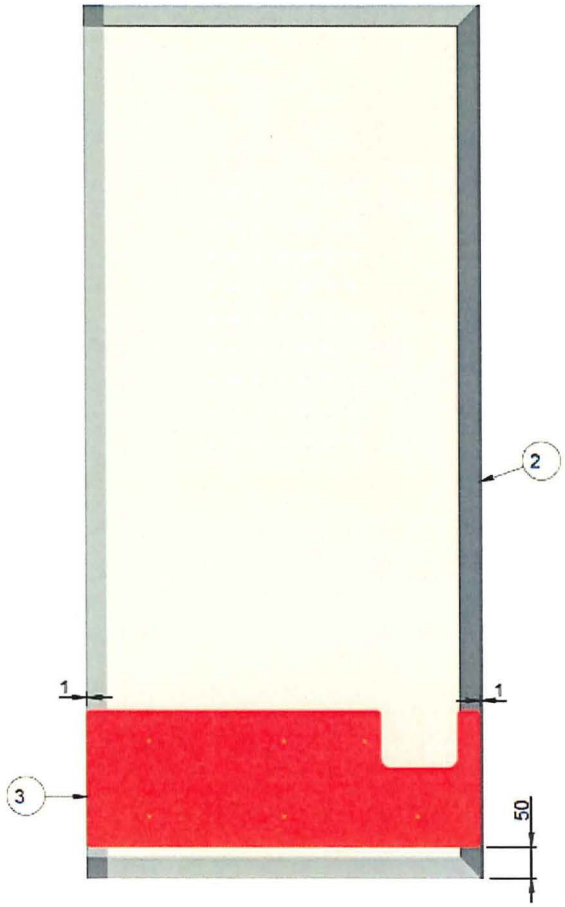
ATTACH BIGHEADS FBM-02514 USING FPA-00014(3/16 DOME HEAD POP) TO 6 CENTRE HOLES BEFORE ATTACHING TO ASSAULT FRAME WITH MONOBOLTS.

Rev.	Revised By	Revised Date	Description	CHANGE
3	James Schofield	27-Feb-18	GROUND M13-05111 REPLACED WITH M13-07200	ECC-26373

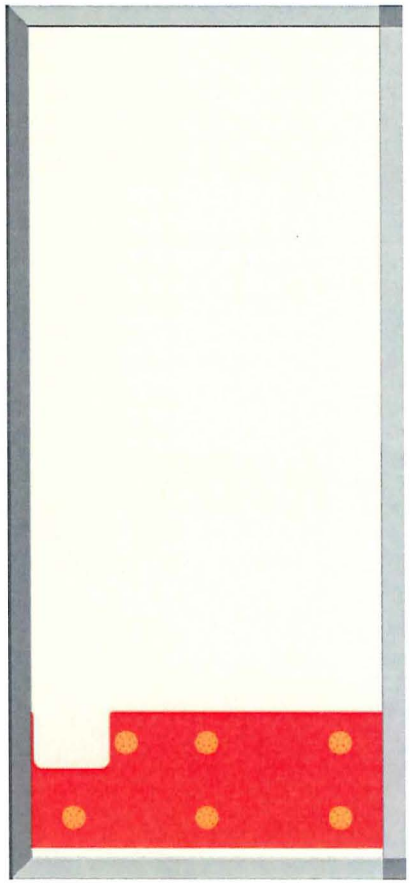
ASSEMBLY BILL OF MATERIAL TABLE

INDEX	PART No.	COMPONENT TYPE	DESCRIPTION	QTY.
1	FBM-02516	PART	M6x30mm BIG HEAD	6
2	SCG-00035	ASSEMBLY	CAB DOOR ASSAULT	1
3	SCG-00595	PART	ASSAULT FRAME ATT	1

REAR VIEW



FRONT VIEW



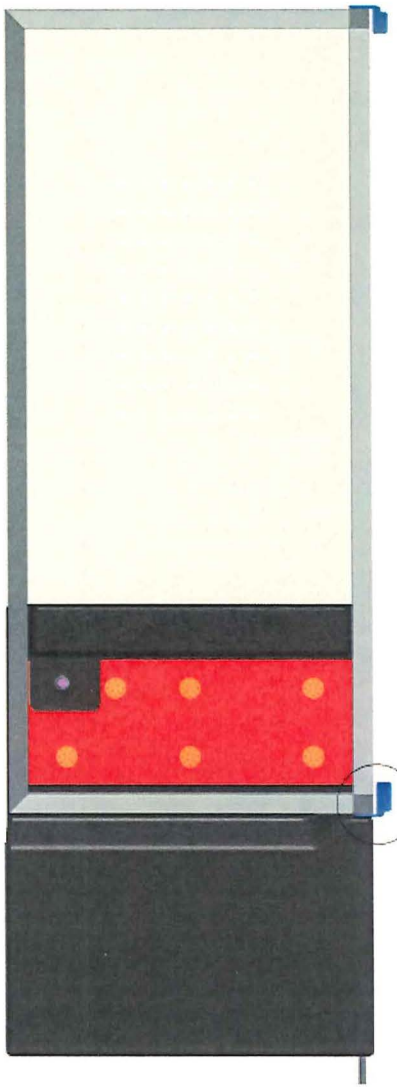
UNLESS STAMPED "CONTROLLED DOCUMENT" USE FOR REFERENCE PURPOSES ONLY - IF IN DOUBT, LATEST REVISION IS AVAILABLE FROM GLOVEBOX

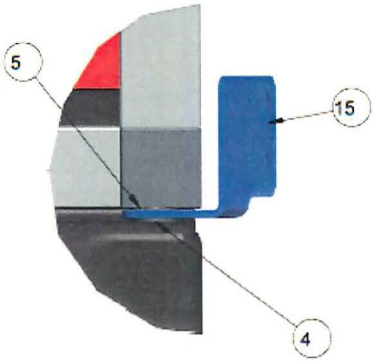
WRIGHT BALLYMENA NORTHERN IRELAND	UNLESS OTHERWISE STATED ALL TOLERANCES TO COMPLY WITH THE RELEVANT SECTION OF WES.40 (LATEST REVISION)	SEE INDIVIDUAL PARTS	James Schofield	27-Feb-18	ASSEMBLY	3
	MUST COMPLY WITH WMP 2040	***	Noel Fullerton	27-Feb-18	NATURAL	4
ALL BURRS AND SHARP EDGES TO BE REMOVED	ALL DIMENSIONS ARE IN mm	1437227896.854 Kg	STEALTH CAB DOOR FIXED SHORT TKEY			MAKE
0.130		Released	W13-05086			3

Rev.	Revised By	Revised Date	Description	CHANGE
3	James Schofield	27-Feb-18	GROUND M13-05111 REPLACED WITH M13-07200	EOC-26373

ASSEMBLY BILL OF MATERIAL TABLE

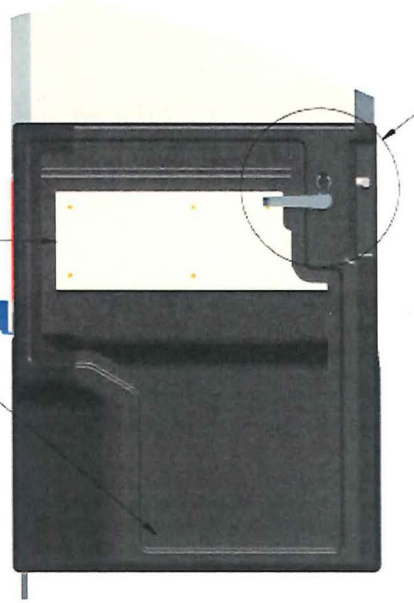
INDEX	PART No.	COMPONENT TYPE	DESCRIPTION	QTY.
1	DEL-00713	ASSEMBLY	CAB DOOR LOCK	1
2	FBM-02516	PART	M6x30mm BIG HEAD	6
3	FGG-00263	ASSEMBLY	STEALTH CAB DOOR	1
4	M13-02573	PART	B9TL SURO IV CAB DOOR DOWNWARD PIVOT PIN	1
5	M13-02574	PART	B9TL EURO IV CAB DOOR UPWARD PIVOT PIN	1
6	M13-03136	PART	T-KEY BUSH	1
7	M13-05015	PART	BOX SECTION	1
8	M13-05501	PART	CAB DOOR LOCK MOUNT	1
9	M13-07200	PART	A/FRAME INNER GROUND	1
10	M14-02052	PART	EU4 CAB DOOR BOTTOM PIVOT PIN	1
11	PLA-00640	PART	B9TL EURO IV CAB DOOR BOTTOM BUSHING	1
12	PLA-00641	PART	B9TL EURO IV CAB DOOR MID/UPPER BUSHING	3
13	SCG-00035	ASSEMBLY	CAB DOOR ASSAULT	1
14	SCG-00050	ASSEMBLY	TOP HINGE BRKT ASSEM	1
15	SCG-00051	PART	MID HINGE BRACKET	1
16	SCG-00595	PART	ASSAULT FRAME ATT	1



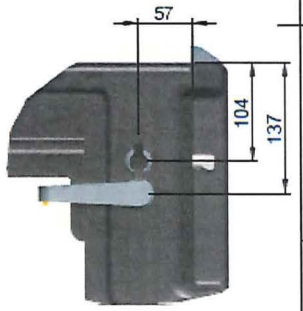


DETAIL C
SCALE 0.500
FIT PIVOT PINS AND MID BRKT
AS ABOVE BEFORE ATTACHING
ASSAULT FRAME

FIX ASSAULT FRAME THROUGH
CAB DOOR USING DRILLED HOLES.
USE M13-05111 AND M6 NUTS
INSIDE CAB DOOR TO FIX BIGHEADS



POSITION 13M-05117 INSIDE
THE CAB DOOR IN RELATION TO
ALL 6 ACCESS PANEL HOLES



DETAIL E
SCALE 0.200

UNLESS STAMPED "CONTROLLED DOCUMENT" USE FOR REFERENCE PURPOSES ONLY - IF IN DOUBT, LATEST REVISION IS AVAILABLE FROM GLOVERBOX

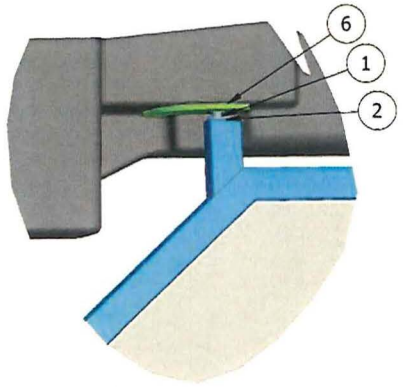
WRIGHT BALLYMENA, NORTHERN IRELAND	UNLESS OTHERWISE STATED ALL TOLERANCES TO COMPLY WITH THE RELEVANT SECTION OF BS 8888 LATEST REVISION	SEE INDIVIDUAL PARTS	James Schofield	27-Feb-18	ASSEMBLY 4
	MUST COMPLY WITH WARP 2040	***	Jonny Murphy	27-Feb-18	NATURAL 4
ALL BURRS AND SHARP EDGES TO BE REMOVED	ALL DIMENSIONS ARE IN mm	14372.27898 8.54 Kg	STEALTH CAB DOOR FIXED SHORT T KEY		MAKE
0.120		Released	W13-05086		3

MATERIAL SPECIFICATION
SEE INDIVIDUAL PARTS

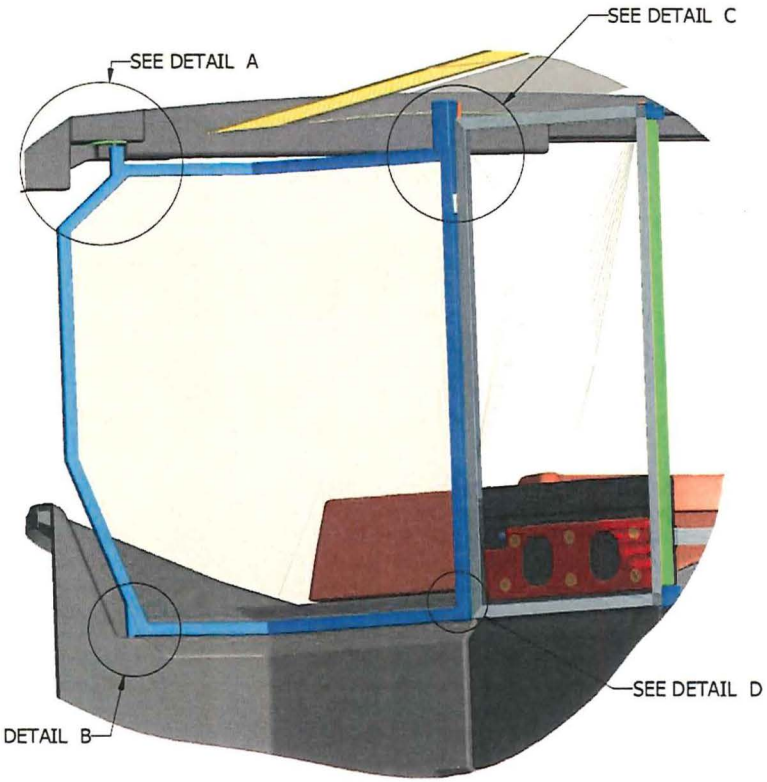
Rev.	Revised By	Revised Date	Description	CHANGE
1	Alastair McCosh	30-Apr-15	INITIALLY DRAWN	AM413-451

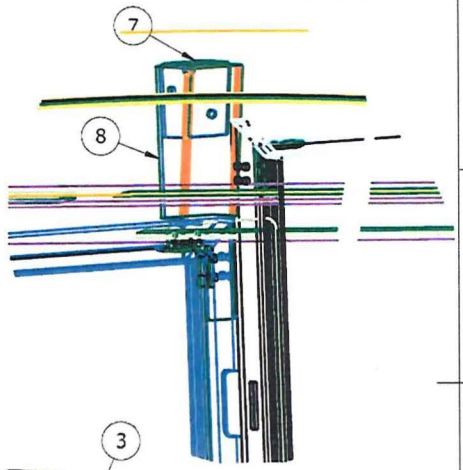
ASSEMBLY BILL OF MATERIAL TABLE

INDEX	PART No.	COMPONENT TYPE	DESCRIPTION	QTY.
1	M13-02573	PART	B9TL SURO IV CAB DOOR DOWNWARD PIVOT PIN	2
2	PLA-01062	PART	PIVOT BUSHING	2
3	SCG-00027	PART	LOWER FIXING	1
4	SCG-00142	ASSEMBLY	FWARD ASSAULT SCREEN	1
5	SCG-00150	PART	F/SCREEN STAB GUARD	1
6	SCG-00155	PART	TOP MOUNT PLATE	1
7	SCG-00164	PART	ASSAULT SCREEN BRKT	1
8	SCG-00165	ASSEMBLY	SCREEN TOP BRKT	1

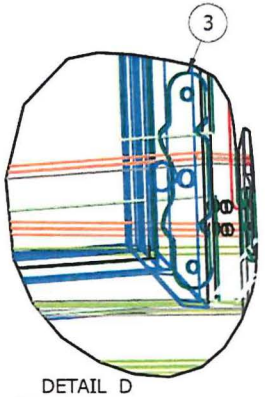


DETAIL A
SCALE 0.200

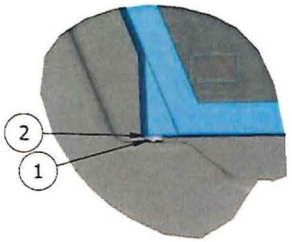




DETAIL C
SCALE 0.250



DETAIL D
SCALE 0.400



DETAIL B
SCALE 0.200

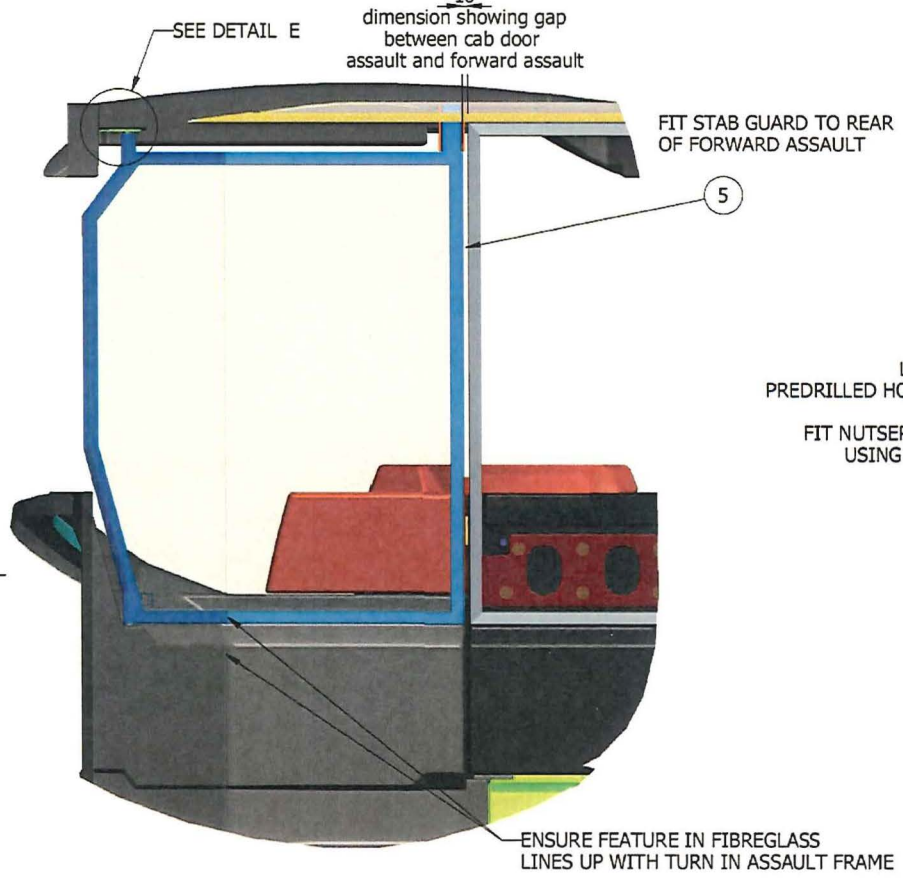
UNLESS STAMPED "CONTROLLED DOCUMENT" USE FOR REFERENCE PURPOSES ONLY - IF IN DOUBT, LATEST REVISION IS AVAILABLE FROM GLOVEBOX

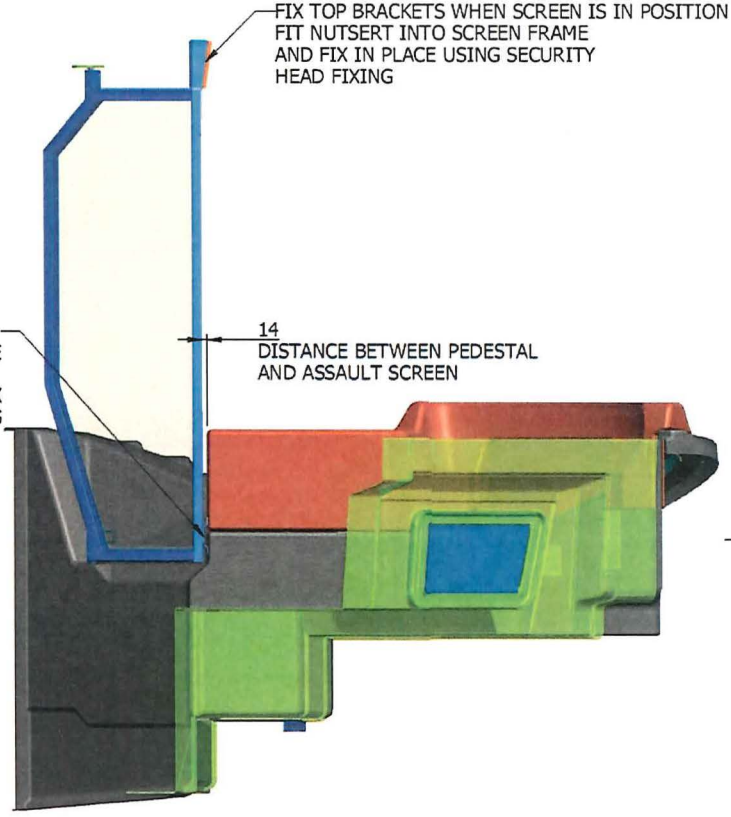
WRIGHT
BALLYMENA, NORTHERN IRELAND

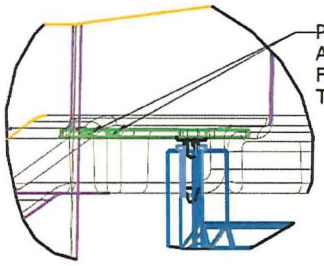
UNLESS OTHERWISE STATED ALL TOLERANCES TO COMPLY WITH THE RELEVANT SECTION OF WES-80 (LATEST REVISION)	MATERIAL NAME (see grid ref. 'A1' for full spec.) SEE INDIVIDUAL PARTS	DRAWN BY Alastair McCosh	DRAWN DATE 30-Apr-15	DOCUMENT TYPE ASSEMBLY	SHEET NO 1
MUST COMPLY WITH WMP-2040	COMMODITY CODE ***	DRAWING CHECKED BY Noel Fullerton	DRAWING CHECKED DATE 30-Oct-14	FINISH/SURFACE TREATMENT NATURAL	OF 2
ALL DIMENSIONS ARE IN mm	ESTIMATED MASS 1452439846.574 Kg	DESCRIPTION FORWARD ASSAULT ASM			SOURCING BUY
ALL BURRS AND SHARP EDGES TO BE REMOVED	THIS DRAWING IS THE PROPERTY OF THE WRIGHT GROUP LTD. DO NOT COPY/REPRODUCE WITHOUT PRIOR WRITTEN PERMISSION OF THE COMPANY. ELECTRONIC DATA FILES AVAILABLE ON REQUEST	STATUS Draft	PART NUMBER W13-03606_DRW		REVISION 1
DRAWN SCALE (DO NOT SCALE OFF DRAWING) 0.075	3rd ANGLE PROJECTION				

MATERIAL SPECIFICATION
SEE INDIVIDUAL PARTS

Rev.	Revised By	Revised Date	Description	CHANGE
1	Alastair McCosh	30-Apr-15	INITIALLY DRAWN	AM413-451







DETAIL E
SCALE 0.300

UNLESS STAMPED "CONTROLLED DOCUMENT" USE FOR REFERENCE PURPOSES ONLY - IF IN DOUBT, LATEST REVISION IS AVAILABLE FROM GLOVEBOX

WRIGHT BALLYMENA, NORTHERN IRELAND	UNLESS OTHERWISE STATED ALL TOLERANCES TO COMPLY WITH THE RELEVANT SECTION OF WES-80 (LATEST REVISION)	MATERIAL NAME (see grid ref. 'A1' for full spec.) SEE INDIVIDUAL PARTS	DRAWN BY Alastair McCosh	DRAWN DATE 30-Apr-15	DOCUMENT TYPE ASSEMBLY	SHEET NO. 2
	MUST COMPLY WITH WMP-2040	COMMODITY CODE ***	DRAWING CHECKED BY Noel Fullerton	DRAWING CHECKED DATE 30-Oct-14	FINISH/SURFACE TREATMENT NATURAL	OF 2
	ALL DIMENSIONS ARE IN mm	ESTIMATED MASS 1452439846.574 Kg	DESCRIPTION FORWARD ASSAULT ASM			SOURCING BUY
ALL BURRS AND SHARP EDGES TO BE REMOVED	THE DRAWING IS THE PROPERTY OF THE WRIGHT GROUP LTD. DO NOT COPY/REPRODUCE WITHOUT PRIOR WRITTEN AGREEMENT OF THE COMPANY. ELECTRONIC DATA FILES AVAILABLE ON REQUEST					
DRAWN SCALE (DO NOT SCALE OFF DRAWING) 0.075	3rd ANGLE PROJECTION	STATUS Draft	PART NUMBER W13-03606_DRW			REVISION 1

ALEXANDER DENNIS

Alexander Dennis (Asia Pacific) Limited
Units A-B, 9/Floor
YHC Tower
1 Sheung Yuet Road
Kowloon Bay
Kowloon, Hong Kong

Tel: +(852) 2757 8057
Fax: +(852) 2757 7766

Kowloon Motor Bus Co. (1933) Ltd
9 Po Lun St,
Lai Chi Kok,
Kowloon
Hong Kong

22nd November 2017

For the attention of Kenneth Lo

Dear Kenneth

Driver Protection Screen

I am writing to confirm that, we, Alexander Dennis Ltd (ADL), have no objection regarding KMB to source and retrofit buses with a screen to protect the driver from passengers.

The affected vehicle types are listed below:

- Enviro500
- Enviro500 Turbo
- Enviro500 Turbo facelift

Please note that [ADL] are not able to accept any liability claim related to the fitment or operation of this screen. For any further questions, please do not hesitate to contact us.

Yours sincerely

Alexander Dennis (Asia Pacific) Limited

Andy Boulton
Customer Development & Technical Director

VOLVO BUSES

The Kowloon Motor Bus Co (1933) Ltd
No. 9 Po Lun Street
Lai Chi Kok, Kowloon
Hong Kong

(By mail)

Date	Telephone indialling	Telefax	Our reference
12 Jun 2018	+852 2827 1688	+852 2219 7088	L0612/18057/JL

For the attention of Kenneth Lo

Dear Kenneth,

Retrofit of Driver Assault Screen to KMB Buses

I am writing to confirm that, we, Volvo Bus Hong Kong Ltd, have no objection regarding KMB to source and retrofit buses with a screen to protect the driver against assault from passengers.

The affected vehicle types are listed below:

- Volvo B9TL MKII and MKI
- Volvo Super Olympian

Yours faithfully,
Volvo Bus Hong Kong Ltd

Julia Lu
Key Account manager

CC S/Admin

九龍巴士（一九三三）有限公司
九巴服務 日日進步 THE KOWLOON MOTOR BUS CO. (1933) LTD.

27 October 2017

Our Ref : ENG/011/17/TAPLAN

Commissioner for Transport
Transport Department
Bus Engineering Division
Room 3402, Immigration Tower
7 Gloucester Road
Wan Chai
Hong Kong

Attn: Danny Chan

Dear Sir,

Change of Particulars
---The retrofit of Assault Screen Panel for all KMB/LW buses---

We intend to retrofit an Assault Screen Panel to the driver cab door for all KMB/LW buses to provide added protection to our bus captains against assault and other physical violence by passengers.

Please find attached the appearance and construction of the Assault Screen Panel. The Assault Screen Panel is made of 10mm transparent polycarbonate plate mounted directly to the structural members of the driver cab door with the provision of a bump stop bracket at the upper portion of the assault screen panel against rattling.

The transparent Assault Screen Panel does not cause both visual and physical obstructions to the driver monitor and control of the vehicle.

For your consideration and approval please.

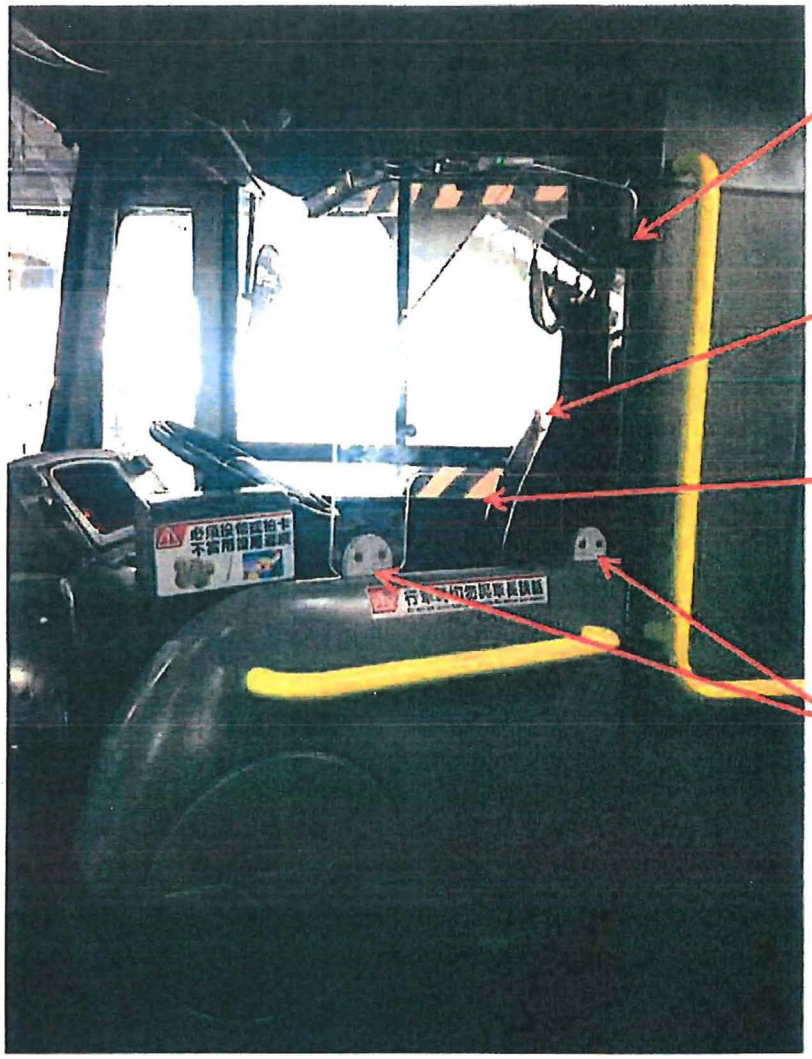
Regards,

So Hing Shun

香港九龍荔枝角寶輪街九號 9 Po Lun Street, Lai Chi Kok, Kowloon, Hong Kong
電話 Tel : (852) 2786 8888 傳真 Fax : (852) 2745 0300 網址 Website : www.kmb.hk

Anti-assault partition screen installation on driver cab door

Below are photos showing partition screen on the Volvo B9TL Wright Body 12m. This general design can apply to all the major bus types

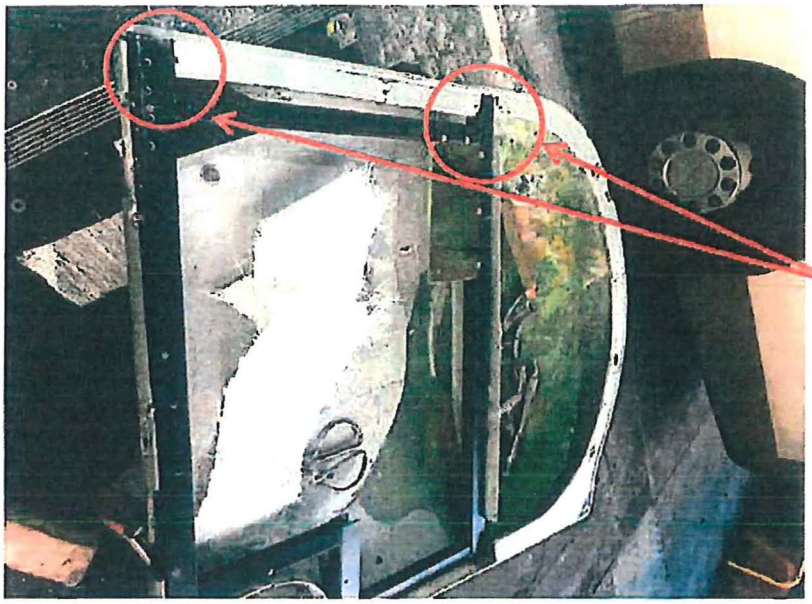


Additional bracket to further support the partition avoid rattling

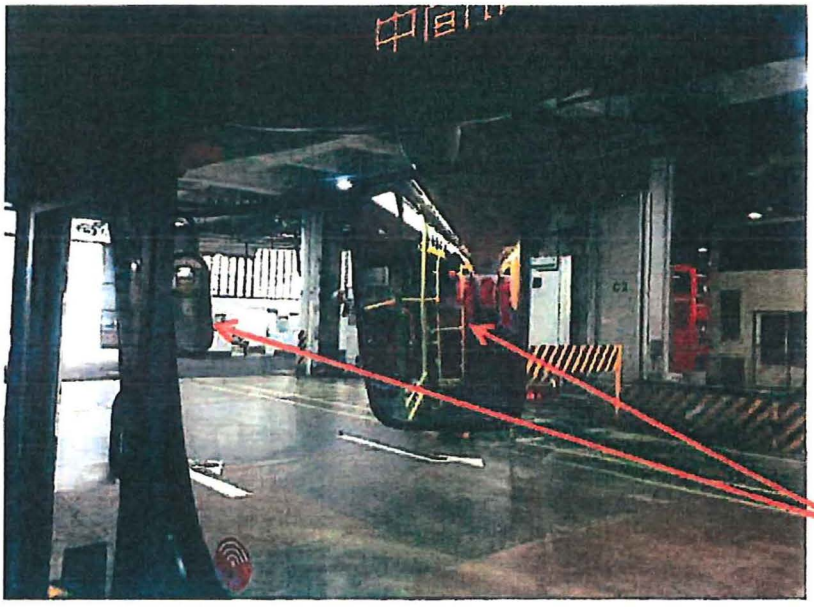
10mm thick Polycarbonate clear partition is used.

An access slot is provided for the driver to gain access for opening of the cab's door.

The partition is held by the bottom two brackets and secured by screws. These two brackets are mounted directly to the frame structure of the driver cab door.



The partition bottom mounting brackets are secured directly to the driver cab door structure



The partition does not block the view to N/S mirror and the rear mirror

運輸署
Transport Department

Our Ref. : (248) in TD TKW 50/203/2
Your Ref. : ENG/011/17/TAPLAN
Tel. : 2189 7082
Fax. : 2764 1517

12 June 2018

The Kowloon Motor Bus Co. (1933) Ltd.
9 Po Lun Street,
Lai Chi Kok,
Kowloon,
Hong Kong
Attn.: Mr. So Hing Shun

Dear Mr. So,

Re: Retrofit buses with Driver Seat Assault Screen Panel

I refer to your letter dated 27 October 2017, regarding the installation of Assault Screen Panel to the driver cab door – in the KMB / LW fleet and your subsequent information.

Based on your submitted drawings and detailed information on the installation, along with the inspection of the sample bus carried out by our vehicle examiner, we have no objection to your application.

This approval applies to the following vehicle models of ADL buses only:

- Enviro 500
- Enviro 500 Turbo
- Enviro 500 Turbo facelift

Please note that this approval may be revoked, if the vehicle and/or passenger safety is found to be affected by installation.

Yours faithfully,

(C. K. CHUI)
for Commissioner for Transport

香港灣仔告士打道七號入境事務大樓四十一樓
41st floor Immigration Tower 7 Gloucester Road Wan Chai Hong Kong
電話 Tel (852) 2804 2600 傳真 Fax (852) 2824 0433
網址 Web Site: http://www.td.gov.hk

九龍巴士（一九三三）有限公司
九巴服務 日日進步 THE KOWLOON MOTOR BUS CO. (1933) LTD.

CC S/Admin

21 June 2018

Our Ref : ENG/006/18/TAPLAN

Commissioner for Transport
Transport Department
Bus Engineering Division
Room 3402, Immigration Tower
7 Gloucester Road
Wan Chai
Hong Kong

Attn: Danny Chan

Dear Sir,

Change of Particulars
The retrofit of Assault Screen Panel on Volvo buses

We intend to retrofit an Assault Screen Panel to the driver cab door for all KMB/LW buses to provide added protection to our bus captains against assault and other physical violence by passengers.

Attached please find the supporting letter from Volvo regarding to this retrofit exercise for your information. The transparent Assault Screen Panel does not cause both visual and physical obstructions to the driver monitor and control of the vehicles.

For your consideration and approval please.

Regards,

For

Principal Engineer

運輸署
Transport Department

Our Ref. : (254) in TD TKW 50/203/2
Your Ref. : ENG/006/18/TAPLAN
Tel. : 2189 7082
Fax. : 2764 1517

25 June 2018

The Kowloon Motor Bus Co. (1933) Ltd.
9 Po Lun Street,
Lai Chi Kok,
Kowloon,
Hong Kong
Attn.: Mr. Ivan Ho

Dear Mr. Ho,

Re: Retrofit buses with Driver Seat Assault Screen Panel

I refer to your letter dated 21 June 2018, regarding the installation of Assault Screen Panel to the driver cab door – in the KMB / LW fleet and your subsequent information.

Based on your submitted drawings and detailed information on the installation, along with the inspection of the sample bus carried out by our vehicle examiner, we have no objection to your application.

This approval applies to the following vehicle models of Volvo buses only:

- B9TL MKI
- B9TL MKII
- Super Olympian

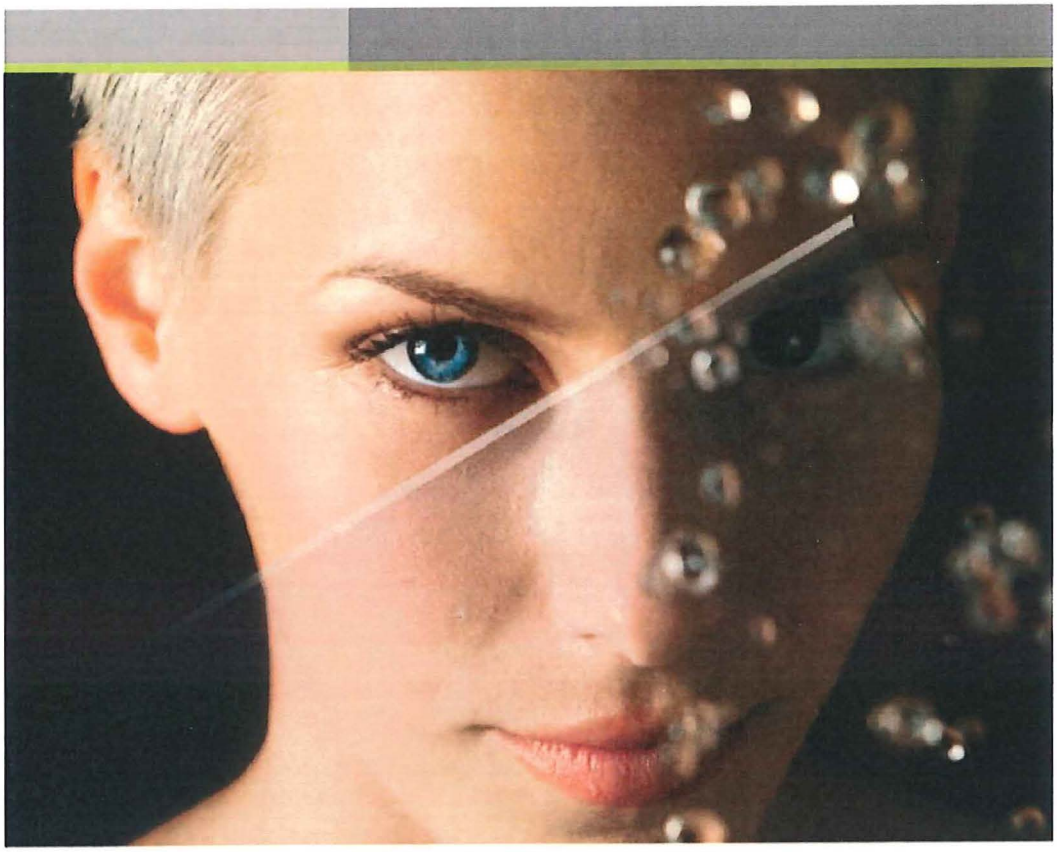
Please note that this approval may be revoked, if the vehicle and/or passenger safety is found to be affected by installation.

Yours faithfully,

(C. K. CHUI)
for Commissioner for Transport

香港灣仔告士打道七號入境事務大樓四十一樓
41st floor Immigration Tower 7 Gloucester Road Wan Chai Hong Kong
電話 Tel (852) 2804 2600 傳真 Fax (852) 2824 0433
網址 Web Site: http://www.td.gov.hk

PALRAM



PALCLEAR®

Flat Transparent PVC Sheet

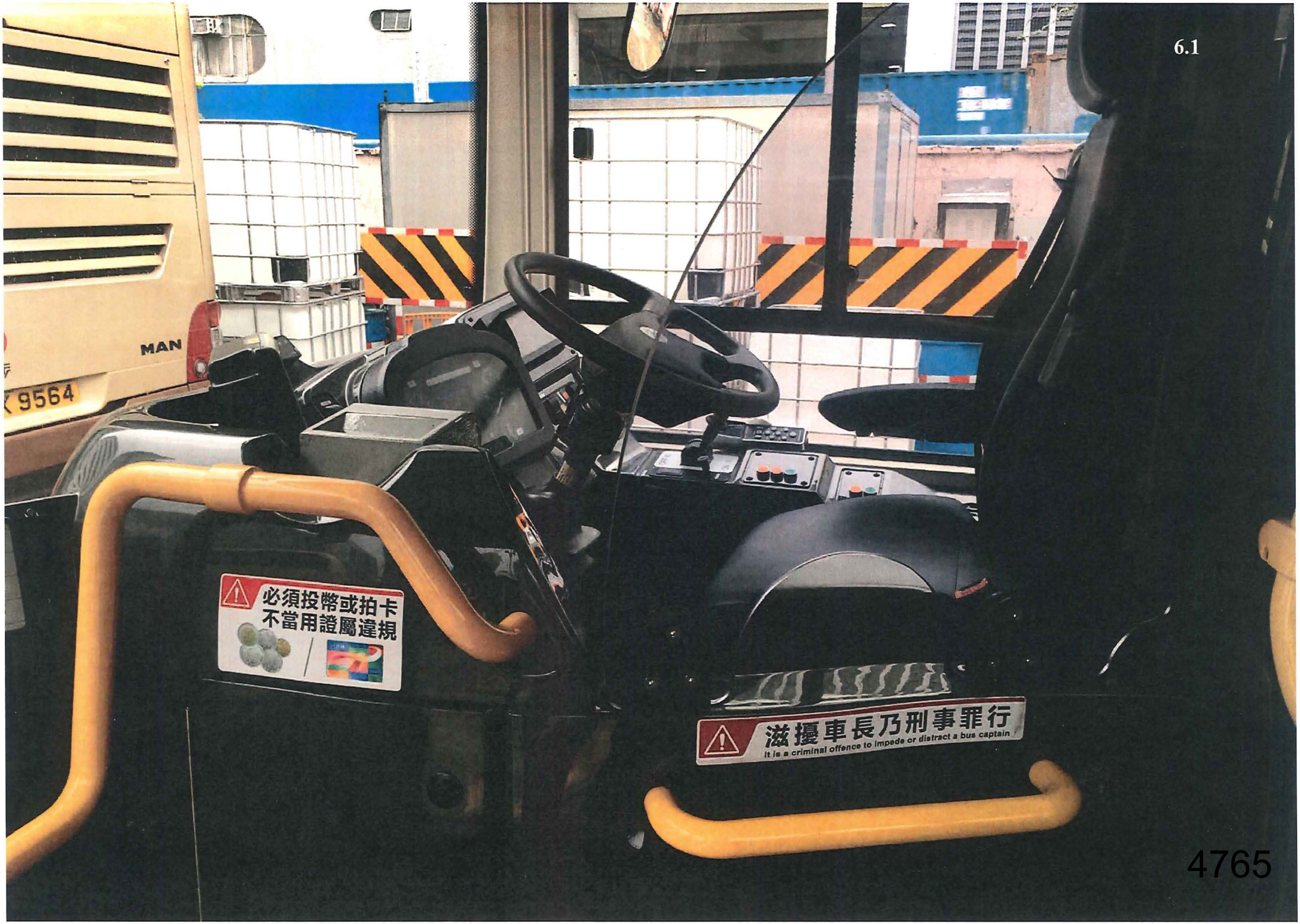
Build On.

ABOUT PALRAM

Since 1963, Palram has led the world in the manufacturing of extruded thermoplastic sheets and panel systems. Established at kibbutz Ramat Yohanan in Israel, Palram has grown from its small-town origins into a multinational conglomerate with branches on six continents. From humble beginnings, we have established ourselves as an industry leader with over half a century of growth.

To see a list of Palram Global Operations

4764


MAN
9564
必須投幣或拍卡
不當用證屬違規
滋擾車長乃刑事罪行
It is a criminal offence to impede or distract a bus captain


滋擾車長乃刑事罪行
It is a criminal offence to impede or distract a bus captain

[Attached is a CD with video]

Note: for the video attached, the translation of the announcement broadcasted in Chinese on the bus after the warning sound is:
"*the bus captain has been harassed; this bus will now stop service; would passengers please be careful of your own safety*".

The Chinese message showing after the first message of "*WELCOME ONBOARD*" is simply "*WELCOME ONBOARD ON A KMB BUS*" in Chinese, followed by three messages in Chinese showing the announcement mentioned above in written Chinese characters.

九巴服務 日日進步

九龍巴士(一九三三)有限公司
THE KOWLOON MOTOR BUS CO. (1933) LTD.

內部通告

報站器新增乘客通告廣播項目

由 2017 年 5 月 26 日起，報站器新增［車長受到滋擾］之乘客通告於編號 10 的位置，原有［機件故障］通告則更改至通告編號 18。如有需要，車長可利用附設之線控器播放有關通告。

乘客通告內容如下：

通告編號	廣播項目
01	請緊握扶手
02	請行入車廂
03	請勿超越黃線
04	上層不准站立　梯間不准站立
05	保持車廂清潔
06	----------
07	照顧小孩長者
08	請勿飲食
09	嚴禁吸煙
10	車長受到滋擾　巴士服務中斷　［新增］
11	交通改道
12	請用上層座位
13	請摺好嬰兒車
14	你也可以讓座
15	看管隨身行李
16	為穩定班次　巴士稍作停留
17	請讓輪椅乘客　優先使用輪椅區
18	機件故障　暫停行車

敬請各車長留意。

此通告張貼日期
由 26-5-2017
至 8-6-2017
後 [redacted] / 棄置

THE KOWLOON MOTOR BUS CO. (1933) LTD.
OPERATIONS DIRECTOR'S OFFICE
車務總監辦公室
九龍巴士(一九三三)有限公司

25 MAY 2017

6.4

九龍巴士(一九三三)有限公司
THE KOWLOON MOTOR BUS CO. (1933) LTD.

Internal Notice

New Passenger Notice Announcement Items of Stop Reporting System

From 26 May 2017, passenger notice of [bus captain being impeded or distracted] will be added as notice number 10, and the original [mechanical broke down] notice will be moved to notice number 18. If necessary, the bus captain can use the attached line controller to broadcast the relevant notice.

The contents of the passenger notice are as follows:

Notice number	Announcement Items
01	Please hold the handrail tightly
02	Please move inside bus compartment
03	Please stand behind the yellow line
04	Do not stand on the stairway Do not stand on the upper deck
05	Keep the bus clean
06	----------
07	Take care of children and the elderly
08	Do not eat or drink
09	Smoking is prohibited
10	Bus captain being impeded or distracted bus service is interrupted [newly added]
11	Diversity due to traffic
12	Please use the seats on the upper deck
13	Please fold up the baby pram
14	You can offer the seat as well
15	Take care of personal belongings
16	The bus will stay shortly to stabilize bus frequency

17	Please give wheelchair passengers priority to use wheelchair area
18	Mechanical broke down bus is suspended

For the attention of all bus captains.

Posting date of this notice
From 26-5-2017
To 8-6-2017
After [redacted]/dispose

THE KOWLOON MOTOR BUS CO. (1933) LTD
OPERATIONS DIRECTOR'S OFFICE
車務總監辦公室
九龍巴士一九三三有限公司
25 MAY 2017

個人性格特徵分析

編號 C 0123

請填寫　　日期 _____

姓名 _____

公司 _____

目前職位 _____

地址 _____

電話 _____

指示：

以下每一行有四個形容字句，在細讀第一行的字句後，請作出第一時間的直覺反應。當你覺得某一字句的特徵最貼徵的形容你時，請在該字句的右邊方格內填上"√"字，如果你覺得某一字句的特徵與你最不相符時，請在該字句的右方格內填上"X"字，在每四個字句中必須有一個"√"和一個"X"字。右邊例子裡的人士，在四個形容字句中，其本人最具有獨創性，而最缺乏溫柔。請用原子筆用力填寫。

例子：

溫柔 ☒	有說服力 ☐	謙虛 ☐	有獨創性 ☑

1	溫柔 ☐	有說服力 ☐	謙虛 ☐	有獨創性 ☐
2	有吸引力 ☐	盡職 ☐	倔強 ☐	親切可人 ☐
3	易被控制 ☐	大膽 ☐	忠誠 ☐	有魅力 ☐
4	開明 ☐	熱心腸 ☐	有毅力 ☐	歡愉 ☐
5	天性快活 ☐	準確 ☐	有胎量 ☐	冷靜 ☐
6	有競爭力 ☐	體貼 ☐	愉快 ☐	融合 ☐
7	愛挑剔 ☐	順從 ☐	不能倔服 ☐	好玩 ☐
8	勇敢 ☐	富有靈感 ☐	謙恭 ☐	膽怯 ☐
9	好交際 ☐	有耐心 ☐	自持 ☐	柔和可親 ☐
10	好冒險 ☐	易于接收 ☐	熱誠 ☐	穩健 ☐
11	健談 ☐	有克制 ☐	拘泥 ☐	果斷 ☐
12	精練 ☐	果敢 ☐	圓滑 ☐	易滿足 ☐
13	急進 ☐	合群 ☐	少猜疑 ☐	恐懼不安 ☐
14	謹慎 ☐	有決心 ☐	善于游說 ☐	好脾氣 ☐
15	願意服從 ☐	熱切 ☐	容易相處 ☐	烈性 ☐
16	自信 ☐	有同情心 ☐	寬容 ☐	武斷 ☐
17	有紀律 ☐	慷慨 ☐	生氣蓬勃 ☐	執著 ☐
18	可敬佩 ☐	仁慈 ☐	順從 ☐	強勁 ☐
19	受尊重 ☐	先鋒 ☐	樂觀 ☐	隨和 ☐
20	好爭辯 ☐	適應力強 ☐	放鬆 ☐	無掛慮 ☐
21	值靠不疑 ☐	滿足 ☐	積極 ☐	心平氣和 ☐
22	善于交際 ☐	有修養 ☐	精力充沛 ☐	寬厚 ☐
23	友善 ☐	精確 ☐	坦率 ☐	克制 ☐
24	急燥 ☐	和睦 ☐	受歡迎 ☐	忠實 ☐

切記：

(1)本分析不是一項測驗，所以沒有"對"或"錯"的答案。

(2)性格特徵分析必須在無人干擾的情況下單獨完成。

(3)在填寫個人性格特徵時，你必須聯想自己是在目前的職位工作。如果你目前沒有工作，那你就想象自己還是在執行上一份工作。如果你從來沒有工作過，那就聯想自己是在家中。

SINGAPORE : TEL: [redacted] • FAX: [redacted]
HONG KONG : TEL: [redacted] • FAX: [redacted]

一九八九年修訂

7.1

Personal Character Analysis No. C 0123

Direction:
There are four adjectives in each of the following lines. After reading the first line of the sentence, please make the instant intuitive response. When you find that the characteristic described by the word is the most appropriate for you, please put a "✓" in the right box of the word. If you find that the characteristic described by the word of are the most inconsistent with you, please put a "X" in the right box of the word. There must be a "✓" and a "X" in each of the four words. The person in the example on the right, among the four adjectives, is the most creative and the least gentle. Please fill in with a pen strongly.

Please fill in Date_____
Name_____
Company_____
Current position _____
Address_____
_____ Telephone_____

Example:

Gentle☒ Persuasive☐ Humble☐ Creative☑

1	Gentle☐	Persuasive☐	Humble☐	Creative☐
2	Attractive☐	Conscientious ☐	Stubborn☐	Kind and freidnly☐
3	Easy to be controlled☐	Bold☐	Loyal☐	Charming☐
4	Openminded ☐	Warm-hearted ☐	Persevering ☐	Happy☐
5	Born to be joyful☐	Accurate☐	Courageous ☐	Calm☐
6	Competitive ☐	Thoughtful☐	Joyful☐	Accomodative ☐
7	Picky☐	Obedient☐	Unyielding ☐	Amusing☐
8	Courageous ☐	Insprirative☐	Courtesy☐	Timid☐
9	Sociable☐	Patient☐	Self-disciplined☐	Gentle and friendly☐
10	Adventurous ☐	Acceptive☐	Enthusiastic ☐	Steady☐
11	Talkative☐	Forbearing☐	Rigid☐	Determinative ☐
12	Concise☐	Resolute☐	Tactful☐	Easy to be satisfied☐
13	Agressive☐	Cooperative☐	Unsuspicious	Fearful and

			☐	anxious☐
14	Diligent☐	Determined☐	Good at persuading ☐	Good temper ☐
15	Willing to follow☐	Cordial☐	Easygoing☐	Spirited☐
16	Confident☐	Compassionate ☐	Tolerant☐	Assertive☐
17	Disciplined ☐	Generous☐	Animated☐	Persistent☐
18	Respectable ☐	Benevolent☐	Obedient☐	Strong☐
19	Respected☐	Pioneer☐	Optimistic☐	Amiable☐
20	Argumental ☐	Adaptive☐	Relaxing☐	No anxiety☐
21	Trustworthy ☐	Satisfied☐	Enthusiastic ☐	In a calm mood☐
22	Sociable☐	Cultivated☐	Energetic☐	Generous☐
23	Friendly☐	Precise☐	Candid☐	Forbearing☐
24	Irritable☐	Peaceful☐	Popular☐	Loyal☐

Remember:

(1) This analysis is not a test, thus there is no "right" or "wrong" answer.

(2) Personal Character Analysis should be completed solely without any interference from third parties.

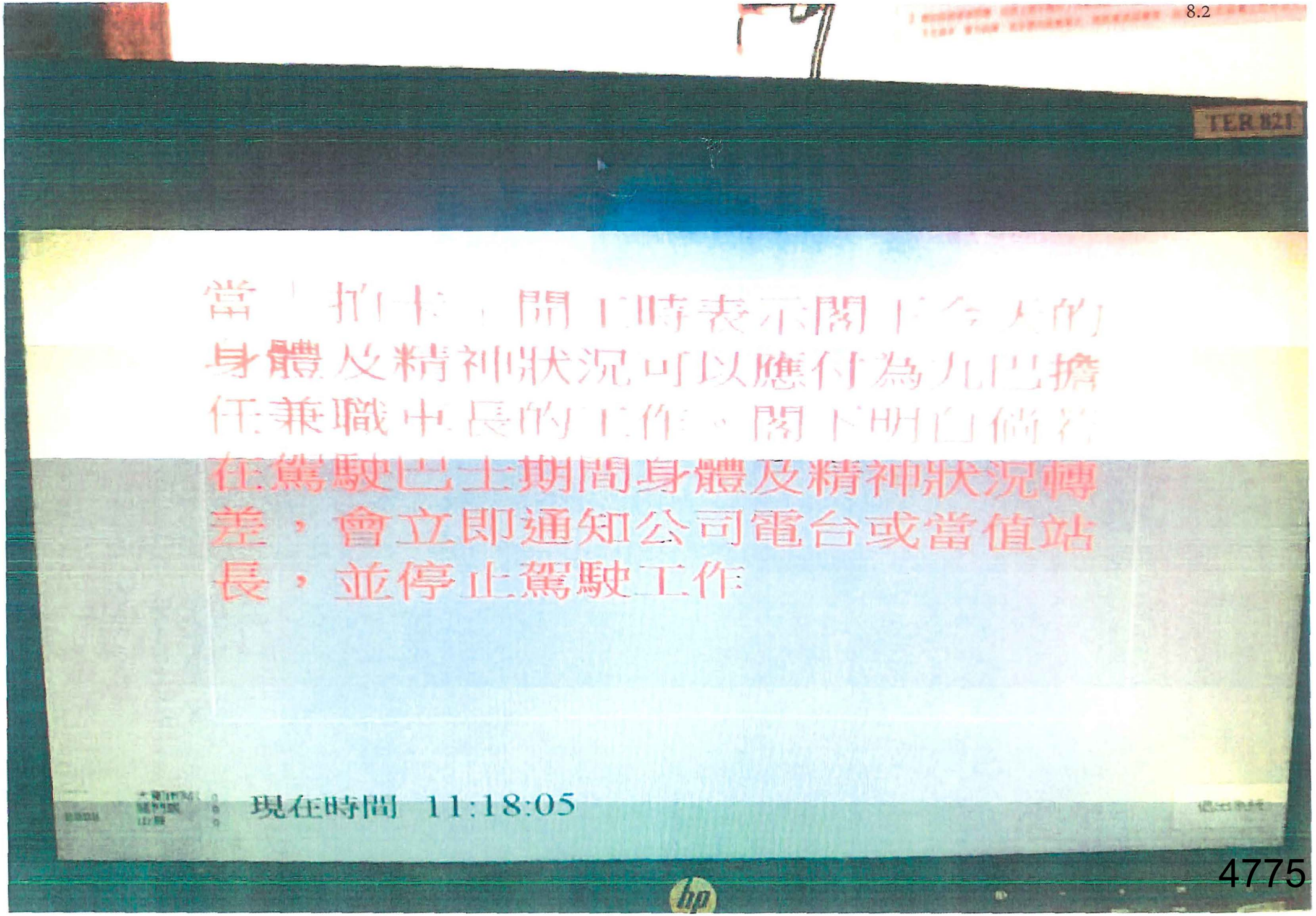
(3) When filling in personal characters, you have to think of yourself to be working in the current position. If you are jobless at the moment, please imagine you are still executing your last job. If you have never worked before, please think of yourself being at home.

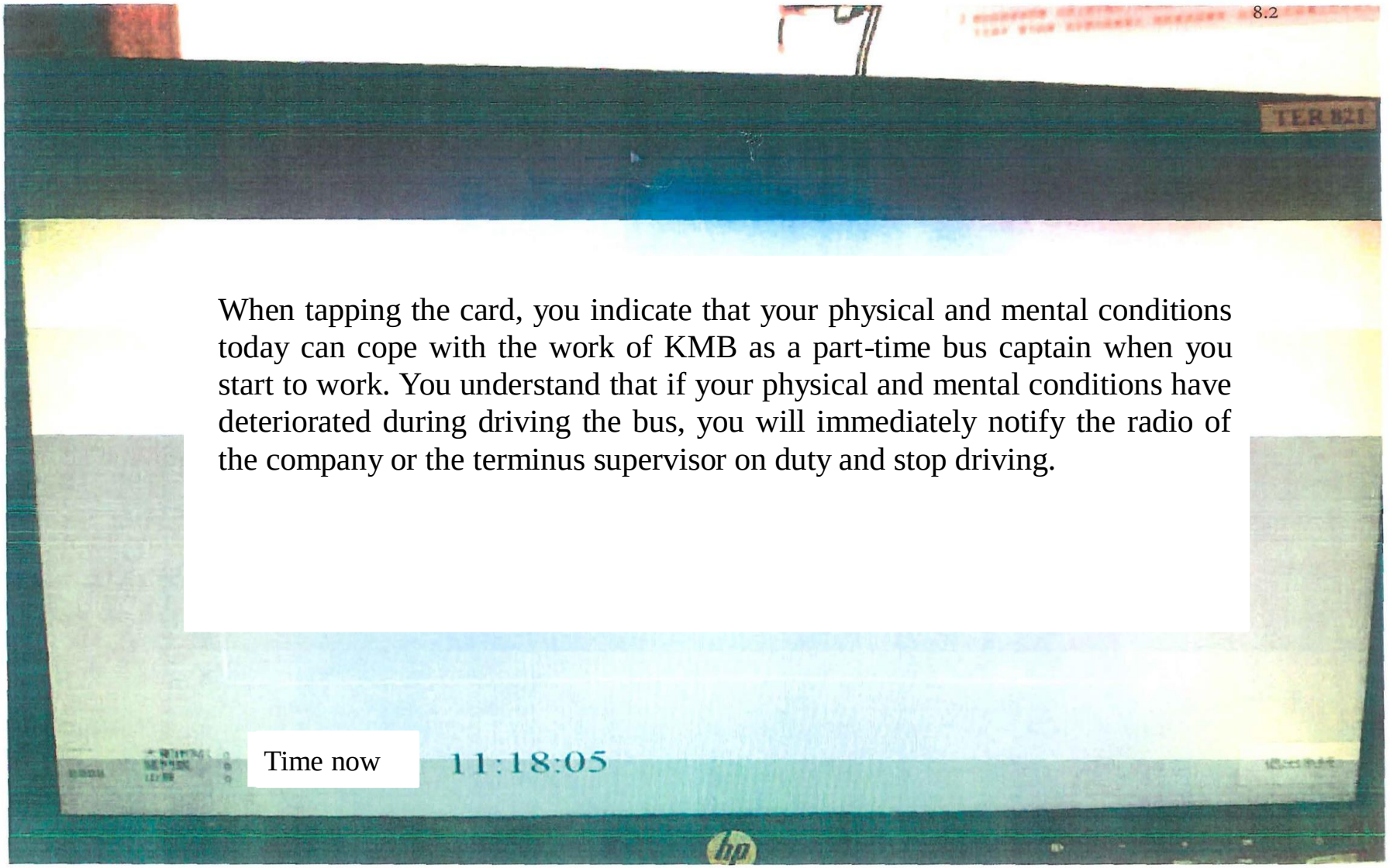
SINGAPORE : TEL: [redacted] • FAX: [redacted]
HONG KONG : TEL: [redacted] • FAX: [redacted]

Amended in 1989

Outside employment of Contract Hourly Rated Bus Captains

	Short working hours	Long working hours	Total	
No other employment	13	86	99	32%
Clerk	24	29	53	17%
Worker	38	41	79	25%
Driver				
Private car	15	9	24	8%
Van	10	6	16	5%
Coach	6	8	14	5%
Part-time bus captains of other franchised bus operators	3	23	26	8%
	34	46	80	26%
Total	109	202	311	100%


TER 121
當「扣十」開工時表示閣下今天的
身體及精神狀況可以應付為九巴擔
任兼職中長的工作，閣下明白倘若
在駕駛巴士期間身體及精神狀況轉
差，會立即通知公司電台或當值站
長，並停止駕駛工作
現在時間 11:18:05



9.1 [redacted]

聲明書

致：九龍巴士(1933)有限公司/龍運巴士有限公司 (下稱 "公司")

本人 [redacted] (中文) [redacted] (英文)，香港身份証號碼為 [redacted]，

地址為 [redacted]，

於 [redacted] 年 3 月 28 日入職公司之 兼職車長 職位，現特此作出以下聲明:-

1) 本人清楚明白並確認本人於入職時及/或在職期間，如受聘於公司以外的工作，不論全職或兼職，都必需向公司申報。

☐ 本人特此聲明於現時並沒有受聘於公司以外的工作，不論全職或兼職。

☑ 本人現於後頁列出本人現時，所有公司以外全職或兼職的工作。

2) 本人清楚明白並確認本人於入職前及/或在職期間，如患有可能會影響行車安全的嚴重疾病都必需向公司申報。

☑ 本人特此聲明本人從未患有任何可能會影響行車安全的嚴重疾病。

☐ 本人現於後頁列出本人的病歷紀錄。

3) 本人清楚明白並確認本人於入職前及/或在職期間，如有任何刑事定罪紀錄都必需向公司申報(包括但不限於交通定罪紀錄)。

☑ 本人特此聲明本人並沒有任何刑事定罪紀錄。

☐ 本人現於後頁列出本人的刑事定罪紀錄。

4) 本人附上已簽署的過往定罪事項證明書申請表格(下稱 "該表格")以授權公司向香港警務署交通總部查詢有關本人之駕駛紀錄。本人清楚明白並確認公司有權在本人入職日起任何時候向香港警務署查詢有關本人之駕駛紀錄。本人亦特此聲明，該表格之副本與正本均具有同等效力。

本人願意向公司作出此份聲明，此聲明的內容全部屬實，本人明白如上述聲明有任何虛假成份，本人有遭檢控刑事罪行之虞。本人亦清楚明白並確認此聲明書於本人簽署當刻生效，公司有權決定此聲明書日後的用途。

日期: 2018 年 3 月 3 日

簽署: [redacted] (姓名 [redacted])

(請於方格內加上「✓」號)

公司以外的全職/兼職工作

入職日期	僱主	全職/兼職	職位	工作職務	工時
[redacted]					

病歷紀錄

疾病詳情	確診日期	仍需覆診	治療之醫院
		是/否*	
		是/否*	
		是/否*	
		是/否*	

刑事定罪紀錄

刑事定罪詳情	定罪日期	判刑

日期: 2018 年 3 月 3 日

簽署 : [redacted] (姓名[redacted])

9.1

Declaration

To: The Kowloon Motor Bus Company (1933) Limited / Long Win Bus Company Limited (hereinafter referred to as the "Company")

I _____ (Chinese) _____ (English), holder of HKID no. _____, of _____ (address), working as a *part-time bus captain* who joined the Company on *28 March*_____, hereby declare that:-

1) I clearly understand and confirm that in case I engage in any job other than those assigned by the Company at the time of my employment and/or during my employment, irrespective of whether it is a full-time or part-time job, I must report such job to the Company.

   □ I hereby declare that I do not engage in any job other than those assigned by the Company, irrespective of whether it is a full-time or part-time job.

   □√ I hereby list all my current full-time or part-time jobs not assigned by the Company on the following page.

2) I clearly understand and confirm that in case I suffer from any serious illness that may affect driving safety before and/or during my employment, I must report such illness to the Company.

   □√ I hereby declare that I have never had any serious illness that may affect the driving safety.

   □ I hereby my medical records on the following page.

3) I clearly understand and confirm that in case I have any criminal conviction record (including but not limited to traffic conviction record) before and/or during my employment, I must report such record to the Company.

   □ √I hereby declare that I do not have any criminal conviction record.

□ I hereby list my criminal conviction record on the following page.

4) I have attached the signed application form for the Certificate Relating to Previous Conviction (hereinafter referred to as the "Form") to authorize the Company to inquire about my driving records from the Traffic Branch Headquarters of the Hong Kong Police Force. I clearly understand and confirm that the Company has the right to inquire at any time from the date of my employment about my driving records from the Hong Kong Police Force. I also hereby declare that the copy and original of the Form have equal effect.

I make the Declaration to the Company on my own will. All the contents of the Declaration are true. I understand that in case there is any false content in the above Declaration, I may be liable to prosecution for a criminal offence. I also clearly understand and confirm that the Declaration is effective at the time of signing, and the Company has the right to determine the future use of the Declaration.

Date: *3 March 2018*

Signature: _____ (Name:)

(Please tick the appropriate boxes.)

9.1

Full-time / part-time jobs not assigned by the Company

Date of employment	Employer	Full-time / part-time	Position	Duty	Working hours

Medical records

Details of illnesses	Date of diagnosis	Further follow-up consultation required	Hospital for treatment
		Yes / No*	
		Yes / No*	
		Yes / No*	
		Yes / No*	

Criminal conviction records

Details of criminal conviction	Date of conviction	Sentence

Date: *3 March 2018*
Signature: _____ (Name:)

聲明書

致：九龍巴士(1933)有限公司/龍運巴士有限公司 (下稱 "公司")

本人 [redacted] (中文) [redacted] (英文)，香港身份証號碼為 [redacted]

地址為 [redacted]，

於 [redacted] 年 [redacted] 月 [redacted] 日入職公司之兼職司機職位，現特此作出以下聲明:-

1) 本人清楚明白並確認本人於入職時及/或在職期間，如受聘於公司以外的工作，不論全職或兼職，都必需向公司申報。

☑ 本人特此聲明於現時並沒有受聘於公司以外的工作，不論全職或兼職。

☐ 本人現於後頁列出本人現時，所有公司以外全職或兼職的工作。

2) 本人清楚明白並確認本人於入職前及/或在職期間，如患有可能會影響行車安全的嚴重疾病都必需向公司申報。

☑ 本人特此聲明本人從未患有任何可能會影響行車安全的嚴重疾病。

☐ 本人現於後頁列出本人的病歷紀錄。

3) 本人清楚明白並確認本人於入職前及/或在職期間，如有任何刑事定罪紀錄都必需向公司申報(包括但不限於交通定罪紀錄)。

☑ 本人特此聲明本人並沒有任何刑事定罪紀錄。

☐ 本人現於後頁列出本人的刑事定罪紀錄。

4) 本人附上已簽署的過往定罪事項證明書申請表格(下稱 "該表格")以授權公司向香港警務署交通總部查詢有關本人之駕駛紀錄。本人清楚明白並確認公司有權在本人入職日起任何時候向香港警務署查詢有關本人之駕駛紀錄。本人亦特此聲明，該表格之副本與正本均具有同等效力。

本人願意向公司作出此份聲明，此聲明的內容全部屬實，本人明白如上述聲明有任何虛假成份，本人有遭檢控刑事罪行之虞。本人亦清楚明白並確認此聲明書於本人簽署當刻生效，公司有權決定此聲明書日後的用途。

日期: [redacted] 年 [redacted] 月 [redacted] 日

簽署: [redacted] (姓名 [redacted])

(請於方格內加上「✓」號)

公司以外的全職/兼職工作

入職日期	僱主	全職/兼職	職位	工作職務	工時

病歷紀錄

疾病詳情	確診日期	仍需覆診	治療之醫院
		是/否*	
		是/否*	
		是/否*	
		是/否*	

刑事定罪紀錄

刑事定罪詳情	定罪日期	判刑

日期: [redacted]年 [redacted]月 [redacted]日

簽署 : [redacted] (姓名 [redacted])

九龍巴士（一九三三）有限公司
簡便報告表

職員編號及姓名：[redacted]　　日期：[redacted]

本人承諾

1）每週工時不少於 10 小時

2) 及在九巴/龍運擔任的車長工作， 沒有違反本人與外間簽訂的僱傭合約。

職員簽署：[redacted]

日期：

Declaration

To: The Kowloon Motor Bus Company (1933) Limited / Long Win Bus Company Limited (hereinafter referred to as the "Company")

I _____ (Chinese) _____ (English), holder of HKID no. _____, of _____ (address), working as a *part-time driver* who joined the Company on _____, hereby declare that:-

1) I clearly understand and confirm that in case I engage in any job other than those assigned by the Company at the time of my employment and/or during my employment, irrespective of whether it is a full-time or part-time job, I must report such job to the Company.

   □ √I hereby declare that I do not engage in any job other than those assigned by the Company, irrespective of whether it is a full-time or part-time job.

   □ I hereby list all my current full-time or part-time jobs not assigned by the Company on the following page.

2) I clearly understand and confirm that in case I suffer from any serious illness that may affect driving safety before and/or during my employment, I must report such illness to the Company.

   □√ I hereby declare that I have never had any serious illness that may affect the driving safety.

   □ I hereby my medical records on the following page.

3) I clearly understand and confirm that in case I have any criminal conviction record (including but not limited to traffic conviction record) before and/or during my employment, I must report such record to the Company.

   □ √ I hereby declare that I do not have any criminal conviction record.

□I hereby list my criminal conviction record on the following page.

4) I have attached the signed application form for the Certificate Relating to Previous Conviction (hereinafter referred to as the "Form") to authorize the Company to inquire about my driving records from the Traffic Branch Headquarters of the Hong Kong Police Force. I clearly understand and confirm that the Company has the right to inquire at any time from the date of my employment about my driving records from the Hong Kong Police Force. I also hereby declare that the copy and original of the Form have equal effect.

I make the Declaration to the Company on my own will. All the contents of the Declaration are true. I understand that in case there is any false content in the above Declaration, I may be liable to prosecution for a criminal offence. I also clearly understand and confirm that the Declaration is effective at the time of signing, and the Company has the right to determine the future use of the Declaration.

Date:

Signature: _____ (Name:)

(Please tick the appropriate boxes.)

9.2

Full-time / part-time jobs not assigned by the Company

Date of employment	Employer	Full-time / part-time	Position	Duty	Working hours

Medical records

Details of illnesses	Date of diagnosis	Further follow-up consultation required	Hospital for treatment
		Yes / No*	
		Yes / No*	
		Yes / No*	
		Yes / No*	

Criminal conviction records

Details of criminal conviction	Date of conviction	Sentence

Date:
Signature: _____ (Name:)

9.2

The Kowloon Motor Bus Company (1933) Limited
Brief report form

Staff number and name: _____ Date: _____

I promise that

1) my working hours will not be less than 10 hours per week
2) and I did not violate the employment contract signed by other party and me while working as a bus captain in KMB/LWB.

Staff signature: _____
Date: _____

九龍巴士（一九三三）有限公司
THE KOWLOON MOTOR BUS CO. (1933) LTD.

機　密

本部檔號：HR/Resourcing/[redacted]

九龍巴士（一九三三）有限公司（以下簡稱為“公司”）現聘請 [redacted] 先生，香港身份證號碼 [redacted]（以下簡稱為“僱員”）為車長，雙方同意下列之僱傭條件：

一、 到職日期 ： 二零一八年八月廿二日

二、 合約期兩年 ： 二零一八年八月廿二日至二零二零年八月廿一日

三、 訓練期 ： 由入職日起為訓練期，訓練日數視乎僱員的受訓進度而定，通過訓練期與否，以公司書面通知為準。

若僱員入職時只持有本地 1 / 1A 駕駛執照：

1. 每名僱員可獲安排最多兩次運輸署的巴士駕駛考試；
2. 如僱員未能通過首次的運輸署巴士駕駛考試，而需再次入班受訓，等候第二次入班受訓期間將作無薪事假處理；
3. 除非獲公司特別批准，否則如僱員仍然未能通過第二次的運輸署巴士駕駛考試，本僱傭合約將因無法履約自動失效。
4. 除了在「車長訓練保証金聲明」上所述的情況外，僱員可獲豁免港幣 12,000 元的訓練學費。

四、 合約期滿 ： 合約期滿後，僱傭關係將自動終止。

五、 糧期 ： 月薪制，每月出糧一次，通常為每個月完結後的第七日。

六、 工資 ：

1. 底薪 ： 每月港幣 16,466 元。
2. 過時補水 ： 若每天實際工作超逾八小時，其後的薪津以過時補水形式發給，每小時計法為每月底薪數目÷240 × 1.5

3. 僱員在訓練期內只可享受底薪，計法為每月之底薪÷當月日數 ×, 訓練期日數。（過時補水並不適用）

[redacted]

香港九龍荔枝角寶輪街九號十五樓 • 15/F, 9 Po Lun Street, Lai Chi Kok, Kowloon, Hong Kong
電話 Tel : (852) 2786 8888 • 傳真 Fax : (852) 2745 0300 • 網址 Website : www.kmb.hk

九龍巴士（一九三三）有限公司
THE KOWLOON MOTOR BUS CO. (1933) LTD.

機　密

七、　迎新獎金　：僱員在經評核合格及通過試用期後會獲發一次性「迎新獎金」港幣 10,000 元。該筆獎金將分兩期，每期港幣 5,000 元。

1. 第一期會於僱員在經評核合格及通過試用期後(以書面通知為準)的下一個出糧日發放。
2. 第二期會於僱員入職公司(包括訓練期)滿十二個月並通過試用期後的下一個出糧日發放。
3. 如僱員通過試用期但在「迎新獎金」發放日前離職，將不獲發放該筆「迎新獎金」。

八、　年尾底薪雙糧　：僱員於大概農曆新年前可獲發多一個月的年尾底薪。底薪雙糧會按照僱員在前一年度十二月卅一日的底薪計算。

1. 年尾底薪雙糧會按僱員通過試用期的日期起按比例發放。
2. 若前一年度的年尾十二月卅一日僱員尚未通過試用期，他/她將不會在下個農曆新年前獲發底薪雙糧。

九、　工作時間　：1. 僱員必須依照公司編定的時間表輪班輪休當值，因不同路線行車時間各有不同，僱員必須服從公司分配每日擔任八小時或超過八小時的工作。

2. 公司有權按工作需要編排僱員當值早、夜、特別或通宵更，僱員不得異議。擔任通宵更，另有通宵津貼發給。僱員擔任通宵更不足一個月，通宵津貼依當值通宵日數按比例發給。
3. 因公司屬公共服務機構，僱員在不正常天氣情況下，如黑色暴雨警告訊號或颱風訊號懸掛下，仍需按公司指定擔任正常或臨時駕駛任務，而不獲任何額外酬勞。

十、　工作地點　：公司可調派僱員於任何巴士路線及廠房工作。

十一、　工作性質　：負責駕駛載客、非載客巴士，或公司指派的車輛。但在特別情況及按實際需要下，公司有權安排僱員留廠或擔任其他工作。

十二、　試用期　：六個月，如僱員工作表現未符公司要求，公司有權將試用期延長三個月。通過試用期與否以公司書面通知為準。

十三、　離職通知期　：1. 在試用期第一個月內，僱員或公司任何一方均可隨時終止僱傭關係而無需給予預先通知或以工資代替通知。

2. 在餘下之五個月試用期內，或在試用期滿後，如終止僱傭關係，任何一方必須在七天前以書面通知對方或以七天工資代替通知。

[redacted]

香港九龍荔枝角寶輪街九號十五樓 • 15/F, 9 Po Lun Street, Lai Chi Kok, Kowloon, Hong Kong
電話 Tel : (852) 2786 8888 • 傳真 Fax : (852) 2745 0300 • 網址 Website : www.kmb.hk

九龍巴士（一九三三）有限公司
THE KOWLOON MOTOR BUS CO. (1933) LTD.

機　密

十四、 即時解僱 ： 公司在下列情況下，可即時解僱僱員，而無需給予預先通知或以工資代替通知，如僱員：
1. 故意不服從公司合法及合理的命令；
2. 行為不檢；
3. 欺詐、不忠實；或
4. 慣常疏忽職守。

十五、 休息日 ： 按香港僱傭法例由公司編配。

十六、 法定假日 ： 按香港僱傭法例享有法定假日，因公司屬公共服務機構，倘未能在該法定假期編給休息，則另定日期補假。

十七、 年假 ： 服務滿一年，可享有十天之有薪年假，如獲續合約而服務連續滿六年後則按香港僱傭法例，逐年增加至最多十四天。

十八、 病假 ： 按香港僱傭法例計算，即在受僱期首十二個月，每月可累積兩天有薪病假，第十三個月起每個月可累積四天有薪病假，最高可累積一百二十天。

十九、 強制性公積金： 僱員將參加強制性公積金計劃，公司及僱員均依照《強制性公積金計劃條例》的規定向強制性公積金計劃供款。供款額為僱員有關入息的百份之伍。

二十、 僱員需接受公司安排之駕駛技術及服務表現考核，如公司認為有需要，亦需接受體格檢驗，倘有不符合公司要求者，公司保留停止僱用的權利。

廿一、 有效駕駛執照： 僱員如獲公司授權駕駛公司車輛，必須確定本身持有有效及適用車輛類別的香港駕駛執照，以免觸犯香港交通條例及受公司紀律處分。僱員因任何事件而引致其駕駛執照被取消（停牌），則公司可予以即時解僱，而無需給予預先通知或以工資代替通知。

廿二、 違反交通規例： 僱員如違反任何交通條例及經被定罪，不論該違例事項是否在當值期間發生或是否被扣分，應立即向公司報告。

廿三、 兼職工作 ： 僱員在擔任車長工作時間以外，擔任其他工作，必須事先向公司申請；僱員未獲公司批准而擅自兼職，經發現者公司保留停止僱用的權利。

[redacted]

香港九龍荔枝角寶輪街九號十五樓 • 15/F, 9 Po Lun Street, Lai Chi Kok, Kowloon, Hong Kong
電話 Tel : (852) 2786 8888 • 傳真 Fax : (852) 2745 0300 • 網址 Website : www.kmb.hk

九龍巴士（一九三三）有限公司
THE KOWLOON MOTOR BUS CO. (1933) LTD.

機　密

廿四、 服務規則 ： 僱員必須遵守服務規則、工作指引及公司通告，請登入員工網www.kmb.org.hk 查閱「車務外勤員工服務手冊」和「董事及僱員紀律守則」。合約內有關工作之安排，員工可參閱該等服務規則、工作指引及公司通告。公司有權隨時修改有關規則及指引以及相關通告，所有增減或修改，以公司最新公佈為準。

廿五、 其他 ： 所有退休福利，包括但不限於歡送金、帛金、金牌及退休免費乘車證等等，只限於年屆 60 歲離職時，已經服務公司滿十年的僱員。

廿六、 工作調配 ： 公司有權安排僱員在載通集團或其下任何公司擔任相關職能的工作。僱員亦須遵守有關工作調配之服務規則。

廿七、 此僱傭合約會取代任何之前就有關此職位之僱傭條件及細則所訂立之口頭或書面協議。

[redacted]

經理 (人力資源)：_____

THE KOWLOON MOTOR BUS COMPANY (1933) LTD. HUMAN RESOURCES DEPARTMENT

二零一八年八月廿一日

本人明白及自願同意以上所列之僱傭條件，同時收取此僱傭合約副本一份。

僱員簽署：[redacted]

僱員編號：[redacted]

日　期：22-8-2018

-完-

CL/SC/CC

10.1

(Logo of KMB)
THE KOWLOON MOTOR BUS CO. (1933) LTD. Confidential

File no.: HR/Resourcing/

The Kowloon Motor Bus Co. (1933) Ltd. (hereinafter referred to as the "Company") is now hiring Mr. _____ HKID no. _____ (hereinafter referred to as the "Employee") as bus captain, and both parties agree on the following conditions of employment:

1. Start date: 22 August 2018

2. 2 - year contract term: 22 August 2018 to 21 August 2020

3. Training period: The training period shall commence from the start date of employment, and the number of training days shall be determined depending on the progress of the Employee's training. Whether the Employee passes the training shall be subject to the Company's written notice.

   In case the Employee is only holding a local 1 / 1A driving licence at the time of enrollment:

   1. Each Employee may be arranged for up to two bus driving tests by the Transport Department ("TD");

   2. In case the Employee fails the first TD bus driving test, he/she shall be required to join the training session and shall be treated as taking unpaid leave during the period in which he/she is waiting for the second training session;

   3. Unless the Company specifically approves, in case the Employee still fails the second TD bus driving test, the Employment Contract shall become invalid automatically due to its non-performance.

   4. Except for the circumstances described in the

香港九龍荔枝角寶輪街九號十五樓 • 15/F, 9 Po Lun Street, Lai Chi Kok, Kowloon, Hong Kong
電話 Tel : (852) 2786 8888 • 傳真 Fax : (852) 2745 0300 • 網址 Website : www.kmb.hk

"Declaration of Bus Captain Training Guarantee", Employees are exempted from training tuition fees of HK$12,000.

4. Expiry of contract: The employment relationship shall be automatically terminated upon expiration of the contract.

5. Salary payment: On a monthly basis. The salary shall be paid once a month, usually on the seventh day after the end of each month.

6. Remuneration:
   1. Basic salary: HK$16,466 per month.
   2. Overtime pay: If the actual work exceeds eight hours every day, the subsequent salary shall be paid in the form of overtime payment. The calculation method for each hour of overtime work is: monthly basic salary / 240 x 1.5
   3. During the training period, the employees may only be paid basic salary. The calculation method is: monthly basic salary / number of days in the month x number of training days. (Overtime pay does not apply)

7. Sign-on bonus: The Employee shall receive a one-off "Sign-on bonus" of HK$10,000 after passing the assessment and the probation period. Such bonus shall be distributed by two instalments of HK$5,000 each.

   1. The first instalment shall be distributed on the next salary payment date after the Employee has passed the assessment and the probation period (subject to written notice).
   2. The second instalment shall be distributed on the next salary payment date after the Employee has joined the Company (including the training period) for 12 months and passed the probation period.

香港九龍荔枝角寶輪街九號十五樓 • 15/F, 9 Po Lun Street, Lai Chi Kok, Kowloon, Hong Kong
電話 Tel : (852) 2786 8888 • 傳真 Fax : (852) 2745 0300 • 網址 Website : www.kmb.hk

3. In case the Employee has passed the probation period but resigned before the date of distribution of the "Sign-on bonus", the said "Sign-on bonus" shall not be distributed.

8. Year-end basic salary double pay: The Employee shall receive an additional year-end bonus equivalent to one-month basic salary before the Lunar New Year. The basic salary double pay shall be calculated based on the Employee's basic salary as of 31 December of the previous year.
   1. The year-end basic salary double pay shall be distributed on a pro rata basis based on the date on which the Employee passes the probation period.
   2. In case the Employee has not passed the probation period on 31 December of the previous year, he/she shall not receive the basic salary double pay before the next Lunar New Year.

9. Working hours:
   1. The Employee must be on shift duty in accordance with the schedule set by the Company. Due to the different driving times for different routes, the Employee must work for eight hours or more than eight hours per day in compliance with the Company's assignment.
   2. The Company reserves the right to arrange for the Employee to work the morning, night, special or overnight shift according to operational needs, and the Employee shall not object. The overnight shift allowance will be paid to the Employee working the overnight shift. In case the Employee works the overnight shift for less than one month, the overnight shift allowance shall be paid on a pro rata basis based on the number of days of the overnight shift.

香港九龍荔枝角寶輪街九號十五樓 • 15/F, 9 Po Lun Street, Lai Chi Kok, Kowloon, Hong Kong
電話 Tel : (852) 2786 8888 • 傳真 Fax : (852) 2745 0300 • 網址 Website : www.kmb.hk

(Logo of KMB)
THE KOWLOON MOTOR BUS CO. (1933) LTD. Confidential

3. As the Company is a public service organization, under abnormal weather conditions such as issuance of black rainstorm warning signals or typhoon signals, the Employee still needs to assume his/her driving duties as usual or on an ad hoc basis as assigned by the Company without any extra remuneration.

10. Work location: The Company may assign the Employee to work on any bus route and depot.

11. Nature of work: Responsible for driving passenger- and non-passenger buses, or any vehicles assigned by the Company. However, the Company reserves the right to arrange for the Employee to stay in the depot or to perform other duties under special circumstances and according to actual needs.

12. Probation period: Six months. In case the Employee's work performance does not meet the Company's requirements, the Company reserves the right to extend the probation period by three months. Whether the Employee passes the probation period shall be subject to the Company's written notice.

13. Notice of resignation:
1. During the first month of the probation period, either the Employee or the Company may terminate the employment relationship at any time without prior notice or payment of wages in lieu of notice.
2. During the remaining five months of the probation period, or after the expiration of the probation period, any party who terminates the employment relationship must notify the other party in writing seven days in advance or pay an equivalent amount of wages in lieu of notice.

香港九龍荔枝角寶輪街九號十五樓 • 15/F, 9 Po Lun Street, Lai Chi Kok, Kowloon, Hong Kong
電話 Tel : (852) 2786 8888 • 傳真 Fax : (852) 2745 0300 • 網址 Website : www.kmb.hk

(Logo of KMB)
THE KOWLOON MOTOR BUS CO. (1933) LTD. Confidential

14. Immediate dismissal: Under any of the following circumstances, the Company may immediately dismiss the Employee without prior notice or payment of wages in lieu of notice:
    1. Deliberately disobey the Company's legal and reasonable orders;
    2. Misconduct:
    3. Be fraudulent or unfaithful; or
    4. Habitual dereliction of duty.

15. Rest days: Arranged by the Company in accordance with the Hong Kong Employment Ordinance.

16. Statutory holidays: The Employee shall be entitled to statutory holidays under the Hong Kong Employment Ordinance. As the Company is a public service organization, where it is not possible to arrange for rest time during the statutory holiday, compensation leave shall be separately arranged.

17. Annual leave: The Employee may be entitled to 10 days of paid annual leave once he/she has worked for one year. In case his/her contract is renewed and he/she has worked for six consecutive years, the number of his/her annual leave shall be increased yearly up to a maximum of 14 days in accordance with the Hong Kong Employment Ordinance.

18. Sick leave: Calculated in accordance with the Hong Kong Employment Ordinance, that is, the Employee may accumulate two days of paid sick leave per month in the first 12 months of employment, and four days of paid sick leave per month from the 13th month, up to a maximum of 120 days.

19. Mandatory Provident Fund: The Employee shall join the Mandatory Provident Fund Scheme. The Company and the Employee shall contribute to the Mandatory Provident Fund

香港九龍荔枝角寶輪街九號十五樓 • 15/F, 9 Po Lun Street, Lai Chi Kok, Kowloon, Hong Kong
電話 Tel : (852) 2786 8888 • 傳真 Fax : (852) 2745 0300 • 網址 Website : www.kmb.hk

Scheme in accordance with the provisions of the Mandatory Provident Fund Schemes Ordinance. The contribution amount shall be 5% of the Employee's relevant income.

20. The Employee needs to be assessed in respect of his/her driving skills and service performance arranged by the Company. He/she also needs to take physical examination where the Company deems it necessary. In case of any failure to meet the Company's requirements, the Company reserves the right to terminate the employment.

21. Valid driving licence: Employees who are authorized by the Company to drive the Company's vehicles must confirm that they have a valid Hong Kong driving licence applicable to vehicle category to avoid infringement of the Hong Kong Traffic Ordinance and disciplinary action by the Company. In case the Employee's driving licence is cancelled (suspended) due to any event, the Company may immediately dismiss the Employee without prior notice or payment of wages in lieu of notice.

22. Breach of traffic regulations: Employees who contravene any traffic regulations and are convicted, should report to the Company immediately, irrespective of whether the violation occurs when they are on duty or whether the driving-offence points are recorded.

23. Part-time job: Employees who take any other job outside the working hours as a bus captain must apply to the Company in advance; the Employee shall not take any part-time job without obtaining the approval of the Company and the Company reserves the right to terminate the employment once discovered.

24. Terms of service: Employees must comply with the Terms of Service, Work Guidelines and the Company's Notices. Please check the Service Manual for

香港九龍荔枝角寶輪街九號十五樓 • 15/F, 9 Po Lun Street, Lai Chi Kok, Kowloon, Hong Kong
電話 Tel : (852) 2786 8888 • 傳真 Fax : (852) 2745 0300 • 網址 Website : www.kmb.hk

(Logo of KMB)
THE KOWLOON MOTOR BUS CO. (1933) LTD. Confidential

Operation Staff and the Code of Conduct for Directors and Employees on the Staff Webpage at www.kmb.org.hk. For the work arrangements stipulated in the contract, employees may refer to such Terms of Service, Work Guidelines and the Company's Notices. The Company reserves the right to amend the relevant rules and guidelines and related notices at any time. All additions, deletions or amendments shall be subject to the latest announcement of the Company.

25. Miscellaneous: All retirement benefits, including but not limited to farewell bonus, memorial contributions, gold medals and retirement free passes, are limited to employees who have served the Company for 10 years when they leave the Company at the age of 60.

26. Job placement: The Company reserves the right to arrange for Employees to perform related functions in Transport International or any of its companies. Employees are also required to comply with the terms of service for the relevant job placement.

27. This employment contract shall supersede any prior oral or written agreement entered into in relation to the terms and conditions and details of the employment of this position.

Manager (Human Resources): _____ **[Chopped: Human Resources Department of KMB]**

21 August 2018

香港九龍荔枝角寶輪街九號十五樓 • 15/F, 9 Po Lun Street, Lai Chi Kok, Kowloon, Hong Kong
電話 Tel : (852) 2786 8888 • 傳真 Fax : (852) 2745 0300 • 網址 Website : www.kmb.hk

10.1

(Logo of KMB)
THE KOWLOON MOTOR BUS CO. (1933) LTD. Confidential

I understand and agree to the employment conditions listed above on my own will and receive a copy of this employment contract.

Signature of Employee: _____

Employee's number: _____

Date: *22 August 2018*

-End-

[signed]
CL/SC/CC

香港九龍荔枝角寶輪街九號十五樓 • 15/F, 9 Po Lun Street, Lai Chi Kok, Kowloon, Hong Kong
電話 Tel : (852) 2786 8888 • 傳真 Fax : (852) 2745 0300 • 網址 Website : www.kmb.hk

九龍巴士（一九三三）有限公司
THE KOWLOON MOTOR BUS CO. (1933) LTD.

機　密

本部檔號：HR/Resourcing/[redacted])

九龍巴士（一九三三）有限公司（以下簡稱為“公司”）現聘請 [redacted] 先生，香港身份證號碼 [redacted]（以下簡稱為“僱員”）為退休重聘車長，雙方同意下列之僱傭條件：

一、 到職日期 ： 二零一八年八月九日

二、 合約期 ： **二零一八年八月九日至二零一九年八月八日**

三、 合約期滿 ： 合約期滿後，僱傭關係將自動終止。

四、 糧期 ： **月薪制**，每月出糧一次，通常為每個月完結後的第七日。

五、 工資 ： 1. **底薪** ： **每月港幣 15,666 元。**
2. 過時補水 ： 若每天實際工作超逾八小時，其後的薪津以過時補水形式發給，每小時計法為每月底薪數目÷240 x 1.5

六、 年尾底薪雙糧 ： 僱員於大概農曆新年前可獲發多一個月的年尾底薪。底薪雙糧會按照僱員在前一年度十二月卅一日的底薪計算。
1. 年尾底薪雙糧會按僱員入職日的日期起按比例發放。
2. 若前一年度的年尾十二月卅一日僱員尚未入職，他/她將不會在下個農曆新年前獲發底薪雙糧。

七、 工作時間 ： 1. 僱員必須依照公司編定的時間表輪班輪休當值，因不同路線行車時間各有不同，僱員必須服從公司分配每日擔任八小時或超過八小時的工作。
2. 公司有權按工作需要編排僱員當值早、夜、特別或通宵更，僱員不得異議。擔任通宵更，另有通宵津貼發給。僱員擔任通宵更不足一個月，通宵津貼依當值通宵日數按比例發給。
3. 因公司屬公共服務機構，僱員在不正常天氣情況下，如黑色暴雨警告訊號或颱風訊號懸掛下，仍需按公司指定擔任正常或臨時駕駛任務，而不獲任何額外酬勞。

[redacted]

香港九龍荔枝角寶輪街九號十五樓 • 15/F, 9 Po Lun Street, Lai Chi Kok, Kowloon, Hong Kong
電話 Tel : (852) 2786 8888 • 傳真 Fax : (852) 2745 0300 • 網址 Website : www.kmb.hk

九龍巴士（一九三三）有限公司
THE KOWLOON MOTOR BUS CO. (1933) LTD.

機 密

八、 工作地點 ： 公司可調派僱員於任何巴士路線及廠房工作。

九、 工作性質 ： 負責駕駛載客、非載客巴士，或公司指派的車輛。但在特別情況及按實際需要下，公司有權安排僱員留廠或擔任其他工作。

十、 離職通知期 ： 如終止僱傭關係，僱員或公司任何一方必須在七天前以書面通知對方或以七天工資代替通知。

十一、 即時解僱 ： 公司在下列情況下，可即時解僱僱員，而無需給予預先通知或以工資代替通知，如僱員：
1. 故意不服從公司合法及合理的命令；
2. 行為不檢；
3. 欺詐、不忠實；或
4. 慣常疏忽職守。

十二、 休息日 ： 按香港僱傭法例由公司編配。

十三、 法定假日 ： 按香港僱傭法例享有法定假日，因公司屬公共服務機構，倘未能在該法定假期編給休息，則另定日期補假。

十四、 年假 ： 服務滿一年，可享有14天之有薪年假。未滿一年者則按比例計算。

十五、 病假 ： 按香港僱傭法例計算，即在受僱期首十二個月，每月可累積兩天有薪病假，第十三個月起每個月可累積四天有薪病假，最高可累積一百二十天。

十六、 強制性公積金 ： 僱員將參加強制性公積金計劃，公司及僱員均依照《強制性公積金計劃條例》的規定向強制性公積金計劃供款。供款額為僱員有關入息的百份之伍。

十七、 僱員需接受公司安排之駕駛技術及服務表現考核，如公司認為有需要，亦需接受體格檢驗，倘有不符合公司要求者，公司保留停止僱用的權利。

十八、 有效駕駛執照 ： 僱員如獲公司授權駕駛公司車輛，必須確定本身持有有效及適用車輛類別的香港駕駛執照，以免觸犯香港交通條例及受公司紀律處分。僱員因任何事件而引致其駕駛執照被取消（停牌），則公司可予以即時解僱，而無需給予預先通知或以工資代替通知。

香港九龍荔枝角寶輪街九號十五樓 • 15/F, 9 Po Lun Street, Lai Chi Kok, Kowloon, Hong Kong
電話 Tel : (852) 2786 8888 • 傳真 Fax : (852) 2745 0300 • 網址 Website : www.kmb.hk

[redacted]

九龍巴士（一九三三）有限公司
THE KOWLOON MOTOR BUS CO. (1933) LTD.

機 密

十九、 違反交通規例 ： 僱員如違反任何交通條例及經被定罪，不論該違例事項是否在當值期間發生或是否被扣分，應立即向公司報告。

二十、 兼職工作 ： 僱員在擔任退休重聘車長工作時間以外，擔任其他工作，必須事先向公司申請，僱員未獲公司批准而擅自兼職，經發現者公司保留停止僱用的權利。

廿一、 服務規則 ： 僱員必須遵守服務規則、工作指引及公司通告，請登入員工網www.kmb.org.hk 查閱「車務外勤員工服務手冊」和「董事及僱員紀律守則」。合約內有關工作之安排，員工可參閱該等服務規則、工作指引及公司通告。公司有權隨時修改有關規則及指引以及相關通告，所有增減或修改，以公司最新公佈為準。

廿二、 工作調配 ： 公司有權安排僱員在載通集團或其下任何公司擔任相關職能的工作。僱員亦須遵守有關工作調配之服務規則。

廿三、 其他 **僱員在六十歲退休前擔任全職車長的服務年資並不會計算在此合約內。**在僱員擔任退休重聘車長期間，公司會發給職員証予僱員，而僱員的退休証需交回人力資源部暫時保管，待僱員停任退休重聘車長時方予發回。

廿四、 此僱傭合約會取代任何之前就有關此職位之僱傭條件及細則所訂立之口頭或書面協議。

[redacted]

THE KOWLOON MOTOR BUS COMPANY (1933) LTD. * HUMAN RESOURCES DEPARTMENT

經理（人力資源）：_____

二零一八年八月六日

本人明白及自願同意以上所列之僱傭條件，同時收取此僱傭合約副本一份。

[redacted]

僱員簽署：_____

僱員編號：_____

日　　期：_____

完

CL/SC/TM

香港九龍荔枝角寶輪街九號十五樓 • 15/F, 9 Po Lun Street, Lai Chi Kok, Kowloon, Hong Kong
電話 Tel : (852) 2786 8888 • 傳真 Fax : (852) 2745 0300 • 網址 Website : www.kmb.hk

10.2

(Logo of KMB)
THE KOWLOON MOTOR BUS CO. (1933) LTD. Confidential

File no.: HR/Resourcing/

The Kowloon Motor Bus Co. (1933) Ltd. (hereinafter referred to as the "Company") is now hiring Mr. _____ HKID no. _____ (hereinafter referred to as the "Employee") as bus captain (re-employed after retirement), and both parties agree on the following conditions of employment:

1. Start date: 9 August 2018

2. Contract term: 9 August 2018 to 8 August 2019

3. Expiry of contract: The employment relationship shall be automatically terminated upon expiration of the contract.

4. Salary payment: On a monthly basis. The salary shall be paid once a month, usually on the seventh day after the end of each month.

5. Remuneration:
   1. Basic salary: HK$15,666 per month.
   2. Overtime pay: If the actual work exceeds eight hours every day, the subsequent salary shall be paid in the form of overtime payment. The calculation method for each hour of overtime work is: monthly basic salary / 240 x 1.5

6. Year-end basic salary double pay: The Employee shall receive an additional year-end bonus equivalent to one-month basic salary before the Lunar New Year. The basic salary double pay shall be calculated based on the Employee's basic salary as of 31 December of the previous year.
   1. The year-end basic salary double pay shall be distributed on a pro rata basis based on the date on which the Employee passes the probation period.
   2. In case the Employee has not passed the

香港九龍荔枝角寶輪街九號十五樓 • 15/F, 9 Po Lun Street, Lai Chi Kok, Kowloon, Hong Kong
電話 Tel : (852) 2786 8888 • 傳真 Fax : (852) 2745 0300 • 網址 Website : www.kmb.hk

probation period on 31 December of the previous year, he/she shall not receive the basic salary double pay before the next Lunar New Year.

7. Working hours:
   1. The Employee must be on shift duty in accordance with the schedule set by the Company. Due to the different driving times for different routes, the Employee must work for eight hours or more than eight hours per day in compliance with the Company's assignment.
   2. The Company reserves the right to arrange for the Employee to work the morning, night, special or overnight shift according to operational needs, and the Employee shall not object. The overnight shift allowance will be paid to the Employee working the overnight shift. In case the Employee works the overnight shift for less than one month, the overnight shift allowance shall be paid on a pro rata basis based on the number of days of the overnight shift.
   3. As the Company is a public service organization, under abnormal weather conditions such as issuance of black rainstorm warning signals or typhoon signals, the Employee still needs to assume his/her driving duties as usual or on an ad hoc basis as assigned by the Company without any extra remuneration.

8. Work location: The Company may assign the Employee to work on any bus route and depot.

9. Nature of work: Responsible for driving passenger- and non-passenger buses, or any vehicles assigned by the Company. However, the Company reserves the

香港九龍荔枝角寶輪街九號十五樓 • 15/F, 9 Po Lun Street, Lai Chi Kok, Kowloon, Hong Kong
電話 Tel : (852) 2786 8888 • 傳真 Fax : (852) 2745 0300 • 網址 Website : www.kmb.hk

right to arrange for the Employee to stay in the depot or to perform other duties under special circumstances and according to actual needs.

10. Notice of resignation: For termination of the employment relationship, either party must notify the other party in writing seven days in advance or pay an equivalent amount of wages in lieu of notice.

11. Immediate dismissal: Under any of the following circumstances, the Company may immediately dismiss the Employee without prior notice or payment of wages in lieu of notice:
    1. Deliberately disobey the Company's legal and reasonable orders;
    2. Misconduct:
    3. Be fraudulent or unfaithful; or
    4. Habitual dereliction of duty.

12. Rest days: Arranged by the Company in accordance with the Hong Kong Employment Ordinance.

13. Statutory holidays: The Employee shall be entitled to statutory holidays under the Hong Kong Employment Ordinance. As the Company is a public service organization, where it is not possible to arrange for rest time during the statutory holiday, compensation leave shall be separately arranged.

14. Annual leave: The Employee may be entitled to 10 days of paid annual leave once he/she has worked for one year. In case his/her contract is renewed and he/she has worked for six consecutive years, the number of his/her annual leave shall be increased yearly up to a maximum of 14 days in accordance with the Hong Kong Employment Ordinance.

15. Sick leave: Calculated in accordance with the Hong Kong Employment Ordinance, that is, the Employee may

香港九龍荔枝角寶輪街九號十五樓 • 15/F, 9 Po Lun Street, Lai Chi Kok, Kowloon, Hong Kong
電話 Tel : (852) 2786 8888 • 傳真 Fax : (852) 2745 0300 • 網址 Website : www.kmb.hk

accumulate two days of paid sick leave per month in the first 12 months of employment, and four days of paid sick leave per month from the 13th month, up to a maximum of 120 days.

16. Mandatory Provident Fund: The Employee shall join the Mandatory Provident Fund Scheme. The Company and the Employee shall contribute to the Mandatory Provident Fund Scheme in accordance with the provisions of the Mandatory Provident Fund Schemes Ordinance. The contribution amount shall be 5% of the Employee's relevant income.

17. The Employee needs to be assessed in respect of his/her driving skills and service performance arranged by the Company. He/she also needs to take physical examination where the Company deems it necessary. In case of any failure to meet the Company's requirements, the Company reserves the right to terminate the employment.

18. Valid driving licence: Employees who are authorized by the Company to drive the Company's vehicles must confirm that they have a valid Hong Kong driving licence applicable to vehicle category to avoid infringement of the Hong Kong Traffic Ordinance and disciplinary action by the Company. In case the Employee's driving licence is cancelled (suspended) due to any event, the Company may immediately dismiss the Employee without prior notice or payment of wages in lieu of notice.

19. Breach of traffic regulations: Employees who contravene any traffic regulations and are convicted, should report to the Company immediately, irrespective of whether the violation occurs when they are on duty or whether the driving-offence points are recorded.

20. Part-time job: Employees who take any other job outside the working hours as a bus captain must apply to the

香港九龍荔枝角寶輪街九號十五樓 • 15/F, 9 Po Lun Street, Lai Chi Kok, Kowloon, Hong Kong
電話 Tel : (852) 2786 8888 • 傳真 Fax : (852) 2745 0300 • 網址 Website : www.kmb.hk

Company in advance; the Employee shall not take any part-time job without obtaining the approval of the Company and the Company reserves the right to terminate the employment once discovered.

21. Terms of service: Employees must comply with the Terms of Service, Work Guidelines and the Company's Notices. Please check the Service Manual for Operation Staff and the Code of Conduct for Directors and Employees on the Staff Webpage at www.kmb.org.hk. For the work arrangements stipulated in the contract, employees may refer to such Terms of Service, Work Guidelines and the Company's Notices. The Company reserves the right to amend the relevant rules and guidelines and related notices at any time. All additions, deletions or amendments shall be subject to the latest announcement of the Company.

22. Job placement: The Company reserves the right to arrange for Employees to perform related functions in Transport International or any of its companies. Employees are also required to comply with the terms of service for the relevant job placement.

23. Miscellaneous: The length of service of an Employee who serves as a full-time bus captain before his/her retirement at the age of 60 shall not be counted herein. During the period of the re-employment of the Employee as the bus captain after his/her retirement, the Company shall issue a staff card to the Employee, and the Employee's retirement certificate shall be returned to the Human Resources Department for temporary custody, and returned to the Employee until he/she is no longer re-employed as bus captain after retirement.

This employment contract shall supersede any prior oral or written

香港九龍荔枝角寶輪街九號十五樓 • 15/F, 9 Po Lun Street, Lai Chi Kok, Kowloon, Hong Kong
電話 Tel : (852) 2786 8888 • 傳真 Fax : (852) 2745 0300 • 網址 Website : www.kmb.hk

(Logo of KMB)
THE KOWLOON MOTOR BUS CO. (1933) LTD. Confidential

agreement entered into in relation to the terms and conditions and details of the employment of this position.
This employment contract shall supersede any prior oral or written agreement entered into in relation to the terms and conditions and details of the employment of this position.

Manager (Human Resources): _____ **[Chopped: Human Resources Department of KMB]**

6 August 2018

I understand and agree to the employment conditions listed above on my own will and receive a copy of this employment contract.

Signature of Employee: _____

Employee's number: _____

Date: _____

-End-

[signed]
CL/SC/TM

香港九龍荔枝角寶輪街九號十五樓 • 15/F, 9 Po Lun Street, Lai Chi Kok, Kowloon, Hong Kong
電話 Tel : (852) 2786 8888 • 傳真 Fax : (852) 2745 0300 • 網址 Website : www.kmb.hk

九龍巴士（一九三三）有限公司
THE KOWLOON MOTOR BUS CO. (1933) LTD.

機　密

本部檔號：HR/Resourcing/1957/2018(56398)

九龍巴士（一九三三）有限公司（以下簡稱為“公司”）現聘請 [redacted] 先生，香港身份證號碼 [redacted]（以下簡稱為“僱員”）為 時薪車長，雙方同意下列之僱傭條件：

一、 到職日期 ：二零一八年八月廿二日

二、 合約期一年 ：二零一八年八月廿二日至二零一九年八月廿一日

三、 訓練期 ： 由入職日起為訓練期，訓練日數視乎僱員的受訓進度而定，通過訓練期與否，以公司書面通知為準。

若僱員入職時只持有本地 1 / 1A 駕駛執照：

1. 每名僱員可獲安排最多兩次運輸署的巴士駕駛考試；
2. 如僱員未能通過首次的運輸署巴士駕駛考試，而需再次入班受訓，等候第二次入班受訓期間將作無薪事假處理；
3. 除非獲公司特別批准，否則如僱員仍然未能通過第二次的運輸署巴士駕駛考試，本僱傭合約將因無法履約自動失效。
4. 除了在「車長訓練保証金聲明」上所述的情況外，僱員可獲豁免港幣 12,000 元的訓練學費。

四、 合約期滿 ： 合約期滿後，僱傭關係將自動終止。

五、 糧期 ：時薪制，每月出糧一次，通常為每個月完結後的第七日。

六、 工資 ：1. 時薪：每小時港幣八十元。
2. 僱員在訓練期內可享有時薪。

七、 工作時間 ： 1. 工作時間由公司編配。
2. 因公司屬公共服務機構，僱員在不正常天氣情況下，如黑色暴雨警告訊號或颱風訊號懸掛下，仍需按公司指定擔任正常或臨時駕駛任務，而不獲任何額外酬勞。
3. 僱員在開工前應確保當天的身體及精神狀況可以應付為公司擔任時薪車長的工作。倘若在當值期間身體及精神狀況欠佳，需即時通知公司電台或當值站長，並停止駕駛工作。

香港九龍荔枝角寶輪街九號十五樓 • 15/F, 9 Po Lun Street, Lai Chi Kok, Kowloon, Hong Kong
電話 Tel : (852) 2786 8888 • 傳真 Fax : (852) 2745 0300 • 網址 Website : www.kmb.hk

[redacted]

九龍巴士（一九三三）有限公司
THE KOWLOON MOTOR BUS CO. (1933) LTD.

機　密

八、　工作地點及路線：由公司調派。

九、　工作性質　　：負責駕駛載客、非載客巴士，或公司指派的車輛。

十、　試用期　　：六個月，如僱員工作表現未符公司要求，公司有權將試用期延長三個月。通過試用期與否以公司書面通知為準。

十一、離職通知期　　：1. 在第一個月內，僱員或公司任何一方均可隨時終止僱傭關係而無需給予預先通知或以工資代替通知。
2. 在第二個月或以後，任何一方必須預早七天書面通知或以七天工資代替通知。

十二、即時解僱　　：公司在下列情況下，可即時解僱僱員，而無需給予預先通知或以工資代替通知，如僱員：
1. 故意不服從公司合法及合理的命令；
2. 行為不檢；
3. 欺詐、不忠實；或
4. 慣常疏忽職守。

十三、休息日　　：按香港僱傭法例由公司編配，休息日屬無薪。

十四、法定假日　　：按香港僱傭法例享有法定假日，因公司屬公共服務機構，倘未能在該法定假期編給休息，則另定日期補假。

十五、年假　　：按香港僱傭法例發給。

十六、病假　　：每月可累積兩天有薪病假額。如獲醫生簽發病假，一至三天屬無薪，如病假連續四天或以上，可使用累積有薪病假額，享受有薪病假。

十七、強制性公積金　　：僱員將參加強制性公積金計劃，公司及僱員均依照《強制性公積金計劃條例》的規定向強制性公積金計劃供款。供款額為僱員有關入息的百份之伍。

十八、僱員需接受公司安排之駕駛技術及服務表現考核，如公司認為有需要，亦需接受體格檢驗，倘有不符合公司要求者，公司保留停止僱用的權利。

[redacted]

香港九龍荔枝角寶輪街九號十五樓 • 15/F, 9 Po Lun Street, Lai Chi Kok, Kowloon, Hong Kong
電話 Tel : (852) 2786 8888 • 傳真 Fax : (852) 2745 0300 • 網址 Website : www.kmb.hk

九龍巴士（一九三三）有限公司
THE KOWLOON MOTOR BUS CO. (1933) LTD.

機 密

十九、法律責任　：如僱員可能或被香港運輸署停牌，僱員必須主動向公司申報，並將有關文件副本交予公司，如僱員被停牌，則雙方的僱傭合約亦會自動終止。如有任何隱瞞或拖延申報，無論任何原因，僱員均須要負上全部法律責任，包括因無牌駕駛引致的所有保險及法律責任，公司同時亦保留一切追究權利。

二十、違反交通規例　：僱員如違反任何交通條例及經被定罪，不論該違例事項是否在當值期間發生或是否被扣分，應立即向公司報告。

廿一、工作申報　：僱員在擔任時薪車長工作時間以外，擔任其他工作，必須事先向公司申報。

廿二、服務規則　：僱員必須遵守服務規則、公司通告及所有有關時薪車長之工作指引，公司有權隨時修改有關規則、公司通告及指引，所有增減或修改，以公司最新公佈為準。

廿三、此僱傭合約已包括適用於僱員的所有僱傭條件，並會取代任何之前就有關此職位之僱傭條件及細則所訂立之口頭或書面協議。

[redacted]

THE KOWLOON MOTOR BUS COMPANY (1933) LTD. * HUMAN RESOURCES DEPARTMENT

經理（人力資源）：_____

二零一八年八月廿一日

本人明白及自願同意以上所列之僱傭條件，同時收取此僱傭合約副本一份。

僱員簽署：[redacted]_____

僱員編號：[redacted]_____

日　期：22-8-2018

CL/SC/YML

-完-

10.3

(Logo of KMB)
THE KOWLOON MOTOR BUS CO. (1933) LTD. Confidential

File no.: HR/Resourcing/1957/2018(56398)

The Kowloon Motor Bus Co. (1933) Ltd. (hereinafter referred to as the "Company") is now hiring Mr. _____ HKID no. _____ (hereinafter referred to as the "Employee") as bus captain (hourly rate), and both parties agree on the following conditions of employment:

1. Start date: 22 August 2018

2. 2 - year contract term: 22 August 2018 to 21 August 2019

3. Training period: The training period shall commence from the start date of employment, and the number of training days shall be determined depending on the progress of the Employee's training. Whether the Employee passes the training shall be subject to the Company's written notice.

   In case the Employee is only holding a local 1 / 1A driving licence at the time of enrollment:

   1. Each Employee may be arranged for up to two bus driving tests by the Transport Department ("TD");

   2. In case the Employee fails the first TD bus driving test, he/she shall be required to join the training session and shall be treated as taking unpaid leave during the period in which he/she is waiting for the second training session;

   3. Unless the Company specifically approves, in case the Employee still fails the second TD bus driving test, the Employment Contract shall become invalid automatically due to its non-performance.

   4. Except for the circumstances described in the

香港九龍荔枝角寶輪街九號十五樓 • 15/F, 9 Po Lun Street, Lai Chi Kok, Kowloon, Hong Kong
電話 Tel : (852) 2786 8888 • 傳真 Fax : (852) 2745 0300 • 網址 Website : www.kmb.hk

	"Declaration of Bus Captain Training Guarantee", Employees are exempted from training tuition fees of HK$12,000.
4. Expiry of contract:	The employment relationship shall be automatically terminated upon expiration of the contract.
5. Salary payment:	On a hourly basis. The salary shall be paid once a month, usually on the seventh day after the end of each month.
6. Remuneration:	1. Hourly rate: HK$80 per hour. 2. Employees are entitled to hourly wages during the training period.
7. Working hours:	1. The working hours shall be assigned by the Company. 2. As the Company is a public service organization, under abnormal weather conditions such as issuance of black rainstorm warning signals or typhoon signals, the Employee still needs to assume his/her driving duties as usual or on an ad hoc basis as assigned by the Company without any extra remuneration. 3. Employees should ensure that his/her physical and mental conditions of the day are suitable to serve as the Company's bus captain paid at an hourly rate before starting his/her work. In case the physical and mental conditions are unsatisfactory during his/her duty, he/she shall immediately notify the radio station or the duty stationmaster of the Company and stop driving.
8. Work location and routes:	As assigned by the Company.
9. Nature of work:	Responsible for driving passenger- and non-

香港九龍荔枝角寶輪街九號十五樓 • 15/F, 9 Po Lun Street, Lai Chi Kok, Kowloon, Hong Kong
電話 Tel : (852) 2786 8888 • 傳真 Fax : (852) 2745 0300 • 網址 Website : www.kmb.hk

passenger buses, or any vehicles assigned by the Company. However, the Company reserves the right to arrange for the Employee to stay in the depot or to perform other duties under special circumstances and according to actual needs.

10. Probation period: Six months. In case the Employee's work performance does not meet the Company's requirements, the Company reserves the right to extend the probation period by three months. Whether the Employee passes the probation period shall be subject to the Company's written notice.

11. Notice of resignation:
1. During the first month of the probation period, either the Employee or the Company may terminate the employment relationship at any time without prior notice or payment of wages in lieu of notice.
2. During or after the second month of the probation period, either party must notify the other party in writing seven days in advance or pay an equivalent amount of wages in lieu of notice.

12. Immediate dismissal: Under any of the following circumstances, the Company may immediately dismiss the Employee without prior notice or payment of wages in lieu of notice:
1. Deliberately disobey the Company's legal and reasonable orders;
2. Misconduct:
3. Be fraudulent or unfaithful; or
4. Habitual dereliction of duty.

13. Rest days: Arranged by the Company in accordance with the Hong Kong Employment Ordinance; rest days are unpaid.

香港九龍荔枝角寶輪街九號十五樓 • 15/F, 9 Po Lun Street, Lai Chi Kok, Kowloon, Hong Kong
電話 Tel : (852) 2786 8888 • 傳真 Fax : (852) 2745 0300 • 網址 Website : www.kmb.hk

(Logo of KMB)
THE KOWLOON MOTOR BUS CO. (1933) LTD. Confidential

14. Statutory holidays: The Employee shall be entitled to statutory holidays under the Hong Kong Employment Ordinance. As the Company is a public service organization, where it is not possible to arrange for rest time during the statutory holiday, compensation leave shall be separately arranged.

15. Annual leave: Granted in accordance with the Hong Kong Employment Ordinance.

16. Sick leave: Two days of paid sick leave may be accumulated each month. In case the Employee is granted sick leave from the doctor, one to three days are unpaid. In case the Employee is granted sick leave for four days or more, he/she may use the accumulated paid sick leave and is entitled to paid sick leave.

17. Mandatory Provident Fund: The Employee shall join the Mandatory Provident Fund Scheme. The Company and the Employee shall contribute to the Mandatory Provident Fund Scheme in accordance with the provisions of the Mandatory Provident Fund Schemes Ordinance. The contribution amount shall be 5% of the Employee's relevant income.

18. The Employee needs to be assessed in respect of his/her driving skills and service performance arranged by the Company. He/she also needs to take physical examination where the Company deems it necessary. In case of any failure to meet the Company's requirements, the Company reserves the right to terminate the employment.

19. Legal liability: In case an Employee may be suspended by the Hong Kong Transport Department, he/she must take the initiative to report to the Company and submit a copy of the relevant documents to the Company. In case the Employee is suspended, the employment contract between the two parties shall be automatically terminated. In case there is any

香港九龍荔枝角寶輪街九號十五樓 • 15/F, 9 Po Lun Street, Lai Chi Kok, Kowloon, Hong Kong
電話 Tel : (852) 2786 8888 • 傳真 Fax : (852) 2745 0300 • 網址 Website : www.kmb.hk

concealment or delay in reporting, the Employee must be fully liable for any reason, including all insurance and legal liabilities arising from unlicensed driving. The Company also reserves all rights to take further actions.

20. Breach of traffic regulations: Employees who contravene any traffic regulations and are convicted, should report to the Company immediately, irrespective of whether the violation occurs when they are on duty or whether the driving-offence points are recorded.

21. Job declaration: Employees who take any other job outside the working hours as a hourly-rate bus captain must report to the Company in advance.

22. Terms of service: Employees must comply with the Terms of Service, the Company's Notices, and all Work Guidelines relating to bus captains paid at hourly rate. The Company reserves the right to amend the relevant rules, the Company's Notices and guidelines at any time. All additions, deletions or amendments shall be subject to the latest announcement of the Company.

23. This employment contract includes all conditions of employment applicable to the Employee and shall supersede any prior oral or written agreement entered into in relation to the terms and conditions and details of the employment of this position.

Manager (Human Resources): _____ **[Chopped: Human Resources Department of KMB]**

21 August 2018

香港九龍荔枝角寶輪街九號十五樓 • 15/F, 9 Po Lun Street, Lai Chi Kok, Kowloon, Hong Kong
電話 Tel : (852) 2786 8888 • 傳真 Fax : (852) 2745 0300 • 網址 Website : www.kmb.hk

10.3

(Logo of KMB)
THE KOWLOON MOTOR BUS CO. (1933) LTD. Confidential

I understand and agree to the employment conditions listed above on my own will and receive a copy of this employment contract.

Signature of Employee: _____

Employee's number: _____

Date: *22 August 2018*

-End-

[signed]
CL/SC/YML

香港九龍荔枝角寶輪街九號十五樓 • 15/F, 9 Po Lun Street, Lai Chi Kok, Kowloon, Hong Kong
電話 Tel : (852) 2786 8888 • 傳真 Fax : (852) 2745 0300 • 網址 Website : www.kmb.hk

九龍巴士（一九三三）有限公司
THE KOWLOON MOTOR BUS CO. (1933) LTD.

機　密

本部檔號：HR/Resourcing/[redacted]

九龍巴士（一九三三）有限公司（以下簡稱為“公司”）現聘請 [redacted] 先生，香港身份證號碼 [redacted]（以下簡稱為“僱員”）為 退休重聘車長，雙方同意下列之僱傭條件：

一、	到職日期	：	二零一八年八月九日
二、	合約期一年	：	二零一八年八月九日至二零一九年八月八日
三、	合約期滿	：	合約期滿後，僱傭關係將自動終止。
四、	糧期	：	時薪制，每月出糧一次，通常為每個月完結後的第七日。
五、	工資	：	每小時港幣七十五元。 在合約期內，僱員將不會獲發給年終酬金、年尾獎金或農曆新年獎金。
六、	工作時間	：	1. 僱員必須依照公司編定的時間表輪班當值。 2. 因公司屬公共服務機構，僱員在不正常天氣情況下，如黑色暴雨警告訊號或颱風訊號懸掛下，仍需按公司指定擔任正常或臨時駕駛任務，而不獲任何額外酬勞。
七、	工作地點	：	公司可調派僱員於任何巴士路線及廠房工作。
八、	工作性質	：	負責駕駛載客、非載客巴士，或公司指派的車輛。
九、	離職通知期	：	1. 在第一個月內，僱員或公司任何一方均可隨時終止僱傭關係而無需給予預先通知或以工資代替通知。 2. 在第二個月或以後，任何一方必須預早七天書面通知或以七天工資代替通知。
十、	即時解僱	：	公司在下列情況下，可即時解僱僱員，而無需給予預先通知或以工資代替通知，如僱員： 1. 故意不服從公司合法及合理的命令； 2. 行為不檢；

[redacted]

香港九龍荔枝角寶輪街九號十五樓 • 15/F, 9 Po Lun Street, Lai Chi Kok, Kowloon, Hong Kong
電話 Tel : (852) 2786 8888 • 傳真 Fax : (852) 2745 0300 • 網址 Website : www.kmb.hk

[redacted]

3. 欺詐、不忠實；或
4. 慣常疏忽職守。

十一、 休息日 ： 香港僱傭法例由公司編配，休息日屬無薪。

十二、 法定假日 ： 按香港僱傭法例享有法定假日，因公司屬公共服務機構，倘未能在該法定假期編給休息，則另定日期補假。

十三、 年假 ： 按香港僱傭法例發給。

十四、 病假 ： 每月可累積兩天有薪病假額。如獲醫生簽發病假，一至三天屬無薪，如病假連續四天或以上，可使用累積有薪病假額，享受有薪病假。

十五、 醫療福利 ： 僱員可免費享受本公司醫療中心提供的服務，惟不受本公司現時向全職員工提供的團體住院保險或意外保險保障。

十六、 強制性公積金 ： 僱員將參加強制性公積金計劃，公司及僱員均依照《強制性公積金計劃條例》的規定向強制性公積金計劃供款。供款額為僱員有關入息的百份之伍。

十七、 僱員需接受公司安排之駕駛技術及服務表現考核，如公司認為有需要，亦需接受體格檢驗，倘有不符合公司要求者，公司保留終止合約的權利。

十八、 法律責任 ： 如僱員可能或被香港運輸署停牌，僱員必須主動向公司申報，並將有關文件副本交予公司，如僱員被停牌，則雙方的僱傭合約亦會自動終止。如有任何隱瞞或拖延申報，無論任何原因，僱員均須要負上全部法律責任，包括因無牌駕駛引致的所有保險及法律責任，公司同時亦保留一切追究權利。

十九、 違反交通規例 ： 僱員如違反任何交通條例及經被定罪，不論該違例事項是否在當值期間發生或是否被扣分，應立即向公司報告。

二十、 工作申報 ： 僱員在擔任退休重聘車長工作時間以外，擔任其他工作，必須事先向公司申報。

[redacted]

香港九龍荔枝角寶輪街九號十五樓 • 15/F, 9 Po Lun Street, Lai Chi Kok, Kowloon, Hong Kong
電話 Tel : (852) 2786 8888 • 傳真 Fax : (852) 2745 0300 • 網址 Website : www.kmb.hk

[redacted]4820

九龍巴士（一九三三）有限公司
THE KOWLOON MOTOR BUS CO. (1933) LTD.

機　密

廿一、 服務規則 ： 僱員必須遵守服務規則、公司通告及所有有關退休重聘車長之工作指引，公司有權隨時修改有關規則、公司通告及工作指引，所有增減或修改，以公司最新公佈為準。

廿二、 其他 ： 僱員在本合約期前擔任全職車長的服務年資並不會計算在此合約內。在僱員擔任退休重聘車長期間，公司會發給職員証予僱員，而僱員的退休証需交回人力資源部暫時保管，待僱員停任退休重聘車長時方予發回。

廿三、 此僱傭合約會取代任何之前就有關此職位之僱傭條件及細則所訂立之口頭或書面協議。

經理（人力資源）：[redacted]

THE KOWLOON MOTOR BUS COMPANY (1933) LTD. * HUMAN RESOURCES DEPARTMENT

二零一八年八月六日

本人明白及自願同意以上所列之僱傭條件，同時收取此僱傭合約副本一份。

僱員簽署：[redacted]

僱員編號：

日　　期：

CL/SC/TM

- 完 -

[redacted]

10.4

(Logo of KMB)
THE KOWLOON MOTOR BUS CO. (1933) LTD. Confidential

File no.: HR/Resourcing/

The Kowloon Motor Bus Co. (1933) Ltd. (hereinafter referred to as the "Company") is now hiring Mr. _____ HKID no. _____ (hereinafter referred to as the "Employee") as bus captain (re-employed after retirement), and both parties agree on the following conditions of employment:

1. Start date: 9 August 2018

2. 1 - year contract term: 9 August 2018 to 8 August 2019

3. Expiry of contract: The employment relationship shall be automatically terminated upon expiration of the contract.

4. Salary payment: On a hourly basis. The salary shall be paid once a month, usually on the seventh day after the end of each month.

5. Remuneration: HK$75 per hour.
   During the contract period, Employees shall not be entitled to year-end remuneration, year-end bonus or a Lunar New Year bonus.

6. Working hours:
   1. The Employee must be on shift duty in accordance with the schedule set by the Company.
   2. As the Company is a public service organization, under abnormal weather conditions such as issuance of black rainstorm warning signals or typhoon signals, the Employee still needs to assume his/her driving duties as usual or on an ad hoc basis as assigned by the Company without any extra remuneration.

7. Work location: The Company may assign the Employee to work

香港九龍荔枝角寶輪街九號十五樓 • 15/F, 9 Po Lun Street, Lai Chi Kok, Kowloon, Hong Kong
電話 Tel : (852) 2786 8888 • 傳真 Fax : (852) 2745 0300 • 網址 Website : www.kmb.hk

on any bus route and depot.

8. Nature of work: Responsible for driving passenger- and non-passenger buses, or any vehicles assigned by the Company.

9. Notice of resignation:
   1. During the first month, either the Employee or the Company may terminate the employment relationship at any time without prior notice or payment of wages in lieu of notice.
   2. During or after the second month of the probation period, either party must notify the other party in writing seven days in advance or pay an equivalent amount of wages in lieu of notice.

10. Immediate dismissal: Under any of the following circumstances, the Company may immediately dismiss the Employee without prior notice or payment of wages in lieu of notice:
    1. Deliberately disobey the Company's legal and reasonable orders;
    2. Misconduct:
    3. Be fraudulent or unfaithful; or
    4. Habitual dereliction of duty.

11. Rest days: Arranged by the Company in accordance with the Hong Kong Employment Ordinance; rest days are unpaid.

12. Statutory holidays: The Employee shall be entitled to statutory holidays under the Hong Kong Employment Ordinance. As the Company is a public service organization, where it is not possible to arrange for rest time during the statutory holiday, compensation leave shall be separately arranged.

13. Annual leave: Granted in accordance with the Hong Kong

香港九龍荔枝角寶輪街九號十五樓 • 15/F, 9 Po Lun Street, Lai Chi Kok, Kowloon, Hong Kong
電話 Tel : (852) 2786 8888 • 傳真 Fax : (852) 2745 0300 • 網址 Website : www.kmb.hk

Employment Ordinance.

14. Sick leave: Two days of paid sick leave may be accumulated each month. In case the Employee is granted sick leave from the doctor, one to three days are unpaid. In case the Employee is granted sick leave for four days or more, he/she may use the accumulated paid sick leave and is entitled to paid sick leave.

15. Medical benefits: Employees may be entitled to the services provided by the Company's medical center free of charge, but are not entitled to the group hospitalization insurance or accident insurance provided by the Company to full-time employees.

16. Mandatory Provident Fund: The Employee shall join the Mandatory Provident Fund Scheme. The Company and the Employee shall contribute to the Mandatory Provident Fund Scheme in accordance with the provisions of the Mandatory Provident Fund Schemes Ordinance. The contribution amount shall be 5% of the Employee's relevant income.

17. The Employee needs to be assessed in respect of his/her driving skills and service performance arranged by the Company. He/she also needs to take physical examination where the Company deems it necessary. In case of any failure to meet the Company's requirements, the Company reserves the right to terminate the employment.

18. Legal liability: In case an Employee may be suspended by the Hong Kong Transport Department, he/she must take the initiative to report to the Company and submit a copy of the relevant documents to the Company. In case the Employee is suspended, the employment contract between the two parties shall be automatically terminated. In case there is any concealment or delay in reporting, the Employee must be fully liable for any reason, including all insurance and legal liabilities arising from

香港九龍荔枝角寶輪街九號十五樓 • 15/F, 9 Po Lun Street, Lai Chi Kok, Kowloon, Hong Kong
電話 Tel : (852) 2786 8888 • 傳真 Fax : (852) 2745 0300 • 網址 Website : www.kmb.hk

unlicensed driving. The Company also reserves all rights to take further actions.

19. Breach of traffic regulations: Employees who contravene any traffic regulations and are convicted, should report to the Company immediately, irrespective of whether the violation occurs when they are on duty or whether the driving-offence points are recorded.

20. Job declaration: Employees who take any other job outside the working hours as a hourly-rate bus captain must report to the Company in advance.

21. Terms of service: Employees must comply with the Terms of Service, the Company's Notices, and all Work Guidelines relating to bus captains paid at hourly rate. The Company reserves the right to amend the relevant rules, the Company's Notices and guidelines at any time. All additions, deletions or amendments shall be subject to the latest announcement of the Company.

22. Miscellaneous: The length of service of an Employee who serves as a full-time bus captain before the contract period shall not be counted herein. During the period of the re-employment of the Employee as the bus captain after his/her retirement, the Company shall issue a staff card to the Employee, and the Employee's retirement certificate shall be returned to the Human Resources Department for temporary custody, and returned to the Employee until he/she is no longer re-employed as bus captain after retirement.

23. This employment contract shall supersede any prior oral or written agreement entered into in relation to the terms and conditions and details of the employment of this position.

香港九龍荔枝角寶輪街九號十五樓 • 15/F, 9 Po Lun Street, Lai Chi Kok, Kowloon, Hong Kong
電話 Tel : (852) 2786 8888 • 傳真 Fax : (852) 2745 0300 • 網址 Website : www.kmb.hk

10.4

(Logo of KMB)
THE KOWLOON MOTOR BUS CO. (1933) LTD. Confidential

Manager (Human Resources): _____ **[Chopped: Human Resources Department of KMB]**

6 August 2018

I understand and agree to the employment conditions listed above on my own will and receive a copy of this employment contract.

Signature of Employee: _____

Employee's number: _____

Date: _____

-End-

[signed]
CL/SC/TM

香港九龍荔枝角寶輪街九號十五樓 • 15/F, 9 Po Lun Street, Lai Chi Kok, Kowloon, Hong Kong
電話 Tel : (852) 2786 8888 • 傳真 Fax : (852) 2745 0300 • 網址 Website : www.kmb.hk

emp_no	name	depot_abbr	operating date	route_no	run_no	bus_no	operating route	departure from	departure time	operating time	duration	max_speed	gps_pos_lat	gps_pos_long	link	speed_limit	Location	Action
[redacted]	黃[redacted]	KBD	04/02/2018	94	P05	JY4396	94	黃石碼頭	04/02/2018 17:50:00	04/02/2018 17:56:29	3	80	22.41012433	114.3258513	location	50	北潭路	Written warning
[redacted]	李[redacted]	LCD	01/02/2018	N260	01	TE3786	N260	美孚	01/02/2018 03:20:00	01/02/2018 03:43:26	6	80	22.35637783	114.0306072	location	80	屯門公路青龍頭段	Final warning
[redacted]	梁[redacted]	TMD	29/01/2018	59M	S06	MU5148	67M	葵芳站	29/01/2018 17:00:00	29/01/2018 17:17:09	5	80	22.36740667	114.0574482	location	80	屯門公路近浪翠園	Verbal warning
[redacted]	林[redacted]	KBD	03/02/2018	13X	06	KG1650	213X	安泰(南)	03/02/2018 18:10:00	03/02/2018 19:11:19	9	84	22.32061117	114.1903107	location	80	東九龍走廊近牛棚藝術村	Verbal warning
[redacted]	陳[redacted]	KBD	05/02/2018	268C	20	UD 759	268C	朗屏站	05/02/2018 17:45:00	05/02/2018 18:13:00	2	80	22.44676967	114.0501033	location	80	元朗公路支路往青朗公路	Verbal warning
[redacted]	陳[redacted]	KBD	05/02/2018	268C	20	UD 759	268C	觀塘碼頭	05/02/2018 23:30:00	05/02/2018 23:49:02	8	83	22.3424085	114.1537348	location	80	皇祥道近明愛醫院	
[redacted]	陳[redacted]	KBD	06/02/2018	268C	20	TB8872	268C	觀塘碼頭	06/02/2018 19:31:00	06/02/2018 20:24:42	11	80	22.431403	114.0628643	location	80	青朗公路近錦上路站	
[redacted]	梁[redacted]	LCD	10/02/2018	48X	24	KU1500	48X	灣景花園	10/02/2018 21:32:00	10/02/2018 22:06:11	9	82	22.38163317	114.1755265	location	80	城厦公路近美松苑	Verbal warning
[redacted]	徐[redacted]	TMD	05/02/2018	260X	S04	JX7849	260X	紅磡站	05/02/2018 11:30:00	05/02/2018 11:52:55	4	81	22.317142	114.1599595	location	80	西九公路近奧運站	Verbal warning
[redacted]	陳[redacted]	TMD	05/02/2018	58M	07	UF4942	58M	良景	05/02/2018 15:10:00	05/02/2018 15:41:00	3	80	22.370855	114.0909843	location	80	屯門公路汀九段	Incorporated in the verbal warning issued on 22 Feb 2018
[redacted]	容[redacted]	KBD	13/02/2018	98D	08	KG3458	98D	坑口(北)	13/02/2018 12:48:00	13/02/2018 13:08:44	2	80	22.311504	114.2330633	location	80	將軍澳道近翠屏南邨	Verbal warning
[redacted]	蕭[redacted]	TMD	29/01/2018	66M	02	RJ7188	66M	大興	29/01/2018 18:50:00	29/01/2018 19:01:17	3	80	22.377422	113.9867145	location	80	屯門公路青山灣段	Verbal warning
[redacted]	何[redacted]	KBD	03/02/2018	296A	61	KD7664	296A	尚德	03/02/2018 12:50:00	03/02/2018 13:15:24	5	81	22.31842083	114.2569022	location	80	將軍澳厦道公路近新都城	Verbal warning
[redacted]	何[redacted]	KBD	05/02/2018	296A	01	VD4052	296A	尚德	05/02/2018 14:08:00	05/02/2018 14:15:24	2	81	22.31159867	114.2333388	location	80	將軍澳道近翠屏南邨	
[redacted]	王[redacted]	LCD	03/02/2018	905	06	TR4966	905	荔枝角	03/02/2018 06:55:00	03/02/2018 07:23:44	6	80	22.29989883	114.1555522	location	80	西厦公路九龍入口	Verbal warning
[redacted]	鄧[redacted]	TMD	29/01/2018	67M	S11	UE4144	67M	葵芳站	29/01/2018 11:30:00	29/01/2018 12:09:50	31	67	22.408701	113.9801317	location	50	青山公路嶺南段	Final warning
[redacted]	吳[redacted]	TMD	07/02/2018	E34A	07	TJ7312	E34A	地面運輸中心	07/02/2018 16:35:00	07/02/2018 17:23:11	20	83	22.43058633	114.0631752	location	80	青朗公路近錦上路站	Verbal warning
[redacted]	吳[redacted]	TMD	07/02/2018	E34A	07	TJ7312	E34B	地面運輸中心	08/02/2018 00:00:00	08/02/2018 00:43:27	8	80	22.43176117	114.0627645	location	80	青朗公路近錦上路站	
[redacted]	關[redacted]	TMD	31/01/2018	67X	02	SA8730	67X	兆康苑	31/01/2018 22:53:00	31/01/2018 23:14:07	11	83	22.36695112	114.054671	location	80	屯門公路近浪翠園	Verbal warning
[redacted]	葉[redacted]	TMD	30/01/2018	59A	01	UU7569	59X	屯門碼頭	30/01/2018 10:08:00	30/01/2018 10:33:44	2	80	22.37410567	114.1026228	location	80	屯門公路近藏城花園	Verbal warning
[redacted]	關[redacted]	TMD	30/01/2018	59X	L04	VC5294	59X	旺角東站	30/01/2018 19:25:00	30/01/2018 20:07:36	5	82	22.35762083	114.0327242	location	80	屯門公路青龍頭段	Written warning (poor performance)
[redacted]	劉[redacted]	TMD	06/02/2018	58M	S01	KN7970	58P	葵芳站	06/02/2018 18:30:00	06/02/2018 18:57:22	2	80	22.365687	114.0469593	location	80	屯門公路近浪翠園	Verbal warning
[redacted]	陳[redacted]賢	KBD	11/02/2018	96R	S10	SY4050	96R	鑽石山站	11/02/2018 09:00:00	11/02/2018 10:48:21	5	84	22.33674417	114.2426618	location	80	清水灣道近清水灣山莊	Verbal warning
[redacted]	陳[redacted]賢	KBD	11/02/2018	96R	S10	SY4050	96R	黃石碼頭	11/02/2018 16:15:00	11/02/2018 17:00:28	3	82	22.336502	114.242473	location	80	清水灣道近清水灣山莊	
[redacted]	湘[redacted]	TMD	02/02/2018	68X	L05	VD5442	268X	洪水橋洪福	02/02/2018 14:45:00	02/02/2018 15:22:34	2	80	22.374032	114.1021813	location	80	屯門公路近藏城花園	Incorporated in the verbal warning issued on 22 Jan 2018

11.1

emp_no	name	depot_abbr	operating date	route_no	bus_no	operating route	departure from	departure time	operating time	duration	max_speed	gps_pos_lat	gps_pos_long	link	speed_limit	Location	Action
[redacted]	Wong [redacted]	KBD	04/02/2018	94	JY4396	94	Wong Shek Pier	04/02/2018 17:50:00	04/02/2018 17:56:29	3	80	22.410124 33	114.325851 3	location	50	Pak Tam Road	Written warning
[redacted]	Cheuk [redacted]	LCD	01/02/2018	N260	TE3786	N260	Mei Foo	01/02/2018 03:20:00	01/02/2018 03:43:26	6	80	22.356377 83	114.030607 2	location	80	Tuen Mun Road Tsing Lung Tau section	Final warning
[redacted]	Leung [redacted]	TMD	29/01/2018	59M	MU5148	67M	Kwai Fong Station	29/01/2018 17:00:00	29/01/2018 17:17:09	5	80	22.367406 67	114.057448 2	location	80	Tuen Mun Road near Sea Crest Villa	Verbal warning
[redacted]	Lam [redacted]	KBD	03/02/2018	13X	KG1650	213X	On Tai (South)	03/02/2018 18:10:00	03/02/2018 19:11:19	9	84	22.320611 17	114.190310 7	location	80	East Kowloon Corridor near Cattle Depot Artists Village	Verbal warning

[redacted]	Chan [redacted] Wing	KBD	05/02/2018	268C	UD759	268C	Long Ping Station	05/02/2018 17:45:00	05/02/2018 18:13:00	2	80	22.4467696 7	114.050103 3	location	80	Yuen Long Highway slip road to Tsing Long Highway	Verbal warning
[redacted]	Chan [redacted] Wing	KBD	05/02/2018	268C	UD759	268C	Kwun Tong Pier	05/02/2018 23:30:30	05/02/2018 23:49:02	8	83	22.3424085	114.153734 8	location	80	Ching Cheung Road near Ming Oi Hospital	
[redacted]	Chan [redacted] Wing	KBD	06/02/2018	268C	TB8872	268C	Kwun Tong Pier	06/02/2018 19:31:00	06/02/2018 20:24:42	11	80	22.431403	114.062864 3	location	80	Tsing Long Highway near Kam Sheung Road Station	
[redacted]	Leung [redacted]	LCD	10/02/2018	48X	KU1500	48X	Bayview Garden	10/02/2018 21:32:00	10/02/2018 22:06:11	9	82	22.3816331 7	114.175526 5	location	80	Shing Mun Tunnels Road near Mei Chung Court	Verbal warning
[redacted]	Tsui [redacted]	TMD	05/02/2018	260X	JX7849	260X	Hung Hom Station	05/02/2018 11:30:00	05/02/2018 11:52:55	4	81	22.317142	114.159595 5	location	80	West Kowloon Highway near Olympic	Verbal warning

															Station	
[redacted]	Chan [redacted] Lok	TMD	05/02/2018	58M	UF4942	58M	Leung King	05/02/2018 15:10:00	05/02/2018 15:41:00	3	80	22.370855	114.090984 3	location	80	Tuen Mun Road Ting Kau section	Incorporated in the verbal warning issued on 22 Feb 2018
[redacted]	Yung [redacted]	KBD	13/02/2018	98D	KG3458	98D	Hang Hau (North)	13/02/2018 12:48:00	13/02/2018 13:08:44	2	80	22.311504	114.233063 3	location	80	Tseung Kwan O Road near Tsui Ping South Estate	Verbal warning
[redacted]	Kan [redacted]	TMD	29/01/2018	66M	RJ7188	66M	Tai Hing	29/01/2018 18:50:00	29/01/2018 19:01:17	3	80	22.377422	114.986714 5	location	80	Tuen Mun Road Castle Peak Road section	Verbal warning
[redacted]	Ho [redacted]	KBD	03/02/2018	296A	KD7664	296A	Sheung Tak	03/02/2018 12:50:00	03/02/2018 13:15:24	5	81	22.318420 83	114.256902	location	80	Tseung Kwan O Tunnel Road near The Metro City	Verbal warning
[redacted]	Ho [redac	KBD	05/02/2018	296A	VD40	296A	Sheung Tak	05/02/2018	05/02/2018	2	81	22.3115986	114.233338	location	80	Tseung Kwan O Road near	

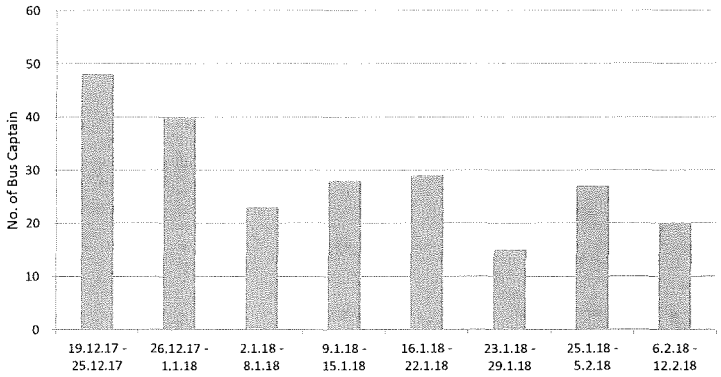
	ted]				52			14:08:00	14:15:24			7	8			Tsui Ping South Estate	
[redacted]	Wong [redacted]	LCD	03/02/2018	905	TR4966	905	Lai Chi Kok	03/02/2018 06:55:00	03/02/2018 07:23:44	6	80	22.2998988 3	114.155552 2	location	80	Western Harbour Tunnel Road Kowloon entrance	Verbal warning
[redacted]	Tang [redacted]	TMD	29/01/2018	67M	UE4144	67M	Kwai Fong Station	29/01/2018 11:30:00	29/01/2018 12:09:50	31	67	22.408701	113.980131 7	location	50	Castle Peak Road Ling Nan section	Final warning
[redacted]	Ng [redacted]	TMD	07/02/2018	E34A	TJ7312	E34A	Ground Transportation Centre	07/02/2018 16:35:00	07/02/2018 17:23:11	20	83	22.4305863	114.063175 2	location	80	Tsing Long Highway near Kam Sheung Road Station	Verbal warning
[redacted]	Ng [redacted]	TMD	07/02/2018	E34A	TJ7312	E34B	Ground Transportati	08/02/2018 00:00:00	08/02/2018 00:43:27	8	80	22.4317611 7	114.062764 5	location	80	Tsing Long Highway near Kam Sheung Road	

							on Centre								Station	
[redacted]	Kwan [redacted]	TMD	31/01/2018	67X	SA8730	67X	Siu Hong Court	31/01/2018 22:53:00	31/01/2018 23:14:07	11	83	22.3669512	114.054671	location	80	Tuen Mun Road near Sea Crest Villa	Verbal warning
[redacted]	Yip [redacted]	TMD	30/01/2018	59A	UU7596	59X	Tuen Mun Pier	30/01/2018 10:08:00	30/01/2018 10:33:44	2	80	22.3741056 7	114.102622 8	location	80	Tuen Mun Road near Belvedere Garden	Verbal warning
[redacted]	Kwan [redacted]	TMD	30/01/2018	59X	VCS294	59X	Mong Kok East Station	30/01/2018 19:25:00	30/01/2018 20:07:36	5	82	22.3576208 3	114.032724 2	location	80	Tuen Mun Road Tsing Lung Tau section	Written warning (poor performance)
[redacted]	Lau [redacted]	TMD	06/02/2018	58M	KN7970	58P	Kwai Fong Station	06/02/2018 18:30:00	06/02/2018 18:57:22	2	80	22.365687	114.046959 3	location	80	Tuen Mun Road near Sea Crest Villa	Verbal warning
[redacted]	Chan [redac	KBD	11/02/2018	96R	SY40	96R	Diamond	11/02/2018	11/02/2018	5	84	22.3367441	114.242661	location	80	Clear Water Bay Road	Verbal warning

	ted] Yin				50		Hill Station	09:00:00	10:48:21			7	8			near Clear Water Bay Knoll	
[redacted]	Chan [redacted] Yin	KBD	11/02/2018	96R	SY4050	96R	Wong Shek Pier	11/02/2018 16:15:00	11/02/2018 17:00:28	3	82	22.336502	114.242473	location	80	Clear Water Bay Road near Clear Water Bay Knoll	
[redacted]	Po [redacted]	TMD	02/02/2018	68X	VD5442	268X	Hung Shui Kiu Hung Fuk	02/02/2018 14:45:00	02/02/2018 15:22:34	2	80	22.374032	114.102181 3	location	80	Tuen Mun Road near Belvedere Garden	Incorporated in the verbal warning issued on 22 Jan 2018

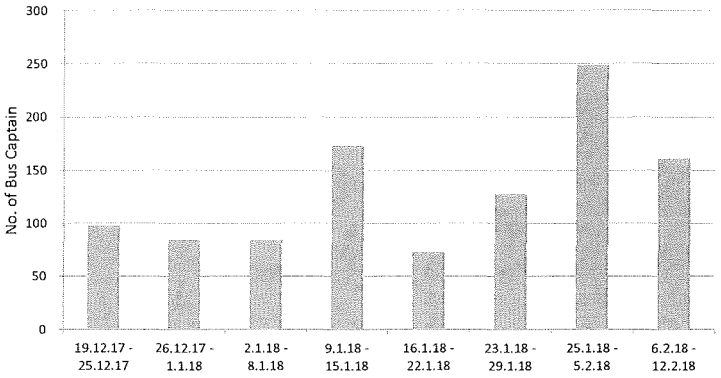
Speeding (accumulated more than 4 mins)

Week	No. of Bus Captain
19.12.17 - 25.12.17	48
26.12.17 - 1.1.18	40
2.1.18 - 8.1.18	23
9.1.18 - 15.1.18	28
16.1.18 - 22.1.18	29
23.1.18 - 29.1.18	15
25.1.18 - 5.2.18	27
6.2.18 - 12.2.18	20



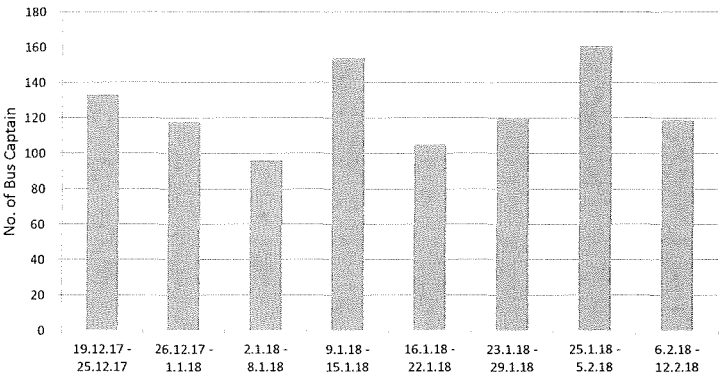
Sudden Acceleration (accumulated more than 60 mins)

Week	No. of Bus Captain
19.12.17 - 25.12.17	98
26.12.17 - 1.1.18	84
2.1.18 - 8.1.18	84
9.1.18 - 15.1.18	173
16.1.18 - 22.1.18	73
23.1.18 - 29.1.18	128
25.1.18 - 5.2.18	249
6.2.18 - 12.2.18	161



Harsh Brake (accumulated more than 4 mins)

Week	No. of Bus Captain
19.12.17 - 25.12.17	133
26.12.17 - 1.1.18	118
2.1.18 - 8.1.18	96
9.1.18 - 15.1.18	154
16.1.18 - 22.1.18	105
23.1.18 - 29.1.18	120
25.1.18 - 5.2.18	161
6.2.18 - 12.2.18	119



BC Performance from 6 Feb 2018 to 12 Feb 2018: Speeding

Speeding (accumulated more than 4 mins)				6.2.18 - 12.2.18 (both dates inclusive)
No.	Employee No.	Depot	Speeding accumulated (speed > 75kph)	No. of appearance since 28.3.2017
1	69[redacted]	荔枝角廠	13 mins	5
2	53[redacted]	九龍灣廠	10 mins	3
3	66[redacted]	屯門廠	8 mins	3
4	54[redacted]	九龍灣廠	8 mins	12
5	71[redacted]	屯門廠	7 mins	6
6	92[redacted]	龍運	6 mins	1
7	71[redacted]	屯門廠	6 mins	5
8	53[redacted]	屯門廠	5 mins	5
9	57[redacted]	屯門廠	5 mins	13
10	12[redacted]	屯門廠	5 mins	8
11	66[redacted]	沙田廠	5 mins	4
12	92[redacted]	龍運	5 mins	3
13	56[redacted]5	荔枝角廠	5 mins	4
14	92[redacted]	龍運	4 mins	6
15	74[redacted]	沙田廠	4 mins	8
16	69[redacted]	屯門廠	4 mins	2
17	92[redacted]	龍運	4 mins	5
18	30[redacted]	屯門廠	4 mins	14
19	63[redacted]	屯門廠	4 mins	3
20	64[redacted]	屯門廠	4 mins	2

BC Performance from 6 Feb 2018 to 12 Feb 2018: Speeding

Speeding (accumulated more than 4 mins) 6.2.18-12.2.18 (both dates inclusive)				
No.	Employee No.	Depot	Speeding accumulated (speed > 75kph)	No. of appearance since 28.3.2017
1	69[redacted]	Lai Chi Kok Depot	13 mins	5
2	53[redacted]	Kowloon Bay Depot	10 mins	3
3	66[redacted]	Tuen Mun Depot	8 mins	3
4	54[redacted]	Kowloon Bay Depot	8 mins	12
5	71[redacted]	Tuen Mun Depot	7 mins	6
6	92[redacted]	Long Win	6 mins	1
7	71[redacted]	Tuen Mun Depot	6 mins	5
8	53[redacted]	Tuen Mun Depot	5 mins	5
9	57[redacted]	Tuen Mun Depot	5 mins	13
10	12[redacted]	Tuen Mun Depot	5 mins	8
11	66[redacted]	Sha Tin Depot	5 mins	4
12	92[redacted]	Long Win	5 mins	3
13	56[redacted]5	Lai Chi Kok Depot	5 mins	4
14	92[redacted]	Long Win	4 mins	6
15	74[redacted]	Sha Tin Depot	4 mins	8
16	69[redacted]	Tuen Mun Depot	4 mins	2
17	92[redacted]	Long Win	4 mins	5
18	30[redacted]	Tuen Mun Depot	4 mins	14
19	63[redacted]	Tuen Mun Depot	4 mins	3
20	64[redacted]	Tuen Mun Depot	4 mins	2

BC Performance from 6 Feb 2018 to 12 Feb 2018: Sudden Acceleration

Sudden Acceleration (accumulated more than 60 mins) 6.2.18-12.2.18 (both dates inclusive)				
No.	Employee No.	Depot	Sudden Acceleration accumulated (Acceleration > 4kph)	No. of appearance since 28.3.2017
1	60[redacted]	Lai Chi Kok Depot	93 mins	27
2	560[redacted]	Kowloon Bay Depot	92 mins	2
3	60[redacted]	Tuen Mun Depot	91 mins	15
4	66[redacted]	Tuen Mun Depot	90 mins	15
5	60[redacted]	Lai Chi Kok Depot	90 mins	10
6	74[redacted]	Sha Tin Depot	89 mins	19
7	61[redacted]	Kowloon Bay Depot	87 mins	10
8	60[redacted]	Lai Chi Kok Depot	86 mins	12
9	54[redacted]	Lai Chi Kok Depot	83 mins	3
10	32[redacted]	Sha Tin Depot	83 mins	3
11	14[redacted]	Kowloon Bay Depot	82 mins	9
12	15[redacted]	Lai Chi Kok Depot	81 mins	2
13	63[redacted]	Lai Chi Kok Depot	80 mins	7
14	60[redacted]	Sha Tin Depot	79 mins	1
15	60[redacted]	Tuen Mun Depot	79 mins	13
16	60[redacted]	Kowloon Bay Depot	78 mins	9
17	61[redacted]	Kowloon Bay Depot	78 mins	3
18	61[redacted]	Lai Chi Kok Depot	78 mins	13
19	42[redacted]	Lai Chi Kok Depot	78 mins	2
20	80[redacted]	Kowloon Bay Depot	77 mins	6
21	72[redacted]	Kowloon Bay Depot	76 mins	3

BC Performance from 6 Feb 2018 to 12 Feb 2018: Sudden Acceleration

Sudden Acceleration (accumulated more than 60 mins)			6.2.18 - 12.2.18 (both dates inclusive)	
No.	Employee No.	Depot	Sudden Acceleration accumulated (Acceleration > 4kph/s)	No. of appearance since 28.3.2017
1	60	荔枝角廠	93 mins	27
2	560	九龍灣廠	92 mins	2
3	60	屯門廠	91 mins	15
4	66	屯門廠	90 mins	15
5	60	荔枝角廠	90 mins	10
6	74	沙田廠	89 mins	19
7	61	九龍灣廠	87 mins	10
8	60	荔枝角廠	86 mins	12
9	54	荔枝角廠	83 mins	3
10	32	沙田廠	83 mins	3
11	14	九龍灣廠	82 mins	9
12	15	荔枝角廠	81 mins	2
13	63	荔枝角廠	80 mins	7
14	60	沙田廠	79 mins	1
15	60	屯門廠	79 mins	13
16	60	九龍灣廠	78 mins	9
17	61	九龍灣廠	78 mins	3
18	61	荔枝角廠	78 mins	13
19	42	荔枝角廠	78 mins	2
20	80	九龍灣廠	77 mins	6
21	72	九龍灣廠	76 mins	3
22	71	荔枝角廠	76 mins	6
23	61	沙田廠	76 mins	5
24	75	荔枝角廠	76 mins	7
25	69	荔枝角廠	75 mins	12
26	72	荔枝角廠	75 mins	15
27	75	荔枝角廠	75 mins	4
28	62	九龍灣廠	75 mins	8
29	69	荔枝角廠	75 mins	1
30	60	屯門廠	74 mins	8
31	66	九龍灣廠	74 mins	4
32	78	九龍灣廠	74 mins	4
33	62	荔枝角廠	74 mins	2
34	770	荔枝角廠	73 mins	1
35	71	屯門廠	73 mins	5
36	73	荔枝角廠	73 mins	9
37	85	九龍灣廠	73 mins	2
38	75	沙田廠	73 mins	1
39	72	沙田廠	73 mins	6
40	71	荔枝角廠	72 mins	3
41	69	荔枝角廠	72 mins	1
42	65	九龍灣廠	72 mins	2
43	568	九龍灣廠	71 mins	2
44	72	荔枝角廠	71 mins	9
45	77	荔枝角廠	71 mins	4
46	60	九龍灣廠	71 mins	1
47	44	九龍灣廠	70 mins	1

BC Performance from 6 Feb 2018 to 12 Feb 2018: Sudden Acceleration

Sudden Acceleration (accumulated more than 60 mins)			6.2.18 - 12.2.18 (both dates inclusive)	
No.	Employee No.	Depot	Sudden Acceleration accumulated (Acceleration > 4kph/s)	No. of appearance since 28.3.2017
48	60	荔枝角廠	70 mins	3
49	50	九龍灣廠	70 mins	1
50	63	九龍灣廠	70 mins	2
51	75	九龍灣廠	70 mins	3
52	73	荔枝角廠	69 mins	7
53	62	荔枝角廠	69 mins	2
54	61	荔枝角廠	69 mins	2
55	71	九龍灣廠	69 mins	1
56	48	九龍灣廠	69 mins	3
57	32	沙田廠	69 mins	1
58	60	屯門廠	68 mins	3
59	71	荔枝角廠	68 mins	2
60	63	九龍灣廠	68 mins	7
61	69	荔枝角廠	68 mins	2
62	76	沙田廠	68 mins	8
63	61	荔枝角廠	68 mins	6
64	63	荔枝角廠	68 mins	3
65	68	荔枝角廠	68 mins	17
66	71	九龍灣廠	67 mins	1
67	72	荔枝角廠	67 mins	1
68	75	沙田廠	67 mins	2
69	69	沙田廠	67 mins	3
70	50	九龍灣廠	67 mins	3
71	78	九龍灣廠	67 mins	1
72	560	九龍灣廠	67 mins	1
73	68	九龍灣廠	67 mins	7
74	77	荔枝角廠	67 mins	4
75	68	荔枝角廠	67 mins	1
76	61	沙田廠	67 mins	1
77	78	沙田廠	66 mins	3
78	60	沙田廠	66 mins	5
79	78	荔枝角廠	66 mins	3
80	64	屯門廠	66 mins	1
81	66	九龍灣廠	66 mins	6
82	16	荔枝角廠	66 mins	4
83	63	九龍灣廠	66 mins	1
84	62	沙田廠	66 mins	3
85	76	沙田廠	65 mins	2
86	32	九龍灣廠	65 mins	5
87	29	九龍灣廠	65 mins	1
88	73	荔枝角廠	65 mins	2
89	71	九龍灣廠	65 mins	2
90	75	九龍灣廠	65 mins	1
91	63	荔枝角廠	65 mins	2
92	17	九龍灣廠	65 mins	5
93	75	屯門廠	64 mins	2
94	60	九龍灣廠	64 mins	3

Sudden Acceleration (accumulated more than 60 mins)			6.2.18 - 12.2.18 (both dates inclusive)	
No.	Employee No.	Depot	Sudden Acceleration accumulated (Acceleration > 4kph/s)	No. of appearance since 28.3.2017
95	73[redacted]	荔枝角廠	64 mins	2
96	21[redacted]	屯門廠	64 mins	2
97	35[redacted]	荔枝角廠	64 mins	3
98	72[redacted]	荔枝角廠	64 mins	2
99	53[redacted]	九龍灣廠	64 mins	2
100	10[redacted]	九龍灣廠	64 mins	5
101	56[redacted]0	九龍灣廠	64 mins	4
102	68[redacted]	荔枝角廠	64 mins	3
103	71[redacted]	九龍灣廠	64 mins	2
104	11[redacted]	荔枝角廠	63 mins	1
105	64[redacted]	九龍灣廠	63 mins	2
106	73[redacted]	荔枝角廠	63 mins	2
107	78[redacted]	沙田廠	63 mins	2
108	62[redacted]	沙田廠	63 mins	10
109	85[redacted]	沙田廠	63 mins	1
110	55[redacted]	九龍灣廠	63 mins	2
111	60[redacted]	沙田廠	63 mins	5
112	23[redacted]	沙田廠	63 mins	4
113	54[redacted]	沙田廠	63 mins	2
114	66[redacted]	九龍灣廠	63 mins	3
115	73[redacted]	荔枝角廠	63 mins	6
116	78[redacted]	九龍灣廠	63 mins	2
117	78[redacted]	荔枝角廠	63 mins	1
118	69[redacted]	九龍灣廠	62 mins	3
119	92[redacted]	龍運	62 mins	1
120	68[redacted]	荔枝角廠	62 mins	7
121	64[redacted]	九龍灣廠	62 mins	7
122	37[redacted]	荔枝角廠	62 mins	2
123	81[redacted]	沙田廠	62 mins	1
124	62[redacted]	荔枝角廠	62 mins	6
125	65[redacted]	九龍灣廠	62 mins	3
126	77[redacted]	九龍灣廠	62 mins	4
127	48[redacted]	九龍灣廠	62 mins	2
128	70[redacted]	荔枝角廠	62 mins	1
129	48[redacted]	沙田廠	61 mins	1
130	34[redacted]	沙田廠	61 mins	2
131	54[redacted]	荔枝角廠	61 mins	1
132	70[redacted]	九龍灣廠	61 mins	5
133	63[redacted]	九龍灣廠	61 mins	3
134	31[redacted]	屯門廠	61 mins	1
135	68[redacted]	荔枝角廠	61 mins	2
136	60[redacted]	九龍灣廠	61 mins	1
137	20[redacted]	九龍灣廠	61 mins	2
138	53[redacted]	沙田廠	61 mins	1
139	60[redacted]	九龍灣廠	61 mins	1
140	46[redacted]	九龍灣廠	61 mins	9
141	68[redacted]	九龍灣廠	61 mins	2

Sudden Acceleration (accumulated more than 60 mins)			6.2.18 - 12.2.18 (both dates inclusive)	
No.	Employee No.	Depot	Sudden Acceleration accumulated (Acceleration > 4kph/s)	No. of appearance since 28.3.2017
142	61	荔枝角廠	61 mins	2
143	54	屯門廠	61 mins	4
144	61	荔枝角廠	60 mins	2
145	10	荔枝角廠	60 mins	1
146	76	九龍灣廠	60 mins	5
147	61	荔枝角廠	60 mins	1
148	61	荔枝角廠	60 mins	2
149	66	荔枝角廠	60 mins	4
150	68	荔枝角廠	60 mins	3
151	53	沙田廠	60 mins	4
152	73	沙田廠	60 mins	1
153	76	荔枝角廠	60 mins	2
154	77	九龍灣廠	60 mins	1
155	77	荔枝角廠	60 mins	8
156	63	沙田廠	60 mins	1
157	73	荔枝角廠	60 mins	1
158	60	荔枝角廠	60 mins	5
159	61	沙田廠	60 mins	1
160	64	九龍灣廠	60 mins	1
161	53	荔枝角廠	60 mins	1

22	71[redacted]	Lai Chi Kok Depot	76 mins	6
23	61[redacted]	Sha Tin Depot	76 mins	5
24	75[redacted]	Lai Chi Kok Depot	76 mins	7
25	96[redacted]	Lai Chi Kok Depot	75 mins	12
26	72[redacted]	Lai Chi Kok Depot	75 mins	15
27	75[redacted]	Lai Chi Kok Depot	75 mins	4
28	62[redacted]	Kowloon Bay Depot	75 mins	8
29	69[redacted]	Lai Chi Kok Depot	75 mins	1
30	60[redacted]	Tuen Mun Depot	74 mins	8
31	66[redacted]	Kowloon Bay Depot	74 mins	4
32	78[redacted]	Kowloon Bay Depot	74 mins	4
33	62[redacted]	Lai Chi Kok Depot	74 mins	2
34	770[redacted]	Lai Chi Kok Depot	73 mins	1
35	71[redacted]	Tuen Mun Depot	73 mins	5
36	73[redacted]	Lai Chi Kok Depot	73 mins	9
37	85[redacted]	Kowloon Bay Depot	73 mins	2
38	75[redacted]	Sha Tin Depot	73 mins	1
39	72[redacted]	Sha Tin Depot	73 mins	6
40	71[redacted]	Lai Chi Kok Depot	72 mins	3
41	69[redacted]	Lai Chi Kok Depot	72 mins	1
42	65[redacted]	Kowloon Bay Depot	72 mins	2
43	568[redacted]	Kowloon Bay Depot	71 mins	2
44	72[redacted]	Lai Chi Kok Depot	71 mins	9
45	77[redacted]	Lai Chi Kok Depot	71 mins	4
46	60[redacted]	Kowloon Bay Depot	71 mins	1
47	44[redacted]	Kowloon Bay Depot	70 mins	1
48	60[redacted]	Lai Chi Kok Depot	70 mins	3
49	50[redacted]	Kowloon Bay	70 mins	1

		Depot		
50	63[redacted]	Kowloon Bay Depot	70 mins	2
51	75[redacted]	Kowloon Bay Depot	70 mins	3
52	73[redacted]	Lai Chi Kok Depot	69 mins	7
53	62[redacted]	Lai Chi Kok Depot	69 mins	2
54	61[redacted]	Lai Chi Kok Depot	69 mins	2
55	71[redacted]	Kowloon Bay Depot	69 mins	1
56	48[redacted]	Kowloon Bay Depot	69 mins	3
57	32[redacted]	Sha Tin Depot	69 mins	1
58	60[redacted]	Tuen Mun Depot	68 mins	3
59	71[redacted]	Lai Chi Kok Depot	68 mins	2
60	63[redacted]	Kowloon Bay Depot	68 mins	7
61	69[redacted]	Lai Chi Kok Depot	68 mins	2
62	76[redacted]	Sha Tin Depot	68 mins	8
63	61[redacted]	Lai Chi Kok Depot	68 mins	6
64	63[redacted]	Lai Chi Kok Depot	68 mins	3
65	68[redacted]	Lai Chi Kok Depot	68 mins	17
66	71[redacted]	Kowloon Bay Depot	67 mins	1
67	72[redacted]	Lai Chi Kok Depot	67 mins	1
68	75[redacted]	Sha Tin Depot	67 mins	2
69	69[redacted]	Sha Tin Depot	67 mins	3
70	50[redacted]	Kowloon Bay Depot	67 mins	3
71	78[redacted]	Kowloon Bay Depot	67 mins	1
72	560[redacted]	Kowloon Bay Depot	67 mins	1
73	68[redacted]	Kowloon Bay Depot	67 mins	7
74	77[redacted]	Lai Chi Kok Depot	67 mins	4

11.2.3

75	68[redacted]	Lai Chi Kok Depot	67 mins	1
76	61[redacted]	Sha Tin Depot	67 mins	1
77	78[redacted]	Sha Tin Depot	66 mins	3
78	60[redacted]	Sha Tin Depot	66 mins	5
79	78[redacted]	Lai Chi Kok Depot	66 mins	3
80	64[redacted]	Tuen Mun Depot	66 mins	1
81	66[redacted]	Kowloon Bay Depot	66 mins	6
82	16[redacted]	Lai Chi Kok Depot	66 mins	4
83	63[redacted]	Kowloon Bay Depot	66 mins	1
84	62[redacted]	Sha Tin Depot	66 mins	3
85	76[redacted]	Sha Tin Depot	65 mins	2
86	32[redacted]	Kowloon Bay Depot	65 mins	5
87	29[redacted]	Kowloon Bay Depot	65 mins	1
88	73[redacted]	Lai Chi Kok Depot	65 mins	2
89	71[redacted]	Kowloon Bay Depot	65 mins	2
90	75[redacted]	Kowloon Bay Depot	65 mins	1
91	63[redacted]	Lai Chi Kok Depot	65 mins	2
92	17[redacted]	Kowloon Bay Depot	65 mins	5
93	75[redacted]	Tuen Mun Depot	64 mins	2
94	60[redacted]	Kowloon Bay Depot	64 mins	3
95	73[redacted]	Lai Chi Kok Depot	64 mins	2
96	21[redacted]	Tuen Mun Depot	64 mins	2
97	35[redacted]	Lai Chi Kok Depot	64 mins	3
98	72[redacted]	Lai Chi Kok Depot	64 mins	2
99	53[redacted]	Kowloon Bay Depot	64 mins	2
100	10[redacted]	Kowloon Bay Depot	64 mins	5

11.2.3

101	56[redacted]0	Kowloon Bay Depot	64 mins	4
102	68[redacted]	Lai Chi Kok Depot	64 mins	3
103	71[redacted]	Kowloon Bay Depot	64 mins	2
104	11[redacted]	Lai Chi Kok Depot	63 mins	1
105	64[redacted]	Kowloon Bay Depot	63 mins	2
106	73[redacted]	Lai Chi Kok Depot	63 mins	2
107	78[redacted]	Sha Tin Depot	63 mins	2
108	62[redacted]	Sha Tin Depot	63 mins	10
109	85[redacted]	Sha Tin Depot	63 mins	1
110	55[redacted]	Kowloon Bay Depot	63 mins	2
111	60[redacted]	Sha Tin Depot	63 mins	5
112	23[redacted]	Sha Tin Depot	63 mins	4
113	54[redacted]	Sha Tin Depot	63 mins	2
114	66[redacted]	Kowloon Bay Depot	63 mins	3
115	73[redacted]	Lai Chi Kok Depot	63 mins	6
116	78[redacted]	Kowloon Bay Depot	63 mins	2
117	78[redacted]	Lai Chi Kok Depot	63 mins	1
118	69[redacted]	Kowloon Bay Depot	62 mins	3
119	92[redacted]	Long Win	62 mins	1
120	68[redacted]	Lai Chi Kok Depot	62 mins	7
121	64[redacted]	Kowloon Bay Depot	62 mins	7
122	37[redacted]	Lai Chi Kok Depot	62 mins	2
123	81[redacted]		62 mins	1
124	62[redacted]	Lai Chi Kok Depot	62 mins	6
125	65[redacted]	Kowloon Bay Depot	62 mins	3
126	77[redacted]	Kowloon Bay Depot	62 mins	4

127	48[redacted]	Kowloon Bay Depot	62 mins	2
128	70[redacted]	Lai Chi Kok Depot	62 mins	1
129	48[redacted]	Sha Tin Depot	61 mins	1
130	34[redacted]	Sha Tin Depot	61 mins	2
131	54[redacted]	Lai Chi Kok Depot	61 mins	1
132	70[redacted]	Kowloon Bay Depot	61 mins	5
133	63[redacted]	Kowloon Bay Depot	61 mins	3
134	31[redacted]	Tuen Mun Depot	61 mins	1
135	68[redacted]	Lai Chi Kok Depot	61 mins	2
136	60[redacted]	Kowloon Bay Depot	61 mins	1
137	20[redacted]	Kowloon Bay Depot	61 mins	2
138	53[redacted]	Sha Tin Depot	61 mins	1
139	60[redacted]	Kowloon Bay Depot	61 mins	1
140	46[redacted]	Kowloon Bay Depot	61 mins	9
141	68[redacted]	Kowloon Bay Depot	61 mins	2
142	61[redacted]	Lai Chi Kok Depot	61 mins	2
143	54[redacted]	Tuen Mun Depot	61 mins	4
144	61[redacted]	Lai Chi Kok Depot	60 mins	2
145	10[redacted]	Lai Chi Kok Depot	60 mins	1
146	76[redacted]	Kowloon Bay Depot	60 mins	5
147	61[redacted]	Lai Chi Kok Depot	60 mins	1
148	61[redacted]	Lai Chi Kok Depot	60 mins	2
149	66[redacted]	Lai Chi Kok Depot	60 mins	4
150	68[redacted]	Lai Chi Kok Depot	60 mins	3
151	53[redacted]	Sha Tin Depot	60 mins	4
152	73[redacted]	Sha Tin Depot	60 mins	1
153	76[redacted]	Lai Chi Kok Depot	60 mins	2

154	77[redacted]	Kowloon Bay Depot	60 mins	1
155	77[redacted]	Lai Chi Kok Depot	60 mins	8
156	63[redacted]	Sha Tin Depot	60 mins	1
157	73[redacted]	Lai Chi Kok Depot	60 mins	1
158	60[redacted]	Lai Chi Kok Depot	60 mins	5
159	61[redacted]	Sha Tin Depot	60 mins	1
160	64[redacted]	Kowloon Bay Depot	60 mins	1
161	53[redacted]	Lai Chi Kok Depot	60 mins	1

Harsh Brake (accumulated more than 4 mins)			6.2.18 - 12.2.18 (both dates inclusive)	
No.	Employee No.	Depot	Harsh Brake accumulated (Deceleration > 8kph/s)	No. of appearance since 28.3.2017
1	68[redacted]	屯門廠	9 mins	11
2	78[redacted]	沙田廠	8 mins	21
3	61[redacted]	荔枝角廠	8 mins	16
4	77[redacted]	沙田廠	8 mins	28
5	10[redacted]	九龍灣廠	8 mins	29
6	81[redacted]	九龍灣廠	8 mins	7
7	75[redacted]	屯門廠	7 mins	3
8	49[redacted]	荔枝角廠	7 mins	1
9	63[redacted]	九龍灣廠	7 mins	13
10	92[redacted]	龍運	7 mins	5
11	722[redacted]	九龍灣廠	6 mins	12
12	60[redacted]	九龍灣廠	6 mins	10
13	11[redacted]	荔枝角廠	6 mins	19
14	62[redacted]	沙田廠	6 mins	22
15	61[redacted]	九龍灣廠	6 mins	8
16	33[redacted]	荔枝角廠	6 mins	6
17	66[redacted]	荔枝角廠	6 mins	10
18	60[redacted]	沙田廠	6 mins	15
19	78[redacted]	荔枝角廠	6 mins	7
20	62[redacted]	荔枝角廠	6 mins	16
21	65[redacted]	九龍灣廠	6 mins	16
22	73[redacted]	沙田廠	6 mins	9
23	73[redacted]	荔枝角廠	6 mins	4
24	77[redacted]	沙田廠	6 mins	2
25	45[redacted]	荔枝角廠	6 mins	10
26	56[redacted]1	荔枝角廠	6 mins	4
27	44[redacted]	荔枝角廠	6 mins	2
28	14[redacted]	九龍灣廠	5 mins	14
29	69[redacted]	荔枝角廠	5 mins	29
30	60[redacted]	屯門廠	5 mins	14
31	60[redacted]	屯門廠	5 mins	22
32	60[redacted]	沙田廠	5 mins	13
33	48[redacted]	沙田廠	5 mins	12
34	62[redacted]	荔枝角廠	5 mins	11
35	46[redacted]	沙田廠	5 mins	11
36	74[redacted]	九龍灣廠	5 mins	1
37	69[redacted]	九龍灣廠	5 mins	1
38	60[redacted]	沙田廠	5 mins	16
39	73[redacted]	荔枝角廠	5 mins	23
40	76[redacted]	九龍灣廠	5 mins	9
41	78[redacted]	沙田廠	5 mins	4
42	77[redacted]	沙田廠	5 mins	9
43	73[redacted]	九龍灣廠	5 mins	15
44	54[redacted]	荔枝角廠	5 mins	1
45	54[redacted]	屯門廠	5 mins	1
46	73[redacted]	沙田廠	5 mins	1
47	77[redacted]	九龍灣廠	5 mins	6

4848

BC Performance from 6 Feb 2018 to 12 Feb 2018: Harsh Brake

Harsh Brake (accumulated more than 4 mins)			6.2.18 - 12.2.18 (both dates inclusive)	
No.	Employee No.	Depot	Harsh Brake accumulated (Deceleration > 8kph/s)	No. of appearance since 28.3.2017
48	61[redacted]	荔枝角廠	5 mins	26
49	62[redacted]	九龍灣廠	5 mins	19
50	72[redacted]	沙田廠	5 mins	21
51	69[redacted]	九龍灣廠	5 mins	2
52	61[redacted]	九龍灣廠	5 mins	5
53	76[redacted]	沙田廠	5 mins	13
54	99[redacted]	龍運	5 mins	3
55	69[redacted]	九龍灣廠	5 mins	6
56	70[redacted]	荔枝角廠	5 mins	2
57	10[redacted]	沙田廠	5 mins	30
58	90[redacted]	龍運	5 mins	20
59	74[redacted]	沙田廠	4 mins	8
60	60[redacted]	沙田廠	4 mins	2
61	78[redacted]	荔枝角廠	4 mins	14
62	76[redacted]	沙田廠	4 mins	12
63	73[redacted]	荔枝角廠	4 mins	5
64	64[redacted]	九龍灣廠	4 mins	1
65	73[redacted]	荔枝角廠	4 mins	18
66	69[redacted]	九龍灣廠	4 mins	6
67	34[redacted]	沙田廠	4 mins	2
68	54[redacted]	荔枝角廠	4 mins	7
69	61[redacted]	荔枝角廠	4 mins	3
70	68[redacted]	九龍灣廠	4 mins	21
71	60[redacted]	荔枝角廠	4 mins	33
72	71[redacted]	九龍灣廠	4 mins	2
73	57[redacted]	屯門廠	4 mins	2
74	77[redacted]	沙田廠	4 mins	3
75	46[redacted]	九龍灣廠	4 mins	15
76	10[redacted]	荔枝角廠	4 mins	3
77	73[redacted]	九龍灣廠	4 mins	5
78	64[redacted]	九龍灣廠	4 mins	13
79	72[redacted]	九龍灣廠	4 mins	6
80	64[redacted]	九龍灣廠	4 mins	6
81	[redacted]77	荔枝角廠	4 mins	3
82	62[redacted]	九龍灣廠	4 mins	10
83	17[redacted]	九龍灣廠	4 mins	1
84	52[redacted]	九龍灣廠	4 mins	3
85	66[redacted]	荔枝角廠	4 mins	8
86	75[redacted]	九龍灣廠	4 mins	11
87	78[redacted]	屯門廠	4 mins	1
88	24[redacted]	沙田廠	4 mins	2
89	76[redacted]	九龍灣廠	4 mins	23
90	64[redacted]	屯門廠	4 mins	2
91	24[redacted]	荔枝角廠	4 mins	1
92	54[redacted]	九龍灣廠	4 mins	8
93	65[redacted]	荔枝角廠	4 mins	9
94	60[redacted]	荔枝角廠	4 mins	6

BC Performance from 6 Feb 2018 to 12 Feb 2018: Harsh Brake

Harsh Brake (accumulated more than 4 mins)			6.2.18 - 12.2.18 (both dates inclusive)	
No.	Employee No.	Depot	Harsh Brake accumulated (Deceleration > 8kph/s)	No. of appearance since 28.3.2017
95	66[redacted]	屯門廠	4 mins	2
96	63[redacted]	屯門廠	4 mins	3
97	75[redacted]	九龍灣廠	4 mins	1
98	60[redacted]	沙田廠	4 mins	11
99	72[redacted]	九龍灣廠	4 mins	1
100	75[redacted]	沙田廠	4 mins	20
101	91[redacted]	龍運	4 mins	7
102	65[redacted]	荔枝角廠	4 mins	14
103	63[redacted]	九龍灣廠	4 mins	6
104	55[redacted]	荔枝角廠	4 mins	11
105	75[redacted]	九龍灣廠	4 mins	8
106	68[redacted]	荔枝角廠	4 mins	2
107	24[redacted]	九龍灣廠	4 mins	1
108	73[redacted]	沙田廠	4 mins	6
109	53[redacted]	沙田廠	4 mins	1
110	53[redacted]	九龍灣廠	4 mins	5
111	85[redacted]	沙田廠	4 mins	9
112	65[redacted]	九龍灣廠	4 mins	2
113	74[redacted]	荔枝角廠	4 mins	6
114	40[redacted]	沙田廠	4 mins	3
115	11[redacted]	沙田廠	4 mins	5
116	64[redacted]	沙田廠	4 mins	23
117	72[redacted]	沙田廠	4 mins	8
118	63[redacted]	屯門廠	4 mins	13
119	92[redacted]	龍運	4 mins	12

BC Performance from 6 Feb 2018 to 12 Feb 2018: Harsh Brake

Harsh Brake (accumulated more than 4 mins) 6.2.18-12.2.18 (both dates inclusive)				
No.	Employee No.	Depot	Harsh Brake accumulated (Deceleration > 8kph)	No. of appearance since 28.3.2017
1	68[redacted]	Tuen Mun Depot	9 mins	11
2	78[redacted]	Sha Tin Depot	8 mins	21
3	61[redacted]	Lai Chi Kok Depot	8 mins	16
4	77[redacted]	Sha Tin Depot	8 mins	28
5	10[redacted]	Kowloon Bay Depot	8 mins	29
6	81[redacted]	Kowloon Bay Depot	8 mins	7
7	75[redacted]	Tuen Mun Depot	7 mins	3
8	49[redacted]	Lai Chi Kok Depot	7 mins	1
9	63[redacted]	Kowloon Bay Depot	7 mins	13
10	92[redacted]	Long Win	7 mins	5
11	722[redacted]	Kowloon Bay Depot	6 mins	12
12	60[redacted]	Kowloon Bay Depot	6 mins	10
13	11[redacted]	Lai Chi Kok Depot	6 mins	19
14	62[redacted]	Sha Tin Depot	6 mins	22
15	61[redacted]	Kowloon Bay Depot	6 mins	8
16	33[redacted]	Lai Chi Kok Depot	6 mins	6
17	66[redacted]	Lai Chi Kok Depot	6 mins	10
18	60[redacted]	Sha Tin Depot	6 mins	15
19	78[redacted]	Lai Chi Kok Depot	6 mins	7
20	62[redacted]	Lai Chi Kok Depot	6 mins	16
21	65[redacted]	Kowloon Bay	6 mins	16

		Depot		
22	73[redacted]	Sha Tin Depot	6 mins	9
23	73[redacted]	Lai Chi Kok Depot	6 mins	4
24	77[redacted]	Sha Tin Depot	6 mins	2
25	45[redacted]	Lai Chi Kok Depot	6 mins	10
26	56[redacted]1	Lai Chi Kok Depot	6 mins	4
27	44[redacted]	Lai Chi Kok Depot	6 mins	2
28	14[redacted]	Kowloon Bay Depot	5 mins	14
29	69[redacted]	Lai Chi Kok Depot	5 mins	29
30	60[redacted]	Tuen Mun Depot	5 mins	14
31	60[redacted]	Tuen Mun Depot	5 mins	22
32	60[redacted]	Sha Tin Depot	5 mins	13
33	48[redacted]	Sha Tin Depot	5 mins	12
34	62[redacted]	Lai Chi Kok Depot	5 mins	11
35	46[redacted]	Sha Tin Depot	5 mins	11
36	74[redacted]	Kowloon Bay Depot	5 mins	1
37	69[redacted]	Kowloon Bay Depot	5 mins	1
38	60[redacted]	Sha Tin Depot	5 mins	16
39	73[redacted]	Lai Chi Kok Depot	5 mins	23
40	76[redacted]	Kowloon Bay Depot	5 mins	9
41	78[redacted]	Sha Tin Depot	5 mins	4
42	77[redacted]	Sha Tin Depot	5 mins	9
43	73[redacted]	Kowloon Bay Depot	5 mins	15
44	54[redacted]	Lai Chi Kok Depot	5 mins	1
45	54[redacted]	Tuen Mun Depot	5 mins	1
46	73[redacted]	Sha Tin Depot	5 mins	1
47	77[redacted]	Kowloon Bay Depot	5 mins	6
48	61[redacted]	Lai Chi Kok Depot	5 mins	26
49	62[redacted]	Kowloon Bay Depot	5 mins	19

50	72[redacted]	Sha Tin Depot	5 mins	21
51	69[redacted]	Kowloon Bay Depot	5 mins	2
52	61[redacted]	Kowloon Bay Depot	5 mins	5
53	76[redacted]	Sha Tin Depot	5 mins	13
54	99[redacted]	Long Win	5 mins	3
55	69[redacted]	Kowloon Bay Depot	5 mins	6
56	70[redacted]	Lai Chi Kok Depot	5 mins	2
57	10[redacted]	Sha Tin Depot	5 mins	30
58	90[redacted]	Long Win	5 mins	20
59	74[redacted]	Sha Tin Depot	4 mins	8
60	60[redacted]	Sha Tin Depot	4 mins	2
61	78[redacted]	Lai Chi Kok Depot	4 mins	14
62	76[redacted]	Sha Tin Depot	4 mins	12
63	73[redacted]	Lai Chi Kok Depot	4 mins	5
64	64[redacted]	Kowloon Bay Depot	4 mins	1
65	73[redacted]	Lai Chi Kok Depot	4 mins	18
66	69[redacted]	Kowloon Bay Depot	4 mins	6
67	34[redacted]	Sha Tin Depot	4 mins	2
68	54[redacted]	Lai Chi Kok Depot	4 mins	7
69	61[redacted]	Lai Chi Kok Depot	4 mins	3
70	68[redacted]	Kowloon Bay Depot	4 mins	21
71	60[redacted]	Lai Chi Kok Depot	4 mins	33
72	71[redacted]	Kowloon Bay Depot	4 mins	2
73	57[redacted]	Tuen Mun Depot	4 mins	2
74	77[redacted]	Sha Tin Depot	4 mins	3
75	46[redacted]	Kowloon Bay Depot	4 mins	15
76	10[redacted]	Lai Chi Kok Depot	4 mins	3
77	73[redacted]	Kowloon Bay	4 mins	5

		Depot		
78	64[redacted]	Kowloon Bay Depot	4 mins	13
79	72[redacted]	Kowloon Bay Depot	4 mins	6
80	64[redacted]	Kowloon Bay Depot	4 mins	6
81	[redacted]77	Lai Chi Kok Depot	4 mins	3
82	62[redacted]	Kowloon Bay Depot	4 mins	10
83	17[redacted]	Kowloon Bay Depot	4 mins	1
84	52[redacted]	Kowloon Bay Depot	4 mins	3
85	66[redacted]	Lai Chi Kok Depot	4 mins	8
86	75[redacted]	Kowloon Bay Depot	4 mins	11
87	78[redacted]	Tuen Mun Depot	4 mins	1
88	24[redacted]	Sha Tin Depot	4 mins	2
89	76[redacted]	Kowloon Bay Depot	4 mins	12
90	64[redacted]	Tuen Mun Depot	4 mins	2
91	24[redacted]	Lai Chi Kok Depot	4 mins	1
92	54[redacted]	Kowloon Bay Depot	4 mins	8
93	65[redacted]	Lai Chi Kok Depot	4 mins	9
94	60[redacted]	Lai Chi Kok Depot	4 mins	6
95	66[redacted]	Tuen Mun Depot	4 mins	2
96	63[redacted]	Tuen Mun Depot	4 mins	3
97	75[redacted]	Kowloon Bay Depot	4 mins	1
98	60[redacted]	Sha Tin Depot	4 mins	11
99	72[redacted]	Kowloon Bay Depot	4 mins	1
100	75[redacted]	Sha Tin Depot	4 mins	20
101	91[redacted]	Long Win	4 mins	7

11.2.4

102	65[redacted]	Lai Chi Kok Depot	4 mins	14
103	63[redacted]	Kowloon Bay Depot	4 mins	6
104	55[redacted]	Lai Chi Kok Depot	4 mins	11
105	75[redacted]	Kowloon Bay Depot	4 mins	8
106	68[redacted]	Lai Chi Kok Depot	4 mins	2
107	24[redacted]	Kowloon Bay Depot	4 mins	1
108	73[redacted]	Sha Tin Depot	4 mins	6
109	53[redacted]	Sha Tin Depot	4 mins	1
110	53[redacted]	Kowloon Bay Depot	4 mins	5
111	85[redacted]	Sha Tin Depot	4 mins	9
112	65[redacted]	Kowloon Bay Depot	4 mins	2
113	74[redacted]	Lai Chi Kok Depot	4 mins	6
114	40[redacted]	Sha Tin Depot	4 mins	3
115	11[redacted]	Sha Tin Depot	4 mins	5
116	64[redacted]	Sha Tin Depot	4 mins	23
117	72[redacted]	Sha Tin Depot	4 mins	8
118	63[redacted]	Tuen Mun Depot	4 mins	13
119	92[redacted]	Long Win	4 mins	12

12.1 Summary of notes for meetings between the Transport Department and all bus operators and bus manufacturers

Date	Description	Summary	Reference
13 March 2018	Notes of 1st Meeting held on 13 March 2018 of the Working Group on Enhancement of Safety of Franchised Buses	Discussed proposed scope of work, training arrangements, installation of seat belts and safety devices etc.	Document no. 12.4
19 April 2018	Notes of 1st Meeting held on 19 April 2018 of the Technical Meeting on Training Arrangements for Bus Captains	Discussed training system structure, modules and weighing, duration of induction course etc.	Document no. 12.5
23 April 2018	Notes of 2nd Meeting held on 23 April 2018 of the Working Group on Enhancement of Safety of Franchised Buses	Discussed training for bus captains, installation of seat belts and safety devices and preparation of report	Document no. 12.6
21 June 2018	Notes of 3rd Meeting held on 21 June 2018 of the Working Group on Enhancement of Safety of Franchised Buses	Discussed training for bus captains, installation of seat belts and safety devices, ISO 39001.	Document no. 12.7
4 June 2018	Draft Notes of 2nd Meeting held on 4 June 2018 of the Technical Meeting on Training Arrangements for Bus Captains	Discussed the draft Guidelines on Training for Bus Captains	Document no. 12.8
27 March 2018	Notes of Meeting of the 1st Sub-Working Group on On-Vehicle Safety Devices for Franchised Buses on 27 March 2018	Discussed various hardware and technologies of on-vehicle safety devices	Document no. 12.9
12 June 2018	Draft Notes of the 2nd Meeting of the Sub-Working Group on On-Vehicle Safety Devices for Franchised Buses on 12 June 2018	Discussed various hardware and technologies of on-vehicle safety devices	Document no. 12.10
27 June 2018	Draft Notes of the 3rd Meeting of the Sub-Working Group on In-Vehicle Safety Devices for Franchised Buses on 27 June 2018	Discussed various hardware and technologies of on-vehicle safety devices	Document no. 12.11

12.2 Summary of correspondences between KMB and the Transport Department

Date	Description	Summary	Reference
15 March 2018	Letter from KMB to Transport Department	Urge to include proposed subjects as part of the scope of the Working Group	Document no. 12.12
26 March 2018	Letter from Transport Department to KMB	Suggest to handle proposed subject separately outside the Working Group	Document no. 12.13
11 July 2018	Letter from KMB to Transport Department	Urge to include proposed subjects as part of the scope of the Working Group	Document no. 12.14

12.3 Meeting Schedule with the Transport Department

Working Group on Enhancement of Safety of Franchised Buses

Dates	Description
13 March 2018	1st Meeting
23 April 2018	2nd Meeting
21 June 2018	3rd Meeting

Technical Meeting on Training Arrangements for Bus Captains

Dates	Description
19 April 2018	1st Meeting
4 June 2018	2nd Meeting

Sub-Working Group on On-Vehicle Safety Devices for Franchised Buses

Dates	Description
27 March 2018	1st Meeting
12 June 2018	2nd Meeting
27 June 2018	3rd Meeting

Working Group on
Enhancement of Safety of Franchised Buses

Notes of 1st Meeting held on 13 March 2018 at 3.00 p.m.
at Room 4110B, 41/F, Immigration Tower, Wan Chai

Present:

Convener		
TD	Miss Rachel KWAN	Assistant Commissioner for Transport/Special Duties
Member - TD		
BRB	Miss Amy TSE	Principal Transport Officer/Bus and Railway 1
	Ms. Amy LEE	Chief Transport Officer/Special Duties
VSSD	Mr. David TSANG	Chief Electrical and Mechanical Engineer/Vehicle Safety and Standards
	Mr. William SHUM	Senior Engineer/Vehicle Regulations and Standards
	Mr. Jimmy YEUNG	Senior Engineer/Vehicle Safety
	Mr. Danny CHAN	Engineer/Bus Safety
RSSD	Mr. Tony YAU	Chief Engineer/Road Safety and Standards
	Mr. Gary WONG	Senior Engineer/Road Safety 2
Member – Bus Operators		
KMB/LW	Mr. Godwin SO	General Manager, Corporate Planning & Business Development
	Mr. LEUNG Kin Wang	Operations Director
	Mr James WONG	Head of Training and Quality Assurance Department
CTB/NWFB	[redacted]	[redacted]
NLB	[redacted]	[redacted]

[redacted]

Note-taker

TD	Miss Natalie YU	Senior Transport Officer/Railway 6

Action

DISCUSSION

(A) Opening Remarks

1. The Convener welcomed members to the first meeting of the Working Group on Enhancement of Safety of Franchised Buses ("WG"). She briefed members that whilst an Independent Review Committee ("IRC") led by Hon. Mr Justice Michael Victor Lunn had been set up to review safety of bus operations after the traffic accident involving a bus on Tai Po Road on 10 February 2018, the purpose of the WG meeting was to review and study measures with a view to further enhancing bus safety. Technical meetings ("TMs") would also be held with members and/or with relevant professionals to discuss on individual topic. A report on the outcome and recommendations of the review is expected to be submitted to the Commissioner for Transport in three months' time.

(B) Confirmation of Membership and Scope of Works

2. The Members had no objection to the Membership and the Scope of Work of the WG ***(Annex)***.

3. As regards the proposed scope of work, KMB/LW further suggested including four other aspects viz. assault on bus captain, illegal parking at bus stops, traffic congestion aggravating bus captains' driving fatigue and pressure as well as bus stop arrangements in the scope of work.

4. TD noted that threat of assault on bus captains would put pressure and stress on bus captains when they were driving. It had already been the Government's plan to enhance publicity on proper passenger behaviour and serious legal consequence of assaults on or disturbance to bus captains. On the illegal parking at bus stops and the individual bus stop arrangement, TD opined that these would be

Action

followed up more effectively by TD's Regional Offices on a case by case basis. In respect of traffic congestion, TD advised that a study had been conducted with a number of measures proposed to the Transport Advisory Council for alleviating traffic congestion. The measures would be implemented in due course subject to consultation and legislative amendments. Besides, the impact (e.g. pressure, fatigue) on the bus drivers arising from traffic congestion could better be mitigated by operational adjustments by the franchised bus operators. Given the 3-month limited time span of the WG, it was agreed at the meeting that the WG should focus on the proposed scope of work set out at Annex, including training arrangements for bus captains, installation of seat belts on all seats, and installation of on-vehicle safety device whilst the issues brought up by KMB/LW should be handled outside the WG.

(C) Training Arrangements for Bus Captains

(a) New recruits

5. [redacted] KMB/LW added that they also carried out road test assessment to ensure the applicants' driving competence even though the applicants had no conviction record in the past [redacted]

6. [redacted]

(b) *In-service bus captains*

7. It was noted that all bus operators would provide classroom

Action

refresher course to in-service bus captains at least once in three years. [redacted]

(c) *Driving behavior monitoring to in-service bus captains*

8. [redacted] In addition, KMB/LW would also investigate the causes of speeding and consider providing appropriate training to the captains, subject to the internal investigation results. It was noted that the disciplinary actions and follow-up actions taken to the bus captains would be varied, depending on the nature and the persistency of the driving malpractice committed by the captains. TD requested all bus operators to provide their companies' guidelines on taking disciplinary actions, by listing the disciplinary actions taken to captains from dismissal to compulsory training on different types of driving malpractices or driving offences committed by the bus captains.

All bus operators

9. Apart from the use of black box, KMB/LW supplemented that they would conduct on-board monitoring on bus captains' driving performance. [redacted]

10. In addition to the normal classroom training, TD suggested all bus operators to consider making use of putting up notice at

All bus

	Action
conspicuous locations and video uploaded onto companies' website to disseminate driving safety messages to the bus captains.	operators
11. [redacted] KMB/LW considered that it should not be the captains' sole responsibility to the high accident rate, and, in some cases, behavior of other road users and/or the road design might also be the contributing factors. [redacted] In response to the above, TD replied that it would be important for the bus operators to carry out an analysis on the correlation of a number of aspects, including captains' age, year of service and other external factors etc., with the accident rate. With the results of the analysis, the bus operators could strengthen the training to the captains purposively.	
12. TD reminded the bus operators to submit training information and requested the bus operators to -	All bus operators
i) review the current training arrangement, including (a) the scope of content that emotion management, complaint handling, alert driving, and safety tips during on-the-road training/ route training etc. were included, (b) frequency and duration, and (c) form of training and distribution channels;	
ii) carry out analysis on the correlation between the accident rate and bus captains' ages as well as the number of training hours received by bus captains;	
iii) compare the in-house training with the training practice of bus captains in other places, such as Singapore and London; and	
iv) provide suggestions to enhance training arrangements, with the ultimate objective to prevent accident happening in the future.	

Action

(D) Installation of seat belts

13. At present, all exposed seats on franchised buses have been installed with seat belts. Taking the technical feasibility into the account, TD proposed to install seat belts on all seats for new buses and retrofit seat belts on all seats on the existing buses.

14. After discussion, all franchised bus operators agreed that installation of seat belts on new buses was feasible if specified when making the procurement. KMB/LW supplemented that there would be difficulties to add the requirement for seat belt installation if the new buses had already been under manufacturing.

15. [redacted]

16. [redacted]

TD advised that there were requests for a comprehensive review on seat belts installation on bus after the traffic accidents. It had been more than a decade since the last review on the installation of seat belt on buses. The objective of the prevailing discussion should focus on the technical feasibility, cost-effectiveness, applicability and other issues relating to installation of seat belts on all seats other than exposed seats.

17. TD proposed that a TM to be held in the following week with the bus operators and the major bus manufacturers, such as Alexander Dennis, Volvo, Man, Benz and Scania to discuss the subject in depth. The TM would look into i) the existing provision of the buses, ii) the feasibility to install seat belts on new buses, and iii) the feasibility and difficulties to install seat belts on existing operating buses. Further discussions and recommendations would be made based on the study and information gathered.

TD and all bus operators

(Post-meeting notes: The TM was held on 27 March with the major bus manufacturers and all franchised bus operators to explore the technical

Action

feasibility of different hardware and technologies of on-vehicle safety devices. Notes of the TM would be prepared separately.)

(E) Installation of on-vehicle safety device

18. TD briefed the members the on-vehicle safety devices outlined in the scope of work, and invited bus operators' views on installation of these devices.

19. [redacted]

KMB/LW reported that all buses in their fleets had been equipped with audible alarm and warning sign on dashboard. TD responded that this device would further be discussed in the TM.

20. [redacted]

21. [redacted] TD suggested exploring the applicability of the technology on bus routes operating in the New Territories or to/from the Airport in the coming TMs. — TD and all bus operators

(See post-meeting note to para. 17.)

22. [redacted]

	Action
KMB/LW added that face and eye detections were also available as an alternative.	
23. After deliberation, it was agreed that the feasibility and applicability of the above technologies and devices would be further investigated in the TM. (See post-meeting note to para. 17.)	TD and all bus operators
(F) Other proposed measures 24. TD invited members' views on the installation of on-vehicle cameras to enhance bus safety.	
25. [redacted] KMB/LW supplemented that over 2 000 buses under their fleet had been equipped with 9 cameras on each bus. [redacted]	
26. In addition to the on-vehicle safety device listed in the scope of work, TD proposed to look into the feasibility and the applicability of geofencing, speed alarm, tilt alarm and heat windscreen in the TM. (See post-meeting note to para. 17.)	TD and all bus operators
(G) A.O.B. 28. There being no other business, the meeting adjourned at 4.40 p.m..	

Working Group on
Enhancement of Safety of Franchised Buses

Scope of Work

After a traffic accident involving a bus of Kowloon Motor Bus Company Limited took place on Tai Po Road on 10 February 2018, a Working Group is proposed to be set up to review and study measures to further enhance bus safety. The scope of the Working Group shall include –

(1) To review and enhance the training arrangements targeting different types of captains (e.g. new recruits, in-service captains and in-service captains having committed traffic offence or having involved in accident, etc.);

(2) To examine the technical feasibility, cost-effectiveness, applicability and any other issues relating to installation of seat belts on all seats other than exposed seats;

(3) To explore the technical feasibility, cost-effectiveness, applicability and any other issues relating to the installation of on-vehicle safety device, including but not limiting to the following –

(a) Speed display unit for passengers;
(b) Active / passive roll stability control;
(c) Electronic stability control;
(d) Speed control aided by GPS;
(e) Speed limiter to cap maximum speed within 70 km/hour;
(f) Collision prevention and lane keeping device; and
(g) Monitoring device on captain's condition e.g. dozing, drowsiness.

(4) Any other proposed measures related to the above 3 areas as considered appropriate.

Membership

Convener

TD	Miss Rachel Kwan	Assistant Commissioner for Transport/Special Duties

Members – TD

BRB	Miss Amy Tse	Principal Transport Officer/Bus and Railway 1
	Ms. Amy Lee	Chief Transport Officer/Special Duties
VSSD	Mr David Tsang	Chief Electrical and Mechanical Engineer/Vehicle Safety and Standards
	Mr William Shum	Senior Engineer/Vehicle Regulations and Standards
	Mr Jimmy Yeung	Senior Engineer/Vehicle Safety
	Mr Danny Chan	Engineer/Bus Safety
RSSD	Mr Tony Yau	Chief Engineer/Road Safety and Standards
	Mr Gary Wong	Senior Engineer/Road Safety 2

Members – Bus Operators

KMB/LW	Mr Godwin So	General Manager, Corporate Planning & Business Development
	Mr Leung Kin Wang	Operations Director
	Mr James Wong	Head of Training and Quality Assurance Department
CTB/	[redacted]	[redacted]

NWFB	[redacted]	[redacted]
	[redacted]	[redacted]
NLB	[redacted]	[redacted]
	[redacted]	[redacted]
	[redacted]	[redacted]

Note-taker

TD	Miss Natalie Yu	Senior Transport Officer/Railway 6

Technical Meetings

Separate technical meetings will be set up to discuss the measures in more details.

Interval of Meeting

On monthly basis or at more frequent interval if necessary (till completion of the review)

Deliverable

A report on the outcome and recommendations of the review is expected to be submitted to the Commissioner for Transport in 3 months' time.

[Blank Page]

Working Group on
Enhancement of Safety of Franchised Buses

Notes of 1st Meeting held on 13 March 2018 at 3.00 p.m.
at Room 4110B, 41/F, Immigration Tower, Wan Chai

Present:

Convener		
TD	Miss Rachel KWAN	Assistant Commissioner for Transport/Special Duties
Member - TD		
BRB	Miss Amy TSE	Principal Transport Officer/Bus and Railway 1
	Ms. Amy LEE	Chief Transport Officer/Special Duties
VSSD	Mr. David TSANG	Chief Electrical and Mechanical Engineer/Vehicle Safety and Standards
	Mr. William SHUM	Senior Engineer/Vehicle Regulations and Standards
	Mr. Jimmy YEUNG	Senior Engineer/Vehicle Safety
	Mr. Danny CHAN	Engineer/Bus Safety
RSSD	Mr. Tony YAU	Chief Engineer/Road Safety and Standards
	Mr. Gary WONG	Senior Engineer/Road Safety 2
Member – Bus Operators		
KMB/LW	Mr. Godwin SO	General Manager, Corporate Planning & Business Development
	Mr. LEUNG Kin Wang	Operations Director
	Mr James WONG	Head of Training and Quality Assurance Department
CTB/NWFB	Mr William CHUNG	Head of Operations
	Mr Paul LI	Head of Engineering
	Mr Vincent FUNG	Senior Operations Manager
NLB	Mr. Benny CHAN	Deputy General Manager

	Mr. Patrick YEUNG	Head of Service and Training
	Mr. Billy WONG	Assistant Manager, Operation Support

Note-taker

TD	Miss Natalie YU	Senior Transport Officer/Railway 6

Action

DISCUSSION

(A) Opening Remarks

1. The Convener welcomed members to the first meeting of the Working Group on Enhancement of Safety of Franchised Buses ("WG"). She briefed members that whilst an Independent Review Committee ("IRC") led by Hon. Mr Justice Michael Victor Lunn had been set up to review safety of bus operations after the traffic accident involving a bus on Tai Po Road on 10 February 2018, the purpose of the WG meeting was to review and study measures with a view to further enhancing bus safety. Technical meetings ("TMs") would also be held with members and/or with relevant professionals to discuss on individual topic. A report on the outcome and recommendations of the review is expected to be submitted to the Commissioner for Transport in three months' time.

(B) Confirmation of Membership and Scope of Works

2. The Members had no objection to the Membership and the Scope of Work of the WG ***(Annex)***.

3. As regards the proposed scope of work, KMB/LW further suggested including four other aspects viz. assault on bus captain, illegal parking at bus stops, traffic congestion aggravating bus captains' driving fatigue and pressure as well as bus stop arrangements in the scope of work.

4. TD noted that threat of assault on bus captains would put pressure and stress on bus captains when they were driving. It had already been the Government's plan to enhance publicity on proper passenger behaviour and serious legal consequence of assaults on or disturbance to bus captains. On the illegal parking at bus stops and the individual bus stop arrangement, TD opined that these would be

Action

followed up more effectively by TD's Regional Offices on a case by case basis. In respect of traffic congestion, TD advised that a study had been conducted with a number of measures proposed to the Transport Advisory Council for alleviating traffic congestion. The measures would be implemented in due course subject to consultation and legislative amendments. Besides, the impact (e.g. pressure, fatigue) on the bus drivers arising from traffic congestion could better be mitigated by operational adjustments by the franchised bus operators. Given the 3-month limited time span of the WG, it was agreed at the meeting that the WG should focus on the proposed scope of work set out at Annex, including training arrangements for bus captains, installation of seat belts on all seats, and installation of on-vehicle safety device whilst the issues brought up by KMB/LW should be handled outside the WG.

(C) Training Arrangements for Bus Captains

(a) New recruits

5. CTB/NWFB and KMB/LW advised that conviction records of the applicants would be checked during bus captains' recruitment exercise with applicants' consent. CTB/NWFB pointed out that they would take into consideration the details of the conviction records, such as types of driving offence that the applicant had committed before making an offer to the applicant. KMB/LW added that they also carried out road test assessment to ensure the applicants' driving competence even though the applicants had no conviction record in the past. For employment of part-time captains, CTB/NWFB advised that they would consider applicants with experience of driving franchised buses only and not other types of vehicles.

6. CTB/NWFB and KMB/LW advised that training were provided to all new recruits, including but not limited to driving skills training for preparation of relevant driving test to new recruits who had not held driving licences with Public Bus (Class 10) and/or Public Bus - Franchised endorsement (Class 17). For new recruits who had already held driving licences with Public Bus and/or Public Bus – Franchised endorsement, CTB/NWFB and NLB advised that only vehicle and route familiarization training would be provided.

(b) *In-service bus captains*

7. It was noted that all bus operators would provide classroom

Action

refresher course to in-service bus captains at least once in three years. NLB said that training for in-service bus captains was similar to that of the new recruits and they would consider employing in-house driving instructors in near future to cope with the need for preparation of conversion from single decker to double decker on their routes. For in-service bus captains who had ceased operating buses for a while, KMB/LW and CTB/NWFB advised that assessments on their driving competence would be carried out by in-house driving instructors before the bus captains returned to duties. Appropriate training would be provided to individual bus captains to follow up with the result of the in-house assessment if necessary.

(c) *Driving behavior monitoring to in-service bus captains*

8. CTB/NWFB and KMB/LW advised that black box was installed on all buses to monitor driving performance of bus captains. CTB/NWFB supplemented that captains' performance on the selected road sections with speed limit at 50 km/hour which were exposed to higher traffic accident risks was monitored while KMB/LW advised that they mapped all road sections with their respective speed limits and monitored captains operating the buses exceeding the respective speed limits. Exception reports would be generated should captains fail to comply. CTB/NWFB and KMB/LW added that they would take disciplinary actions to bus captains who committed driving offence and failed to comply with the companies' performance requirements persistently. In addition, KMB/LW would also investigate the causes of speeding and consider providing appropriate training to the captains, subject to the internal investigation results. It was noted that the disciplinary actions and follow-up actions taken to the bus captains would be varied, depending on the nature and the persistency of the driving malpractice committed by the captains. TD requested all bus operators to provide their companies' guidelines on taking disciplinary actions, by listing the disciplinary actions taken to captains from dismissal to compulsory training on different types of driving malpractices or driving offences committed by the bus captains.

All bus operators

9. Apart from the use of black box, KMB/LW supplemented that they would conduct on-board monitoring on bus captains' driving performance. NLB advised that they carried out on-board monitoring upon receipt of complaints or in case of special incidents.

10. In addition to the normal classroom training, TD suggested all bus operators to consider making use of putting up notice at

All bus

	Action
conspicuous locations and video uploaded onto companies' website to disseminate driving safety messages to the bus captains.	operators
11. In response to TD's enquiry on any analysis on the correlation between a particular type of bus captains and accident rate, CTB/NWFB and KMB/LW expressed that according to their in-house analysis, there was no clear indication that bus captains with short or long years of service would expose to higher risk of traffic accidents involving passengers fatal or injury. KMB/LW considered that it should not be the captains' sole responsibility to the high accident rate, and, in some cases, behavior of other road users and/or the road design might also be the contributing factors. CTB/NWFB also pointed out that the occurrence of a traffic accident might not merely be due to insufficient training. In response to the above, TD replied that it would be important for the bus operators to carry out an analysis on the correlation of a number of aspects, including captains' age, year of service and other external factors etc., with the accident rate. With the results of the analysis, the bus operators could strengthen the training to the captains purposively.	
12. TD reminded the bus operators to submit training information and requested the bus operators to -	All bus operators
i) review the current training arrangement, including (a) the scope of content that emotion management, complaint handling, alert driving, and safety tips during on-the-road training/ route training etc. were included, (b) frequency and duration, and (c) form of training and distribution channels;	
ii) carry out analysis on the correlation between the accident rate and bus captains' ages as well as the number of training hours received by bus captains;	
iii) compare the in-house training with the training practice of bus captains in other places, such as Singapore and London; and	
iv) provide suggestions to enhance training arrangements, with the ultimate objective to prevent accident happening in the future.	

Action

(D) Installation of seat belts

13. At present, all exposed seats on franchised buses have been installed with seat belts. Taking the technical feasibility into the account, TD proposed to install seat belts on all seats for new buses and retrofit seat belts on all seats on the existing buses.

14. After discussion, all franchised bus operators agreed that installation of seat belts on new buses was feasible if specified when making the procurement. KMB/LW supplemented that there would be difficulties to add the requirement for seat belt installation if the new buses had already been under manufacturing.

15. CTB/NWFB and KMB/LW pointed out that the installation of seat belts on lower deck of the existing buses would increase the structural loading of buses. CTB/NWFB added that the floor on the lower deck was mainly made up of fiberglass which would made retrofitting seat belts onto existing seats extremely difficult and nearly impossible.

16. CTB/NWFB queried the practicability of installation of seat belts on all seats to enhance passengers safety because it would be difficult for the bus captains to ensure passengers on buses wearing seat belts. Besides, CTB/NWFB also raised the concerns on the need of wearing seat belt by standees who could not be provided with seat belts. TD advised that there were requests for a comprehensive review on seat belts installation on bus after the traffic accidents. It had been more than a decade since the last review on the installation of seat belt on buses. The objective of the prevailing discussion should focus on the technical feasibility, cost-effectiveness, applicability and other issues relating to installation of seat belts on all seats other than exposed seats.

17. TD proposed that a TM to be held in the following week with the bus operators and the major bus manufacturers, such as Alexander Dennis, Volvo, Man, Benz and Scania to discuss the subject in depth. The TM would look into i) the existing provision of the buses, ii) the feasibility to install seat belts on new buses, and iii) the feasibility and difficulties to install seat belts on existing operating buses. Further discussions and recommendations would be made based on the study and information gathered.

TD and all bus operators

(Post-meeting notes: The TM was held on 27 March with the major bus manufacturers and all franchised bus operators to explore the technical

Action

feasibility of different hardware and technologies of on-vehicle safety devices. Notes of the TM would be prepared separately.)

(E) Installation of on-vehicle safety device

18. TD briefed the members the on-vehicle safety devices outlined in the scope of work, and invited bus operators' views on installation of these devices.

19. CTB/NWFB and NLB expressed grave concerns that the installation of speed display unit for passengers under item (3)(a) might induce conflicts between the bus captains and passengers. To alert the bus captains on vehicle speed, CTB/NWFB said that majority of their buses were equipped with audible alarm and warning sign on dashboard when buses were being operated exceeding 70 km/hour and the device would be expanded to cover all buses in their fleet in the future. KMB/LW reported that all buses in their fleets had been equipped with audible alarm and warning sign on dashboard. TD responded that this device would further be discussed in the TM.

20. In response to the proposal of installation of speed control aided by GPS under item (3)(d), CTB/NWFB and KMB/LW responded that signal errors might frequently occur because of the unique landscape features in the territory. High density development and insufficient network coverage might also affect the stability and the accuracy of the GPS signals. It would take a long testing time to ensure the reliability of the GPS system.

21. With regard to the installation of collision prevention and lane keeping device under item (3)(f), NWFB/CTB expressed reservation in view of the results of their trial of the device on buses about two to three years ago. With time, the bus captains tended to ignore intermittent alarms due to frequent lane changing in urban areas and the need of weaving to kerbside or bus bays for picking up and setting down passengers at bus stops. TD suggested exploring the applicability of the technology on bus routes operating in the New Territories or to/from the Airport in the coming TMs. — TD and all bus operators

(See post-meeting note to para. 17.)

22. Concerning the monitoring device on the bus captain's condition under item (3)(g), NLB pointed out that some coaches were equipped with shaking driver's seat to serve the same purpose.

	Action
KMB/LW added that face and eye detections were also available as an alternative.	
23. After deliberation, it was agreed that the feasibility and applicability of the above technologies and devices would be further investigated in the TM. (See post-meeting note to para. 17.)	TD and all bus operators
(F) Other proposed measures 24. TD invited members' views on the installation of on-vehicle cameras to enhance bus safety. 25. CTB/NWFB and KMB/LW advised that all CTB/NWFB buses and about 60% of KMB/LW buses had been installed with cameras in the bus captain's cabin. KMB/LW supplemented that over 2 000 buses under their fleet had been equipped with 9 cameras on each bus. CTB/NWFB and KMB/LW added that one of the purposes of the installation of cameras on vehicles was to facilitate accident investigation. That said, the bus operators considered that installation of on-vehicle cameras might not be able to prevent all incidents because some incidents were caused by the unpredictable behaviours of passengers and road users.	
26. In addition to the on-vehicle safety device listed in the scope of work, TD proposed to look into the feasibility and the applicability of geofencing, speed alarm, tilt alarm and heat windscreen in the TM. (See post-meeting note to para. 17.)	TD and all bus operators
(G) A.O.B. 28. There being no other business, the meeting adjourned at 4.40 p.m..	

Working Group on
Enhancement of Safety of Franchised Buses

Scope of Work

After a traffic accident involving a bus of Kowloon Motor Bus Company Limited took place on Tai Po Road on 10 February 2018, a Working Group is proposed to be set up to review and study measures to further enhance bus safety. The scope of the Working Group shall include –

(1) To review and enhance the training arrangements targeting different types of captains (e.g. new recruits, in-service captains and in-service captains having committed traffic offence or having involved in accident, etc.);

(2) To examine the technical feasibility, cost-effectiveness, applicability and any other issues relating to installation of seat belts on all seats other than exposed seats;

(3) To explore the technical feasibility, cost-effectiveness, applicability and any other issues relating to the installation of on-vehicle safety device, including but not limiting to the following –

   (a) Speed display unit for passengers;
   (b) Active / passive roll stability control;
   (c) Electronic stability control;
   (d) Speed control aided by GPS;
   (e) Speed limiter to cap maximum speed within 70 km/hour;
   (f) Collision prevention and lane keeping device; and
   (g) Monitoring device on captain's condition e.g. dozing, drowsiness.

(4) Any other proposed measures related to the above 3 areas as considered appropriate.

Membership

Convener

TD	Miss Rachel Kwan	Assistant Commissioner for Transport/Special Duties

Members – TD

BRB	Miss Amy Tse	Principal Transport Officer/Bus and Railway 1
	Ms. Amy Lee	Chief Transport Officer/Special Duties
VSSD	Mr David Tsang	Chief Electrical and Mechanical Engineer/Vehicle Safety and Standards
	Mr William Shum	Senior Engineer/Vehicle Regulations and Standards
	Mr Jimmy Yeung	Senior Engineer/Vehicle Safety
	Mr Danny Chan	Engineer/Bus Safety
RSSD	Mr Tony Yau	Chief Engineer/Road Safety and Standards
	Mr Gary Wong	Senior Engineer/Road Safety 2

Members – Bus Operators

KMB/LW	Mr Godwin So	General Manager, Corporate Planning & Business Development
	Mr Leung Kin Wang	Operations Director
	Mr James Wong	Head of Training and Quality Assurance Department
CTB/	Mr William Chung	Head of Operations

NWFB		
	Mr Paul Li	Head of Engineering
	Mr Vincent Fung	Senior Operations Manager
NLB	Mr Benny Chan	Deputy General Manager
	Mr Patrick YEUNG	Head of Service and Training
	Mr Billy WONG	Assistant Manager, Operation Support
Note-taker		
TD	Miss Natalie Yu	Senior Transport Officer/Railway 6

Technical Meetings

Separate technical meetings will be set up to discuss the measures in more details.

Interval of Meeting

On monthly basis or at more frequent interval if necessary (till completion of the review)

Deliverable

A report on the outcome and recommendations of the review is expected to be submitted to the Commissioner for Transport in 3 months' time.

Technical Meeting on
Training Arrangements for Bus Captains

Notes of 1st Meeting held on 19 April 2018 at 10.00 a.m.
at Room 4110A, 41/F, Immigration Tower, Wan Chai

Present:

Chairperson		
TD	Miss Rachel KWAN	Assistant Commissioner for Transport/Special Duties
Member - TD		
BRB	Miss Amy TSE	Principal Transport Officer/Bus and Railway 1
	Ms. Amy LEE	Chief Transport Officer/Special Duties
Member – Bus Operators		
KMB/LW	Mr. James WONG	Head of Training and Quality Assurance Department
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
Note-taker		
TD	Miss Natalie YU	Senior Transport Officer/Railway 6

Action

(1) Discussion on the training arrangements for bus captains

(a) Structure of training system

After deliberation, all bus operators agreed that the structure

Action

of training system for bus captains should include the following training courses:

(i) Induction course
(ii) New bus route training course
(iii) New bus model training course
(iv) Refresher course
(v) Ancillary training course

(b) Modules and their weightings for induction course and refresher course

2. All bus operators confirmed that the induction course consisted of classroom and route trainings for both full-time and part-time bus captains, of which KMB/LW mentioned that seven days out of its nine-day induction course was on-vehicle training with behind–the-wheel practice to each bus captain trainee [redacted]

3. All bus operators advised that their induction course had covered the following scope:

(i) Driving and route training
(ii) Operations of on-vehicle device/ facilities
(iii) Safe driving and road safety
(iv) Handling incident/emergency
(v) Customer service & EQ management
(vi) Others, e.g. company rules

4. However, all bus operators opined that it would be difficult to segment each of the above topics and give a single weighting for each of them as the training would cover multiple topics at a single point of time. For example, operations of in-bus facilities and safety awareness would be delivered during the driving and route training. With the consideration of the above, the TD proposed to provide a combined weighting across some of the above-mentioned topics, such

Action

as driving and route training, operations of on-vehicle device/ facilities and safety awareness, with a range of relative weightings. All bus operators had no objection to further deliberate the relative weighting once TD had drawn up any proposal.

5. As an assistant measure to bus captains, KMB/LW said that they had a "Buddy Bus Captain" scheme under which experienced bus captain would be arranged to accompany the new bus captain in his first few revenue trips and to give advice to him when necessary.

6. [redacted]

7. [redacted]

8. KMB/LW and NLB said that their refresher courses covered both classroom and route training. KMB/LW advised that the objective of the refresher course was to enhance the service level of in-service bus captains and allow their instructors to observe the bus captains' driving performance. KMB/LW did not have part-time bus captains any more. [redacted]

(c) Duration of induction course

9. [redacted]

Action

[redacted]

10. [redacted]

(d) Duration and frequency of refresher course

11. [redacted]

12. It was clarified by all franchised bus operators in the meeting that it would not be a must for a bus captain to attend the refresher course once every three years if he/she attended other training courses provided by the bus operators in a three-year period.

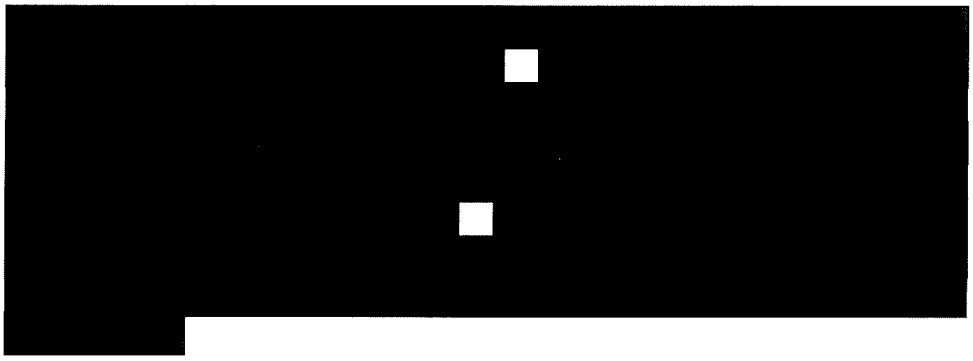
(e) Training on new route and new bus model

13. KMB/LW pointed out that the bus captains might receive an integrated training of new routes and new bus model in one-go.

14. In particular to new route training, KMB/LW reported that since the traffic accident involving a bus on Tai Po Road on 10 February 2018, their new route training required the bus captains to have behind-the-wheel practice with instructor-to-trainee ratio at 1:6. During the course, bus captains were required to operate the buses. KMB/LW also pointed out that the instructor-to-trainee ratio for integrated training for new route and new bus model was 1:3, trainees would have behind-the-wheel practice and they would be more likely to operate a full trip during the training.

15. [redacted]

Action

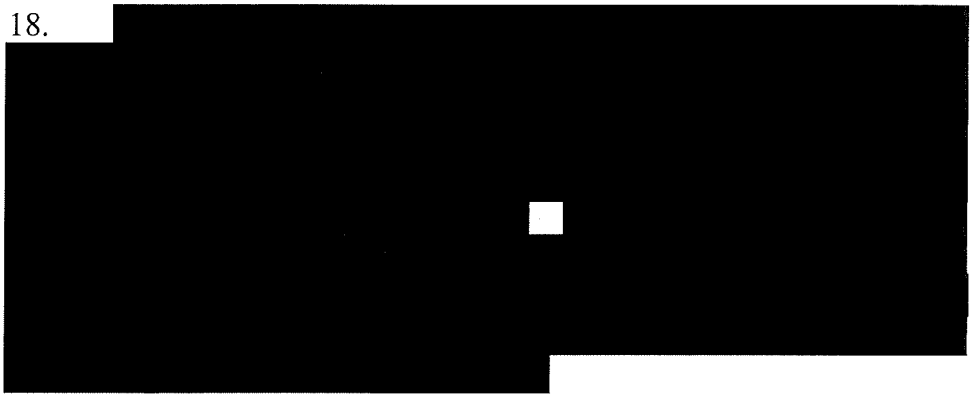


16. [redacted]

(f) Guidelines on re-training requirements for bus captains

17. All bus operators expressed no objection to unify the name of the re-training courses provided to (i) bus captains with improper driving behavior and (ii) bus captains who have left the driving post for a certain period of time as "Ancillary Training" in the proposed guidelines on training under planning.

18. [redacted]



19. Despite that KMB/LW did not monitor DOPs of their bus captains, KMB/LW pointed out that bus captains had to report traffic accidents during the working hours within 72 hours and the company would follow up with the bus captains with the driving offence as deem necessary. In addition, KMB/LW would also monitor the bus captains' driving behavior through review of the black box information. Should improper driving behavour of a bus captain such as speeding be found repeatedly (irrespectively of whether such behaviour leads to incurrence of any DOPs), he/she would be arranged to attend the ancillary training. Upon TD's request in consideration of monitoring

Action

the situation of bus captains' DOPs for sake of public safety, KMB/LW replied that they had included the condition into the **new** employment contracts of bus captains on disclosure of DOPs information. However, it would be difficult to extend the requirements to the in-service bus captains with employment contracts of older version due to personal data privacy issue.

20. [redacted] TD was concerned that the DOPs could have lapsed by the time the bus captains reported to the company and thus doubted the effectiveness on taking follow up actions on bus captains timely to address their improper driving behaviour. TD requested NLB to review the existing practice and make necessary improvement. NLB

21. For training courses for bus captains who have left the driving posts for a certain period of time, all bus operators confirmed that assessments would be carried out by in-house instructors to assure the driving competence before the bus captains returning to services after leaving the driving posts for more than 30 days. In addition to the driving competence assessment, KMB/LW reported that they provided a one-day ancillary training course to the bus captains with instructor-to-trainee ratio at 1:3 [redacted]

(g) Training for part-time drivers

22. KMB/LW reported that they had stopped recruiting new part-time bus captains ("PTBCs") since 15 February 2018. The existing PTBCs had received all training courses same as the full-time bus captains did. Yet, KMB/LW would check if their PTBCs were required to attend refresher course. KMB/LW

[Post-meeting note: KMB/LW advised that its refresher course is provided to all bus captains, including part-time, hourly-rated or office staff bus captains.]

Action

23. [redacted]

24. [redacted]

[redacted]

25. [redacted]

[redacted]

(h) Internal monitoring and auditing mechanism

26. All bus operators agreed that there was a need to have an internal monitoring and auditing mechanism such that there would a responsible party in each bus company to ensure appropriate training would be assigned to bus captains timely and training details would be

All bus

Action

properly recorded. All bus operators agreed to check the existing practice of their companies' internal monitoring and auditing mechanism and review if any improvements should be made. operators

(2) A.O.B.

(a) Comparison of the in-house training with the training practice of bus captains in other places

27. [redacted]

28. Upon KMB/LW's enquiry, TD clarified that the research on bus captain's training practice in other places aimed to position the bus captains training currently provided by bus operators in Hong Kong and identify if any training elements could be applied to the existing training. All bus operators were encouraged to carry out the research. All bus operators

(b) Analysis on the correlation between the accident rate and the bus captains' ages as well as the number of training hours received by bus captains

29. [redacted]

[redacted] KMB/LW

Action

captains.

[Post-meeting notes: KMB/LW has submitted their findings on the correlation between the accident rate and bus captains' age from 2014 to 2017 on 25 April 2018. [redacted]

30. It was agreed that the number of traffic accidents with person injured would form the basis of the number of accidents in the analyses. To ensure meaningful comparison between full-time bus captains and part-time bus captains, it was also agreed that number of working hours would apply.

(c) Training guidelines

31. All bus operators had no objection to TD's plan to propose a training guideline in near future.

32. There being no other business, the meeting adjourned at 1:00 p.m..

Technical Meeting on
Training Arrangements for Bus Captains

Notes of 1st Meeting held on 19 April 2018 at 10.00 a.m.
at Room 4110A, 41/F, Immigration Tower, Wan Chai

Present:

Chairperson		
TD	Miss Rachel KWAN	Assistant Commissioner for Transport/Special Duties
Member - TD		
BRB	Miss Amy TSE	Principal Transport Officer/Bus and Railway 1
	Ms. Amy LEE	Chief Transport Officer/Special Duties
Member – Bus Operators		
KMB/LW	Mr. James WONG	Head of Training and Quality Assurance Department
CTB/NWFB	Mr. William CHUNG	Head of Operations
	Mr. Vincent FUNG	Senior Operations Manager
	Mr. Ryan LO	Operations Training Manager
NLB	Mr. Benny CHAN	Deputy General Manager
	Mr. Richard LEE	Training Manager
Note-taker		
TD	Miss Natalie YU	Senior Transport Officer/Railway 6

Action

(1) Discussion on the training arrangements for bus captains

(a) Structure of training system

After deliberation, all bus operators agreed that the structure

Action

of training system for bus captains should include the following training courses:

(i) Induction course
(ii) New bus route training course
(iii) New bus model training course
(iv) Refresher course
(v) Ancillary training course

(b) Modules and their weightings for induction course and refresher course

2. All bus operators confirmed that the induction course consisted of classroom and route trainings for both full-time and part-time bus captains, of which KMB/LW mentioned that seven days out of its nine-day induction course was on-vehicle training with behind–the-wheel practice to each bus captain trainee while CTB/NWFB said that 13-day on-vehicle training with behind-the-wheel practice out of 14-day induction course was provided to each bus captain trainee.

[Post meeting note: CTB/NWFB clarified that the induction course for full-time bus captains included one day classroom training and 10 to 15 days driving training (depending on the instructor to bus captain ratio which varied from 1:3 to 1:5).]

3. All bus operators advised that their induction course had covered the following scope:

(i) Driving and route training
(ii) Operations of on-vehicle device/ facilities
(iii) Safe driving and road safety
(iv) Handling incident/emergency
(v) Customer service & EQ management
(vi) Others, e.g. company rules

4. However, all bus operators opined that it would be difficult to segment each of the above topics and give a single weighting for each of them as the training would cover multiple topics at a single point of time. For example, operations of in-bus facilities and safety awareness would be delivered during the driving and route training. With the consideration of the above, the TD proposed to provide a combined weighting across some of the above-mentioned topics, such

Action

as driving and route training, operations of on-vehicle device/ facilities and safety awareness, with a range of relative weightings. All bus operators had no objection to further deliberate the relative weighting once TD had drawn up any proposal.

5. As an assistant measure to bus captains, KMB/LW said that they had a "Buddy Bus Captain" scheme under which experienced bus captain would be arranged to accompany the new bus captain in his first few revenue trips and to give advice to him when necessary.

6. TD considered that this scheme might be beneficial to new bus captains who were new to franchised bus operations and therefore requested CTB/NWFB and NLB to consider adopting similar arrangement in addition to their existing training course. In response, CTB/NWFB and NLB would consider to arrange similar "Buddy Bus Captain" scheme for the new bus captains. — CTB/NWFB and NLB

[Post meeting note: CTB/NWFB advised that they started to arrange experienced bus captains to accompany new bus captains on non passenger-carrying buses in their first day of work after the induction training from mid-May 2018. NLB replied that "Buddy Bus Captain" scheme was scheduled to be introduced as part of its training course in Q4 2018.]

7. For refresher course, CTB/NWFB reported that only classroom training was provided for full-time bus captains to refresh their safety awareness, skills in emotional management, knowledge on prevailing regulations, etc. so as to facilitate their daily franchised bus operation.

8. KMB/LW and NLB said that their refresher courses covered both classroom and route training. KMB/LW advised that the objective of the refresher course was to enhance the service level of in-service bus captains and allow their instructors to observe the bus captains' driving performance. KMB/LW did not have part-time bus captains any more. NLB also arranged refresher course for their part-time bus captains while CTB/NWFB did not arrange refresher course for their part-time bus captains.

(c) Duration of induction course

9. CTB/NWFB, KMB/LW and NLB advised that the duration of their induction courses were approximately 14 days, nine days and five days respectively, subject to the instructor-to-trainee ratio and/or the

Action

performance of the bus captain trainees.

10. It was noted that the number of training hours to each bus captain trainee might be similar among CTB/NWFB and KMB/LW as the instructor-to-trainee ratios for CTB/NWFB and KMB/LW were approximately 1:4 and 1:2 respectively. Due to small number of bus captains, NLB said that the instructor-to-trainee ratio for NLB was 1:2 or 1:3.

(d) Duration and frequency of refresher course

11. CTB/NWFB and KMB/LW advised that the duration of their refresher course were approximately eight hours. CTB/NWFB would deliver the course in two consecutive half days while KMB/LW would deliver the course in one day. NLB advised that the duration of the refresher course was two days.

12. It was clarified by all franchised bus operators in the meeting that it would not be a must for a bus captain to attend the refresher course once every three years if he/she attended other training courses provided by the bus operators in a three-year period.

(e) Training on new route and new bus model

13. KMB/LW pointed out that the bus captains might receive an integrated training of new routes and new bus model in one-go.

14. In particular to new route training, KMB/LW reported that since the traffic accident involving a bus on Tai Po Road on 10 February 2018, their new route training required the bus captains to have behind-the-wheel practice with instructor-to-trainee ratio at 1:6. During the course, bus captains were required to operate the buses. KMB/LW also pointed out that the instructor-to-trainee ratio for integrated training for new route and new bus model was 1:3, trainees would have behind-the-wheel practice and they would be more likely to operate a full trip during the training.

15. CTB/NWFB reported that they would arrange in-service bus captains to ride on the revenue trip of the route as a passenger to observe the route and the locations of the en-route bus stops. CTB/NWFB advised that they were considering to enhance this by arranging the in-service bus captains to practise on the new route by

Action

driving non passenger-carrying buses on their own after riding on the revenue trip as observer of the route. For some routes which required special driving techniques, such as those serving Stanley, Shek O and the Peak, they would arrange behind-the-wheel practice under supervision of in-house instructors to the bus captains who would be assigned to operate these routes. CTB/NWFB added that in-service bus captains would be trained on-vehicle by in-house instructors to operate the new routes, and yet it would be limited to the new road sections only.

16. NLB informed that for new route training, their bus captains were provided behind-the-wheel practice under the supervision of the in-house instructors.

(f) Guidelines on re-training requirements for bus captains

17. All bus operators expressed no objection to unify the name of the re-training courses provided to (i) bus captains with improper driving behavior and (ii) bus captains who have left the driving post for a certain period of time as "Ancillary Training" in the proposed guidelines on training under planning.

18. For re-training requirements for bus captains with improper driving behaviours, CTB/NWFB reported that they would provide driving training to bus captains who either involved in traffic accidents, received complaints or had incurred eight driving offence points ("DOPs") or above to rectify the driving malpractice with assessment by the in-house instructors afterwards. To monitor the latest position of DOPs of a bus captain, CTB/NWFB supplemented that they also required their bus captains to report to the company on each DOP incurred and would carry out random check on a monthly basis upon receipt the consent from the bus captains.

19. Despite that KMB/LW did not monitor DOPs of their bus captains, KMB/LW pointed out that bus captains had to report traffic accidents during the working hours within 72 hours and the company would follow up with the bus captains with the driving offence as deem necessary. In addition, KMB/LW would also monitor the bus captains' driving behavior through review of the black box information. Should improper driving behavour of a bus captain such as speeding be found repeatedly (irrespectively of whether such behaviour leads to incurrence of any DOPs), he/she would be arranged to attend the ancillary training. Upon TD's request in consideration of monitoring

	Action
the situation of bus captains' DOPs for sake of public safety, KMB/LW replied that they had included the condition into the **new** employment contracts of bus captains on disclosure of DOPs information. However, it would be difficult to extend the requirements to the in-service bus captains with employment contracts of older version due to personal data privacy issue.	
20. NLB advised that they requested bus captains to report their DOPs status once a year. They would also follow up with bus captains with improper driving behaviour and arrange ancillary training course to bus captains as deem appropriate. NLB said they would consider toprovide ancillary training course for bus captains who had accumulated eight DOPs or above. TD was concerned that the DOPs could have lapsed by the time the bus captains reported to the company and thus doubted the effectiveness on taking follow up actions on bus captains timely to address their improper driving behaviour. TD requested NLB to review the existing practice and make necessary improvement.	NLB
21. For training courses for bus captains who have left the driving posts for a certain period of time, all bus operators confirmed that assessments would be carried out by in-house instructors to assure the driving competence before the bus captains returning to services after leaving the driving posts for more than 30 days. In addition to the driving competence assessment, KMB/LW reported that they provided a one-day ancillary training course to the bus captains with instructor-to-trainee ratio at 1:3 while NLB said that they provided a one or two-day ancillary training course to the bus captains. CTB/NWFB pointed out that no further ancillary training would be provided if the bus captains were able to demonstrate sound driving competence during the assessment.	
(g) Training for part-time drivers	
22. KMB/LW reported that they had stopped recruiting new part-time bus captains ("PTBCs") since 15 February 2018. The existing PTBCs had received all training courses same as the full-time bus captains did. Yet, KMB/LW would check if their PTBCs were required to attend refresher course.	KMB/LW
[Post-meeting note: KMB/LW advised that its refresher course is provided to all bus captains, including part-time, hourly-rated or office staff bus captains.]	

	Action
23. NLB confirmed that there was no difference in the training arrangements between full-time bus captains and PTBCs.	
24. CTB/NWFB advised that two-day induction course would be provided to PTBC trainees. The scope of induction course was different from that of induction course for full-time bus captain trainees. It would be mainly on route training and bus model training. Only two routes would be trained for PTBCs, as compared to five to six routes for full-time bus captains. TD considered that there would be significant differences in time and scope of the induction courses between full-time bus captains and PTBCs were undesirable and requested CTB/NWFB to review the induction course for PTBCs. CTB/NWFB agreed to consider extending the duration of induction course for PTBCs.	CTB/NWFB
[Post-meeting note: CTB/NWFB advised that the duration of induction training for new PTBCs would be extended from 2 days (16 hours) to 4 days (36 hours) since June 2018. With instructor to bus captain ratio at 1:2, each student would receive 16-hour behind-the-wheel training and 4-hour classroom training.]	
25. CTB/NWFB pointed out that it would be difficult for them to provide refresher course to their part-time bus captains because these PTBCs would unlikely be able to attend any refresher course during daytime given the commitment of their full-time jobs. CTB/NWFB also reported that ancillary training would not be provided to PTBCs who have left the driving post for more than 30 days. TD strongly requested CTB/NWFB to provide refresher course and ancillary training to PTBCs. CTB/NWFB replied that they would consider to enhance the training for PTBCs to ensure their driving competence.	CTB/NWFB
[Post-meeting note: CTB/NWFB advised that PTBCs would be arranged to attend refresher course similar to that of provided to full-time bus captains once every three years. The effective date of the arrangement would be advised after communicating with the PTBCs on the new arrangements.]	
(h) Internal monitoring and auditing mechanism	
26. All bus operators agreed that there was a need to have an internal monitoring and auditing mechanism such that there would a responsible party in each bus company to ensure appropriate training would be assigned to bus captains timely and training details would be	All bus

Action

properly recorded. All bus operators agreed to check the existing practice of their companies' internal monitoring and auditing mechanism and review if any improvements should be made. — operators

(2) A.O.B.

(a) Comparison of the in-house training with the training practice of bus captains in other places

27. To follow up on the request made in the first meeting of the Working Group on Enhancement of Franchised Buses Safety regarding the research of bus captains' training practice in London and Singapore, CTB/NWFB shared their findings upon TD's enquiry that a bus driving licence applicant in the United Kingdom and Singapore was required to attend a relevant vocational training course in addition to the driving test so as to obtain a vocational driving licence to operate buses, such practice was similar to the application of public light bus (Class 5) driving licence endorsement in Hong Kong. In addition, they noted that simulator was deployed for route training in Singapore. However, CTB/NWFB said that no training information could be collected from overseas bus operators due to lack of contacts of overseas bus operators.

28. Upon KMB/LW's enquiry, TD clarified that the research on bus captain's training practice in other places aimed to position the bus captains training currently provided by bus operators in Hong Kong and identify if any training elements could be applied to the existing training. All bus operators were encouraged to carry out the research. — All bus operators

(b) Analysis on the correlation between the accident rate and the bus captains' ages as well as the number of training hours received by bus captains

29. To address the concern from CTB/NWFB and KMB/LW, the meeting revisited the above requests made in the first meeting of the Working Group on Enhancement on Safety of Franchised Buses. CTB/NWFB and KMB/LW were requested to submit the correlation between the accident rate and the bus captains' ages for the past three years, while CTB/NWFB would also provide the correlation between the accident rate and the types of bus captains (i.e. full-time bus captains and part-time bus captains) from 2015 to 2017. NLB was not required to provide such information due to its limited number of bus — CTB/NWFB & KMB/LW

Action

captains.

[Post-meeting notes: KMB/LW has submitted their findings on the correlation between the accident rate and bus captains' age from 2014 to 2017 on 25 April 2018. CTB/NWFB has submitted their findings on the correlation between the accident rate and the bus captains' ages and the correlation between the accident rate and the types of bus captains in the past three years on 18 May 2018.]

30. It was agreed that the number of traffic accidents with person injured would form the basis of the number of accidents in the analyses. To ensure meaningful comparison between full-time bus captains and part-time bus captains, it was also agreed that number of working hours would apply.

(c) Training guidelines

31. All bus operators had no objection to TD's plan to propose a training guideline in near future.

32. There being no other business, the meeting adjourned at 1:00 p.m..

[Blank Page]

Working Group on
Enhancement of Safety of Franchised Buses

Notes of 2nd Meeting held on 23 April 2018 at 3.00 p.m.
at Room 4110B, 41/F, Immigration Tower, Wan Chai

Present:

Convener		
TD	Miss Rachel KWAN	Assistant Commissioner for Transport/Special Duties
Member – TD		
BRB	Ms. Amy LEE	Chief Transport Officer/Special Duties
	Mr. Albert HO	Chief Transport Officer/Bus and Railway 6
VSSD	Mr. William SHUM	Chief Electrical and Mechanical Engineer/Vehicle Safety and Standards
	Mr. Jimmy YEUNG	Senior Engineer/Vehicle Safety
	Mr. Danny CHAN	Engineer/Bus Safety
RSSD	Mr. Tony YAU	Chief Engineer/Road Safety and Standards
	Mr. Gary WONG	Senior Engineer/Road Safety 2
Member – Bus Operators		
KMB/LW	Mr. Godwin SO	General Manager, Corporate Planning & Business Development
	Mr. LEUNG Kin Wang	Operations Director
	Mr. James WONG	Head of Training and Quality Assurance Department
CTB/NWFB	[redacted]	[redacted]
NLB	[redacted]	[redacted]

Note-taker

TD Miss Natalie YU Senior Transport Officer/Railway 6

Action

DISCUSSION

(A) Confirmation of notes of meeting

The Convener acknowledged that the draft notes of the last meeting had been circulated to Members and comments from Members had been incorporated in the notes of meeting. The Meeting confirmed the notes of the last meeting.

(B) Matters arising from the last meeting

(i) Internal guidelines on taking disciplinary actions

2. In response to TD's enquiries on the internal guidelines on taking disciplinary actions, all franchised bus ("FB") operators advised that they had not laid down hard and fast rules or internal guidelines on the circumstances that specific disciplinary actions would be taken against the bus captains with improper driving behavior. The disciplinary action to be taken would depend on the nature, seriousness, and persistency of the behaviour.

3. KMB/LW supplemented that follow up actions would be taken, including issuing of verbal advice or warning, written warning, or mandatory participation in ancillary training, etc.. [redacted].

4. All FB operators said that they had their appeal mechanism. In case the subject bus captain was not convinced with the actions taken against him, he might make their appeal vide the appeal mechanism.

(ii) Correlation between the accident rate and bus captains' age as well as the full-time/ part-time bus captains

5. TD reminded [redacted] and KMB/LW to submit their findings on the correlation between accident rate and bus captains' age for the past 3 years. [redacted]

Action

[redacted]. KMB/LW reported that the analysis was close to final and would submit to TD in the next couple of days. KMB/LW pointed out that the bus captains' age might not be the sole contributing factor to traffic accident, road condition and bus captains' performance, which might be contributing to a traffic accident, should also be considered.

[Post-meeting notes: KMB/LW has submitted their findings on the correlation between the accident rate and bus captains' age from 2014 to 2017 on 25 April 2018.]

6. [redacted]

(iii) Comparison of the in-house training with the training practice of bus captains in other places

7. In respect of making comparison of training practice of bus captains in other jurisdictions, KMB/LW suggested TD to carry out comparison with adjacent cities, such as Shenzhen and Macau, in view of costs and time incurred for obtaining the information from London and Singapore. TD noted KMB/LW's suggestions.

(C) Training for bus captains

(i) Formulation of a set of guidelines for training

8. Following the discussion in the Technical Meeting ("TM") on training arrangements for bus captains, TD proposed to formulate a set of Guidelines to provide a framework of the training to be provided by bus operators which would cover -

- structure of training (e.g. induction training (including classroom training and route training) for the new recruits, refresher training for the in-service bus captains, and bus route training, bus model training as well as ancillary training for in-service bus captains on a need basis);

- modules of the induction and refresher training with a range of relative weightings while the actual weighting of each module would be decided by the respective

Action

franchised bus operators to suit their operational needs; and

- guiding principles on the need for bus captains to participate in the ancillary training.

All bus operators had no objection to being guided by a set of Guidelines with the above-mentioned outlines. TD advised that the draft Guidelines would be drawn up for all bus operators' comments by 11 May 2018. TD

(ii) Internal monitoring and audit mechanism

9. [redacted]

10. KMB/LW advised that their Human Resources Department would nominate new recruits to attend induction training. Respective depots would be responsible for their in-service bus captains' route training, refresher training and ancillary training for bus captains who have left the driving post for more than 30 days while the Training Department would notify respective depots upon identifying the need for the refresher and ancillary training from training record. The Performance Management Section would nominate the ancillary training for bus captains with improper driving behaviours. KMB/LW also advised that training arrangement for bus captains was also scrutinized by their Internal and Audit Section.

11. [redacted]

12. All FB operators agreed that there should be an internal monitoring and audit mechanism on the training arrangement so that

Action

training situation of bus captains could be traced and abnormalities could be detected and reported to senior management and the Board of their respective company. All FB operators would advise of TD of their own internal monitoring and audit mechanism in the next meeting. | All FB operators

(iii) Improvement of their training to bus captains

13. It was learnt from the TM that KMB/LW had arranged "buddy bus captain", who were usually experienced bus captains, to accompany new recruits on their first day of providing passenger service. [redacted]

14. [redacted]

15. [redacted]

(D) Installation of seat belts for all passenger seats

16. After checking with the bus manufacturers on the feasibility for installation of seat belts for all passenger seats for new buses, all FB operators advised that it was technically feasible to install seat belts for all passenger seats for new buses to be procured. KMB/LW supplemented that it would cost about an additional of £5,000 for each double-decker to install seat belts for all passenger seats. All bus operators agreed to incorporate this requirement in their new | All bus operators

	Action
single-decked buses and double-decked buses to be procured.	
17. For new buses which had been procured but not yet delivered, KMB/LW said they would request the bus manufacturers to install seat belts for all passenger seats if it would be feasible to include such requirement. KMB/LW advised that 145 new buses to be delivered before September 2018 could be able to install with seat belts for all passenger seats. [redacted]	[redacted]
18. [redacted] TD encouraged all FB operators to continue to study the technical feasibility of retrofitting seat belts on all passenger seats on each bus model before reaching the final decision.	All bus operators
(E) Installation of on-vehicle safety devices	
(i) Electronic stability control ("ESC")	
19. All FB operators agreed to incorporate the ESC on all new buses to be procured. For new buses had been procured but not yet delivered, the FB operators would check with their respective bus manufacturers to see if it would be feasible to include such feature at this stage. [redacted]	All FB operators
(ii) Speed limiter (with retarder) to cap the maximum speed within 70 km/hour when travelling downhill	
20. All FB operators advised that it was technically feasible to install speed limiter (with retarder) on new buses. The speed limiter (with retarder) could cap the maximum speed within 70 km/hour when the bus was travelling downhill. For new buses which has been procured but not yet delivered, all FB operators would check with their respective bus manufacturers to see if it would be feasible to include	All FB operators

Action

such feature at this stage and advise TD of the result by April 2018.

(iii) Roll stability control ("RSC")

21. The bus manufacturers advised that the ESC had already had the RSC function and could reduce the risk of a bus from rollover. All FB operators considered that as the newly procured buses would be installed with the ESC, the RSC function would be automatically included on new buses.

(iv) Speed control by Global Positioning Service ("GPS") or geo-fencing

22. TD said that according to bus manufacturers' view that while it would be technically feasible for installing a speed control by GPS (or geo-fencing) on the bus but it required further study on its effectiveness and practicability as a comprehensive hardware and software system is required to be developed. All FB operators considered that the effectiveness and reliability of the proposed device had yet to be proven. In addition, [redacted] pointed out that it might encourage bus [redacted] Hence, all FB operators considered it undesirable to pursue this device at this moment.

[Post-meeting notes: KMB/LW continues to keep track on the latest progress of geo-fencing with the bus manufacturers.]

(v) Speed display unit ("SDU") in passenger compartment

23. Though it was advised that it would be technically feasible, all FB operators doubted the effectiveness of installation of SDU in enhancing driving safety. In addition, all FB operators considered that the proposed device might create argument and conflict between the bus captain and passengers about the travelling speed.

24. Upon the request from the FB operators, TD would provide analysis on involvement rate of public light buses with and without installation of the SDU for FB operators' reference. TD

(vi) Collision prevention and lane keeping device

Action

25. All FB operators reported that they had tried the device a couple of years ago. [redacted]. KMB/LW opined that the results of the previous trial were not conclusive since the trial was not conducted on buses. [redacted]

26. It was noted that the technology of current version of the device was much enhanced. [redacted]

(vii) Driver monitoring device

27. Instead of putting collision prevention and lane keeping device on trial, KMB/LW has initiated to install the driver monitoring device on four buses. It was planned that the buses would be deployed for night routes or routes with relatively long journey distance. KMB/LW added that the trial was planned to last for about six months for collection of sufficient data and bus captains' opinion to assess the effectiveness before considering the way forward.

28. [redacted]

(iv) Preparation of a report for the Working Group

29. TD reminded the Members that the Working Group had been formed since mid-March 2018. It was expected that a report of the works of the Working Group would be submitted before mid-June 2018. The next meeting might be held to discuss the draft report. The Members would be informed of the meeting details once available.

	Action
(v) A.O.B.	
30. KMB/LW advised that they had imminent need to increase the number of in-house driving instructors with driving instructors' licences to meet the training needs. KMB/LW asked if it would be possible to shorten the processing period of the application for examination of their driving instructor candidates and allow spare driving instructors trainees to attend the examinations for replacement in case of any drop-out. TD replied that the opinions on the arrangement of driving instructors test would be passed to relevant sections for consideration.	TD
[Post-meeting note: The matter was followed up after the meeting. KMB was satisfied with the arrangements.]	
31. TD advised all FB operators that the Independent Review Committee ("IRC") requested TD to submit samples of data received from the FB operators for ensuring the compliance of the FB operators with safety-related requirements and service pledges. TD added that the identifiers of the samples containing sensitive information would be redacted. TD would provide all FB operators with the samples that would be submitted to IRC. All FB operators had no objections to the arrangements.	TD
32. There being no other business, the meeting adjourned at 5.15 p.m..	

[Blank Page]

Working Group on
Enhancement of Safety of Franchised Buses

Notes of 2nd Meeting held on 23 April 2018 at 3.00 p.m.
at Room 4110B, 41/F, Immigration Tower, Wan Chai

Present:

Convener		
TD	Miss Rachel KWAN	Assistant Commissioner for Transport/Special Duties
Member – TD		
BRB	Ms. Amy LEE	Chief Transport Officer/Special Duties
	Mr. Albert HO	Chief Transport Officer/Bus and Railway 6
VSSD	Mr. William SHUM	Chief Electrical and Mechanical Engineer/Vehicle Safety and Standards
	Mr. Jimmy YEUNG	Senior Engineer/Vehicle Safety
	Mr. Danny CHAN	Engineer/Bus Safety
RSSD	Mr. Tony YAU	Chief Engineer/Road Safety and Standards
	Mr. Gary WONG	Senior Engineer/Road Safety 2
Member – Bus Operators		
KMB/LW	Mr. Godwin SO	General Manager, Corporate Planning & Business Development
	Mr. LEUNG Kin Wang	Operations Director
	Mr. James WONG	Head of Training and Quality Assurance Department
CTB/NWFB	Mr. William CHUNG	Head of Operations
	Mr. Paul LI	Head of Engineering
	Mr. Vincent FUNG	Senior Operations Manager
NLB	Mr. Benny CHAN	Deputy General Manager
	Mr. Patrick YEUNG	Head of Service and Training
	Mr. Billy WONG	Assistant Manager, Operation Support

Note-taker

TD Miss Natalie YU Senior Transport Officer/Railway 6

Action

DISCUSSION

(A) Confirmation of notes of meeting

The Convener acknowledged that the draft notes of the last meeting had been circulated to Members and comments from Members had been incorporated in the notes of meeting. The Meeting confirmed the notes of the last meeting.

(B) Matters arising from the last meeting

(i) Internal guidelines on taking disciplinary actions

2. In response to TD's enquiries on the internal guidelines on taking disciplinary actions, all franchised bus ("FB") operators advised that they had not laid down hard and fast rules or internal guidelines on the circumstances that specific disciplinary actions would be taken against the bus captains with improper driving behavior. The disciplinary action to be taken would depend on the nature, seriousness, and persistency of the behaviour.

3. KMB/LW supplemented that follow up actions would be taken, including issuing of verbal advice or warning, written warning, or mandatory participation in ancillary training, etc.. CTB/NWFB and NLB advised that they had similar arrangements.

4. All FB operators said that they had their appeal mechanism. In case the subject bus captain was not convinced with the actions taken against him, he might make their appeal vide the appeal mechanism.

(ii) Correlation between the accident rate and bus captains' age as well as the full-time/ part-time bus captains

5. TD reminded CTB/NWFB and KMB/LW to submit their findings on the correlation between accident rate and bus captains' age for the past 3 years. CTB/NWFB reported that they had carried out

Action

the analysis in 2017 and it was found that no correlation between the accident rate and the bus captains' age in 2017 and agreed to submit the requisite information as soon as possible. KMB/LW reported that the analysis was close to final and would submit to TD in the next couple of days. KMB/LW pointed out that the bus captains' age might not be the sole contributing factor to traffic accident, road condition and bus captains' performance, which might be contributing to a traffic accident, should also be considered.

[Post-meeting notes: KMB/LW has submitted their findings on the correlation between the accident rate and bus captains' age from 2014 to 2017 on 25 April 2018.]

6. As for the correlation between the accident rate and the full-time / part-time bus captains, CTB/NWFB advised that the analysis was in progress and would provide to TD later.

(iii) Comparison of the in-house training with the training practice of bus captains in other places

7. In respect of making comparison of training practice of bus captains in other jurisdictions, KMB/LW suggested TD to carry out comparison with adjacent cities, such as Shenzhen and Macau, in view of costs and time incurred for obtaining the information from London and Singapore. TD noted KMB/LW's suggestions.

(C) Training for bus captains

(i) Formulation of a set of guidelines for training

8. Following the discussion in the Technical Meeting ("TM") on training arrangements for bus captains, TD proposed to formulate a set of Guidelines to provide a framework of the training to be provided by bus operators which would cover -

- structure of training (e.g. induction training (including classroom training and route training) for the new recruits, refresher training for the in-service bus captains, and bus route training, bus model training as well as ancillary training for in-service bus captains on a need basis);

- modules of the induction and refresher training with a range of relative weightings while the actual weighting of each module would be decided by the respective

Action

franchised bus operators to suit their operational needs; and

- guiding principles on the need for bus captains to participate in the ancillary training.

All bus operators had no objection to being guided by a set of Guidelines with the above-mentioned outlines. TD advised that the draft Guidelines would be drawn up for all bus operators' comments by 11 May 2018. TD

(ii) Internal monitoring and audit mechanism

9. As regards the monitoring on existing training assignment, CTB/NWFB advised that the training for bus captains would be assigned and monitored by different departments depending on the training purposes. The arrangement and record keeping of refresher training, route training and bus model training for in-service bus captains were managed by their respective Operations Department. As for ancillary training to rectify improper driving behaviour, their Service Quality Department would inform the Operations Department and the Operation Training Department to coordinate the arrangements. For new recruits, their Human Resources Department would arrange induction training with the Operation Training Department.

10. KMB/LW advised that their Human Resources Department would nominate new recruits to attend induction training. Respective depots would be responsible for their in-service bus captains' route training, refresher training and ancillary training for bus captains who have left the driving post for more than 30 days while the Training Department would notify respective depots upon identifying the need for the refresher and ancillary training from training record. The Performance Management Section would nominate the ancillary training for bus captains with improper driving behaviours. KMB/LW also advised that training arrangement for bus captains was also scrutinized by their Internal and Audit Section.

11. NLB advised that their Operations Department was responsible for training arrangements for bus captains. NLB indicated that they would set up a Training Department to keep training record of staff properly.

12. All FB operators agreed that there should be an internal monitoring and audit mechanism on the training arrangement so that

	Action
training situation of bus captains could be traced and abnormalities could be detected and reported to senior management and the Board of their respective company. All FB operators would advise of TD of their own internal monitoring and audit mechanism in the next meeting.	All FB operators
(iii) Improvement of their training to bus captains	
13. It was learnt from the TM that KMB/LW had arranged "buddy bus captain", who were usually experienced bus captains, to accompany new recruits on their first day of providing passenger service. Drawing reference of the current practice of KMB/LW, CTB/NWFB and NLB expressed that they would actively consider arranging "buddy bus captain" to accompany new bus captain on his first or first few passenger-carrying rides.	CTB/NWFB and NLB
14. To follow up on TD's suggestion raised in the TM for enhancing the training for the part-time bus captains, CTB/NWFB replied that they would consider lengthening the duration of induction course for new part-time bus captains (currently 2 days), and providing refresher training for in-service part-time bus captains, and requiring the in-service bus captains to undergo driving assessment (and ancillary training, if necessary) if they had been away from driving duties for more than 30 days.	CTB/NWFB
15. TD was advised in the TM that unlike other FB operators, CTB/NWFB provided behind-the-wheel route training for in-service bus captains for complicated routes only (not all routes). Upon TD's request to consider strengthening the new route training for in-service bus captains, CTB/NWFB indicated that they would consider arranging the in-service bus captains to have behind-the-wheel practice on all routes new to them after riding as a passenger on an in-service bus before actually taking up the driving duties for passenger-carrying service.	CTB/NWFB
(D) Installation of seat belts for all passenger seats	
16. After checking with the bus manufacturers on the feasibility for installation of seat belts for all passenger seats for new buses, all FB operators advised that it was technically feasible to install seat belts for all passenger seats for new buses to be procured. KMB/LW supplemented that it would cost about an additional of £5,000 for each double-decker to install seat belts for all passenger seats. All bus operators agreed to incorporate this requirement in their new	All bus operators

	Action
single-decked buses and double-decked buses to be procured.	
17. For new buses which had been procured but not yet delivered, KMB/LW said they would request the bus manufacturers to install seat belts for all passenger seats if it would be feasible to include such requirement. KMB/LW advised that 145 new buses to be delivered before September 2018 could be able to install with seat belts for all passenger seats. CTB/NWFB and NLB would advise TD by end of April 2018 if the bus manufacturer could install seat belts for all passenger seats for new buses being manufacture.	CTB/NWFB and NLB
18. For existing buses, CTB/NWFB and KMB/LW advised that the technical feasibility for installation of the seat belts on all passenger seats at upper deck was still uncertain. Even if it proved to be technical feasible, the subject still needed further deliberation taking into consideration the financial implications and impacts on bus operation (i.e. the availability of bus) due to the time required for the substantial modification of buses. TD encouraged all FB operators to continue to study the technical feasibility of retrofitting seat belts on all passenger seats on each bus model before reaching the final decision.	All bus operators
(E) Installation of on-vehicle safety devices	
(i) Electronic stability control ("ESC")	
19. All FB operators agreed to incorporate the ESC on all new buses to be procured. For new buses had been procured but not yet delivered, the FB operators would check with their respective bus manufacturers to see if it would be feasible to include such feature at this stage. CTB/NWFB and KMB/LW added that, subject to the costs involved, they would consider retrofit ESC on existing buses if it was technically feasible.	All FB operators
(ii) Speed limiter (with retarder) to cap the maximum speed within 70 km/hour when travelling downhill	
20. All FB operators advised that it was technically feasible to install speed limiter (with retarder) on new buses. The speed limiter (with retarder) could cap the maximum speed within 70 km/hour when the bus was travelling downhill. For new buses which has been procured but not yet delivered, all FB operators would check with their respective bus manufacturers to see if it would be feasible to include	All FB operators

Action

such feature at this stage and advise TD of the result by April 2018.

(iii) Roll stability control ("RSC")

21. The bus manufacturers advised that the ESC had already had the RSC function and could reduce the risk of a bus from rollover. All FB operators considered that as the newly procured buses would be installed with the ESC, the RSC function would be automatically included on new buses.

(iv) Speed control by Global Positioning Service ("GPS") or geo-fencing

22. TD said that according to bus manufacturers' view that while it would be technically feasible for installing a speed control by GPS (or geo-fencing) on the bus but it required further study on its effectiveness and practicability as a comprehensive hardware and software system is required to be developed. All FB operators considered that the effectiveness and reliability of the proposed device had yet to be proven. In addition, CTB/NWFB pointed out that it might encourage bus captains to rely on this device and to drive at critical speed (i.e. the speed limits set in the geo-fencing system) but not according to the actual road and traffic conditions as well as weather situations. Hence, all FB operators considered it undesirable to pursue this device at this moment.

[Post-meeting notes: KMB/LW continues to keep track on the latest progress of geo-fencing with the bus manufacturers.]

(v) Speed display unit ("SDU") in passenger compartment

23. Though it was advised that it would be technically feasible, all FB operators doubted the effectiveness of installation of SDU in enhancing driving safety. In addition, all FB operators considered that the proposed device might create argument and conflict between the bus captain and passengers about the travelling speed.

24. Upon the request from the FB operators, TD would provide analysis on involvement rate of public light buses with and without installation of the SDU for FB operators' reference. TD

(vi) Collision prevention and lane keeping device

Action

25. All FB operators reported that they had tried the device a couple of years ago. CTB/NWFB and NLB advised that they had tried the device on their buses while KMB/LW put the device on trial on private cars. CTB/NWFB pointed out that the device, which was supplied by a third party provider (not a bus manufacturer), would only be able to give alerts to remind bus captains. However, frequent alerts were given especially on routes operating in the city centre where frequent weaving of buses and insufficient clearance with the vehicle in front were common. This created nuisance to bus captains and bus captains tended to ignore the alerts. KMB/LW opined that the results of the previous trial were not conclusive since the trial was not conducted on buses. NLB added that the feedback from bus captains who had participated in the previous trial was not positive.

26. It was noted that the technology of current version of the device was much enhanced. CTB/NWFB pointed out that the current version would be able to provide to control room the real time data of buses. CTB/NWFB has undertaken to carry out another trial.

(vii) Driver monitoring device

27. Instead of putting collision prevention and lane keeping device on trial, KMB/LW has initiated to install the driver monitoring device on four buses. It was planned that the buses would be deployed for night routes or routes with relatively long journey distance. KMB/LW added that the trial was planned to last for about six months for collection of sufficient data and bus captains' opinion to assess the effectiveness before considering the way forward.

28. CTB/NWFB considered that the device would involve the use of camera shooting on bus captains' face, they would take the acceptability of bus captains into the account before putting the device on trial.

(iv) Preparation of a report for the Working Group

29. TD reminded the Members that the Working Group had been formed since mid-March 2018. It was expected that a report of the works of the Working Group would be submitted before mid-June 2018. The next meeting might be held to discuss the draft report. The Members would be informed of the meeting details once available.

Action

(v) A.O.B.

30. KMB/LW advised that they had imminent need to increase the number of in-house driving instructors with driving instructors' licences to meet the training needs. KMB/LW asked if it would be possible to shorten the processing period of the application for examination of their driving instructor candidates and allow spare driving instructors trainees to attend the examinations for replacement in case of any drop-out. TD replied that the opinions on the arrangement of driving instructors test would be passed to relevant sections for consideration. TD

[Post-meeting note: The matter was followed up after the meeting. KMB was satisfied with the arrangements.]

31. TD advised all FB operators that the Independent Review Committee ("IRC") requested TD to submit samples of data received from the FB operators for ensuring the compliance of the FB operators with safety-related requirements and service pledges. TD added that the identifiers of the samples containing sensitive information would be redacted. TD would provide all FB operators with the samples that would be submitted to IRC. All FB operators had no objections to the arrangements. TD

32. There being no other business, the meeting adjourned at 5.15 p.m..

Working Group on
Enhancement of Safety of Franchised Buses

Notes of 3rd Meeting held on 21 June 2018 at 2.00 p.m.
at Room 4110A, 41/F, Immigration Tower, Wan Chai

Present:

Convener		
TD	Ms. Macella LEE	Deputy Commissioner for Transport/Transport Services and Management
Members – TD		
ALB	Mr. YK CHAN	Assistant Commissioner for Transport /Administration and Licensing
	Mr. William SHUM	Chief Electrical and Mechanical Engineer/Vehicle Safety and Standard
	Mr. Jimmy YEUNG	Senior Engineer/Vehicle Safety
	Mr. Danny CHAN	Engineer/Bus Safety
BRB	Mr. Patrick WONG	Assistant Commissioner for Transport /Bus and Railway
	Ms. Amy LEE	Chief Transport Officer/Special Duties
RSSD	Mr. Tony YAU	Chief Engineer/Road Safety and Standards
	Mr. Gary WONG	Senior Engineer/Road Safety 2
Members – Bus Operators		
KMB/LW	Mr. Godwin SO	General Manager, Corporate Planning & Business Development
	Mr. LEUNG Kin Wang	Operations Director
	Mr. James WONG	Head of Training and Quality Assurance Department
CTB/NWFB	[redacted]	

NLB [redacted]

Note-taker

TD Miss Natalie YU Senior Transport Officer/Railway 6

Action

DISCUSSION

(A) Confirmation of notes of meeting

The Convener advised that the revised draft notes of the last meeting had been circulated to Members incorporating comments from Members. As Members did not have further amendments, the Meeting confirmed the notes of the last meeting.

(B) Progress of the discussions of the following items discussed in respective technical meetings and proposed way forward

(i) Training arrangements for bus captains

2. A set of guidelines (which was subsequently turned into a practice note) on training arrangements for the bus captains were fully deliberated in the previous working group meetings and agreed at the technical group meeting on 4 June. Having regard to the large number of bus captains of KMB/LW, there would be a need to avoid bunching in bus captains for refresher training, the proposed refresher course would be implemented by phases with full implementation in three-year's time in accordance with the requirement. The Meeting agreed that to start implementing their training with reference to the practice note by phases starting from October 2018. The TD also reminded that, as agreed at the last technical meeting, all franchised bus ("FB") operators should submit their internal monitoring and audit mechanism by end of June or early July 2018. — All FB operators

(Post-meeting note : The TD circulated the agreed Practice Note on Training Framework for Franchised Bus Captains at **Annex A** to all FB operator for implementation on 29 June 2018.)

3. In addition to the training courses, the TD explored with all FB operators on any other alternative training measures with an aim to

Action

enhance bus captains' training on driving such as driving simulators internet training, and contracting out bus captains' training.

4. [redacted] KMB/LW replied that they had deployed driving simulators from 2007 to 2015, and opinion from their senior driving instructors that simulator training was not an essential element and could be replaced by more on-road training, and most of the users of their simulators reflected that they felt dizzy after using the driving simulator. Taking this opinion into the account, KMB/LW indicated that they have conducted more on-road training instead of deploying driving simulator from 2015.

5. [redacted] The TD welcomed the initiative and suggested other FB operators to explore the use of virtual reality simulator as appropriate.

All FB operators

6. As for internet training, KMB/LW currently incorporated internet training as a part of their induction course. [redacted] The TD encouraged all FB operators to make use of intranet as a training channel to deliver safety awareness messages to bus captains.

All FB operators

7. [redacted] That said, they would continue to encourage their bus captains to join the road safety seminars organized by the TD. [redacted]

8. The Meeting also noted that the FB operators had an on-going practice to put up notices and posters in order to keep up bus captains' safety awareness. All FB operators were encouraged to continue the practice to enhance safety awareness of the bus captains.

All FB operators

Action

(ii) Installation of in-vehicle safety device

9. With the help of a summary table at **Annex B**, the meeting discussed the feasibility and desirability of installing seat belts on all passenger seats and other in-vehicle safety devices on FBs was tabled to facilitate members' discussion. The main points raised at the meeting were set out below.

(a) General

10. The Meeting had discussed and reached an agreed views that that in order to enable the FB operators to step up their management and control of their bus fleet, and reduce the potential risks arising from human errors or effect of careless / dangerous driving behaviour, any new on-vehicle safety technology which can assist the FB operators and drivers to enhance safety should be actively explored. Generally, the FB operators agreed to explore sources of supply of the appropriate safety devices/technology and launch trials with a view to establish the technical and operational feasibility of such technology. Without appropriate trials, it was difficult to prove to the travelling public the technical feasibility or infeasibility in adopting the new technology. The Meeting well noted that extended application of certain technologies/devices to part of whole bus fleet had to be very carefully studied having regard to their technical and operational feasibility, cost-effectiveness, as well as commercial viability.

(b) Bus monitoring and control system ("BMCS")

11. In view of the latest technology development in bus fleet management system and black box with functions on real time fleet supervision, estimated time of bus arrival or departure, bus speed recording, GPS location recording, etc., the TD proposed that a BMCS, an integral system with positioning function, operational information monitoring function, variable speed limiting function with geo-fencing technology, should be considered, developed or deployed by all FB operators, and suggested all FB operators to carry out trials on the BMCS by phases.

12. Upon the FB operators' enquiry, the TD clarified that Phase 1 trial aimed to conduct trial on BMCS with positioning function, operational information (such as vehicle speed, brake status, deceleration, etc.) monitoring function and geo-fencing technology for fleet management to achieve detection of over speeding and provide real time alert to the bus captains. Subject to the successful

	Action
development of the Phase 1 trial and successful development of speed limiter with variable speed limiting function, Phase 2 trial would be conducted with the BMCS developed in Phase 1 incorporated with additional application of speed limiter of enhanced design being developed by bus manufacturers for compliance with respective speed limits of different road sections.	
13. [redacted] The TD noted and replied that reference would be made to other international standards and bus manufacturers' proposals to approve the relevant device. The TD added that without knowing how the device would work during trials with details, it was difficult to evaluate the implications, and hence the TD stressed that the purpose of conducting trials was to find out the technical feasibility and implications.	
14. After deliberation, all FB operators were committed to embark Phase 1 trial by end of 2018 on selected routes. Subject to the trial results of Phase 1 and the development of speed limiter with variable speed limiting function to achieve 2-speed limiting function, all FB operators agreed to set the working target for embarking the Phase 2 trial within 2019.	All FB operators
15. The Meeting concluded that it would be a medium-term goal for FB operators to develop a comprehensive BMCS with the objective to enable all FB operators to monitor their bus fleet closely and to take appropriate management action against over bus captains' malpractice, such as speeding.	
(b) Electronic stability control ("ESC") and retarders for capping the maximum speed of the speed limiter on downhill ("speed limiting retarder")	
16. Having deliberated in the previous working group meetings and technical meetings, the Meeting noted that all FB operators agreed that all new buses would be incorporated with ESC and speed limiting retarder. All FB operators also agreed to retrofit ESC and speed limiting retarder on the existing buses[1], subject to the satisfactory development results of these devices for retro-fitting on the existing bus models, the retrofitting proposal from the bus manufacturers and	All FB operators

[1] Existing buses refer to Euro V buses of ADL Enviro 500 manufactured from 2013, Volvo B9TL and MAN A95 buses and Euro VI.

Action

the commercial viability. The Meeting hence recommended that all FB operators should liaise with and commission the bus manufacturers on the development of these devices with the working target to commence the trials/tests of the devices and retrofitting work in about 12 to 18 months, that is within 2019.

(c) Collision alert/ lane keeping devices

17. [redacted] The Meeting also noted that these five buses would also be deployed to operate revenue trips. [redacted]

18. The TD pointed out that there were similar devices available in the market. [redacted]

(d) Driving monitoring device

19. The Meeting noted that KMB/LW had already embarked a trial on driving monitoring device on a couple of buses. The TD requested KMB/LW to share the results of the trial with the TD and other FB operators. [redacted]

(e) Speed display unit ("SDU") in passenger compartment

20. In order to provide visual display of the current speed of FBs to the passengers on-board, the proposal for installation SDUs in passenger compartments of FBs was explored.

21. The TD advised all FB operators on the analysis of the public light buses' ("PLBs") involvement rates upon the launch of the speed display device ("SDD") installation since 2002. The statistics analysis was based on limited available information as the installation date of the SDD in each PLB was not available as there was no legal requirement for PLB operators to report this to the TD. Limited by the availability of data, and considering the possibility that other factors might have an effect on the number of accidents involving PLBs during the period, conducting any statistical analysis for

Action

drawing a conclusive statement merely on the effect of the installation of SDDs on the accident rate was not conceivable.

22. [redacted] KMB/LW also expressed that the SDU would intensify the conflict between bus captains and passengers and that there was no correlation between SDU and accident in the case of PLBs with reference to the information orally provided by the TD in the Meeting. Therefore, all FB operators had reservations to install SDU on FBs.

23. After some discussions, the Meeting generally concluded that the SDU might not be conducive to safety if passengers were playing an active monitoring role. The FB operators should focus on the development and trials of the BMCS instead, which was a more effective total solution for monitoring the bus operation, managing and control their fleet as well as speeding and other driving mis-behavior of bus captains.

24. The TD, however, added that, as the Government, it was also necessary for the TD to gather views of the driver unions and the public/passengers as a whole. The TD, in conjunction with the bus companies, should examine how best we could deliver the above views to the public.

The TD and all FB operators

(iii) Installation of seat belts on all seats other than exposed seats

25. The Meeting noted that it was technically feasible to supply all new buses with seat belts for all passenger seats conforming to relevant international standards and all FB operators committed that all new FBs would be incorporated with seat belts on all passengers seats.

26. As for existing buses[1], the Meeting noted that retrofitting seat belts on all passenger seats of the upper deck of some existing double-deck bus models should be feasible. KMB/LW advised that they would retrofit seat belts on all passenger seats of the upper deck or deploy buses with seat belts on all passenger seats on routes which

Action

serve long haul passengers or are operated on expressways with limited boarding or alighting activities at the enroute stops.

[Post-meeting note : KMB/LW advised that there would be about 400 new buses with seat belts on all passengers seats by mid-2019. KMB/LW would deploy these buses to the required routes. Retrofitting seat belts to existing buses would depend on the actual situation/ requirement at that moment.]

27. In the light of KMB/LW's initiative, the Meeting had discussed and come to the views that having regard to the technical feasibility in retrofitting seat belts on existing buses; operation of FBs in Hong Kong which were mostly deployed on urban routes with standing passengers; and the costs and downtime incurred to retrofit seat belts on all existing buses, as well as overseas experiences, that there were insufficient justifications to make it a mandatory requirement for all buses to be fitted with seat belts on all passenger seats. Nevertheless, Members reckoned that as in the case of exposed seats and in bus compartment with no standees allowed, seat belts might give extra protection to seated passengers to prevent passengers from falling out from these seats.

28. [redacted]

29. [redacted]

30. The Meeting agreed that it was worth exploring in more details in conjunction with the major bus manufacturers to ascertain the technical feasibility of retrofitting seat belts on the upper deck of different bus models, the operational and capacity constraints, and the timetable for completing the retrofitting works on all suitable buses for

	Action
deployment on suitable routes, as well as the commercial viability	
31. In this connection, the TD requested all FB operators to estimate the number of long-haul bus routes operating via expressway with relatively fewer bus stops and the corresponding number of buses involved, and provide the information to the TD for reference the soonest possible.	All FB operators
[redacted]	
32. The TD would revise the summary table reflecting the discussions and provide to all FB operators for further comments.	
[Post-meeting notes: The TD revised the summary table and sent to all FB operators twice for further comments on 22 June and 5 July 2018. The summary table with consolidation with FB operators' comments (**Annex C**) was emailed to all FB operators on 9 July 2018 for record.]	
(C) ISO 39001 - Road Traffic Safety Management System	
33. The Meeting noted that each bus operator had its own system in safety management. [redacted]	
34. The Meeting noted that there was an international management standard for Road Traffic Safety, i.e. ISO 39001 - Road Traffic Safety Management System that was launched in 2014. While all FB operators advised that they had developed their own management systems which enabled them to manage FB operations in a safe manner, all FB operators were request to make comparison between their own management system and the ISO 39001 or other similar management systems in the market, and to report findings, including but not limited to, organization and details of the existing safety management systems in their respective companies with improvement measures, if any, by end of October 2018.	All FB operators
(D) Preparation of a report for the Working Group	
35. The Convener thanked the members' valuable contributions	

Action

to the discussions at working group meetings and technical meetings, and advised the members that the TD would start preparing the report with recommendations based on the information deliberated at the meetings. All FB operators were invited to note that the Working Group recommendations would be submitted to Legislative Council Panel on Transport and the information could be accessed by the members of public.

(E) Any other business

36. There being no other business, the meeting adjourned at 4.30 p.m.

Practice Note on Training Framework for Franchised Bus Captains

Introduction

This paper sets out the "Practice Note on Training Framework for Franchised Bus Captains" (the "Practice Note") to be promulgated for reference and adoption by the franchised bus operators.

Objectives of the Practice Note

2. With a view to enhancing safety delivery in the franchised bus services, the Transport Department ("TD") has, after reviewing the franchised bus operators' training arrangements for bus captains, sought to lay down a set of industry-wide standard practices in respect of the franchised bus captains' training framework, including the basic requirements on modules, duration and weighting, so as to provide a common basis for internal monitoring and audit within individual franchised bus companies.

3. The objective of the Practice Note is to align the training arrangements of different franchised bus operators and to lay down a common framework of the training system for their bus captains. Given that different bus companies have different bus networks operating in different operating environment, it is necessary for them to make specific training programmes in order to suit their respective operational needs on the basis of the common standard as set out in this Practice Note. The TD will review the Practice Note with the franchised bus operators on a regular basis, in order to strive for the best standard practices to cater for the ever-changing operating needs and public expectations on safe franchised bus services.

The Practice Note

(A) Structure of training system

4. The structure of the training system for franchised bus captains should comprise at least the following :-

Types of Courses	Minimum Requirement	Target Trainees [2]	Timing
(a) Induction course (i) Classroom training	1 day (Full-time) & 0.5 day (Part-time)	New recruits	Before providing passenger service
(ii) Behind-the-wheel road training	Full–time bus captains 20 hours[1] Part-time bus captains 16 hours[1]		
(b) Refresher course	0.5 day	In-service bus captains	Once in every three years
(c) New bus route training	Behind-the-wheel road training	In-service bus captains	Before the bus captain is assigned to provide passenger service
(d) New bus type (model with new driving features) training	Behind-the-wheel road training	In-service bus captains	Before the bus captain is assigned to provide passenger service
(e) Remedial training	1 day	In-service bus captains with improper driving behavior or attitude	As and when required

Notes :

(1) After the behind-the-wheel road training, the bus captains will be subject to internal driving assessment. The bus captains must pass the internal driving assessment before they are deployed on revenue trips.

(2) Applicable to full-time and part-time bus captains.

(B) Modules for Induction and Refresher Courses

5. The Modules and the weightings recommended for induction course and refresher course are set as follows :-

Modules	Weightings in induction course (Classroom and Behind-the-wheel Road Training[3])	Weightings in refresher course (Classroom)
(a) Safe driving and road safety	70%-85%	60-75%
(b) Cognition of on-vehicle device/facilities		
(c) Handling of incident/emergency	5%-10%	20-30%
(d) Customer service & emotional management	10%-20%	
(e) Knowledge of company rules, traffic regulations, occupational health and safety		5%-10%

Notes :

(3) While behind-the-wheel road training provided during induction course enables the bus captains to be familiarized with bus types/models of the company's bus fleet and the routings of bus services, it should also cover the contents of the modules to be delivered in a practical way with on-the-ground experiences.

(C) Remedial Training

6. Remedial training should be provided to those bus captains in the following categories :-

(a) with improper driving behaviour repeatedly detected from black box data or other sources like plain-cloth inspections;
(b) having involved in serious traffic accidents;
(c) having persistently committed the same traffic offence; or
(d) having reached a certain driving offence points.

(D) Internal Monitoring and Audit Mechanism by Franchised Bus Operators

7. To ensure that adequate and appropriate trainings are provided to the bus captains, the franchised bus operators should set up an internal monitoring and audit mechanism in order to achieve the following objectives :

(a) To monitor the compliance of this Practice Note;

(b) To develop key indicators on the effectiveness of the training system provided to bus captains (e.g. accident involvement rates, complaints on driving skills and performance and etc.); and

(c) In the light of the findings of (b), to review and determine appropriate actions or measures.

8. The management of franchised bus operators should submit regular periodic reports (e.g. at least half-yearly) to their respective Boards of Directors in respect of the findings on matters in para. 7 above.

Transport Department
June 2018

Discussion on the Feasibility and Desirability of Installing Seat Belts on All Passenger Seats and Other On-vehicle Safety Devices on Franchised Buses (as at 21 June 2018)

Proposal	WG's Recommendations	Target Timeframe
(1) Bus monitoring & control system (BMCS) [An integral system with positioning function, operational information monitoring function, variable speed limiting function with geo-fencing technology] ● Phase 1 BMCS with positioning function, operational information monitoring function and geo-fencing technology for fleet management ● Phase 2 BMCS with full functions	● KMB/LW were conducting trial with a bus manufacturer to test the speed limiting by GPS ● All FB operators would develop this technology for their bus fleet monitoring & speed control system ● Phase 1 trial will include 2 routes.	● Phase 1 trial to be embarked by end 2018 ● Phase 2 trial to be embarked within 2019
(2) Electronic stability control ("ESC") and Roll stability control ("RSC")	New Buses ● All FB operators agreed that all new buses will be incorporated with ESC Existing Buses[1] ● Subject to the development result of the device for the existing bus models and the retrofitting proposal from bus manufacturers, all FB operators will retrofit such installation on all buses	New Buses ● KMB/LW : with buses delivery from Jan 2019 ● [redacted] ● [redacted] Existing Buses[1] ● To complete the retrofitting within [x] years

[1] Existing Buses refer to Euro V buses of ADL Enviro 500 manufactured from 2013, Volvo B9TL and MAN A95 buses and Euro VI

Proposal	WG's Recommendations	Target Timeframe
(3) Capping the maximum speed at 70 km/hour on downhill by the speed limiter	New Buses • FB operators agreed that all new buses will be incorporated with this device. Existing Buses[1] • Subject to the development result of the device for the existing bus models and the retrofitting proposal from bus manufacturers, all FB operators will retrofit such installation.	New Buses • KMB/LW : with buses delivery from Jan 2019 • [redacted] • Existing Buses[1] • To complete the retrofitting within [x] years
(4) Collision prevention and lane keeping devices	• [redacted] • KMB/LW will explore similar devices from different suppliers and embark on a trial.	• To embark the trial by end 2018.
(5) Driver monitoring device	• KMB/LW will embark a trial on this device. • [redacted]	• To embark the trial in late June 2018. • [redacted]
(6) Speed display unit ("SDU") in passenger	Subject to consultation, all FB operators are	• To complete the installation within [x] years

Proposal	WG's Recommendations	Target Timeframe
compartment	required to install the SDU for all buses	
(7) Seat belts for all passenger seats	<u>New Buses</u> All FB operators agreed that all new buses will be incorporated with seat belts. <u>Existing Buses</u>[1] KMB/LW will retrofit seat belts phase by phase for specific routes [redacted]	<u>New Buses</u> • KMB/LW : with buses delivery from Jul 2018 • [redacted] • [redacted] <u>Existing Buses</u>[1]

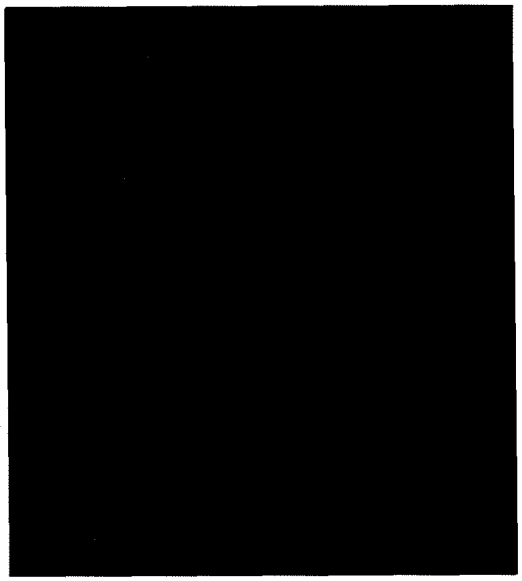
Recommendations of
Installing Seat Belts on All Passenger Seats and Other On-vehicle Safety Devices and Technologies on Franchised Buses
(as at 9 July 2018)

Proposed on-vehicle safety devices/technologies	WG's Recommendations	Target Timeframe
(1) Bus monitoring & control system (BMCS) An integral system with positioning function, operational information monitoring function, variable speed limiting function with geo-fencing technology ● Phase 1 BMCS with positioning function, operational information (such as vehicle speed, brake status, deceleration, etc.) monitoring function and geo-fencing technology for fleet management to achieve detection of overspeeding and provide real time alert to the bus captains ● Phase 2 BMCS to utilize the functions developed in Phase 1 together with the 2-speed active speed limiting function being developed by bus manufacturers to achieve automatic speed limiting functions (50km/hr or 70km/hr depending on the speed limit of road section)	● KMB/LW were conducting trial with a bus manufacturer to test the speed limiting by GPS ● All FB operators would develop and trial the application of GPS technology for their bus fleet monitoring & speed control system ● Phase 1 trial on the application of GPS will include at least 2 routes for each FB operator.	● Phase 1 trial to be embarked by end 2018 ● Phase 2 trial to be embarked within 2019, subject to the satisfactory trial result of Phase 1 and the satisfactory development of device with variable speed limiting function to achieve 2-speed limiting functions.
(2) Electronic stability control ("ESC") and Roll stability control ("RSC")	New Buses ● All FB operators agreed that all new double-deck buses will be incorporated with ESC	New Buses ● KMB/LW : with buses delivered from Jan 2019 ● [redacted]

Proposed on-vehicle safety devices/technologies	WG's Recommendations	Target Timeframe
	Existing Buses[1] • Subject to the satisfactory development result and the commercial viability of the device for the existing double-deck bus models and the retrofitting proposal from bus manufacturers, all FB operators will retrofit such installation on all double-deck buses	• [redacted]
(3) Capping the maximum speed at 70 km/hour on downhill by the speed limiter	New Buses • FB operators agreed that all new buses will be incorporated with this device. Existing Buses[1] • Subject to the satisfactory development result and the commercial viability of the device for the existing bus models and the retrofitting proposal from bus manufacturers, all FB operators will retrofit such installation.	New Buses • KMB/LW : with buses delivered from Jan 2019 • [redacted] •
(4) Collision alert/ lane keeping devices	• [redacted]	• To embark the trial by end 2018.

[1] Existing Buses refer to Euro V buses of ADL Enviro 500 manufactured from 2013, Volvo B9TL and MAN A95 buses and Euro VI buses

Proposed on-vehicle safety devices/technologies	WG's Recommendations	Target Timeframe
	• KMB/LW and NLB will explore similar devices from different suppliers and embark on a trial.	
(5) Driver monitoring device	• KMB/LW will embark a trial on this device on 4 buses. • [redacted]	• To embark the trial in Q3 2018. • [redacted]
(6) Speed display unit ("SDU") in passenger compartment	Though all FB operators did not agree to install SDU, TD requested all FB operators to consider installing the SDU for all buses and to consult with the unions.	
(7) Seat belts for all passenger seats	<u>New Buses</u> • All FB operators agreed that all new buses will be incorporated with seat belts. <u>Existing Buses[1]</u> • KMB/LW will retrofit seat belts on upper deck passenger seats only or deploy buses with seat belts on all passenger seats on routes which serve long haul passengers or are operated on expressways with limited boarding or	<u>New Buses</u> • KMB/LW : with buses delivery from Jul 2018 • [redacted] <u>Existing Buses[1]</u> • All FB operators will provide the estimated no. of buses involved, cost implication and timeframe for retrofit

Proposed on-vehicle safety devices/technologies	WG's Recommendations	Target Timeframe
	alighting activities at the enroute stops. •  • All bus operators will provide the estimated no. of buses involved in bus routes serving long haul passengers, or operating on expressways with limited boarding or alighting activities at the enroute stops, cost implication and timeframe for the retrofitting seat belts on all upper deck seats.	

Working Group on
Enhancement of Safety of Franchised Buses

Notes of 3rd Meeting held on 21 June 2018 at 2.00 p.m.
at Room 4110A, 41/F, Immigration Tower, Wan Chai

Present:

Convener		
TD	Ms. Macella LEE	Deputy Commissioner for Transport/Transport Services and Management
Members – TD		
ALB	Mr. YK CHAN	Assistant Commissioner for Transport /Administration and Licensing
	Mr. William SHUM	Chief Electrical and Mechanical Engineer/Vehicle Safety and Standard
	Mr. Jimmy YEUNG	Senior Engineer/Vehicle Safety
	Mr. Danny CHAN	Engineer/Bus Safety
BRB	Mr. Patrick WONG	Assistant Commissioner for Transport /Bus and Railway
	Ms. Amy LEE	Chief Transport Officer/Special Duties
RSSD	Mr. Tony YAU	Chief Engineer/Road Safety and Standards
	Mr. Gary WONG	Senior Engineer/Road Safety 2
Members – Bus Operators		
KMB/LW	Mr. Godwin SO	General Manager, Corporate Planning & Business Development
	Mr. LEUNG Kin Wang	Operations Director
	Mr. James WONG	Head of Training and Quality Assurance Department
CTB/NWFB	Mr. William CHUNG	Head of Operations
	Mr. Paul LI	Head of Engineering
	Mr. Vincent FUNG	Senior Operations Manager

NLB	Mr. Timothy WONG	Director
	Mr. Patrick YEUNG	Head of Service and Training
	Mr. Billy WONG	Assistant Manager, Operation Support

Note-taker

TD	Miss Natalie YU	Senior Transport Officer/Railway 6

Action

DISCUSSION

(A) Confirmation of notes of meeting

The Convener advised that the revised draft notes of the last meeting had been circulated to Members incorporating comments from Members. As Members did not have further amendments, the Meeting confirmed the notes of the last meeting.

(B) Progress of the discussions of the following items discussed in respective technical meetings and proposed way forward

(i) Training arrangements for bus captains

2. A set of guidelines (which was subsequently turned into a practice note) on training arrangements for the bus captains were fully deliberated in the previous working group meetings and agreed at the technical group meeting on 4 June. Having regard to the large number of bus captains of KMB/LW, there would be a need to avoid bunching in bus captains for refresher training, the proposed refresher course would be implemented by phases with full implementation in three-year's time in accordance with the requirement. The Meeting agreed that to start implementing their training with reference to the practice note by phases starting from October 2018. The TD also reminded that, as agreed at the last technical meeting, all franchised bus ("FB") operators should submit their internal monitoring and audit mechanism by end of June or early July 2018.

All FB operators

(Post-meeting note : The TD circulated the agreed Practice Note on Training Framework for Franchised Bus Captains at **Annex A** to all FB operator for implementation on 29 June 2018.)

3. In addition to the training courses, the TD explored with all FB operators on any other alternative training measures with an aim to

	Action
enhance bus captains' training on driving such as driving simulators internet training, and contracting out bus captains' training.	
4. Upon TD's enquiry on the application of driving simulator as part of their training, CTB/NWFB said that they learnt that simulator was deployed for driving training in Singapore. KMB/LW replied that they had deployed driving simulators from 2007 to 2015, and opinion from their senior driving instructors that simulator training was not an essential element and could be replaced by more on-road training, and most of the users of their simulators reflected that they felt dizzy after using the driving simulator. Taking this opinion into the account, KMB/LW indicated that they have conducted more on-road training instead of deploying driving simulator from 2015.	
5. Provided that the cost for virtual reality simulator was relatively low and it also allowed higher flexibility compared to the traditional simulator, NLB said that they planned to explore the use of virtual reality simulator for bus captains to enhance their ability to handle emergency situations that might be encountered during bus operations. The TD welcomed the initiative and suggested other FB operators to explore the use of virtual reality simulator as appropriate.	All FB operators
6. As for internet training, KMB/LW currently incorporated internet training as a part of their induction course. CTB/NWFB said that they uploaded training videos onto the intranet while NLB said that they disseminated messages to bus captains directly by use of instant message app. The TD encouraged all FB operators to make use of intranet as a training channel to deliver safety awareness messages to bus captains.	All FB operators
7. The Meeting noted that CTB/NWFB and KMB/LW delivered their bus captain training courses through in-house instructors, and had no plan to outsource their trainings to other institutions. That said, they would continue to encourage their bus captains to join the road safety seminars organized by the TD. NLB supplemented that they had once engaged an external organization, viz. Institute of Advanced Motorists, for delivering safety talks/seminars to their bus captains, but such engagement had stopped as the company had been developing their own in-house training arrangement.	
8. The Meeting also noted that the FB operators had an on-going practice to put up notices and posters in order to keep up bus captains' safety awareness. All FB operators were encouraged to continue the practice to enhance safety awareness of the bus captains.	All FB operators

Action

(ii) Installation of in-vehicle safety device

9. With the help of a summary table at **Annex B**, the meeting discussed the feasibility and desirability of installing seat belts on all passenger seats and other in-vehicle safety devices on FBs was tabled to facilitate members' discussion. The main points raised at the meeting were set out below.

(a) General

10. The Meeting had discussed and reached an agreed views that that in order to enable the FB operators to step up their management and control of their bus fleet, and reduce the potential risks arising from human errors or effect of careless / dangerous driving behaviour, any new on-vehicle safety technology which can assist the FB operators and drivers to enhance safety should be actively explored. Generally, the FB operators agreed to explore sources of supply of the appropriate safety devices/technology and launch trials with a view to establish the technical and operational feasibility of such technology. Without appropriate trials, it was difficult to prove to the travelling public the technical feasibility or infeasibility in adopting the new technology. The Meeting well noted that extended application of certain technologies/devices to part of whole bus fleet had to be very carefully studied having regard to their technical and operational feasibility, cost-effectiveness, as well as commercial viability.

(b) Bus monitoring and control system ("BMCS")

11. In view of the latest technology development in bus fleet management system and black box with functions on real time fleet supervision, estimated time of bus arrival or departure, bus speed recording, GPS location recording, etc., the TD proposed that a BMCS, an integral system with positioning function, operational information monitoring function, variable speed limiting function with geo-fencing technology, should be considered, developed or deployed by all FB operators, and suggested all FB operators to carry out trials on the BMCS by phases.

12. Upon the FB operators' enquiry, the TD clarified that Phase 1 trial aimed to conduct trial on BMCS with positioning function, operational information (such as vehicle speed, brake status, deceleration, etc.) monitoring function and geo-fencing technology for fleet management to achieve detection of over speeding and provide real time alert to the bus captains. Subject to the successful

	Action
development of the Phase 1 trial and successful development of speed limiter with variable speed limiting function, Phase 2 trial would be conducted with the BMCS developed in Phase 1 incorporated with additional application of speed limiter of enhanced design being developed by bus manufacturers for compliance with respective speed limits of different road sections.	
13. CTB/NWFB raised concerns on the legal implication when the automatic speed limiting function involving the application of braking system or other speed reduction device. The TD noted and replied that reference would be made to other international standards and bus manufacturers' proposals to approve the relevant device. The TD added that without knowing how the device would work during trials with details, it was difficult to evaluate the implications, and hence the TD stressed that the purpose of conducting trials was to find out the technical feasibility and implications.	
14. After deliberation, all FB operators were committed to embark Phase 1 trial by end of 2018 on selected routes. Subject to the trial results of Phase 1 and the development of speed limiter with variable speed limiting function to achieve 2-speed limiting function, all FB operators agreed to set the working target for embarking the Phase 2 trial within 2019.	All FB operators
15. The Meeting concluded that it would be a medium-term goal for FB operators to develop a comprehensive BMCS with the objective to enable all FB operators to monitor their bus fleet closely and to take appropriate management action against over bus captains' malpractice, such as speeding.	
(b) Electronic stability control ("ESC") and retarders for capping the maximum speed of the speed limiter on downhill ("speed limiting retarder")	
16. Having deliberated in the previous working group meetings and technical meetings, the Meeting noted that all FB operators agreed that all new buses would be incorporated with ESC and speed limiting retarder. All FB operators also agreed to retrofit ESC and speed limiting retarder on the existing buses[1], subject to the satisfactory development results of these devices for retro-fitting on the existing bus models, the retrofitting proposal from the bus manufacturers and	All FB operators

[1] Existing buses refer to Euro V buses of ADL Enviro 500 manufactured from 2013, Volvo B9TL and MAN A95 buses and Euro VI.

	Action
the commercial viability. The Meeting hence recommended that all FB operators should liaise with and commission the bus manufacturers on the development of these devices with the working target to commence the trials/tests of the devices and retrofitting work in about 12 to 18 months, that is within 2019.	
(c) Collision alert/ lane keeping devices	
17. With regard to the installation of collision alert/ lane keeping devices, CTB/NWFB said that they would trial a device of this function in five buses for training and assessment purposes. The Meeting also noted that these five buses would also be deployed to operate revenue trips. The TD requested CTB/NWFB to share with the TD and other FB operators on the results of the trial in due course.	CTB/NWFB
18. The TD pointed out that there were similar devices available in the market. KMB/LW and NLB agreed to explore similar devices from different suppliers and embark a trial, if feasible.	KMB/LW & NLB
(d) Driving monitoring device	
19. The Meeting noted that KMB/LW had already embarked a trial on driving monitoring device on a couple of buses. The TD requested KMB/LW to share the results of the trial with the TD and other FB operators. CTB/NWFB and NLB were also requested to explore similar devices from different suppliers and embark a trial, if feasible.	KMB/LW CTB/NWFB & NLB
(e) Speed display unit ("SDU") in passenger compartment	
20. In order to provide visual display of the current speed of FBs to the passengers on-board, the proposal for installation SDUs in passenger compartments of FBs was explored.	
21. The TD advised all FB operators on the analysis of the public light buses' ("PLBs") involvement rates upon the launch of the speed display device ("SDD") installation since 2002. The statistics analysis was based on limited available information as the installation date of the SDD in each PLB was not available as there was no legal requirement for PLB operators to report this to the TD. Limited by the availability of data, and considering the possibility that other factors might have an effect on the number of accidents involving PLBs during the period, conducting any statistical analysis for	

Action

drawing a conclusive statement merely on the effect of the installation of SDDs on the accident rate was not conceivable.

22. CTB/NWFB and NLB expressed grave concern on installation of SDU with the consideration that it might generate conflicts between bus captains and passengers. NLB also considered that FBs, different from PLBs, had already been installed with other devices monitoring bus captains' driving behaviour. NLB also expressed that it would be a nuisance and complicate procedure to handle a complaint of bus captain's driving performance when passengers took a photo on the SDU showing an improper vehicle speed. KMB/LW also expressed that the SDU would intensify the conflict between bus captains and passengers and that there was no correlation between SDU and accident in the case of PLBs with reference to the information orally provided by the TD in the Meeting. Therefore, all FB operators had reservations to install SDU on FBs.

23. After some discussions, the Meeting generally concluded that the SDU might not be conducive to safety if passengers were playing an active monitoring role. The FB operators should focus on the development and trials of the BMCS instead, which was a more effective total solution for monitoring the bus operation, managing and control their fleet as well as speeding and other driving mis-behavior of bus captains.

24. The TD, however, added that, as the Government, it was also necessary for the TD to gather views of the driver unions and the public/passengers as a whole. The TD, in conjunction with the bus companies, should examine how best we could deliver the above views to the public.

The TD and all FB operators

(iii) Installation of seat belts on all seats other than exposed seats

25. The Meeting noted that it was technically feasible to supply all new buses with seat belts for all passenger seats conforming to relevant international standards and all FB operators committed that all new FBs would be incorporated with seat belts on all passengers seats.

26. As for existing buses[1], the Meeting noted that retrofitting seat belts on all passenger seats of the upper deck of some existing double-deck bus models should be feasible. KMB/LW advised that they would retrofit seat belts on all passenger seats of the upper deck or deploy buses with seat belts on all passenger seats on routes which

Action

serve long haul passengers or are operated on expressways with limited boarding or alighting activities at the enroute stops.

[Post-meeting note : KMB/LW advised that there would be about 400 new buses with seat belts on all passengers seats by mid-2019. KMB/LW would deploy these buses to the required routes. Retrofitting seat belts to existing buses would depend on the actual situation/ requirement at that moment.]

27. In the light of KMB/LW's initiative, the Meeting had discussed and come to the views that having regard to the technical feasibility in retrofitting seat belts on existing buses; operation of FBs in Hong Kong which were mostly deployed on urban routes with standing passengers; and the costs and downtime incurred to retrofit seat belts on all existing buses, as well as overseas experiences, that there were insufficient justifications to make it a mandatory requirement for all buses to be fitted with seat belts on all passenger seats. Nevertheless, Members reckoned that as in the case of exposed seats and in bus compartment with no standees allowed, seat belts might give extra protection to seated passengers to prevent passengers from falling out from these seats.

28. In this regard, CTB/NWFB was requested to consider retrofitting seat belts on all passenger seats on the upper deck for the buses operating selected bus routes for long haul passengers or operating on expressways with limited boarding and alighting activities along the routes. CTB/NWFB indicated that it would be difficult for their companies to allocate their buses to solely operate specific routes as their buses would serve a number of routes in a day under their existing operations. In addition, CTB/NWFB observed that very few passengers would make use of seat belts, it would not be financially viable to retrofit existing buses with seat belts on all passenger seats. CTB/NWFB requested the Government to fund the retrofit of seat belts to existing buses if that was what the government wanted.

29. NLB said they had approximate 35 double deckers and would consider retrofitting seat belts, subject to the technical and operational feasibility and commercial viability.

30. The Meeting agreed that it was worth exploring in more details in conjunction with the major bus manufacturers to ascertain the technical feasibility of retrofitting seat belts on the upper deck of different bus models, the operational and capacity constraints, and the timetable for completing the retrofitting works on all suitable buses for

	Action
deployment on suitable routes, as well as the commercial viability	
31. In this connection, the TD requested all FB operators to estimate the number of long-haul bus routes operating via expressway with relatively fewer bus stops and the corresponding number of buses involved, and provide the information to the TD for reference the soonest possible.	All FB operators
(Post-meeting notes : CTB/NWFB and NLB provided the information on 26 June, while KMB provided the estimates on 5 July 2018.)	
32. The TD would revise the summary table reflecting the discussions and provide to all FB operators for further comments.	
[Post-meeting notes: The TD revised the summary table and sent to all FB operators twice for further comments on 22 June and 5 July 2018. The summary table with consolidation with FB operators' comments (**Annex C**) was emailed to all FB operators on 9 July 2018 for record.]	
(C) ISO 39001 - Road Traffic Safety Management System	
33. The Meeting noted that each bus operator had its own system in safety management. Upon the TD's enquiry to all FB operators on adaptation of any management system under international standards, CTB/NWFB replied that they did not obtain any management system accreditations under international standards. KMB/LW and NLB said that they obtained accreditations of ISO 9001, ISO 14001 and OHSAS 18001.	
34. The Meeting noted that there was an international management standard for Road Traffic Safety, i.e. ISO 39001 - Road Traffic Safety Management System that was launched in 2014. While all FB operators advised that they had developed their own management systems which enabled them to manage FB operations in a safe manner, all FB operators were request to make comparison between their own management system and the ISO 39001 or other similar management systems in the market, and to report findings, including but not limited to, organization and details of the existing safety management systems in their respective companies with improvement measures, if any, by end of October 2018.	All FB operators
(D) Preparation of a report for the Working Group	
35. The Convener thanked the members' valuable contributions	

Action

to the discussions at working group meetings and technical meetings, and advised the members that the TD would start preparing the report with recommendations based on the information deliberated at the meetings. All FB operators were invited to note that the Working Group recommendations would be submitted to Legislative Council Panel on Transport and the information could be accessed by the members of public.

(E) Any other business

36. There being no other business, the meeting adjourned at 4.30 p.m.

Practice Note on Training Framework for Franchised Bus Captains

Introduction

This paper sets out the "Practice Note on Training Framework for Franchised Bus Captains" (the "Practice Note") to be promulgated for reference and adoption by the franchised bus operators.

Objectives of the Practice Note

2. With a view to enhancing safety delivery in the franchised bus services, the Transport Department ("TD") has, after reviewing the franchised bus operators' training arrangements for bus captains, sought to lay down a set of industry-wide standard practices in respect of the franchised bus captains' **training framework**, including the basic requirements on modules, duration and weighting, so as to provide a common basis for internal monitoring and audit within individual franchised bus companies.

3. The objective of the Practice Note is to align the training arrangements of different franchised bus operators and to lay down a common framework of the training system for their bus captains. Given that different bus companies have different bus networks operating in different operating environment, it is necessary for them to make specific training programmes in order to suit their respective operational needs on the basis of the common standard as set out in this Practice Note. The TD will review the Practice Note with the franchised bus operators on a regular basis, in order to strive for the best standard practices to cater for the ever-changing operating needs and public expectations on safe franchised bus services.

The Practice Note

(A) Structure of training system

4. The structure of the training system for franchised bus captains should comprise at least the following :-

Types of Courses	Minimum Requirement	Target Trainees [2]	Timing
(a) Induction course (i) Classroom training	1 day (Full-time) & 0.5 day (Part-time)	New recruits	Before providing passenger service
(ii) Behind-the-wheel road training	Full–time bus captains 20 hours[1] Part-time bus captains 16 hours[1]		
(b) Refresher course	0.5 day	In-service bus captains	Once in every three years
(c) New bus route training	Behind-the-wheel road training	In-service bus captains	Before the bus captain is assigned to provide passenger service
(d) New bus type (model with new driving features) training	Behind-the-wheel road training	In-service bus captains	Before the bus captain is assigned to provide passenger service
(e) Remedial training	1 day	In-service bus captains with improper driving behavior or attitude	As and when required

Notes :

(1) After the behind-the-wheel road training, the bus captains will be subject to internal driving assessment. The bus captains must pass the internal driving assessment before they are deployed on revenue trips.

(2) Applicable to full-time and part-time bus captains.

(B) Modules for Induction and Refresher Courses

5. The Modules and the weightings recommended for induction course and refresher course are set as follows :-

Modules	Weightings in induction course (Classroom and Behind-the-wheel Road Training[3])	Weightings in refresher course (Classroom)
(a) Safe driving and road safety	70%-85%	60-75%
(b) Cognition of on-vehicle device/facilities		
(c) Handling of incident/emergency	5%-10%	20-30%
(d) Customer service & emotional management	10%-20%	
(e) Knowledge of company rules, traffic regulations, occupational health and safety		5%-10%

Notes :

(3) While behind-the-wheel road training provided during induction course enables the bus captains to be familiarized with bus types/models of the company's bus fleet and the routings of bus services, it should also cover the contents of the modules to be delivered in a practical way with on-the-ground experiences.

(C) Remedial Training

6. Remedial training should be provided to those bus captains in the following categories :-

(a) with improper driving behaviour repeatedly detected from black box data or other sources like plain-cloth inspections;
(b) having involved in serious traffic accidents;
(c) having persistently committed the same traffic offence; or
(d) having reached a certain driving offence points.

(D) Internal Monitoring and Audit Mechanism by Franchised Bus Operators

7. To ensure that adequate and appropriate trainings are provided to the bus captains, the franchised bus operators should set up an internal monitoring and audit mechanism in order to achieve the following objectives :

(a) To monitor the compliance of this Practice Note;

(b) To develop key indicators on the effectiveness of the training system provided to bus captains (e.g. accident involvement rates, complaints on driving skills and performance and etc.); and

(c) In the light of the findings of (b), to review and determine appropriate actions or measures.

8. The management of franchised bus operators should submit regular periodic reports (e.g. at least half-yearly) to their respective Boards of Directors in respect of the findings on matters in para. 7 above.

Transport Department
June 2018

4908-14

Discussion on the Feasibility and Desirability of Installing Seat Belts on All Passenger Seats and Other On-vehicle Safety Devices on Franchised Buses (as at 21 June 2018)

Proposal	WG's Recommendations	Target Timeframe
(1) Bus monitoring & control system (BMCS) [An integral system with positioning function, operational information monitoring function, variable speed limiting function with geo-fencing technology] ● Phase 1 BMCS with positioning function, operational information monitoring function and geo-fencing technology for fleet management ● Phase 2 BMCS with full functions	● KMB/LW were conducting trial with a bus manufacturer to test the speed limiting by GPS ● All FB operators would develop this technology for their bus fleet monitoring & speed control system ● Phase 1 trial will include 2 routes.	● Phase 1 trial to be embarked by end 2018 ● Phase 2 trial to be embarked within 2019
(2) Electronic stability control ("ESC") and Roll stability control ("RSC")	New Buses ● All FB operators agreed that all new buses will be incorporated with ESC Existing Buses[1] ● Subject to the development result of the device for the existing bus models and the retrofitting proposal from bus manufacturers, all FB operators will retrofit such installation on all buses	New Buses ● KMB/LW : with buses delivery from Jan 2019 ● CTB/NWFB : with buses delivery from Jun 2019 ● NLB : new bus orders to be placed in future Existing Buses[1] ● To complete the retrofitting within [x] years

[1] Existing Buses refer to Euro V buses of ADL Enviro 500 manufactured from 2013, Volvo B9TL and MAN A95 buses and Euro VI

Proposal	WG's Recommendations	Target Timeframe
(3) Capping the maximum speed at 70 km/hour on downhill by the speed limiter	New Buses • FB operators agreed that all new buses will be incorporated with this device. Existing Buses[1] • Subject to the development result of the device for the existing bus models and the retrofitting proposal from bus manufacturers, all FB operators will retrofit such installation.	New Buses • KMB/LW : with buses delivery from Jan 2019 • CTB/NWFB : with buses delivery from Jun 2019 • NLB : new bus orders to be placed in future Existing Buses[1] • To complete the retrofitting within [x] years
(4) Collision prevention and lane keeping devices	• CTB/NWFB will install this device in their training buses for training purpose and will conduct a trial on service trips in due course. • KMB/LW will explore similar devices from different suppliers and embark on a trial.	• To embark the trial by end 2018.
(5) Driver monitoring device	• KMB/LW will embark a trial on this device. • CTB/NWFB will explore similar devices from different suppliers and embark on a trial.	• To embark the trial in late June 2018. • CTB/NWFB to embark the trial by end 2018.
(6) Speed display unit ("SDU") in passenger	Subject to consultation, all FB operators are	• To complete the installation within [x] years

Proposal	WG's Recommendations	Target Timeframe
compartment	required to install the SDU for all buses	
(7) Seat belts for all passenger seats	<u>New Buses</u> All FB operators agreed that all new buses will be incorporated with seat belts. <u>Existing Buses</u>[1] KMB/LW will retrofit seat belts phase by phase for specific routes CTB/NWFB's views ? NLB's views ?	<u>New Buses</u> • KMB/LW : with buses delivery from Jul 2018 • CTB/NWFB : with buses delivery from Jun 2019 • NLB : new bus orders to be placed in future <u>Existing Buses</u>[1]

Recommendations of
Installing Seat Belts on All Passenger Seats and Other On-vehicle Safety Devices and Technologies on Franchised Buses
(as at 9 July 2018)

Proposed on-vehicle safety devices/technologies	WG's Recommendations	Target Timeframe
(1) Bus monitoring & control system (BMCS) An integral system with positioning function, operational information monitoring function, variable speed limiting function with geo-fencing technology ● Phase 1 BMCS with positioning function, operational information (such as vehicle speed, brake status, deceleration, etc.) monitoring function and geo-fencing technology for fleet management to achieve detection of overspeeding and provide real time alert to the bus captains ● Phase 2 BMCS to utilize the functions developed in Phase 1 together with the 2-speed active speed limiting function being developed by bus manufacturers to achieve automatic speed limiting functions (50km/hr or 70km/hr depending on the speed limit of road section)	● KMB/LW were conducting trial with a bus manufacturer to test the speed limiting by GPS ● All FB operators would develop and trial the application of GPS technology for their bus fleet monitoring & speed control system ● Phase 1 trial on the application of GPS will include at least 2 routes for each FB operator.	● Phase 1 trial to be embarked by end 2018 ● Phase 2 trial to be embarked within 2019, subject to the satisfactory trial result of Phase 1 and the satisfactory development of device with variable speed limiting function to achieve 2-speed limiting functions.
(2) Electronic stability control ("ESC") and Roll stability control ("RSC")	New Buses ● All FB operators agreed that all new double-deck buses will be incorporated with ESC	New Buses ● KMB/LW : with buses delivered from Jan 2019 ● CTB/NWFB : with buses delivered from Jun 2019

4908-18

Proposed on-vehicle safety devices/technologies	WG's Recommendations	Target Timeframe
	Existing Buses[1] ● Subject to the satisfactory development result and the commercial viability of the device for the existing double-deck bus models and the retrofitting proposal from bus manufacturers, all FB operators will retrofit such installation on all double-deck buses	● NLB : new bus orders to be placed in future
(3) Capping the maximum speed at 70 km/hour on downhill by the speed limiter	New Buses ● FB operators agreed that all new buses will be incorporated with this device. Existing Buses[1] ● Subject to the satisfactory development result and the commercial viability of the device for the existing bus models and the retrofitting proposal from bus manufacturers, all FB operators will retrofit such installation.	New Buses ● KMB/LW : with buses delivered from Jan 2019 ● CTB/NWFB : with buses delivery from Jun 2019 ● NLB : new bus orders to be placed in future
(4) Collision alert/ lane keeping devices	● CTB/NWFB will install this device in 5 buses for training and assessment purposes. These buses will also be deployed on service trips.	● To embark the trial by end 2018.

[1] Existing Buses refer to Euro V buses of ADL Enviro 500 manufactured from 2013, Volvo B9TL and MAN A95 buses and Euro VI buses

Proposed on-vehicle safety devices/technologies	WG's Recommendations	Target Timeframe
	• KMB/LW and NLB will explore similar devices from different suppliers and embark on a trial.	
(5) Driver monitoring device	• KMB/LW will embark a trial on this device on 4 buses. • CTB/NWFB and NLB will explore similar devices from different suppliers and embark on a trial.	• To embark the trial in Q3 2018. • CTB/NWFB to embark the trial by end 2018.
(6) Speed display unit ("SDU") in passenger compartment	Though all FB operators did not agree to install SDU, TD requested all FB operators to consider installing the SDU for all buses and to consult with the unions.	
(7) Seat belts for all passenger seats	<u>New Buses</u> • All FB operators agreed that all new buses will be incorporated with seat belts. <u>Existing Buses[1]</u> • KMB/LW will retrofit seat belts on upper deck passenger seats only or deploy buses with seat belts on all passenger seats on routes which serve long haul passengers or are operated on expressways with limited boarding or	<u>New Buses</u> • KMB/LW : with buses delivery from Jul 2018 • CTB/NWFB : with buses delivery from Jun 2019 • NLB : new bus orders to be placed in future <u>Existing Buses[1]</u> • All FB operators will provide the estimated no. of buses involved, cost implication and timeframe for retrofit

Proposed on-vehicle safety devices/technologies	WG's Recommendations	Target Timeframe
	alighting activities at the enroute stops. • Though CTB/NWFB did not agree to retrofitting as it is expected that few passengers will make use of the seat belts and it will not be financially viable to retrofit existing buses unless it is funded by the Government, TD is of the view to retrofit the seat belts for bus routes serving long haul passengers, or operating on expressways with limited boarding or alighting activities at the enroute stops where passengers tend to use them. • All bus operators will provide the estimated no. of buses involved in bus routes serving long haul passengers, or operating on expressways with limited boarding or alighting activities at the enroute stops, cost implication and timeframe for the retrofitting seat belts on all upper deck seats.	

[Blank Page]

[Draft]
Technical Meeting on
Training Arrangements for Bus Captains

Notes of Second Meeting held on 4 June 2018 at 2.30 p.m.
at Room 4110B, 41/F, Immigration Tower, Wan Chai

Present:

Convener		
TD	Ms. Macella LEE	Deputy Commissioner for Transport/ Transport Services and Management
Member – TD		
BRB	Mr. Patrick WONG	Assistant Commissioner for Transport/ Bus and Railway
	Ms. Amy LEE	Chief Transport Officer/Special Duties
Member – Franchised Bus Operators		
KMB/LW	Mr. James WONG	Head of Training and Quality Assurance Department
CTB/NWFB	[redacted]	
NLB	[redacted]	
Note-taker		
TD	Miss Natalie YU	Senior Transport Officer/Railway 6

Action

DISCUSSION

(A) Confirmation of notes of meeting

The Convener acknowledged that the draft notes of the last meeting had been circulated to Members and comments from Members had been incorporated in the notes of meeting. With no further comments, the Meeting confirmed the notes of the last meeting.

(B) Matters arising from the last meeting

"Buddy Bus Captain" scheme

2. [redacted]. On that day, the experienced bus captain will give advice and assistance to new bus captains on their future daily works such as driving trips about routes that the bus captains will be driven on, sign on / sign off procedures, meal break arrangement and introduce the new bus captains to the regulators etc. [redacted]

3. [redacted] KMB/LW clarified that their experienced bus captains assigned in the "Buddy Bus Captain" scheme would only provide tips/reminders to the new bus captains when necessary during the revenue trips.

4. [redacted]

5. The TD concluded that he scheme was beneficial to new bus captains and encouraged all FB operators to implement similar scheme in a way that would be able to meet the requirements of their daily

Action

operations.

Bus Captains Incurring DOPs

6. [redacted] KMB/LW replied that they had recently included a condition in the employment contracts of new bus captains on disclosure of DOPs information. For bus captains under previous employment contracts, KMB/LW supplemented that they would have to discuss with bus captain's unions on reporting of DOPs before making decision on the way forward.

7. Noting that DOPs serve as a good indicator of the driving performance of a driver, the TD encouraged all FB operators to consider incorporating a clause on disclosure of DOPs regularly into their bus captains' employment contracts and/or as one of the staff regulation in order to monitor the driving competence of their in-service bus captains. — All FB operators

Accident rate and Driver Age

8. [redacted]

(C) Guidelines on Training for FB Captains

9. The draft Guidelines on Training for Bus Captains ("the Guidelines") **(Annex A)** was discussed. The TD advised that the Guidelines aimed at aligning the training system of different FB operators and institutionalizing the monitoring of FB companies' training arrangements for bus captains.

10. Taking the operational needs of different FB operators into

Action

the account, all FB operators agreed that the number of training day(s) would serve the basis of the training duration, except the on-the-wheel road training under the induction course. After deliberation, the Meeting considered that the instructor to trainee ratio varied among FB operators would affect the training intensity received by the bus captains, and agreed that number of training hours would serve the basis for the on-the-wheel road training of the induction course.

11. The Meeting noted that the objective of the refresher course was to share important and current job-related information with the in-service bus captains. [redacted] The TD noted that the arrangements of refresher course provided by the FB operators varied. With the objective of the Guidelines to align the training system of different franchised bus operators, the TD proposed that the minimum duration of the refresher course would be half day.

12. In the last technical meeting on training arrangements for bus captains, the TD learnt from the FB operators that a bus captain might not be required to attend separate refresher course once every three years if he/she had attended other training(s) within a three-year period under the existing practice. In light that the nature of refresher training was different from other trainings and with a view to ensure bus captains receiving important and current job-related information through attending refresher course regularly, the TD was of the view that refresher course should be provided to all serving bus captains in every three years, regardless whether or not other trainings on routes, bus models or driving improvement, were provided during the period. KMB/LW had reservation to arrange all serving bus captains to attend refresher course in addition to bus route training, bus model training or ancillary trainings. In consideration of limited number of bus captains available for provision of bus services, KMB/LW expected that bus service might be affected. KMB/LW said that they would try to explore the feasibility of delivering refresher course on-site and would advise TD on the arrangement of refresher course. KMB/LW

[Post-meeting note: Having regard to the large number of bus captians, the need to avoid bunching in bus captains for refresher training, KMB/LW proposed on 15 June 2018 to implement the proposed refresher training by phases with full implementation in three-year's time in accordance with the requirement stipulated in the proposed Guidelines. [redacted]

Action

[redacted]

13. In connection with ancillary training for improper driving behaviour, the Meeting agreed that the minimum duration would be one day for both full-time and part-time bus captains. The Meeting noted that FB operators provided the ancillary training by different means with the common objective to rectify the improper driving behaviour of bus captains. Taking the above into the account, the Meeting agreed that FB operators could continue adopting the means of delivering the ancillary training which were considered effective. To more accurate to reflect the purpose to rectify the improper driving behaviour or attitude during the training, the TD proposed to rename it as remedial training. All FB operators welcomed the proposal.

14. Regarding the bus captains who had been abstained from driving duties for more than 30 days, all FB operators advised that driving assessments for these bus captains would be conducted in order to ensure bus captains' driving competence before assigning the bus captains to provide FB service, and the Meeting agreed that to take out these bus captains from the targets of the remedial training. That said, the TD encouraged the FB operators to provide training for bus captains who have been abstained from driving duties for a long period of time when deemed necessary.

15. The TD advised that the draft Guidelines would be revised according to the meeting discussion and would circulate to the meeting members after the meeting. — TD

(Post-meeting note : The revised draft Guidelines were circulated to the FB operators on 5 June 2018. FB operators provided further textual comments on the draft Guidelines, and the latest draft of the Guidelines was at **Annex B**.)

16. As a part of the Guidelines, all FB operators were requested to have an internal monitoring and audit mechanism with the objectives to (i) monitor the compliance of the Guidelines, (ii) develop key indicators on the effectiveness of the training system provided to bus captains, and (iii) review and determine appropriate actions or measures in light of the findings of the indicators. The TD pointed out that regular periodic reports (e.g. at least half-yearly) in respect of the findings should be submitted to their respective Boards of Directors with the purpose to allow the Government representatives in the Board to oversee the bus captains' training regularly. All FB operators were — All FB operators

Action

requested to bring this up to their respective management on the requirements to develop an internal monitoring and audit mechanism with a view to submitting their internal monitoring and audit mechanism by end of June 2018 for record with the target effective date of the mechanism in the fourth quarter of 2018.

17. There being no other business, the meeting adjourned at 5:00 p.m..

DRAFT 2 **Annex A**

Guidelines on Training for Franchised Bus Captains

(A) Structure of training system

1. The structure of the training system for franchised bus captains should comprise at least the following :-

Types of courses	Minimum Duration	Target Trainees [1]	Timing
(a) Induction course (i) Classroom training	1 day (Full-time) & 0.5 day (Part-time)	New recruits	Before providing passenger service
(ii) On-the-wheel route training	Full–time bus captains 5 – 15 days, subject to the 'instructor to trainee' ratio [2] Part-time bus captains 4 days at an 'instructor to trainee' ratio of 1:2		
(b) Refresher course (classroom training)	1 day	In-service captains	Once in every three years
(c) New bus route training	On-the-wheel training before revenue trip	In-service captains	Before the bus captain is assigned to provide service
(d) New bus type (model with new driving features) training	On-the-wheel training before revenue trip	In-service captains	Before the bus captain is assigned to provide service
(e) Ancillary training (i) On-the-wheel and classroom training for bus captains with improper driving behavior or attitude	1 day	In-service captains	As and when required
(ii) On-the-wheel training for bus captains have been abstained from driving duties for more than 30 consecutive days	0.5 day		

Note (1) : Applicable to full-time and part-time bus captains.

Note (2) : The minimum training days for 'instructor to trainee' ratios of 1:2, 1:3, 1:4, and 1:5 will be 8, 10, 13 and 15 respectively. There is an exception for New Lantao Bus Co. Ltd. (NLB) whose minimum training days for its new full-time bus captains is 5 days at an 'instructor to trainee' ratio of 1:2, in the light of its much smaller and confined bus routeings and networks mostly within Lantau.

(B) Modules for Induction and Refresher Courses

2. During the induction course, both on-the-wheel route training and classroom training are provided. The following Modules are covered in both classroom and on-the-wheel route training. While route training enables the bus captains to be familiarized with bus types/models of the company's bus fleet and the routings of bus services, it also covers the following modules in a practical ways with on-the-ground experiences. The Modules and the weightings recommended for induction course and refresher course are set as follows :-

Modules	Weightings in induction course	Weightings in refresher course
(a) Safe driving and road safety	70%-85%	60-75%
(b) Cognition of on-vehicle device/ facilities		
(c) Handling of incident/emergency	5%-10%	20-30%
(d) Customer service & emotional management	10%-20%	
(e) Knowledge of company rules, traffic regulations, occupational health and safety		5%-10%

(C) Ancillary Training requirements

3. The following bus captains should be refrained from delivering any driving duty until they have at least attended and completed the ancillary training satisfactorily :-

(a) with improper driving behaviour detected from black box data or other sources like plain-cloth inspections, irrespective such driving behavior leads to incurrence of any driving offence points ("DOPs"); or
(b) having involved in serious accidents; or
(c) having persistently committed same traffic offence; or
(d) having reached a certain DOPs (say, 8 DOPs or above).

(D) Internal Monitoring and Audit Mechanism by FB Operators

4. To ensure that adequate and appropriate trainings are provided to the bus captains, the franchised bus operators should set up an internal monitoring and audit mechanism in order to achieve the following objectives :

   (a) To monitor the compliance of this Training Guidelines;

   (b) To develop key indicators on the effective of the training system provided to bus captains (e.g. accident involvement rates, complaints on driving skills and performance and etc.); and

   (c) In the light of the findings of (b), to review and determine appropriate actions or measures.

5. The management of FB Operators should submit regular periodic reports (e.g. at least half-yearly) to their respective Board of Directors in respect of the findings on matters in para. 4 above.

Transport Department
June 2018

DRAFT 4 **Annex B**

Guidelines on Training for Franchised Bus Captains

(A) Structure of training system

1. The structure of the training system for franchised bus captains should comprise at least the following :-

Types of Courses	Minimum Duration	Target Trainees [2]	Timing
(a) Induction course (i) Classroom training	1 day (Full-time) & 0.5 day (Part-time)	New recruits	Before providing passenger service
(ii) Behind-the-wheel road training	Full–time bus captains 20 hours[1] Part-time bus captains 16 hours[1]		
(b) Refresher course	0.5 day	In-service bus captains	Once in every three years
(c) New bus route training	Behind-the-wheel road training	In-service bus captains	Before the bus captain is assigned to provide passenger service
(d) New bus type (model with new driving features) training	Behind-the-wheel road training	In-service bus captains	Before the bus captain is assigned to provide passenger service
(e) Remedial training	1 day	In-service bus captains with improper driving behavior or attitude	As and when required

Notes :

(1) After the behind-the-wheel road training, the bus captains will be subject to internal driving assessment. The bus captains must pass the internal driving assessment before they are deployed on revenue trips.

(2) Applicable to full-time and part-time bus captains.

(B) Modules for Induction and Refresher Courses

2. The Modules and the weightings recommended for induction course and refresher course are set as follows :-

Modules	Weightings in induction course (Classroom and Behind-the-wheel Road Training[3])	Weightings in refresher course (Classroom)
(a) Safe driving and road safety	70%-85%	60-75%
(b) Cognition of on-vehicle device/facilities		
(c) Handling of incident/emergency	5%-10%	20-30%
(d) Customer service & emotional management	10%-20%	
(e) Knowledge of company rules, traffic regulations, occupational health and safety		5%-10%

Notes :

(3) While behind-the-wheel road training provided during induction course enables the bus captains to be familiarized with bus types/models of the company's bus fleet and the routings of bus services, it also covers the abovementioned modules in a practical ways with on-the-ground experiences.

(C) Remedial Training

3. The following bus captains should be required to attend and complete the remedial training :-

(a) with improper driving behaviour repeatedly detected from black box data or other sources like plain-cloth inspections; or

(b) having involved in serious traffic accidents; or

(c) having persistently committed same traffic offence; or

(d) having reached a certain driving offence points ("DOPs") (say, 8 DOPs or above).

(D) Internal Monitoring and Audit Mechanism by Franchised Bus Operators

4. To ensure that adequate and appropriate trainings are provided to the bus captains, the franchised bus operators should set up an internal monitoring and audit mechanism in order to achieve the following objectives :

   (a) To monitor the compliance of this Training Guidelines;

   (b) To develop key indicators on the effectiveness of the training system provided to bus captains (e.g. accident involvement rates, complaints on driving skills and performance and etc.); and

   (c) In the light of the findings of (b), to review and determine appropriate actions or measures.

5. The management of Franchised Bus Operators should submit regular periodic reports (e.g. at least half-yearly) to their respective Boards of Directors in respect of the findings on matters in para. 4 above.

Transport Department
June 2018

[Draft]
Technical Meeting on
Training Arrangements for Bus Captains

Notes of Second Meeting held on 4 June 2018 at 2.30 p.m.
at Room 4110B, 41/F, Immigration Tower, Wan Chai

Present:

Convener		
TD	Ms. Macella LEE	Deputy Commissioner for Transport/ Transport Services and Management
Member – TD		
BRB	Mr. Patrick WONG	Assistant Commissioner for Transport/ Bus and Railway
	Ms. Amy LEE	Chief Transport Officer/Special Duties
Member – Franchised Bus Operators		
KMB/LW	Mr. James WONG	Head of Training and Quality Assurance Department
CTB/NWFB	Mr. William CHUNG	Head of Operations
	Mr. Vincent FUNG	Senior Operations Manager
	Mr. Ryan LO	Operations Training Manager
NLB	Mr. Benny CHAN	Deputy General Manager
	Mr. Richard LEE	Manager, Training Department
Note-taker		
TD	Miss Natalie YU	Senior Transport Officer/Railway 6

Action

DISCUSSION

(A) Confirmation of notes of meeting

The Convener acknowledged that the draft notes of the last meeting had been circulated to Members and comments from Members had been incorporated in the notes of meeting. With no further comments, the Meeting confirmed the notes of the last meeting.

(B) Matters arising from the last meeting

"Buddy Bus Captain" scheme

2. Making reference to KMB's "Buddy Bus Captain" scheme, CTB/NWFB advised that they started to arrange experienced bus captains to accompany new bus captains on their first day of work, after the induction training from mid-May 2018. CTB/NWFB further added that the bus captains would not be assigned any passenger-carrying service on the first day of work. On that day, the experienced bus captain will give advice and assistance to new bus captains on their future daily works such as driving trips about routes that the bus captains will be driven on, sign on / sign off procedures, meal break arrangement and introduce the new bus captains to the regulators etc. CTB/NWFB advised that as it was prohibited to talk to bus captains when the buses were moving, this might possibly induce passenger complaints if bus captains talked to another uniform staff when driving.

3. In response to CTB/NWFB's concern, KMB/LW clarified that their experienced bus captains assigned in the "Buddy Bus Captain" scheme would only provide tips/reminders to the new bus captains when necessary during the revenue trips.

4. NLB said that they would introduce "大師兄計劃", which their in-house instructors would be arranged to accompany new bus captains in their first and second revenue trips, the scheme was expected to be put into practice from the fourth quarter of 2018.

5. The TD concluded that he scheme was beneficial to new bus captains and encouraged all FB operators to implement similar scheme in a way that would be able to meet the requirements of their daily

Action

operations.

Bus Captains Incurring DOPs

6. In respect of the frequency in reporting of DOPs by bus captains, NLB reported that they requested the bus captains to declare their DOPs, be it incurred when performing driving duties or during their rest time, when they attended the refresher course. CTB/NWFB said that their bus captains were requested to report to the company whenever DOPs were incurred, and the requirement of such reporting was stipulated as a company rule in the staff handbook. KMB/LW replied that they had recently included a condition in the employment contracts of new bus captains on disclosure of DOPs information. For bus captains under previous employment contracts, KMB/LW supplemented that they would have to discuss with bus captain's unions on reporting of DOPs before making decision on the way forward.

7. Noting that DOPs serve as a good indicator of the driving performance of a driver, the TD encouraged all FB operators to consider incorporating a clause on disclosure of DOPs regularly into their bus captains' employment contracts and/or as one of the staff regulation in order to monitor the driving competence of their in-service bus captains. — All FB operators

Accident rate and Driver Age

8. The Meeting noted that CTB/NWFB and KMB/LW submitted the statistics on the correlation between the accident rate and the bus captains' ages for the past three years, while CTB/NWFB also provided the analysis on the correlation between the accident rate and the types of bus captains from 2015 to 2017. CTB/NWFB and KMB/LW pointed out that there was no strong correlation between the accident rate and the bus captains' age or the types of bus captains.

(C) Guidelines on Training for FB Captains

9. The draft Guidelines on Training for Bus Captains ("the Guidelines") **(Annex A)** was discussed. The TD advised that the Guidelines aimed at aligning the training system of different FB operators and institutionalizing the monitoring of FB companies' training arrangements for bus captains.

10. Taking the operational needs of different FB operators into

Action

the account, all FB operators agreed that the number of training day(s) would serve the basis of the training duration, except the on-the-wheel road training under the induction course. After deliberation, the Meeting considered that the instructor to trainee ratio varied among FB operators would affect the training intensity received by the bus captains, and agreed that number of training hours would serve the basis for the on-the-wheel road training of the induction course.

11. The Meeting noted that the objective of the refresher course was to share important and current job-related information with the in-service bus captains. CTB/NWFB clarified that they delivered refresher course in two half days, instead of one full day as proposed in the Guideline. The TD noted that the arrangements of refresher course provided by the FB operators varied. With the objective of the Guidelines to align the training system of different franchised bus operators, the TD proposed that the minimum duration of the refresher course would be half day.

12. In the last technical meeting on training arrangements for bus captains, the TD learnt from the FB operators that a bus captain might not be required to attend separate refresher course once every three years if he/she had attended other training(s) within a three-year period under the existing practice. In light that the nature of refresher training was different from other trainings and with a view to ensure bus captains receiving important and current job-related information through attending refresher course regularly, the TD was of the view that refresher course should be provided to all serving bus captains in every three years, regardless whether or not other trainings on routes, bus models or driving improvement, were provided during the period. KMB/LW had reservation to arrange all serving bus captains to attend refresher course in addition to bus route training, bus model training or ancillary trainings. In consideration of limited number of bus captains available for provision of bus services, KMB/LW expected that bus service might be affected. KMB/LW said that they would try to explore the feasibility of delivering refresher course on-site and would advise TD on the arrangement of refresher course.

KMB/LW

[Post-meeting note: Having regard to the large number of bus captians, the need to avoid bunching in bus captains for refresher training, KMB/LW proposed on 15 June 2018 to implement the proposed refresher training by phases with full implementation in three-year's time in accordance with the requirement stipulated in the proposed Guidelines. CTB/NWFB and NLB indicated that they had no problem in implementing the refresher course as proposed in the

	Action
Guidelines.]	
13. In connection with ancillary training for improper driving behaviour, the Meeting agreed that the minimum duration would be one day for both full-time and part-time bus captains. The Meeting noted that FB operators provided the ancillary training by different means with the common objective to rectify the improper driving behaviour of bus captains. Taking the above into the account, the Meeting agreed that FB operators could continue adopting the means of delivering the ancillary training which were considered effective. To more accurate to reflect the purpose to rectify the improper driving behaviour or attitude during the training, the TD proposed to rename it as remedial training. All FB operators welcomed the proposal.	
14. Regarding the bus captains who had been abstained from driving duties for more than 30 days, all FB operators advised that driving assessments for these bus captains would be conducted in order to ensure bus captains' driving competence before assigning the bus captains to provide FB service, and the Meeting agreed that to take out these bus captains from the targets of the remedial training. That said, the TD encouraged the FB operators to provide training for bus captains who have been abstained from driving duties for a long period of time when deemed necessary.	
15. The TD advised that the draft Guidelines would be revised according to the meeting discussion and would circulate to the meeting members after the meeting. (Post-meeting note : The revised draft Guidelines were circulated to the FB operators on 5 June 2018. FB operators provided further textual comments on the draft Guidelines, and the latest draft of the Guidelines was at **Annex B**.)	TD
16. As a part of the Guidelines, all FB operators were requested to have an internal monitoring and audit mechanism with the objectives to (i) monitor the compliance of the Guidelines, (ii) develop key indicators on the effectiveness of the training system provided to bus captains, and (iii) review and determine appropriate actions or measures in light of the findings of the indicators. The TD pointed out that regular periodic reports (e.g. at least half-yearly) in respect of the findings should be submitted to their respective Boards of Directors with the purpose to allow the Government representatives in the Board to oversee the bus captains' training regularly. All FB operators were	All FB operators

Action

requested to bring this up to their respective management on the requirements to develop an internal monitoring and audit mechanism with a view to submitting their internal monitoring and audit mechanism by end of June 2018 for record with the target effective date of the mechanism in the fourth quarter of 2018.

17. There being no other business, the meeting adjourned at 5:00 p.m..

DRAFT 2 **Annex A**

Guidelines on Training for Franchised Bus Captains

(A) Structure of training system

1. The structure of the training system for franchised bus captains should comprise at least the following :-

Types of courses	Minimum Duration	Target Trainees (1)	Timing
(a) Induction course (i) Classroom training	1 day (Full-time) & 0.5 day (Part-time)	New recruits	Before providing passenger service
(ii) On-the-wheel route training	Full–time bus captains 5 – 15 days, subject to the 'instructor to trainee' ratio (2) Part-time bus captains 4 days at an 'instructor to trainee' ratio of 1:2		
(b) Refresher course (classroom training)	1 day	In-service captains	Once in every three years
(c) New bus route training	On-the-wheel training before revenue trip	In-service captains	Before the bus captain is assigned to provide service
(d) New bus type (model with new driving features) training	On-the-wheel training before revenue trip	In-service captains	Before the bus captain is assigned to provide service
(e) Ancillary training (i) On-the-wheel and classroom training for bus captains with improper driving behavior or attitude	1 day	In-service captains	As and when required
(ii) On-the-wheel training for bus captains have been abstained from driving duties for more than 30 consecutive days	0.5 day		

Note (1) : Applicable to full-time and part-time bus captains.

Note (2) : The minimum training days for 'instructor to trainee' ratios of 1:2, 1:3, 1:4, and 1:5 will be 8, 10, 13 and 15 respectively. There is an exception for New Lantao Bus Co. Ltd. (NLB) whose minimum training days for its new full-time bus captains is 5 days at an 'instructor to trainee' ratio of 1:2, in the light of its much smaller and confined bus routeings and networks mostly within Lantau.

4920-7

(B) Modules for Induction and Refresher Courses

2. During the induction course, both on-the-wheel route training and classroom training are provided. The following Modules are covered in both classroom and on-the-wheel route training. While route training enables the bus captains to be familiarized with bus types/models of the company's bus fleet and the routings of bus services, it also covers the following modules in a practical ways with on-the-ground experiences. The Modules and the weightings recommended for induction course and refresher course are set as follows :-

Modules	Weightings in induction course	Weightings in refresher course
(a) Safe driving and road safety	70%-85%	60-75%
(b) Cognition of on-vehicle device/ facilities		
(c) Handling of incident/emergency	5%-10%	20-30%
(d) Customer service & emotional management	10%-20%	
(e) Knowledge of company rules, traffic regulations, occupational health and safety		5%-10%

(C) Ancillary Training requirements

3. The following bus captains should be refrained from delivering any driving duty until they have at least attended and completed the ancillary training satisfactorily :-

(a) with improper driving behaviour detected from black box data or other sources like plain-cloth inspections, irrespective such driving behavior leads to incurrence of any driving offence points ("DOPs"); or
(b) having involved in serious accidents; or
(c) having persistently committed same traffic offence; or
(d) having reached a certain DOPs (say, 8 DOPs or above).

(D) Internal Monitoring and Audit Mechanism by FB Operators

4. To ensure that adequate and appropriate trainings are provided to the bus captains, the franchised bus operators should set up an internal monitoring and audit mechanism in order to achieve the following objectives :

   (a) To monitor the compliance of this Training Guidelines;

   (b) To develop key indicators on the effective of the training system provided to bus captains (e.g. accident involvement rates, complaints on driving skills and performance and etc.); and

   (c) In the light of the findings of (b), to review and determine appropriate actions or measures.

5. The management of FB Operators should submit regular periodic reports (e.g. at least half-yearly) to their respective Board of Directors in respect of the findings on matters in para. 4 above.

Transport Department
June 2018

DRAFT 4 **Annex B**

Guidelines on Training for Franchised Bus Captains

(A) Structure of training system

1. The structure of the training system for franchised bus captains should comprise at least the following :-

Types of Courses	Minimum Duration	Target Trainees [2]	Timing
(a) Induction course (i) Classroom training	1 day (Full-time) & 0.5 day (Part-time)	New recruits	Before providing passenger service
(ii) Behind-the-wheel road training	Full–time bus captains 20 hours[1] Part-time bus captains 16 hours[1]		
(b) Refresher course	0.5 day	In-service bus captains	Once in every three years
(c) New bus route training	Behind-the-wheel road training	In-service bus captains	Before the bus captain is assigned to provide passenger service
(d) New bus type (model with new driving features) training	Behind-the-wheel road training	In-service bus captains	Before the bus captain is assigned to provide passenger service
(e) Remedial training	1 day	In-service bus captains with improper driving behavior or attitude	As and when required

Notes :

(1) After the behind-the-wheel road training, the bus captains will be subject to internal driving assessment. The bus captains must pass the internal driving assessment before they are deployed on revenue trips.

(2) Applicable to full-time and part-time bus captains.

4920-10

(B) Modules for Induction and Refresher Courses

2. The Modules and the weightings recommended for induction course and refresher course are set as follows :-

Modules	Weightings in induction course (Classroom and Behind-the-wheel Road Training[3])	Weightings in refresher course (Classroom)
(a) Safe driving and road safety	70%-85%	60-75%
(b) Cognition of on-vehicle device/facilities		
(c) Handling of incident/emergency	5%-10%	20-30%
(d) Customer service & emotional management	10%-20%	
(e) Knowledge of company rules, traffic regulations, occupational health and safety		5%-10%

Notes :

(3) While behind-the-wheel road training provided during induction course enables the bus captains to be familiarized with bus types/models of the company's bus fleet and the routings of bus services, it also covers the abovementioned modules in a practical ways with on-the-ground experiences.

(C) Remedial Training

3. The following bus captains should be required to attend and complete the remedial training :-

(a) with improper driving behaviour repeatedly detected from black box data or other sources like plain-cloth inspections; or

(b) having involved in serious traffic accidents; or

(c) having persistently committed same traffic offence; or

(d) having reached a certain driving offence points ("DOPs") (say, 8 DOPs or above).

(D) Internal Monitoring and Audit Mechanism by Franchised Bus Operators

4. To ensure that adequate and appropriate trainings are provided to the bus captains, the franchised bus operators should set up an internal monitoring and audit mechanism in order to achieve the following objectives :

   (a) To monitor the compliance of this Training Guidelines;

   (b) To develop key indicators on the effectiveness of the training system provided to bus captains (e.g. accident involvement rates, complaints on driving skills and performance and etc.); and

   (c) In the light of the findings of (b), to review and determine appropriate actions or measures.

5. The management of Franchised Bus Operators should submit regular periodic reports (e.g. at least half-yearly) to their respective Boards of Directors in respect of the findings on matters in para. 4 above.

Transport Department
June 2018

NOTES OF MEETING
1ST SUB-WORKING GROUP ON
ON-VEHICLE SAFETY DEVICES FOR FRANCHISED BUSES

Date : 27 March 2018

Time : 1000 hour

Venue : Room 4110B, 41/F.,
Immigration Tower, 7 Gloucester Road,
Wan Chi, H.K.

Present :

TD Representatives
Mr David Tsang – Chairman
Mr Jimmy Yeung
Mr William Shum
Ms Amy Lee
Mr Danny Chan – Secretary

KMB/LW Representatives
Mr. K W Leung
Mr Ivan Ho

CTB/NWFB Representatives
Mr [redacted]
Mr [redacted]

NLB Representatives
Mr [redacted]
Mr. [redacted]

Bus Suppliers Representatives
ADL – [redacted]
Volvo Bus – [redacted]
Volvo Bus – [redacted]
Regal (MAN) [redacted]
Regal (MAN) [redacted]

ACTION

(a) Welcome Message

The Chairman welcomed members from the franchised buses companies and bus manufacturers/dealers in participating this sub-working group. The Chairman briefed members the background for setting up this sub-working group and said that as agreed in the Working Group meeting held on 13 March 2018, technical meetings would also be held with members and/or with relevant concerned parties to discuss individual topic. The proposed on-vehicle safety hardware or technologies to be discussed in the meeting are :

- Electronic stability control
- Active / passive roll stability control
- Speed control aided by GPS / geo-fencing
- Speed limiter to cap maximum speed within 70 km/hour
- Safety seat belts for all passenger seats
- Speed display unit for passengers
- Collision prevention and lane keeping device
- Monitoring device on captain's condition e.g. dozing, drowsiness

(b) Discussion on various hardware and technologies of on-vehicle safety devices

The proposed on-vehicle safety devices were explored in the meeting and the initial technical assessments were summarized as follows :

- Electronic stability control (ESC)

  Except one of the bus manufacturers which advised that their new and existing buses have already equipped with ESC, the other two bus manufacturers initially advised that their new buses could be equipped with ESC but not in existing buses.

  All three bus manufacturers opined that these vehicle's stability systems, including RSC and ESC, could not replace the driver's responsibility for operating the vehicle in a safe manner. Speed and driving style should always be adapted to the current road, traffic and weather conditions. Posted speed limits should always be followed.

- Active / passive roll stability control

  Except one of the bus manufacturers which advised that their new and existing buses have already equipped with RSC using active suspension system in rollover protection, the other two bus manufacturers initially replied that their new buses could be equipped with electronic stability control which already minimize the risk of losing control of vehicle.

  For passive RSC with audio and visual alert to drivers, bus manufacturers and franchised bus companies opined that it would either be too late for the driver to respond or the alert become a nuisance to the driver if the system was not properly set.

They opined that even with RSC, it is still possible to lose control of the vehicle due to inappropriate driver input for the conditions (for example, aggressive driving can cause lose control of vehicle.). The vehicle can still roll over if the bus is being driven off-road and the body angle is too high. In addition, RSC cannot prevent rollovers caused by hitting a curb or sliding into a ditch.

As the interpretation on the function of the RSC among the three bus manufacturers are quite different, the three bus manufacturers are requested to further clarify with the function and availability of such device. — ADL, Volvo & MAN

- Speed control aided by GPS / geo-fencing
  All three bus manufacturers opined that the technology is theoretically feasible. However, they have concerns on the accuracy of GPS signals which will be affected by the high rise buildings of Hong Kong.

  The franchised bus companies also concern that bus driver will rely on the speed limit to control the bus rather than to the road and weather conditions.

- Speed limiter to cap maximum speed within 70 km/hour
  All three bus manufacturers advised that it is technically feasible to engage retarder and/or service brake automatically to slow down the vehicle when the speed limit is over 70 km/hour during downhill situation.

- Safety Seat Belt for all Passenger Seats
  As regards the installation of safety seat belt for all passenger seats, all three bus manufacturers have confirmed that it is technically feasible on new buses, upon the request of franchised bus companies, to supply seat belts for all passengers seats which comply with the said international standards.

  As for retrofitting of safety seat belts to the passenger seats of the existing buses, they have concerns that the existing floor structure (especially lower deck) were not designed to comply with these international standards. In order to fulfil the requirements, reinforcement to the existing floor structure may be required and replacement of all existing passenger seats will be required with new passenger seats. Depending of the age of the bus, the bus manufacturers have initially confirmed that it is technically feasible to retrofit safety seat belts to all passenger seats of upper deck of some of the existing buses.

  The three bus manufacturers have been requested to further study on whether there it is technically feasible to retrofit safety seat belt for existing buses and the recommended model or batch of buses which are currently used by franchised bus companies. — ADL, Volvo & MAN

- Speed display unit for passengers
  All three bus manufacturers confirmed that it is technically feasible to install additional speed display units for passengers.

  The franchised bus companies have great reservation on the installation. They opined that such device will create conflict and argument on the vehicle speed between the bus driver and the passengers. As a result of that, it would impose additional pressure to driver and affect their driving safety. In addition, they also emphasized that speed limiters have been installed for all franchised buses to limit the maximum vehicle speed to 70 km/hour during normal driving situation and electronic tachograph ("black box") have been installed for all franchised buses so that bus companies could investigate any driver's mis-behavior including overspeeding, if necessary.

- Collision prevention and lane keeping device
  All three bus manufacturers advised that there are in-built systems or third-party systems available for new and existing buses. However, they have reservation that for city operations like that in Hong Kong where road speed is below 70 km/hour and with dense traffic condition, it would frequently generate false alarm. As a result of that, drivers might get used to the false alarm and ignored the real driving situation.

  [redacted] For KMB, they had performed trial on their patrol vehicles and concluded that the system generated false alerts to the drivers.

- Monitoring device on captain's condition e.g. dozing, drowsiness
  All three bus manufacturers advised that these systems are third-party system and standalone to the bus system. It is technically feasible to monitor the bus driver status but they also pose unnecessary nuisance (false alarms) to the drivers.

  KMB advised that they would conduct a trial on a similar device for four buses in April 2018. KMB agreed to provide trial result to TD for reference. — KMB

To prepare for the further detailed discussion in the Main Working Group in mid-April 2018, the Chairman requested all bus manufacturers to further clarify with their homologation teams or body builders on the proposed on-vehicle safety devices and provide further details including technical limitations, pros and cons, cost implication, availability and applicability to model/batch of bus for TD further consideration. — ADL, Volvo & MAN
For franchised bus companies, they were also requested to provide their comments on the proposed on-vehicle safety devices.

(d) **AOB**

As regards the installation of demister or equivalent device (e.g. heated windscreen) to prevent fogging of driver windscreen, TD was of the view that demister was a safety device to ensure the driver has a clear view at any time. As such, TD requested all bus manufacturers and franchised bus companies should make sure all the newly delivered buses shall equipped with demister or equivalent device.

All to note

There being no other business, the meeting adjourned at 12:00pm.

[Blank Page]

NOTES OF MEETING
1ST SUB-WORKING GROUP ON
ON-VEHICLE SAFETY DEVICES FOR FRANCHISED BUSES

Date : 27 March 2018

Time : 1000 hour

Venue : Room 4110B, 41/F.,
Immigration Tower, 7 Gloucester Road,
Wan Chi, H.K.

Present :

TD Representatives
Mr David Tsang – Chairman
Mr Jimmy Yeung
Mr William Shum
Ms Amy Lee
Mr Danny Chan – Secretary

KMB/LW Representatives
Mr. K W Leung
Mr Ivan Ho

CTB/NWFB Representatives
Mr Paul Li
Mr Kenny So

NLB Representatives
Mr Benny Chan
Mr. Patrick Yeung

Bus Suppliers Representatives
ADL – Mr Andrew Boulton
Volvo Bus – Mr Scott Harvey
Volvo Bus – Mr Adam Wong
Regal (MAN) – Mr Him Kwan
Regal (MAN) – Mr Rex Wong

ACTION

(a) Welcome Message

The Chairman welcomed members from the franchised buses companies and bus manufacturers/dealers in participating this sub-working group. The Chairman briefed members the background for setting up this sub-working group and said that as agreed in the Working Group meeting held on 13 March 2018, technical meetings would also be held with members and/or with relevant concerned parties to discuss individual topic. The proposed on-vehicle safety hardware or technologies to be discussed in the meeting are :

- Electronic stability control
- Active / passive roll stability control
- Speed control aided by GPS / geo-fencing
- Speed limiter to cap maximum speed within 70 km/hour
- Safety seat belts for all passenger seats
- Speed display unit for passengers
- Collision prevention and lane keeping device
- Monitoring device on captain's condition e.g. dozing, drowsiness

(b) Discussion on various hardware and technologies of on-vehicle safety devices

The proposed on-vehicle safety devices were explored in the meeting and the initial technical assessments were summarized as follows :

- Electronic stability control (ESC)

  Except one of the bus manufacturers which advised that their new and existing buses have already equipped with ESC, the other two bus manufacturers initially advised that their new buses could be equipped with ESC but not in existing buses.

  All three bus manufacturers opined that these vehicle's stability systems, including RSC and ESC, could not replace the driver's responsibility for operating the vehicle in a safe manner. Speed and driving style should always be adapted to the current road, traffic and weather conditions. Posted speed limits should always be followed.

- Active / passive roll stability control

  Except one of the bus manufacturers which advised that their new and existing buses have already equipped with RSC using active suspension system in rollover protection, the other two bus manufacturers initially replied that their new buses could be equipped with electronic stability control which already minimize the risk of losing control of vehicle.

  For passive RSC with audio and visual alert to drivers, bus manufacturers and franchised bus companies opined that it would either be too late for the driver to respond or the alert become a nuisance to the driver if the system was not properly set.

They opined that even with RSC, it is still possible to lose control of the vehicle due to inappropriate driver input for the conditions (for example, aggressive driving can cause lose control of vehicle.). The vehicle can still roll over if the bus is being driven off-road and the body angle is too high. In addition, RSC cannot prevent rollovers caused by hitting a curb or sliding into a ditch.

As the interpretation on the function of the RSC among the three bus manufacturers are quite different, the three bus manufacturers are requested to further clarify with the function and availability of such device. ADL, Volvo & MAN

- Speed control aided by GPS / geo-fencing
  All three bus manufacturers opined that the technology is theoretically feasible. However, they have concerns on the accuracy of GPS signals which will be affected by the high rise buildings of Hong Kong.

  The franchised bus companies also concern that bus driver will rely on the speed limit to control the bus rather than to the road and weather conditions.

- Speed limiter to cap maximum speed within 70 km/hour
  All three bus manufacturers advised that it is technically feasible to engage retarder and/or service brake automatically to slow down the vehicle when the speed limit is over 70 km/hour during downhill situation.

- Safety Seat Belt for all Passenger Seats
  As regards the installation of safety seat belt for all passenger seats, all three bus manufacturers have confirmed that it is technically feasible on new buses, upon the request of franchised bus companies, to supply seat belts for all passengers seats which comply with the said international standards.

  As for retrofitting of safety seat belts to the passenger seats of the existing buses, they have concerns that the existing floor structure (especially lower deck) were not designed to comply with these international standards. In order to fulfil the requirements, reinforcement to the existing floor structure may be required and replacement of all existing passenger seats will be required with new passenger seats. Depending of the age of the bus, the bus manufacturers have initially confirmed that it is technically feasible to retrofit safety seat belts to all passenger seats of upper deck of some of the existing buses.

  The three bus manufacturers have been requested to further study on whether there it is technically feasible to retrofit safety seat belt for existing buses and the recommended model or batch of buses which are currently used by franchised bus companies. ADL, Volvo & MAN

- Speed display unit for passengers
  All three bus manufacturers confirmed that it is technically feasible to install additional speed display units for passengers.

  The franchised bus companies have great reservation on the installation. They opined that such device will create conflict and argument on the vehicle speed between the bus driver and the passengers. As a result of that, it would impose additional pressure to driver and affect their driving safety. In addition, they also emphasized that speed limiters have been installed for all franchised buses to limit the maximum vehicle speed to 70 km/hour during normal driving situation and electronic tachograph ("black box") have been installed for all franchised buses so that bus companies could investigate any driver's mis-behavior including overspeeding, if necessary.

- Collision prevention and lane keeping device
  All three bus manufacturers advised that there are in-built systems or third-party systems available for new and existing buses. However, they have reservation that for city operations like that in Hong Kong where road speed is below 70 km/hour and with dense traffic condition, it would frequently generate false alarm. As a result of that, drivers might get used to the false alarm and ignored the real driving situation.

  KMB and CTB/NWFB advised that they had performed trial for third-party system (i.e. Mobileye) which generated visual and audio warning to drivers. However, their trial results were not positive and conclusive. CTB/NWFB conducted trial for their three franchised buses and commented that some warnings did not fit for their bus operations. For KMB, they had performed trial on their patrol vehicles and concluded that the system generated false alerts to the drivers.

- Monitoring device on captain's condition e.g. dozing, drowsiness
  All three bus manufacturers advised that these systems are third-party system and standalone to the bus system. It is technically feasible to monitor the bus driver status but they also pose unnecessary nuisance (false alarms) to the drivers.

  KMB advised that they would conduct a trial on a similar device for four buses in April 2018. KMB agreed to provide trial result to TD for reference. — KMB

To prepare for the further detailed discussion in the Main Working Group in mid-April 2018, the Chairman requested all bus manufacturers to further clarify with their homologation teams or body builders on the proposed on-vehicle safety devices and provide further details including technical limitations, pros and cons, cost implication, availability and applicability to model/batch of bus for TD further consideration. — ADL, Volvo & MAN
For franchised bus companies, they were also requested to provide their comments on the proposed on-vehicle safety devices.

(d) AOB

As regards the installation of demister or equivalent device (e.g. heated windscreen) to prevent fogging of driver windscreen, TD was of the view that demister was a safety device to ensure the driver has a clear view at any time. As such, TD requested all bus manufacturers and franchised bus companies should make sure all the newly delivered buses shall equipped with demister or equivalent device.

All to note

There being no other business, the meeting adjourned at 12:00pm.

Sub-Working Group on
On-vehicle Safety Devices for Franchised Buses
Notes of 2nd Meeting held on 12 June 2018 at 2:30 p.m.
at Conference Room, 3rd Floor, United Centre, 95 Queensway, Hong Kong

Present:

Chairman		
TD	Mr. YK CHAN	Assistant Commissioner/Administration and Licensing
Member – TD		
	Mr. William SHUM	Chief Electrical and Mechanical Engineer/Vehicle Safety and Standards
	Mr. Jimmy YEUNG	Senior Engineer/Vehicle Safety
	Mr. David TSANG	Senior Engineer/New Vehicle
	Ms. Amy LEE	Chief Transport Officer/Special Duties
	Mr. Danny CHAN	Engineer/Bus Safety (Note-taker)
Member – Bus Operators		
KMB/LW	Mr. KW LEUNG	Operations Director
	Mr. Ivan HO	Principal Engineer
CTB/NWFB	[redacted]	[redacted]
NLB	[redacted]	[redacted]
Member - Bus Manufacturers		
ADL	[redacted]	
Volvo	[redacted]	[redacted]
Regal – MAN	[redacted]	[redacted]

Action

DISCUSSION

(A) Confirmation of notes of meeting

The Chairman acknowledged that the draft notes of the last meeting had been circulated to members and comments from members had been incorporated in the notes of meeting. The meeting confirmed the notes of the last meeting.

(B) Discussion on various hardware and technologies of on-vehicle safety devices

2. The Chairman welcomed members of the franchised buses (FB) operators and bus manufacturers/dealers attending the second sub-working group meeting. The Chairman told that, based on the latest advices and updates from bus manufacturers on 7 June 2018 and the previous comments from FB operators in early April 2018, the meeting could further discuss the proposed on-vehicle safety devices in details on the technical feasibility and applicability. The discussions on various hardware and devices were summarized as follows :

(i) Installation of Seat Belts for All Passenger Seats

3. [redacted]

4. [redacted]

5. [redacted]

6. [redacted]

7. All FB operators agreed to specify seat belts at all passenger seats on new buses. They advised that new buses with the following delivery would be incorporated with seat belts:-

- KMB/LW : 145 buses delivered before Oct 2018 and all buses delivered from Jan 2019 onwards
- [redacted]

8. [redacted] From their day-to-day operation experience, most passengers sitting on exposed seats did not wear seat belts. The retrofitting work with huge cost would be a waste of money if nobody uses them. It was agreed that promotion and education to passengers should be conducted to promote the use of seat belts. [redacted] The estimated cost of retrofit would be in the magnitude of about HK$240 million which is almost impossible for the company to afford. [redacted] Therefore they have no plan to retrofit seatbelts on their own. It was agreed that the issue of financial implication would be brought up in the Working Group for discussion.

9. KMB/LW emphasized that they supported the seat belt installations for all new buses. Subject to the technical details and retrofitting proposal provided by the bus manufacturers, KMB/LW might consider to retrofit seat belts phase by phase for buses operating in specific routes where passengers tend to use them. [redacted]

(ii) Installation of Electronic stability control ("ESC")

10. [redacted]

11. FB operators agreed that new buses with the following delivery would be incorporated with ESC function:-

- KMB/LW : from Jan 2019 onwards
- [redacted]

12. Subject to the development result of the ESC device for the existing bus models and the retrofitting proposal (such as cost implication, manpower required and bus downtime) from bus manufacturers, the FB operators might consider the retrofit.

(iii) Installation of speed limiter to cap the maximum speed at 70 km/hour on downhill

13. [redacted]

14. FB operators advised that new buses with the following delivery would be incorporated with such function:-

- KMB/LW : from Jan 2019 onwards*
- [redacted]

Remarks : [redacted]

15. Subject to the development result of the device for the existing bus models and the retrofit proposal (such as cost implication, manpower required and bus downtime) from bus manufacturers, the FB operators might consider the retrofit.

(iv) Installation of Speed display unit ("SDU") in passenger compartment

16. All bus manufacturers expressed it was technically feasible to install SDU for all single deck and double deck buses. However, all three bus manufacturers opined that SDU was not installed for buses in any other countries. All bus manufacturers and FB operators expressed that passengers could check the bus speed by using mobile phone's APP.

17. All FB operators told that their buses had already equipped with visual/audio alarm or both alarms to alert the driver when the bus speed exceeded 70km/hr. KMB/LW mentioned that TD promised to provide the accident statistic of PLB on pre- and post-retrofit of SDU for their reference to show the effectiveness of the device. [redacted]. They expressed that they already utilized black box data to generate exception reports on over speed to monitor the driver behavior. They also expressed that the government should provide full subsidiary for this installation, if the installation was required by TD. [redacted]

18. The Chairman strongly requested FB operators to seriously consider installing the SDU for passengers to know the vehicle speed during their journey.

(v) Trial of Collision prevention and lane keeping devices

19. All bus manufacturers advised that lane keeping device and emergency brake assist ("EBA") to achieve automatic collision prevention were not suitable for city buses and buses with standees due to dense traffic condition and frequent lane changing. It might result in a lot of sudden braking and cause injury to standees. As such, they had no plan to develop this technology for city buses. [redacted] All bus manufacturers opined that collision prevention and lane keeping devices supplied by third party were not advisable to be installed for city bus operations. The device would generate false alerts to bus driver in city with dense traffic environment and frequent lane changing movements like HK. As a result of that, drivers might apply inappropriate driving action (such as sudden braking, steering) due to the device's alert, or might ignore the warnings assuming that all are false alarms.

20. [redacted]

21. During the meeting, TD had shared that the HZMB shuttle buses were fitted with the device.

(vi) Trial of Driver monitoring device

KMB/LW

22. KMB/LW told that they had installed the device on four buses and were conducting internal testing and tuning. KMB/LW also told that at the moment the device would not log any data nor capture any image of the driver. It would only alert the driver when abnormalities were detected. Subject to the testing/tuning progress, KMB/LW would probably put the buses in passenger carrying services in late June 2018. [redacted] There was no concrete plan for trial at the moment. [redacted]

23. During the meeting, TD had shared that the HZMB shuttle buses were fitted with such device.

(vii) Fleet Management

24. All FB operators advised that their current bus onboard system (such as ETA or blackbox) could provide real time data (with certain time delay) to their back-end system for bus and driver monitoring. All FB operators confirmed that their buses were equipped with visual/audio alarm or both alarms to alert driver when the bus speed exceeded 70km/hr. [redacted]. KMB/LW also told the meeting that their system could also generate exception reports for identified road sections with speed limits of 50km/h and 70km/h. [redacted]r.

25. TD would provide a list of road sections with bus accident happened before to FB operators for their reference. TD also provided the guideline for retrieving the digital map on speed limit for roads managed by TD to FB operators for further enhancement of their fleet management system. TD

(viii) Trial of Speed control by Global Positioning Service ("GPS") or geo-fencing

26. [redacted]

27. [redacted]

(C) A.O.B.

28. There being no other business, the meeting adjourned at 5:45 p.m..

Sub-Working Group on
On-vehicle Safety Devices for Franchised Buses
Notes of 2nd Meeting held on 12 June 2018 at 2:30 p.m.
at Conference Room, 3rd Floor, United Centre, 95 Queensway, Hong Kong

Present:

Chairman		
TD	Mr. YK CHAN	Assistant Commissioner/Administration and Licensing
Member – TD		
	Mr. William SHUM	Chief Electrical and Mechanical Engineer/Vehicle Safety and Standards
	Mr. Jimmy YEUNG	Senior Engineer/Vehicle Safety
	Mr. David TSANG	Senior Engineer/New Vehicle
	Ms. Amy LEE	Chief Transport Officer/Special Duties
	Mr. Danny CHAN	Engineer/Bus Safety (Note-taker)
Member – Bus Operators		
KMB/LW	Mr. KW LEUNG	Operations Director
	Mr. Ivan HO	Principal Engineer
CTB/NWFB	Mr. Paul LI	Head of Engineering
	Mr. Kenny SO	Senior Engineering Support Manager
NLB	Mr. Benny CHAN	Deputy General Manager
	Mr. Patrick YEUNG	Head of Service and Training
Member - Bus Manufacturers		
ADL	Mr. Andrew BOULTON	Customer Development & Technical Director
Volvo	Ms. Julia LU	Key Account Manager
	Mr. Jacky CHAN	Service Manager
Regal – MAN	Mr. Rex WONG	Deputy General Manager
	Mr. Torsten PETRICH	Head of Sales and Operations

Action

DISCUSSION

(A) Confirmation of notes of meeting

The Chairman acknowledged that the draft notes of the last meeting had been circulated to members and comments from members had been incorporated in the notes of meeting. The meeting confirmed the notes of the last meeting.

(B) Discussion on various hardware and technologies of on-vehicle safety devices

2. The Chairman welcomed members of the franchised buses (FB) operators and bus manufacturers/dealers attending the second sub-working group meeting. The Chairman told that, based on the latest advices and updates from bus manufacturers on 7 June 2018 and the previous comments from FB operators in early April 2018, the meeting could further discuss the proposed on-vehicle safety devices in details on the technical feasibility and applicability. The discussions on various hardware and devices were summarized as follows :

(i) Installation of Seat Belts for All Passenger Seats

3. The three bus manufacturers (i.e. ADL, Volvo and MAN) opined that seat belts were not required for city buses in other countries. They also advised that, in Europe, seat belts were only required for intercity coaches with no standee. The retrofit of seat belt could not protect standing passengers. All bus manufacturers expressed that the seat belts would not provide any protection unless passengers wear them. MAN opined that passengers on city bus tend not to wear seat belt due to the short travelling time (i.e. passengers were in transient).

4. For new buses, ADL, Volvo and MAN confirmed that it was technically feasible to fit seat belts at all seats. For existing buses, ADL, Volvo and MAN advised that it was technical feasible (with modification works of the bus structure, mounting support and replacement of seats) to retrofit seat belts for upper deck of Enviro500 series buses manufactured from 2013, B9TL Euro V and A95 buses respectively. All bus manufacturers expressed that it was impractical to retrofit seat belts for lower deck due to the bus body fiberglass moldings were not designed to support seat belt installations. Volvo advised that there would be substantial reinforcement work required for the upper floor structure for retrofitting seat belts (such as strip the under side of the interfloor to fit spreader plates, etc.). MAN advised that there would be additional reinforcement required in the structure on the seats of last row at upper deck.

5. Due to the availability of the local manpower and premises, ADL and Volvo advised they could only provide technical design and part lists to FB operators to facilitate the retrofit work, and they had no local manpower nor workshop to carry out the retrofitting works. As such, FB operators were required to consider engaging contractors or utilize their own manpower and workshop to carry out the retrofitting works if so required. MAN told the meeting that they could utilize their existing manpower and workshop for the retrofitting works for MAN buses.

6. All bus manufacturers advised that the retrofitting works would cause an increase of about 300kg to 400kg in the weight of the bus. The drive axle loading of the 12.8meter D/D buses would probably exceed the permitted limit. The passenger carrying capacity will probably be decreased by 7 to 8 passengers as advised by ADL. Exemption on the maximum drive axle load for the retrofitted buses would be required. Subject to manpower availability, ADL and Volvo estimated that the retrofitting work would take around one week per bus, for 3 to 4 skilled labour. MAN could not provide the estimation. Both ADL and Volvo expressed that it would be difficult to recruit skilled labour to do the job locally.

7. All FB operators agreed to specify seat belts at all passenger seats on new buses. They advised that new buses with the following delivery would be incorporated with seat belts:-

- KMB/LW : 145 buses delivered before Oct 2018 and all buses delivered from Jan 2019 onwards
- CTB/NWFB : from Jun 2019 onwards
- NLB : new bus orders to be placed in future

8. CTB/NWFB mentioned that the exposed seats on the existing buses were already fitted with 3 point seat belts. From their day-to-day operation experience, most passengers sitting on exposed seats did not wear seat belts. The retrofitting work with huge cost would be a waste of money if nobody uses them. It was agreed that promotion and education to passengers should be conducted to promote the use of seat belts. CTB/NWFB said that they had about 1,100 buses registered in or after 2013 which might be feasible of retrofitting seat belts to the upper deck. The estimated cost of retrofit would be in the magnitude of about HK$240 million which is almost impossible for the company to afford. CTB/NWFB requested the Government to provide funding or subsidy to such retrofit project if that is really required. Therefore they have no plan to retrofit seatbelts on their own. It was agreed that the issue of financial implication would be brought up in the Working Group for discussion.

9. KMB/LW emphasized that they supported the seat belt installations for all new buses. Subject to the technical details and retrofitting proposal provided by the bus manufacturers, KMB/LW might consider to retrofit seat belts phase by phase for buses operating in specific routes where passengers tend to use them. NLB objected to such installation due to low utilization rate and huge cost. NLB had no plan to retrofit seatbelts.

(ii) Installation of Electronic stability control ("ESC")

10. ADL, Volvo and MAN confirmed that their new buses would be equipped with ESC. For existing buses, ADL and Volvo expressed that HK was the first city requiring ESC for double deck buses. 12 months and 18-24months were needed for the development of ESC for existing buses of ADL Enviro500 from 2013 and Volvo B9TL Euro V buses respectively. Both ADL and Volvo advised that they would complete the ESC development for their new Euro 6 buses first and then develop this technology to existing Euro V buses. ADL also advised that apart from the fitment of yaw sensor; steering sensor and a new control unit; a new steering column would be required and the cost is not yet known. MAN told that their new and existing A95 buses would be and were equipped with ESC. No retrofitting work was required

11. FB operators agreed that new buses with the following delivery would be incorporated with ESC function:-

- KMB/LW : from Jan 2019 onwards
- CTB/NWFB : from Jun 2019 onwards
- NLB : new bus orders to be placed in future

12. Subject to the development result of the ESC device for the existing bus models and the retrofitting proposal (such as cost implication, manpower required and bus downtime) from bus manufacturers, the FB operators might consider the retrofit.

(iii) Installation of speed limiter to cap the maximum speed at 70 km/hour on downhill

13. ADL and Volvo expressed that this was a new requirement for double deck buses, and need 12 months and 18-24 months for the development of such device for the existing buses of ADL Enviro500 from 2013 and Volvo B9TL Euro V buses respectively. Both ADL and Volvo advised that they would complete this technology development for their new Euro 6 buses first and then develop this technology to the existing Euro V buses. MAN advised that they were reprogramming their bus to achieve the function and were in the testing stage. MAN could not indicate the retrofit cost for A95 bus.

14. FB operators advised that new buses with the following delivery would be incorporated with such function:-

- KMB/LW : from Jan 2019 onwards*
- CTB/NWFB : from Jun 2019 onwards
- NLB : new bus orders to be placed in future

Remarks : * Volvo committed to retrofit all new Euro VI buses once development completed after end of Jun2019.

15. Subject to the development result of the device for the existing bus models and the retrofit proposal (such as cost implication, manpower required and bus downtime) from bus manufacturers, the FB operators might consider the retrofit.

(iv) Installation of Speed display unit ("SDU") in passenger compartment

16. All bus manufacturers expressed it was technically feasible to install SDU for all single deck and double deck buses. However, all three bus manufacturers opined that SDU was not installed for buses in any other countries. All bus manufacturers and FB operators expressed that passengers could check the bus speed by using mobile phone's APP.

17. All FB operators told that their buses had already equipped with visual/audio alarm or both alarms to alert the driver when the bus speed exceeded 70km/hr. KMB/LW mentioned that TD promised to provide the accident statistic of PLB on pre- and post-retrofit of SDU for their reference to show the effectiveness of the device. CTB/NWFB objected to such installation as it might cause conflict between the driver and passengers. They expressed that they already utilized black box data to generate exception reports on over speed to monitor the driver behavior. They also expressed that the government should provide full subsidiary for this installation, if the installation was required by TD. In view of other FB operators and bus manufacturers' view, NLB had no plan on this.

18. The Chairman strongly requested FB operators to seriously consider installing the SDU for passengers to know the vehicle speed during their journey.

(v) Trial of Collision prevention and lane keeping devices

19. All bus manufacturers advised that lane keeping device and emergency brake assist ("EBA") to achieve automatic collision prevention were not suitable for city buses and buses with standees due to dense traffic condition and frequent lane changing. It might result in a lot of sudden braking and cause injury to standees. As such, they had no plan to develop this technology for city buses. MAN told that, from their experience, intercity coaches with EBA would have the device disabled during urban driving to avoid false alerts to driver or automatic braking action. All bus manufacturers opined that collision prevention and lane keeping devices supplied by third party were not advisable to be installed for city bus operations. The device would generate false alerts to bus driver in city with dense traffic environment and frequent lane changing movements like HK. As a result of that, drivers might apply inappropriate driving action (such as sudden braking, steering) due to the device's alert, or might ignore the warnings assuming that all are false alarms.

CTB/NWFB

20. CTB/NWFB clarified that they would install such device in some of their training buses for driver training purpose only (i.e. not for normally operation). CTB/NWFB was requested to provide details of application of such device in training buses. KMB/LW told that they had at present no bus on trial with this. NLB told that they had no plan for any trial on this device.

21. During the meeting, TD had shared that the HZMB shuttle buses were fitted with the device.

(vi) <u>Trial of Driver monitoring device</u>

KMB/LW

22. KMB/LW told that they had installed the device on four buses and were conducting internal testing and tuning. KMB/LW also told that at the moment the device would not log any data nor capture any image of the driver. It would only alert the driver when abnormalities were detected. Subject to the testing/tuning progress, KMB/LW would probably put the buses in passenger carrying services in late June 2018. CTB/NWFB told that they were exploring the technical details of similar devices from different suppliers. There was no concrete plan for trial at the moment. NLB had carried out trial on similar device previously but there were inconclusive comments from bus drivers. NLB had no plan for any further trial at the moment.

23. During the meeting, TD had shared that the HZMB shuttle buses were fitted with such device.

(vii) <u>Fleet Management</u>

24. All FB operators advised that their current bus onboard system (such as ETA or blackbox) could provide real time data (with certain time delay) to their back-end system for bus and driver monitoring. All FB operators confirmed that their buses were equipped with visual/audio alarm or both alarms to alert driver when the bus speed exceeded 70km/hr. CTB/NWFB told the meeting that their RTS2 to be launched in Q3 2018 would generate pop-up alarm through the visual display unit to bus drivers when the bus speed exceed 55km/h for 10 seconds at 25 identified critical road sections. CTB/NWFB would further review other road sections to expand the coverage. KMB/LW also told the meeting that their system could also generate exception reports for identified road sections with speed limits of 50km/h and 70km/h. NLB told that they were in the process to generate exception reports to monitor the bus driver behavior.

25. TD would provide a list of road sections with bus accident happened before to FB operators for their reference. TD also provided the guideline for retrieving the digital map on speed limit for roads managed by TD to FB operators for further enhancement of their fleet management system. TD

(viii) Trial of Speed control by Global Positioning Service ("GPS") or geo-fencing

26. Volvo and MAN advised that they could engage the 2-speed limiting function for geofencing purpose and ADL advised they could also introduce a second speed limiting, if required. However, they opined that accurate GPS signal was a "must" for accurate geofencing. Otherwise, the bus would be operated in a false speed limit due to inaccurate GPS signal. They all opined that the GPS signal in HK was highly affected by the high-rise buildings and flyovers. As a result of that, the success in other countries' trials in geofencing or Intelligent Speed Adaption (ISA) such as UK or Sweden might not be repeated in HK.

27. KMB/LW and Volvo told that they were conducting trial on a Volvo bus with Volvo telematics system to test the speed limiting control by GPS. Currently, the system was still in fine tuning status and at very preliminary stage. KMB/LW and Volvo were requested to provide progress of their trial. Both CTB/NWFB and NLB told that they had no plan for any trial at the moment. KMB/LW and Volvo

(C) A.O.B.

28. There being no other business, the meeting adjourned at 5:45 p.m..

[Blank Page]

[Draft] Sub-Working Group on In-vehicle Safety Devices for Franchised Buses

Notes of 3rd Meeting held on 27 June 2018 at 9:30 a.m.

at Conference Room, 3rd Floor, United Centre, 95 Queensway, Hong Kong

Present:

Chairman		
TD	Mr. YK CHAN	Assistant Commissioner/Administration and Licensing
Member – TD		
	Mr. William SHUM	Chief Electrical and Mechanical Engineer/Vehicle Safety and Standards
	Mr. Jimmy YEUNG	Senior Engineer/Vehicle Safety
	Mr. David TSANG	Senior Engineer/New Vehicle
	Mr. Danny CHAN	Engineer/Bus Safety (Note-taker)
Member – Bus Operators		
KMB/LW	Mr. Ivan HO	Principal Engineer
CTB/NWFB	[redacted]	[redacted]
NLB	[redacted]	[redacted]
Member - Bus Manufacturers		
ADL	[redacted]	[redacted]
Volvo	[redacted]	[redacted]
Regal – MAN	[redacted]	[redacted]

Action

DISCUSSION

The Chairman welcomed members of the franchised buses (FB) operators and bus manufacturers/dealers attending the third sub-working group meeting.

(A) Confirmation of notes of meeting

2. The Chairman acknowledged that the draft notes of the last meeting had been circulated to members and comments from members had been incorporated in the notes of meeting. As there was no further comment to be raised on the draft notes, they would be taken as confirmed.

(B) Discussion on various hardware and technologies of in-vehicle safety devices

3. The Chairman advised that, based on the discussion at the last Main working group on 21 June 2018, a revised table summaring all the recommended in-vehicle safety devices was tabled to members for discussion. The Chairman advised that the purpose of the meeting was to revisit the timeframe for implementation or trial of these safety devices taking account the inputs from bus manufacturers' perspective.

(i) Trial of Bus Monitoring and Control System (BMCS)

4. TD briefed members the details of the BMCS as discussed at the last Main working group meeting:

- The BMCS is an integral system coupling the positioning function, operational information monitoring function, variable speed limiting function with geo-fencing technology. Trials should be embarked to assess the BMCS in 2 phases.
- Phase 1 BMCS with positioning function, operational information (such as vehicle speed, brake status, deceleration, etc.) monitoring function and geo-fencing technology for fleet management to achieve detection of overspeeding and provide real time alert to the bus captains.
- Phase 2 BMCS will utilize the functions developed in Phase 1

Action

together with the 2-speed active speed limiting device being developed by bus manufacturers to achieve automatic speed limiting functions (50km/hr or 70km/hr depending on the speed limit of road section)

5. [redacted]

6. TD opined that, these devices were intended to assist bus captain to achieve safe driving but not to take away their responsibility in controlling the bus. The phase 1 BMCS would provide alert to bus captain on speed limit. Subject to the solid proposal from bus manufacturers on the design details of the 2-speed limiting device, the technical details of the device could be further deliberated to ensure the FB operators' concerns could be addressed. [redacted]

7. The Chairman asked the bus manufacturers whether it was technically feasible to develop the 2-speed limiting device and conduct the trial within 2019. All bus manufacturers agreed that the timeframe was reasonable for them to develop the devices for phase 2 trial.

Action

However, it was also subject to how the black box would provide signal to trigger their 2-speed limiting device. As the trial of phase 1 BMCS would only involve the black box suppliers, TD requested FB operators to closely work with bus manufacturers and black box suppliers to develop a safe device for their operations.

(ii) Installation of Electronic stability control (ESC)

8. For new buses, it has been agreed that ESC would be incorporated. TD noted that the longest development time of ESC retrofit on existing buses would require 18-24 months and asked if the lead time could be further shortened. [redacted]

9. [redacted]

(iii) Installation of speed limiter to cap the maximum speed of buses at 70 km/hour on downhill

10. For new buses, it has already been agreed that the speed limiter would be incorporated. [redacted]

11. [redacted]

(iv) Trial of Collision alert and lane keeping devices

12. [redacted]

Action

[redacted]

(v) Trial of Driver monitoring device

13. KMB/LW advised that they had installed the device on four buses and were on trial with passenger service. [redacted]

(vi) Installation of Speed display unit ("SDU") in passenger compartment

14. [redacted]

TD advised that their comments/concerns on SDU were noted and would be reflected in the notes of meeting of Main working group and the working group report. [redacted]

(vii) Installation of Seat Belts for All Passenger Seats

15. TD informed the meeting of their view to retrofit seat belts for bus routes serving long haul passengers, or operating on expressways with limited boarding or alighting activities at the enroute stops where passengers tend to use them. TD had already requested FB operators to provide return on the number of buses involved in these service natures. [redacted]

16. [redacted] TD requested that there should be solid proposal made to TD to explain on how the retrofit would affect the passenger carrying capacity and assess the exemption

Action

application.

(C) A.O.B.

17. There being no other business, the meeting was adjourned at 12:00 p.m.

[Draft] Sub-Working Group on
In-vehicle Safety Devices for Franchised Buses
Notes of 3rd Meeting held on 27 June 2018 at 9:30 a.m.
at Conference Room, 3rd Floor, United Centre, 95 Queensway, Hong Kong

Present:

Chairman		
TD	Mr. YK CHAN	Assistant Commissioner/Administration and Licensing
Member – TD		
	Mr. William SHUM	Chief Electrical and Mechanical Engineer/Vehicle Safety and Standards
	Mr. Jimmy YEUNG	Senior Engineer/Vehicle Safety
	Mr. David TSANG	Senior Engineer/New Vehicle
	Mr. Danny CHAN	Engineer/Bus Safety (Note-taker)
Member – Bus Operators		
KMB/LW	Mr. Ivan HO	Principal Engineer
CTB/NWFB	Mr. Paul LI	Head of Engineering
	Mr. Kenny SO	Senior Engineering Support Manager
NLB	Mr. Benny CHAN	Deputy General Manager
	Mr. Patrick YEUNG	Head of Service and Training
Member - Bus Manufacturers		
ADL	Mr. Andrew BOULTON	Customer Development & Technical Director
Volvo	Mr. Adam WONG	Service Manager
	Mr. Jacky CHAN	Service Manager
Regal – MAN	Mr. Rex WONG	Deputy General Manager

Action

DISCUSSION

The Chairman welcomed members of the franchised buses (FB) operators and bus manufacturers/dealers attending the third sub-working group meeting.

(A) Confirmation of notes of meeting

2. The Chairman acknowledged that the draft notes of the last meeting had been circulated to members and comments from members had been incorporated in the notes of meeting. As there was no further comment to be raised on the draft notes, they would be taken as confirmed.

(B) Discussion on various hardware and technologies of in-vehicle safety devices

3. The Chairman advised that, based on the discussion at the last Main working group on 21 June 2018, a revised table summaring all the recommended in-vehicle safety devices was tabled to members for discussion. The Chairman advised that the purpose of the meeting was to revisit the timeframe for implementation or trial of these safety devices taking account the inputs from bus manufacturers' perspective.

(i) Trial of Bus Monitoring and Control System (BMCS)

4. TD briefed members the details of the BMCS as discussed at the last Main working group meeting:

- The BMCS is an integral system coupling the positioning function, operational information monitoring function, variable speed limiting function with geo-fencing technology. Trials should be embarked to assess the BMCS in 2 phases.
- Phase 1 BMCS with positioning function, operational information (such as vehicle speed, brake status, deceleration, etc.) monitoring function and geo-fencing technology for fleet management to achieve detection of overspeeding and provide real time alert to the bus captains.
- Phase 2 BMCS will utilize the functions developed in Phase 1

Action

together with the 2-speed active speed limiting device being developed by bus manufacturers to achieve automatic speed limiting functions (50km/hr or 70km/hr depending on the speed limit of road section)

5. NWFB/CTB raised concerns on the legality of automatic speed limiting by the BMCS taking the following situations as examples -

Situation 1 : When a bus is running at 70km/h and entering a 50km/h speed limit section, the bus will be automatically decelerate; and

Situation 2 : When a bus is running 50km/hr and entering the 70km/hr speed limit section, the bus will suddenly accelerate if the acceleration pedal is fully pressed.

NWFB/CTB pointed out that, under both situations, there might be a risk that passengers may be fallen when the bus decelerate or accelerate suddenly without notice and asked who would be responsible for such automatic actions.

6. TD opined that, these devices were intended to assist bus captain to achieve safe driving but not to take away their responsibility in controlling the bus. The phase 1 BMCS would provide alert to bus captain on speed limit. Subject to the solid proposal from bus manufacturers on the design details of the 2-speed limiting device, the technical details of the device could be further deliberated to ensure the FB operators' concerns could be addressed. ADL suggested that they could propose the conditions/logic of speed limiting in one month time. ADL

7. The Chairman asked the bus manufacturers whether it was technically feasible to develop the 2-speed limiting device and conduct the trial within 2019. All bus manufacturers agreed that the timeframe was reasonable for them to develop the devices for phase 2 trial.

Action

However, it was also subject to how the black box would provide signal to trigger their 2-speed limiting device. As the trial of phase 1 BMCS would only involve the black box suppliers, TD requested FB operators to closely work with bus manufacturers and black box suppliers to develop a safe device for their operations.

(ii) Installation of Electronic stability control (ESC)

8. For new buses, it has been agreed that ESC would be incorporated. TD noted that the longest development time of ESC retrofit on existing buses would require 18-24 months and asked if the lead time could be further shortened. Both Volvo and MAN replied that they would further check with the head-office to see if the development time could be further shortened. ADL replied that their ESC for Euro VI bus would probably available in mid-2019 and the retrofit kit for Euro V bus would probably be available between mid to end 2019. ADL emphasized that there would be a lot of testing works on the ESC retrofit to ensure its safe operation before it could be launched for retrofit. ADL had agreed to provide the details of retrofit works required.

Volvo, MAN and ADL

9. MAN clarified that their Euro V double-deck buses manufactured from 2016 had already been equipped with ESC; and the retrofit kit would be developed for those Euro V buses manufactured before 2016.

(iii) Installation of speed limiter to cap the maximum speed of buses at 70 km/hour on downhill

10. For new buses, it has already been agreed that the speed limiter would be incorporated. MAN advised that they were still in the process of reprogramming their buses to achieve the function and it is in the testing stage. Both ADL and Volvo advised that the development of retrofit kit of this device for double deck buses would take 12 and 18-24 months respectively.

11. As regards the concerns of NWFB/CTB on the speed reduction in phase 2 BMCS, it was clarified that the speed reduction range (say from 73km/h to 70km/hr) for the deceleration was much lower than the case in BMCS (say 70km/hr to 50km/hr).

(iv) Trial of Collision alert and lane keeping devices

12. TD advised that the NWFB/CTB would conduct trials on their

Action

training buses. Based on the discussion in the Main working group, KMB/LW and NLB had also agreed to explore these devices and embark the trial on their buses in 2018.

(v) Trial of Driver monitoring device

13. KMB/LW advised that they had installed the device on four buses and were on trial with passenger service. TD advised that, based on the Main working group discussion, CTB/NWFB and NLB had also agreed to explore similar devices and embark the trial in 2018.

(vi) Installation of Speed display unit ("SDU") in passenger compartment

14. NWFB/CTB and NLB expressed reservations (such as other safety enhancements were/being in place, the effectiveness and conflict between bus captain and passengers, etc.) on the installation of SDU. TD advised that their comments/concerns on SDU were noted and would be reflected in the notes of meeting of Main working group and the working group report. NWFB/CTB agreed that, subject to the result of union consultation, they would consider the installation the SDU.

(vii) Installation of Seat Belts for All Passenger Seats

15. TD informed the meeting of their view to retrofit seat belts for bus routes serving long haul passengers, or operating on expressways with limited boarding or alighting activities at the enroute stops where passengers tend to use them. TD had already requested FB operators to provide return on the number of buses involved in these service natures. NWFB/CTB emphasized that they did not agreed to such retrofit work unless it would be funded by the government. NWFB/CTB also mentioned that it would take 3-4 skilled labour one week to retrofit a bus (e.g. one man-month). Taking into account the labour cost and material cost, it was estimated that the retrofit cost for one bus would be around $240,000.

16. ADL expressed that there would be reduction of passenger carrying capacity due to the seat belt retrofitting works and sought TD's exemption on the maximum axle load. TD requested that there should be solid proposal made to TD to explain on how the retrofit would affect the passenger carrying capacity and assess the exemption

Action

application.

(C) A.O.B.

17. There being no other business, the meeting was adjourned at 12:00 p.m.

九龍巴士（一九三三）有限公司
THE KOWLOON MOTOR BUS CO. (1933) LTD.

Our Ref: MD/009/2018
Your Ref:

15 March 2018

Commissioner for Transport
Transport Department
41st Floor
Immigration Tower
7 Gloucester Road
Wan Chai
Hong Kong

Attn: Ms Rachel KWAN

[By Email and By Fax]

Dear Commissioner,

Working Group of Enhancement of Franchised Bus Safety

The first meeting of the Working Group of Enhancement of Franchised Bus Safety (the "Working Group") has been held on 13 March 2018.

In the meeting, franchised bus operators and your Department discussed on the scope of works of the Working Group. KMB suggested the following items to be included in the scope of the Working Group.

1. Illegal parking and loading/unloading activities at bus stops

A number of recent incidents show that parking and loading/unloading activities by vehicles other than public buses at bus stops result in difficulties for franchised buses to enter bus bays properly. Not only does this create longer journey time for franchised bus services, in some cases bus captains are forced to allow passengers boarding or alighting the buses in the middle of the road, thus creating safety hazards to the traffic. More often, the tails of the buses may obstruct the normal traffic if they cannot completely enter the bus bays, and this leads to higher chance of traffic accidents.

香港九龍荔枝角寶輪街九號十五樓 15/F, 9 Po Lun Street, Lai Chi Kok, Kowloon, Hong Kong
電話 Tel : (852) 2786 8888 傳真 Fax : (852) 2745 0300 網址 Website : www.kmb.hk

九巴服務 日日進步

2. Traffic congestion

There is no doubt that traffic congestion leads to prolonged journey time, and a more tiring driving experience from the bus captains compared to a smooth journey. We believe that some policies or measures (such as bus priority measures) can be relieved that traffic congestion problem faced by franchised buses, which will in turn help relieve the stress of the bus captains.

3. Bus captain assault

We observe an increasing trend of bus captain assault cases recently. We and our bus captains consider that the government should step up enforcement against the alleged assault cases, and consider revising the existing regulations for increasing punishment for these cases. The government should also join hands with franchised bus companies for related promotion and education to the society.

4. Traffic black spots

We receive comments on special road design or bus stop arrangement that are prone to traffic accidents, as well as suggestions on improving road safety (such as relocation of bus stops, additional road barriers) from our frontline staff on a day-to-day basis. We suggest discussing these key traffic black spots and suggestions with your Department and other franchised bus companies in the Working Group in order to minimize the chance of traffic accident.

We respectfully urge your Department to consider including the above items to the scope of the Working Group, such that the review conducted by the Working Group will be more comprehensive.

Kindly contact the undersigned if you have any further queries on the above.

Thank you for your attention.

Yours faithfully,
for and on behalf of
THE KOWLOON MOTOR BUS CO. (1933) LTD.

Godwin So
General Manager,
Corporate Planning & Business Development

c.c. Ms Amy TSE – Transport Department (By email)
c.c. Mr CK LEUNG – Transport Department (By email)

運輸署
Transport Department

Our Ref: TD BR 76/190-2C
Your Ref: MD/009/2018
Tel No.: 2829 5306
Fax No.: 2511 4158

Urgent By Fax
(Fax No. 2745 0300)

26 March 2018

Mr Godwin So
General Manager
Corporate Planning & Business Development
The Kowloon Motor Bus Co. (1933) Ltd.
9 Po Lun Street
Lai Chi Kok
Kowloon

Dear Godwin,

Working Group of Enhancement of Franchised Bus Safety

Thank you for attending the first meeting of the Working Group of Enhancement of Franchised Bus Safety ("WG") held on 13 March 2018 and your subsequent letter dated 15 March 2018.

We appreciate your valuable comments and suggestions on four subjects mentioned by you at the said meeting and in your letter. The Government attaches great concerns to these issues and has taken various actions to tackle these issues with details set out in the following paragraphs. As deliberated at the first meeting, the purpose of the WG meeting is to review and study measures to further enhance bus safety with focus on the training arrangements for bus captains, installation of seat belts on all seats and installation of on-vehicle safety device. Given limited time span of the WG, it is considered that the WG should focus on the proposed scope of works with a view to timely submitting a review report on the outcome and recommendations to the Commissioner for Transport in 3 months' time. As for the four subjects that you have raised, we would handle them separately outside the WG.

香港灣仔告士打道七號入境事務大樓四十一樓
41st floor Immigration Tower 7 Gloucester Road Wan Chai Hong Kong
電話 Tel (852) 2804 2600 傳真 Fax (852) 2824 0433
網址 Web Site: http://www.td.gov.hk

1. Illegal parking and loading/unloading activities at bus stops

There are meetings between the Police and the TD which are held regularly to review, among other traffic issues, the black spots of illegal parking on busy road sections that obstruct bus operations when bus observing the bus stops thereat. Through these meetings and other routine channels, lists of black spots based on our routine site inspections and inputs from bus companies are provided to the Police for their stepping up of enforcement actions against illegal parking.

Apart from working with the Police on stepping up enforcement action against illegal parking at the bus stops, TD also reviews the traffic conditions and designates restricted zones in the vicinity of bus stops as appropriate with a view to facilitating smooth operation of buses and Police's enforcement against illegal parking at the bus stops. Other than the above, we have recently worked with the Police and produced a session in the Police Magazine reminding other drivers not to park their vehicles at the bus stops.

We are of the view that enforcement action against illegal parking at the bus stops is an on-going exercise. With assistance from KMB and other bus companies, we can give information to the Police for their timely action. In this regard, I should be grateful if you would keep on providing us with locations of bus stops where illegal parking is serious for our follow-up with the Police.

2. Traffic congestion
3. Bus captain assault

We share with you that traffic congestion and threat of assault on bus captains put pressure and stress on bus captains when they are driving. As mentioned in the Policy Address 2017, the Government will continue the effort to alleviate road traffic congestion by implementing measures such as taking forward the study on the rationalisation of the traffic distribution among the three road harbour crossings and the three land tunnels between Kowloon and Sha Tin, commencing a consultancy study on parking for commercial vehicles, implementing a series of short and medium to long terms measures to increase the provision of parking spaces having regard to the situation in various districts, and conducting a feasibility study for the Electronic Road Pricing Pilot Scheme in

Central and its adjacent areas. In addition, with effect from 1 June 2018, the Government will increase the level of fixed penalties for congestion-related traffic offences to restore the deterrent effect of fixed penalty charges to tackle traffic congestion.

Furthermore, bus priority measures, such as designation of new bus only lanes and extension of effective hours of existing bus only lanes, will be considered to facilitate smooth bus operations on major bus corridors having due regard to the actual road situation and traffic conditions. In fact, we have extended the operation hours of six bus-only lanes and implemented one additional bus-only lane in the past three years (i.e. from 2015 to 2017) and will consider the new bus priority measures as proposed in the Public Transport Strategy Study.

On day-to-day basis, we have established close liaison with the Police in monitoring of the traffic situation especially during peak hours. In the event of traffic congestion, we will take appropriate actions, including adjustment of the traffic signals, regulating the traffic by the Police on site and disseminating traffic news to advise the public so as to alleviate traffic congestion.

Stress of bus captains resulted from traffic congestion may also be partly alleviated through flexible deployment of spare bus captains. Should persistent traffic congestion occur on particular road section and affect the scheduled trips, you may consider submitting applications to our Regional Offices for amending the schedules of service if the demand can be met.

On noting that there are assault on bus captain cases, we have worked with the Police and produced a session in the Police Magazine to publicize and educate the public not to disturb bus captain's driving and remind them of the serious legal consequence of the assault on or disturbance to bus captain. In respect of your suggestion of intensifying the penalty for such offence in law, we would refer it to the Police for their consideration. On your side, you may also consider enhancing the publicity on passengers' behavior and exploring the feasibility of installing/improving on-vehicle device/facilities to safeguard the bus captains against attack while they are driving.

4. Traffic black spots

Currently, roads are designed and bus stops are designated in compliance with the Transport Planning and Design Manual. Over the years, re-organisations of bus sopts along major bus corridors such as Nathan Road and Kwun Tong Road have been implemented to facilitate smooth bus operations. Civil works such as widening of carriageway and junction have been carried out to facilitate bus movements and manoeuvrings. Having said that, we will continue review the need for re-organisation of bus stops, refine the road layout and install road barriers to facilitate safe bus operations as and when necessary. Should you have any specific suggestions and comments in this aspect, you may submit concrete proposals to us for consideration.

As an operator providing land transport services on the road, we believe you have solid experience and may have concrete proposals in mind already probably not just confining to the four subjects that you have mentioned above for further enhancing safe operation of franchised bus. Should you have any suggestion, please feel free to contact us.

Yours sincerely,

(Miss Rachel Kwan)
for Commissioner for Transport

九龍巴士（一九三三）有限公司
THE KOWLOON MOTOR BUS CO. (1933) LTD.

Our Ref: CPBD/010L/TD/KMB/18
Your Ref: TD BR 76/190-2C

11 July 2018

Commissioner for Transport
Transport Department
41st Floor
Immigration Tower
7 Gloucester Road
Wan Chai
Hong Kong

Attn: Ms Macella LEE

[By Email and By Fax (2824 0433)]

Dear Commissioner,

Working Group of Enhancement of Franchised Bus Safety

We refer to your letter dated 26 March 2018 on the captioned subject.

Further to your reply letter and subsequent discussion in various occasions including the Regular Meeting between your Department and KMB / LW held on 31 May 2018, we understand that your Department would like to handle the following proposed subjects outside the Working Group of Enhancement of Franchised Bus Safety (the "Working Group"):

- Illegal parking and loading/unloading activities at bus stops
- Traffic congestion
- Bus captain assault
- Traffic black spots

The Working Group has been an effective platform for discussing bus safety related issues among all franchised bus operators and your Department. It is observed that there has been fruitful progress for the Working Group, and the first set of missions will be achieved shortly. In light of this, we respectfully urge your Department to re-consider including our proposed subjects as part of the scope of the Working Group in the second phase, as we should continue to utilise this effective platform for enhancing bus safety.

Otherwise, it would be grateful if you could provide the preliminary route map, timetable and the suggested format for the discussion of these matters outside the Working Group. We expect your suggested format should have similar effectiveness when compared to including them in the Working Group, and representatives from other franchised bus companies will also take part to enhance the recognition of the discussion in the industry.

香港九龍荔枝角寶輪街九號十五樓 15/F, 9 Po Lun Street, Lai Chi Kok, Kowloon, Hong Kong
電話 Tel : (852) 2786 8888 傳真 Fax : (852) 2745 0300 網址 Website : www.kmb.hk

九巴服務 日日進步

Our Ref: CPBD/010L/TD/KMB/18
Your Ref: TD BR 76/190-2C

Kindly contact the undersigned if you have any further queries on the above. We look forward to your favorable reply.

Thank you for your attention.

Yours faithfully,
for and on behalf of
THE KOWLOON MOTOR BUS CO. (1933) LTD.

Godwin So
General Manager,
Corporate Planning & Business Development

c.c. Ms Amy TSE – Transport Department (By email)
c.c. Mr CK LEUNG – Transport Department (By email)

13.1 Summary of Practice Note and Guidelines documents

Date	Description	Summary	Reference
4 June 2018	2nd and 4th Draft Guidelines on Training for Franchised Bus Captains, annexed to the Draft Notes of Second Meeting held on 4 June 2018 of the Technical Meeting on Training Arrangements for Bus Captains	Meeting notes enclosing several Draft Guidelines on Training for Franchised Bus Captains	Document no. 13.3
21 June 2018	The Practice Note on Training Framework for Franchised Bus Captains, annexed to the Notes of 3rd Meeting held on 21 June 2018 of the Working Group on Enhancement of Safety of Franchised Buses	Meeting notes enclosing the Practice Note on Training Framework for Franchised Bus Captains	Document no. 13.4
6 August 2018	Practice note on Training Framework for Franchised Bus Captains, annexed to letter from Transport Department	Letter enclosing the Practice Note drawn up by the Transport Department and other directions given by the Transport Department	Document no. 13.5

13.2 Summary of correspondences between KMB and the Transport Department

Date	Description	Summary	Reference
18 July 2018	Letter from KMB to Transport Department	Enquiries regarding the Guidelines and the Practice Note	Document no. 13.6
6 August 2018	Letter from Transport Department to KMB	Reply to KMB's enquiries regarding the Guidelines and the Practice Note	Document no. 13.7

[Draft]
Technical Meeting on
Training Arrangements for Bus Captains

Notes of Second Meeting held on 4 June 2018 at 2.30 p.m.
at Room 4110B, 41/F, Immigration Tower, Wan Chai

Present:

Convener		
TD	Ms. Macella LEE	Deputy Commissioner for Transport/ Transport Services and Management
Member – TD		
BRB	Mr. Patrick WONG	Assistant Commissioner for Transport/ Bus and Railway
	Ms. Amy LEE	Chief Transport Officer/Special Duties
Member – Franchised Bus Operators		
KMB/LW	Mr. James WONG	Head of Training and Quality Assurance Department
CTB/NWFB	[redacted]	
NLB	[redacted]	
Note-taker		
TD	Miss Natalie YU	Senior Transport Officer/Railway 6

Action

DISCUSSION

(A) Confirmation of notes of meeting

The Convener acknowledged that the draft notes of the last meeting had been circulated to Members and comments from Members had been incorporated in the notes of meeting. With no further comments, the Meeting confirmed the notes of the last meeting.

(B) Matters arising from the last meeting

"Buddy Bus Captain" scheme

2. [redacted]. On that day, the experienced bus captain will give advice and assistance to new bus captains on their future daily works such as driving trips about routes that the bus captains will be driven on, sign on / sign off procedures, meal break arrangement and introduce the new bus captains to the regulators etc. [redacted]

3. [redacted] KMB/LW clarified that their experienced bus captains assigned in the "Buddy Bus Captain" scheme would only provide tips/reminders to the new bus captains when necessary during the revenue trips.

4. [redacted]

5. The TD concluded that he scheme was beneficial to new bus captains and encouraged all FB operators to implement similar scheme in a way that would be able to meet the requirements of their daily

Action

operations.

Bus Captains Incurring DOPs

6. [redacted] KMB/LW replied that they had recently included a condition in the employment contracts of new bus captains on disclosure of DOPs information. For bus captains under previous employment contracts, KMB/LW supplemented that they would have to discuss with bus captain's unions on reporting of DOPs before making decision on the way forward.

7. Noting that DOPs serve as a good indicator of the driving performance of a driver, the TD encouraged all FB operators to consider incorporating a clause on disclosure of DOPs regularly into their bus captains' employment contracts and/or as one of the staff regulation in order to monitor the driving competence of their in-service bus captains. All FB operators

Accident rate and Driver Age

8. [redacted]

(C) Guidelines on Training for FB Captains

9. The draft Guidelines on Training for Bus Captains ("the Guidelines") **(Annex A)** was discussed. The TD advised that the Guidelines aimed at aligning the training system of different FB operators and institutionalizing the monitoring of FB companies' training arrangements for bus captains.

10. Taking the operational needs of different FB operators into

Action

the account, all FB operators agreed that the number of training day(s) would serve the basis of the training duration, except the on-the-wheel road training under the induction course. After deliberation, the Meeting considered that the instructor to trainee ratio varied among FB operators would affect the training intensity received by the bus captains, and agreed that number of training hours would serve the basis for the on-the-wheel road training of the induction course.

11. The Meeting noted that the objective of the refresher course was to share important and current job-related information with the in-service bus captains. [redacted] The TD noted that the arrangements of refresher course provided by the FB operators varied. With the objective of the Guidelines to align the training system of different franchised bus operators, the TD proposed that the minimum duration of the refresher course would be half day.

12. In the last technical meeting on training arrangements for bus captains, the TD learnt from the FB operators that a bus captain might not be required to attend separate refresher course once every three years if he/she had attended other training(s) within a three-year period under the existing practice. In light that the nature of refresher training was different from other trainings and with a view to ensure bus captains receiving important and current job-related information through attending refresher course regularly, the TD was of the view that refresher course should be provided to all serving bus captains in every three years, regardless whether or not other trainings on routes, bus models or driving improvement, were provided during the period. KMB/LW had reservation to arrange all serving bus captains to attend refresher course in addition to bus route training, bus model training or ancillary trainings. In consideration of limited number of bus captains available for provision of bus services, KMB/LW expected that bus service might be affected. KMB/LW said that they would try to explore the feasibility of delivering refresher course on-site and would advise TD on the arrangement of refresher course.

KMB/LW

[Post-meeting note: Having regard to the large number of bus captians, the need to avoid bunching in bus captains for refresher training, KMB/LW proposed on 15 June 2018 to implement the proposed refresher training by phases with full implementation in three-year's time in accordance with the requirement stipulated in the proposed Guidelines. [redacted]

Action

[redacted]

13. In connection with ancillary training for improper driving behaviour, the Meeting agreed that the minimum duration would be one day for both full-time and part-time bus captains. The Meeting noted that FB operators provided the ancillary training by different means with the common objective to rectify the improper driving behaviour of bus captains. Taking the above into the account, the Meeting agreed that FB operators could continue adopting the means of delivering the ancillary training which were considered effective. To more accurate to reflect the purpose to rectify the improper driving behaviour or attitude during the training, the TD proposed to rename it as remedial training. All FB operators welcomed the proposal.

14. Regarding the bus captains who had been abstained from driving duties for more than 30 days, all FB operators advised that driving assessments for these bus captains would be conducted in order to ensure bus captains' driving competence before assigning the bus captains to provide FB service, and the Meeting agreed that to take out these bus captains from the targets of the remedial training. That said, the TD encouraged the FB operators to provide training for bus captains who have been abstained from driving duties for a long period of time when deemed necessary.

15. The TD advised that the draft Guidelines would be revised according to the meeting discussion and would circulate to the meeting members after the meeting. — TD

(Post-meeting note : The revised draft Guidelines were circulated to the FB operators on 5 June 2018. FB operators provided further textual comments on the draft Guidelines, and the latest draft of the Guidelines was at **Annex B**.)

16. As a part of the Guidelines, all FB operators were requested to have an internal monitoring and audit mechanism with the objectives to (i) monitor the compliance of the Guidelines, (ii) develop key indicators on the effectiveness of the training system provided to bus captains, and (iii) review and determine appropriate actions or measures in light of the findings of the indicators. The TD pointed out that regular periodic reports (e.g. at least half-yearly) in respect of the findings should be submitted to their respective Boards of Directors with the purpose to allow the Government representatives in the Board to oversee the bus captains' training regularly. All FB operators were — All FB operators

Action

requested to bring this up to their respective management on the requirements to develop an internal monitoring and audit mechanism with a view to submitting their internal monitoring and audit mechanism by end of June 2018 for record with the target effective date of the mechanism in the fourth quarter of 2018.

17. There being no other business, the meeting adjourned at 5:00 p.m..

DRAFT 2 **Annex A**

Guidelines on Training for Franchised Bus Captains

(A) Structure of training system

1. The structure of the training system for franchised bus captains should comprise at least the following :-

Types of courses	Minimum Duration	Target Trainees [1]	Timing
(a) Induction course (i) Classroom training	1 day (Full-time) & 0.5 day (Part-time)	New recruits	Before providing passenger service
(ii) On-the-wheel route training	Full-time bus captains 5 – 15 days, subject to the 'instructor to trainee' ratio [2] Part-time bus captains 4 days at an 'instructor to trainee' ratio of 1:2		
(b) Refresher course (classroom training)	1 day	In-service captains	Once in every three years
(c) New bus route training	On-the-wheel training before revenue trip	In-service captains	Before the bus captain is assigned to provide service
(d) New bus type (model with new driving features) training	On-the-wheel training before revenue trip	In-service captains	Before the bus captain is assigned to provide service
(e) Ancillary training (i) On-the-wheel and classroom training for bus captains with improper driving behavior or attitude	1 day	In-service captains	As and when required
(ii) On-the-wheel training for bus captains have been abstained from driving duties for more than 30 consecutive days	0.5 day		

Note (1) : Applicable to full-time and part-time bus captains.

Note (2) : The minimum training days for 'instructor to trainee' ratios of 1:2, 1:3, 1:4, and 1:5 will be 8, 10, 13 and 15 respectively. There is an exception for New Lantao Bus Co. Ltd. (NLB) whose minimum training days for its new full-time bus captains is 5 days at an 'instructor to trainee' ratio of 1:2, in the light of its much smaller and confined bus routeings and networks mostly within Lantau.

(B) Modules for Induction and Refresher Courses

2. During the induction course, both on-the-wheel route training and classroom training are provided. The following Modules are covered in both classroom and on-the-wheel route training. While route training enables the bus captains to be familiarized with bus types/models of the company's bus fleet and the routings of bus services, it also covers the following modules in a practical ways with on-the-ground experiences. The Modules and the weightings recommended for induction course and refresher course are set as follows :-

Modules	Weightings in induction course	Weightings in refresher course
(a) Safe driving and road safety	70%-85%	60-75%
(b) Cognition of on-vehicle device/ facilities		
(c) Handling of incident/emergency	5%-10%	20-30%
(d) Customer service & emotional management	10%-20%	
(e) Knowledge of company rules, traffic regulations, occupational health and safety		5%-10%

(C) Ancillary Training requirements

3. The following bus captains should be refrained from delivering any driving duty until they have at least attended and completed the ancillary training satisfactorily :-

(a) with improper driving behaviour detected from black box data or other sources like plain-cloth inspections, irrespective such driving behavior leads to incurrence of any driving offence points ("DOPs"); or
(b) having involved in serious accidents; or
(c) having persistently committed same traffic offence; or
(d) having reached a certain DOPs (say, 8 DOPs or above).

(D) Internal Monitoring and Audit Mechanism by FB Operators

4. To ensure that adequate and appropriate trainings are provided to the bus captains, the franchised bus operators should set up an internal monitoring and audit mechanism in order to achieve the following objectives :

   (a) To monitor the compliance of this Training Guidelines;

   (b) To develop key indicators on the effective of the training system provided to bus captains (e.g. accident involvement rates, complaints on driving skills and performance and etc.); and

   (c) In the light of the findings of (b), to review and determine appropriate actions or measures.

5. The management of FB Operators should submit regular periodic reports (e.g. at least half-yearly) to their respective Board of Directors in respect of the findings on matters in para. 4 above.

Transport Department
June 2018

DRAFT 4 **Annex B**

Guidelines on Training for Franchised Bus Captains

(A) Structure of training system

1. The structure of the training system for franchised bus captains should comprise at least the following :-

Types of Courses	Minimum Duration	Target Trainees [2]	Timing
(a) Induction course (i) Classroom training	1 day (Full-time) & 0.5 day (Part-time)	New recruits	Before providing passenger service
(ii) Behind-the-wheel road training	Full–time bus captains 20 hours[1] Part-time bus captains 16 hours[1]		
(b) Refresher course	0.5 day	In-service bus captains	Once in every three years
(c) New bus route training	Behind-the-wheel road training	In-service bus captains	Before the bus captain is assigned to provide passenger service
(d) New bus type (model with new driving features) training	Behind-the-wheel road training	In-service bus captains	Before the bus captain is assigned to provide passenger service
(e) Remedial training	1 day	In-service bus captains with improper driving behavior or attitude	As and when required

Notes :

(1) After the behind-the-wheel road training, the bus captains will be subject to internal driving assessment. The bus captains must pass the internal driving assessment before they are deployed on revenue trips.

(2) Applicable to full-time and part-time bus captains.

(B) Modules for Induction and Refresher Courses

2. The Modules and the weightings recommended for induction course and refresher course are set as follows :-

Modules	Weightings in induction course (Classroom and Behind-the-wheel Road Training[3])	Weightings in refresher course (Classroom)
(a) Safe driving and road safety	70%-85%	60-75%
(b) Cognition of on-vehicle device/facilities		
(c) Handling of incident/emergency	5%-10%	20-30%
(d) Customer service & emotional management	10%-20%	
(e) Knowledge of company rules, traffic regulations, occupational health and safety		5%-10%

Notes :

(3) While behind-the-wheel road training provided during induction course enables the bus captains to be familiarized with bus types/models of the company's bus fleet and the routings of bus services, it also covers the abovementioned modules in a practical ways with on-the-ground experiences.

(C) Remedial Training

3. The following bus captains should be required to attend and complete the remedial training :-

(a) with improper driving behaviour repeatedly detected from black box data or other sources like plain-cloth inspections; or

(b) having involved in serious traffic accidents; or

(c) having persistently committed same traffic offence; or

(d) having reached a certain driving offence points ("DOPs") (say, 8 DOPs or above).

(D) Internal Monitoring and Audit Mechanism by Franchised Bus Operators

4. To ensure that adequate and appropriate trainings are provided to the bus captains, the franchised bus operators should set up an internal monitoring and audit mechanism in order to achieve the following objectives :

   (a) To monitor the compliance of this Training Guidelines;

   (b) To develop key indicators on the effectiveness of the training system provided to bus captains (e.g. accident involvement rates, complaints on driving skills and performance and etc.); and

   (c) In the light of the findings of (b), to review and determine appropriate actions or measures.

5. The management of Franchised Bus Operators should submit regular periodic reports (e.g. at least half-yearly) to their respective Boards of Directors in respect of the findings on matters in para. 4 above.

Transport Department
June 2018

[Draft]
Technical Meeting on
Training Arrangements for Bus Captains

Notes of Second Meeting held on 4 June 2018 at 2.30 p.m.
at Room 4110B, 41/F, Immigration Tower, Wan Chai

Present:

Convener		
TD	Ms. Macella LEE	Deputy Commissioner for Transport/ Transport Services and Management
Member – TD		
BRB	Mr. Patrick WONG	Assistant Commissioner for Transport/ Bus and Railway
	Ms. Amy LEE	Chief Transport Officer/Special Duties
Member – Franchised Bus Operators		
KMB/LW	Mr. James WONG	Head of Training and Quality Assurance Department
CTB/NWFB	Mr. William CHUNG	Head of Operations
	Mr. Vincent FUNG	Senior Operations Manager
	Mr. Ryan LO	Operations Training Manager
NLB	Mr. Benny CHAN	Deputy General Manager
	Mr. Richard LEE	Manager, Training Department
Note-taker		
TD	Miss Natalie YU	Senior Transport Officer/Railway 6

Action

DISCUSSION

(A) Confirmation of notes of meeting

The Convener acknowledged that the draft notes of the last meeting had been circulated to Members and comments from Members had been incorporated in the notes of meeting. With no further comments, the Meeting confirmed the notes of the last meeting.

(B) Matters arising from the last meeting

"Buddy Bus Captain" scheme

2. Making reference to KMB's "Buddy Bus Captain" scheme, CTB/NWFB advised that they started to arrange experienced bus captains to accompany new bus captains on their first day of work, after the induction training from mid-May 2018. CTB/NWFB further added that the bus captains would not be assigned any passenger-carrying service on the first day of work. On that day, the experienced bus captain will give advice and assistance to new bus captains on their future daily works such as driving trips about routes that the bus captains will be driven on, sign on / sign off procedures, meal break arrangement and introduce the new bus captains to the regulators etc. CTB/NWFB advised that as it was prohibited to talk to bus captains when the buses were moving, this might possibly induce passenger complaints if bus captains talked to another uniform staff when driving.

3. In response to CTB/NWFB's concern, KMB/LW clarified that their experienced bus captains assigned in the "Buddy Bus Captain" scheme would only provide tips/reminders to the new bus captains when necessary during the revenue trips.

4. NLB said that they would introduce "大師兄計劃", which their in-house instructors would be arranged to accompany new bus captains in their first and second revenue trips, the scheme was expected to be put into practice from the fourth quarter of 2018.

5. The TD concluded that he scheme was beneficial to new bus captains and encouraged all FB operators to implement similar scheme in a way that would be able to meet the requirements of their daily

Action

operations.

Bus Captains Incurring DOPs

6. In respect of the frequency in reporting of DOPs by bus captains, NLB reported that they requested the bus captains to declare their DOPs, be it incurred when performing driving duties or during their rest time, when they attended the refresher course. CTB/NWFB said that their bus captains were requested to report to the company whenever DOPs were incurred, and the requirement of such reporting was stipulated as a company rule in the staff handbook. KMB/LW replied that they had recently included a condition in the employment contracts of new bus captains on disclosure of DOPs information. For bus captains under previous employment contracts, KMB/LW supplemented that they would have to discuss with bus captain's unions on reporting of DOPs before making decision on the way forward.

7. Noting that DOPs serve as a good indicator of the driving performance of a driver, the TD encouraged all FB operators to consider incorporating a clause on disclosure of DOPs regularly into their bus captains' employment contracts and/or as one of the staff regulation in order to monitor the driving competence of their in-service bus captains. — All FB operators

Accident rate and Driver Age

8. The Meeting noted that CTB/NWFB and KMB/LW submitted the statistics on the correlation between the accident rate and the bus captains' ages for the past three years, while CTB/NWFB also provided the analysis on the correlation between the accident rate and the types of bus captains from 2015 to 2017. CTB/NWFB and KMB/LW pointed out that there was no strong correlation between the accident rate and the bus captains' age or the types of bus captains.

(C) Guidelines on Training for FB Captains

9. The draft Guidelines on Training for Bus Captains ("the Guidelines") **(Annex A)** was discussed. The TD advised that the Guidelines aimed at aligning the training system of different FB operators and institutionalizing the monitoring of FB companies' training arrangements for bus captains.

10. Taking the operational needs of different FB operators into

Action

the account, all FB operators agreed that the number of training day(s) would serve the basis of the training duration, except the on-the-wheel road training under the induction course. After deliberation, the Meeting considered that the instructor to trainee ratio varied among FB operators would affect the training intensity received by the bus captains, and agreed that number of training hours would serve the basis for the on-the-wheel road training of the induction course.

11. The Meeting noted that the objective of the refresher course was to share important and current job-related information with the in-service bus captains. CTB/NWFB clarified that they delivered refresher course in two half days, instead of one full day as proposed in the Guideline. The TD noted that the arrangements of refresher course provided by the FB operators varied. With the objective of the Guidelines to align the training system of different franchised bus operators, the TD proposed that the minimum duration of the refresher course would be half day.

12. In the last technical meeting on training arrangements for bus captains, the TD learnt from the FB operators that a bus captain might not be required to attend separate refresher course once every three years if he/she had attended other training(s) within a three-year period under the existing practice. In light that the nature of refresher training was different from other trainings and with a view to ensure bus captains receiving important and current job-related information through attending refresher course regularly, the TD was of the view that refresher course should be provided to all serving bus captains in every three years, regardless whether or not other trainings on routes, bus models or driving improvement, were provided during the period. KMB/LW had reservation to arrange all serving bus captains to attend refresher course in addition to bus route training, bus model training or ancillary trainings. In consideration of limited number of bus captains available for provision of bus services, KMB/LW expected that bus service might be affected. KMB/LW said that they would try to explore the feasibility of delivering refresher course on-site and would advise TD on the arrangement of refresher course. KMB/LW

[Post-meeting note: Having regard to the large number of bus captians, the need to avoid bunching in bus captains for refresher training, KMB/LW proposed on 15 June 2018 to implement the proposed refresher training by phases with full implementation in three-year's time in accordance with the requirement stipulated in the proposed Guidelines. CTB/NWFB and NLB indicated that they had no problem in implementing the refresher course as proposed in the

Action

Guidelines.]

13. In connection with ancillary training for improper driving behaviour, the Meeting agreed that the minimum duration would be one day for both full-time and part-time bus captains. The Meeting noted that FB operators provided the ancillary training by different means with the common objective to rectify the improper driving behaviour of bus captains. Taking the above into the account, the Meeting agreed that FB operators could continue adopting the means of delivering the ancillary training which were considered effective. To more accurate to reflect the purpose to rectify the improper driving behaviour or attitude during the training, the TD proposed to rename it as remedial training. All FB operators welcomed the proposal.

14. Regarding the bus captains who had been abstained from driving duties for more than 30 days, all FB operators advised that driving assessments for these bus captains would be conducted in order to ensure bus captains' driving competence before assigning the bus captains to provide FB service, and the Meeting agreed that to take out these bus captains from the targets of the remedial training. That said, the TD encouraged the FB operators to provide training for bus captains who have been abstained from driving duties for a long period of time when deemed necessary.

15. The TD advised that the draft Guidelines would be revised according to the meeting discussion and would circulate to the meeting members after the meeting. — TD

(Post-meeting note : The revised draft Guidelines were circulated to the FB operators on 5 June 2018. FB operators provided further textual comments on the draft Guidelines, and the latest draft of the Guidelines was at **Annex B**.)

16. As a part of the Guidelines, all FB operators were requested to have an internal monitoring and audit mechanism with the objectives to (i) monitor the compliance of the Guidelines, (ii) develop key indicators on the effectiveness of the training system provided to bus captains, and (iii) review and determine appropriate actions or measures in light of the findings of the indicators. The TD pointed out that regular periodic reports (e.g. at least half-yearly) in respect of the findings should be submitted to their respective Boards of Directors with the purpose to allow the Government representatives in the Board to oversee the bus captains' training regularly. All FB operators were — All FB operators

Action

requested to bring this up to their respective management on the requirements to develop an internal monitoring and audit mechanism with a view to submitting their internal monitoring and audit mechanism by end of June 2018 for record with the target effective date of the mechanism in the fourth quarter of 2018.

17. There being no other business, the meeting adjourned at 5:00 p.m..

DRAFT 2 **Annex A**

Guidelines on Training for Franchised Bus Captains

(A) Structure of training system

1. The structure of the training system for franchised bus captains should comprise at least the following :-

Types of courses	Minimum Duration	Target Trainees (1)	Timing
(a) Induction course (i) Classroom training	1 day (Full-time) & 0.5 day (Part-time)	New recruits	Before providing passenger service
(ii) On-the-wheel route training	Full–time bus captains 5 – 15 days, subject to the 'instructor to trainee' ratio (2) Part-time bus captains 4 days at an 'instructor to trainee' ratio of 1:2		
(b) Refresher course (classroom training)	1 day	In-service captains	Once in every three years
(c) New bus route training	On-the-wheel training before revenue trip	In-service captains	Before the bus captain is assigned to provide service
(d) New bus type (model with new driving features) training	On-the-wheel training before revenue trip	In-service captains	Before the bus captain is assigned to provide service
(e) Ancillary training (i) On-the-wheel and classroom training for bus captains with improper driving behavior or attitude	1 day	In-service captains	As and when required
(ii) On-the-wheel training for bus captains have been abstained from driving duties for more than 30 consecutive days	0.5 day		

Note (1) : Applicable to full-time and part-time bus captains.

Note (2) : The minimum training days for 'instructor to trainee' ratios of 1:2, 1:3, 1:4, and 1:5 will be 8, 10, 13 and 15 respectively. There is an exception for New Lantao Bus Co. Ltd. (NLB) whose minimum training days for its new full-time bus captains is 5 days at an 'instructor to trainee' ratio of 1:2, in the light of its much smaller and confined bus routeings and networks mostly within Lantau.

4960-7

(B) Modules for Induction and Refresher Courses

2. During the induction course, both on-the-wheel route training and classroom training are provided. The following Modules are covered in both classroom and on-the-wheel route training. While route training enables the bus captains to be familiarized with bus types/models of the company's bus fleet and the routings of bus services, it also covers the following modules in a practical ways with on-the-ground experiences. The Modules and the weightings recommended for induction course and refresher course are set as follows :-

Modules	Weightings in induction course	Weightings in refresher course
(a) Safe driving and road safety	70%-85%	60-75%
(b) Cognition of on-vehicle device/ facilities		
(c) Handling of incident/emergency	5%-10%	20-30%
(d) Customer service & emotional management	10%-20%	
(e) Knowledge of company rules, traffic regulations, occupational health and safety		5%-10%

(C) Ancillary Training requirements

3. The following bus captains should be refrained from delivering any driving duty until they have at least attended and completed the ancillary training satisfactorily :-

(a) with improper driving behaviour detected from black box data or other sources like plain-cloth inspections, irrespective such driving behavior leads to incurrence of any driving offence points ("DOPs"); or
(b) having involved in serious accidents; or
(c) having persistently committed same traffic offence; or
(d) having reached a certain DOPs (say, 8 DOPs or above).

(D) Internal Monitoring and Audit Mechanism by FB Operators

4. To ensure that adequate and appropriate trainings are provided to the bus captains, the franchised bus operators should set up an internal monitoring and audit mechanism in order to achieve the following objectives :

   (a) To monitor the compliance of this Training Guidelines;

   (b) To develop key indicators on the effective of the training system provided to bus captains (e.g. accident involvement rates, complaints on driving skills and performance and etc.); and

   (c) In the light of the findings of (b), to review and determine appropriate actions or measures.

5. The management of FB Operators should submit regular periodic reports (e.g. at least half-yearly) to their respective Board of Directors in respect of the findings on matters in para. 4 above.

Transport Department
June 2018

DRAFT 4 **Annex B**

Guidelines on Training for Franchised Bus Captains

(A) Structure of training system

1. The structure of the training system for franchised bus captains should comprise at least the following :-

Types of Courses	Minimum Duration	Target Trainees [2]	Timing
(a) Induction course (i) Classroom training	1 day (Full-time) & 0.5 day (Part-time)	New recruits	Before providing passenger service
(ii) Behind-the-wheel road training	Full–time bus captains 20 hours[1] Part-time bus captains 16 hours[1]		
(b) Refresher course	0.5 day	In-service bus captains	Once in every three years
(c) New bus route training	Behind-the-wheel road training	In-service bus captains	Before the bus captain is assigned to provide passenger service
(d) New bus type (model with new driving features) training	Behind-the-wheel road training	In-service bus captains	Before the bus captain is assigned to provide passenger service
(e) Remedial training	1 day	In-service bus captains with improper driving behavior or attitude	As and when required

Notes :

(1) After the behind-the-wheel road training, the bus captains will be subject to internal driving assessment. The bus captains must pass the internal driving assessment before they are deployed on revenue trips.

(2) Applicable to full-time and part-time bus captains.

(B) Modules for Induction and Refresher Courses

2. The Modules and the weightings recommended for induction course and refresher course are set as follows :-

Modules	Weightings in induction course (Classroom and Behind-the-wheel Road Training[3])	Weightings in refresher course (Classroom)
(a) Safe driving and road safety	70%-85%	60-75%
(b) Cognition of on-vehicle device/facilities		
(c) Handling of incident/emergency	5%-10%	20-30%
(d) Customer service & emotional management	10%-20%	
(e) Knowledge of company rules, traffic regulations, occupational health and safety		5%-10%

Notes :

(3) While behind-the-wheel road training provided during induction course enables the bus captains to be familiarized with bus types/models of the company's bus fleet and the routings of bus services, it also covers the abovementioned modules in a practical ways with on-the-ground experiences.

(C) Remedial Training

3. The following bus captains should be required to attend and complete the remedial training :-

(a) with improper driving behaviour repeatedly detected from black box data or other sources like plain-cloth inspections; or

(b) having involved in serious traffic accidents; or

(c) having persistently committed same traffic offence; or

(d) having reached a certain driving offence points ("DOPs") (say, 8 DOPs or above).

(D) Internal Monitoring and Audit Mechanism by Franchised Bus Operators

4. To ensure that adequate and appropriate trainings are provided to the bus captains, the franchised bus operators should set up an internal monitoring and audit mechanism in order to achieve the following objectives :

   (a) To monitor the compliance of this Training Guidelines;

   (b) To develop key indicators on the effectiveness of the training system provided to bus captains (e.g. accident involvement rates, complaints on driving skills and performance and etc.); and

   (c) In the light of the findings of (b), to review and determine appropriate actions or measures.

5. The management of Franchised Bus Operators should submit regular periodic reports (e.g. at least half-yearly) to their respective Boards of Directors in respect of the findings on matters in para. 4 above.

Transport Department
June 2018

Working Group on
Enhancement of Safety of Franchised Buses

Notes of 3rd Meeting held on 21 June 2018 at 2.00 p.m.
at Room 4110A, 41/F, Immigration Tower, Wan Chai

Present:

Convener		
TD	Ms. Macella LEE	Deputy Commissioner for Transport/Transport Services and Management
Members – TD		
ALB	Mr. YK CHAN	Assistant Commissioner for Transport /Administration and Licensing
	Mr. William SHUM	Chief Electrical and Mechanical Engineer/Vehicle Safety and Standard
	Mr. Jimmy YEUNG	Senior Engineer/Vehicle Safety
	Mr. Danny CHAN	Engineer/Bus Safety
BRB	Mr. Patrick WONG	Assistant Commissioner for Transport /Bus and Railway
	Ms. Amy LEE	Chief Transport Officer/Special Duties
RSSD	Mr. Tony YAU	Chief Engineer/Road Safety and Standards
	Mr. Gary WONG	Senior Engineer/Road Safety 2
Members – Bus Operators		
KMB/LW	Mr. Godwin SO	General Manager, Corporate Planning & Business Development
	Mr. LEUNG Kin Wang	Operations Director
	Mr. James WONG	Head of Training and Quality Assurance Department
CTB/NWFB	[redacted]	

NLB [redacted]

Note-taker

TD Miss Natalie YU Senior Transport Officer/Railway 6

Action

DISCUSSION

(A) Confirmation of notes of meeting

The Convener advised that the revised draft notes of the last meeting had been circulated to Members incorporating comments from Members. As Members did not have further amendments, the Meeting confirmed the notes of the last meeting.

(B) Progress of the discussions of the following items discussed in respective technical meetings and proposed way forward

(i) Training arrangements for bus captains

2. A set of guidelines (which was subsequently turned into a practice note) on training arrangements for the bus captains were fully deliberated in the previous working group meetings and agreed at the technical group meeting on 4 June. Having regard to the large number of bus captains of KMB/LW, there would be a need to avoid bunching in bus captains for refresher training, the proposed refresher course would be implemented by phases with full implementation in three-year's time in accordance with the requirement. The Meeting agreed that to start implementing their training with reference to the practice note by phases starting from October 2018. The TD also reminded that, as agreed at the last technical meeting, all franchised bus ("FB") operators should submit their internal monitoring and audit mechanism by end of June or early July 2018. — All FB operators

(Post-meeting note : The TD circulated the agreed Practice Note on Training Framework for Franchised Bus Captains at **Annex A** to all FB operator for implementation on 29 June 2018.)

3. In addition to the training courses, the TD explored with all FB operators on any other alternative training measures with an aim to

Action

enhance bus captains' training on driving such as driving simulators internet training, and contracting out bus captains' training.

4. [redacted] KMB/LW replied that they had deployed driving simulators from 2007 to 2015, and opinion from their senior driving instructors that simulator training was not an essential element and could be replaced by more on-road training, and most of the users of their simulators reflected that they felt dizzy after using the driving simulator. Taking this opinion into the account, KMB/LW indicated that they have conducted more on-road training instead of deploying driving simulator from 2015.

5. [redacted] The TD welcomed the initiative and suggested other FB operators to explore the use of virtual reality simulator as appropriate.

All FB operators

6. As for internet training, KMB/LW currently incorporated internet training as a part of their induction course. [redacted] The TD encouraged all FB operators to make use of intranet as a training channel to deliver safety awareness messages to bus captains.

All FB operators

7. [redacted] That said, they would continue to encourage their bus captains to join the road safety seminars organized by the TD. [redacted]

8. The Meeting also noted that the FB operators had an on-going practice to put up notices and posters in order to keep up bus captains' safety awareness. All FB operators were encouraged to continue the practice to enhance safety awareness of the bus captains.

All FB operators

Action

(ii) Installation of in-vehicle safety device

9. With the help of a summary table at **Annex B**, the meeting discussed the feasibility and desirability of installing seat belts on all passenger seats and other in-vehicle safety devices on FBs was tabled to facilitate members' discussion. The main points raised at the meeting were set out below.

(a) General

10. The Meeting had discussed and reached an agreed views that that in order to enable the FB operators to step up their management and control of their bus fleet, and reduce the potential risks arising from human errors or effect of careless / dangerous driving behaviour, any new on-vehicle safety technology which can assist the FB operators and drivers to enhance safety should be actively explored. Generally, the FB operators agreed to explore sources of supply of the appropriate safety devices/technology and launch trials with a view to establish the technical and operational feasibility of such technology. Without appropriate trials, it was difficult to prove to the travelling public the technical feasibility or infeasibility in adopting the new technology. The Meeting well noted that extended application of certain technologies/devices to part of whole bus fleet had to be very carefully studied having regard to their technical and operational feasibility, cost-effectiveness, as well as commercial viability.

(b) Bus monitoring and control system ("BMCS")

11. In view of the latest technology development in bus fleet management system and black box with functions on real time fleet supervision, estimated time of bus arrival or departure, bus speed recording, GPS location recording, etc., the TD proposed that a BMCS, an integral system with positioning function, operational information monitoring function, variable speed limiting function with geo-fencing technology, should be considered, developed or deployed by all FB operators, and suggested all FB operators to carry out trials on the BMCS by phases.

12. Upon the FB operators' enquiry, the TD clarified that Phase 1 trial aimed to conduct trial on BMCS with positioning function, operational information (such as vehicle speed, brake status, deceleration, etc.) monitoring function and geo-fencing technology for fleet management to achieve detection of over speeding and provide real time alert to the bus captains. Subject to the successful

Action

development of the Phase 1 trial and successful development of speed limiter with variable speed limiting function, Phase 2 trial would be conducted with the BMCS developed in Phase 1 incorporated with additional application of speed limiter of enhanced design being developed by bus manufacturers for compliance with respective speed limits of different road sections.

13. [redacted] The TD noted and replied that reference would be made to other international standards and bus manufacturers' proposals to approve the relevant device. The TD added that without knowing how the device would work during trials with details, it was difficult to evaluate the implications, and hence the TD stressed that the purpose of conducting trials was to find out the technical feasibility and implications.

14. After deliberation, all FB operators were committed to embark Phase 1 trial by end of 2018 on selected routes. Subject to the trial results of Phase 1 and the development of speed limiter with variable speed limiting function to achieve 2-speed limiting function, all FB operators agreed to set the working target for embarking the Phase 2 trial within 2019. All FB operators

15. The Meeting concluded that it would be a medium-term goal for FB operators to develop a comprehensive BMCS with the objective to enable all FB operators to monitor their bus fleet closely and to take appropriate management action against over bus captains' malpractice, such as speeding.

(b) Electronic stability control ("ESC") and retarders for capping the maximum speed of the speed limiter on downhill ("speed limiting retarder")

16. Having deliberated in the previous working group meetings and technical meetings, the Meeting noted that all FB operators agreed that all new buses would be incorporated with ESC and speed limiting retarder. All FB operators also agreed to retrofit ESC and speed limiting retarder on the existing buses[1], subject to the satisfactory development results of these devices for retro-fitting on the existing bus models, the retrofitting proposal from the bus manufacturers and All FB operators

[1] Existing buses refer to Euro V buses of ADL Enviro 500 manufactured from 2013, Volvo B9TL and MAN A95 buses and Euro VI.

Action

the commercial viability. The Meeting hence recommended that all FB operators should liaise with and commission the bus manufacturers on the development of these devices with the working target to commence the trials/tests of the devices and retrofitting work in about 12 to 18 months, that is within 2019.

(c) Collision alert/ lane keeping devices

17. [redacted] The Meeting also noted that these five buses would also be deployed to operate revenue trips. [redacted]

18. The TD pointed out that there were similar devices available in the market. [redacted]

(d) Driving monitoring device

19. The Meeting noted that KMB/LW had already embarked a trial on driving monitoring device on a couple of buses. The TD requested KMB/LW to share the results of the trial with the TD and other FB operators. [redacted]

(e) Speed display unit ("SDU") in passenger compartment

20. In order to provide visual display of the current speed of FBs to the passengers on-board, the proposal for installation SDUs in passenger compartments of FBs was explored.

21. The TD advised all FB operators on the analysis of the public light buses' ("PLBs") involvement rates upon the launch of the speed display device ("SDD") installation since 2002. The statistics analysis was based on limited available information as the installation date of the SDD in each PLB was not available as there was no legal requirement for PLB operators to report this to the TD. Limited by the availability of data, and considering the possibility that other factors might have an effect on the number of accidents involving PLBs during the period, conducting any statistical analysis for

Action

drawing a conclusive statement merely on the effect of the installation of SDDs on the accident rate was not conceivable.

22. [redacted] KMB/LW also expressed that the SDU would intensify the conflict between bus captains and passengers and that there was no correlation between SDU and accident in the case of PLBs with reference to the information orally provided by the TD in the Meeting. Therefore, all FB operators had reservations to install SDU on FBs.

23. After some discussions, the Meeting generally concluded that the SDU might not be conducive to safety if passengers were playing an active monitoring role. The FB operators should focus on the development and trials of the BMCS instead, which was a more effective total solution for monitoring the bus operation, managing and control their fleet as well as speeding and other driving mis-behavior of bus captains.

24. The TD, however, added that, as the Government, it was also necessary for the TD to gather views of the driver unions and the public/passengers as a whole. The TD, in conjunction with the bus companies, should examine how best we could deliver the above views to the public.

The TD and all FB operators

(iii) Installation of seat belts on all seats other than exposed seats

25. The Meeting noted that it was technically feasible to supply all new buses with seat belts for all passenger seats conforming to relevant international standards and all FB operators committed that all new FBs would be incorporated with seat belts on all passengers seats.

26. As for existing buses[1], the Meeting noted that retrofitting seat belts on all passenger seats of the upper deck of some existing double-deck bus models should be feasible. KMB/LW advised that they would retrofit seat belts on all passenger seats of the upper deck or deploy buses with seat belts on all passenger seats on routes which

Action

serve long haul passengers or are operated on expressways with limited boarding or alighting activities at the enroute stops.

[Post-meeting note : KMB/LW advised that there would be about 400 new buses with seat belts on all passengers seats by mid-2019. KMB/LW would deploy these buses to the required routes. Retrofitting seat belts to existing buses would depend on the actual situation/ requirement at that moment.]

27. In the light of KMB/LW's initiative, the Meeting had discussed and come to the views that having regard to the technical feasibility in retrofitting seat belts on existing buses; operation of FBs in Hong Kong which were mostly deployed on urban routes with standing passengers; and the costs and downtime incurred to retrofit seat belts on all existing buses, as well as overseas experiences, that there were insufficient justifications to make it a mandatory requirement for all buses to be fitted with seat belts on all passenger seats. Nevertheless, Members reckoned that as in the case of exposed seats and in bus compartment with no standees allowed, seat belts might give extra protection to seated passengers to prevent passengers from falling out from these seats.

28. [redacted]

29. [redacted]

30. The Meeting agreed that it was worth exploring in more details in conjunction with the major bus manufacturers to ascertain the technical feasibility of retrofitting seat belts on the upper deck of different bus models, the operational and capacity constraints, and the timetable for completing the retrofitting works on all suitable buses for

	Action
deployment on suitable routes, as well as the commercial viability	
31. In this connection, the TD requested all FB operators to estimate the number of long-haul bus routes operating via expressway with relatively fewer bus stops and the corresponding number of buses involved, and provide the information to the TD for reference the soonest possible.	All FB operators
[redacted]	
32. The TD would revise the summary table reflecting the discussions and provide to all FB operators for further comments.	
[Post-meeting notes: The TD revised the summary table and sent to all FB operators twice for further comments on 22 June and 5 July 2018. The summary table with consolidation with FB operators' comments (**Annex C**) was emailed to all FB operators on 9 July 2018 for record.]	
(C) ISO 39001 - Road Traffic Safety Management System	
33. The Meeting noted that each bus operator had its own system in safety management. [redacted]	
34. The Meeting noted that there was an international management standard for Road Traffic Safety, i.e. ISO 39001 - Road Traffic Safety Management System that was launched in 2014. While all FB operators advised that they had developed their own management systems which enabled them to manage FB operations in a safe manner, all FB operators were request to make comparison between their own management system and the ISO 39001 or other similar management systems in the market, and to report findings, including but not limited to, organization and details of the existing safety management systems in their respective companies with improvement measures, if any, by end of October 2018.	All FB operators
(D) Preparation of a report for the Working Group	
35. The Convener thanked the members' valuable contributions	

Action

to the discussions at working group meetings and technical meetings, and advised the members that the TD would start preparing the report with recommendations based on the information deliberated at the meetings. All FB operators were invited to note that the Working Group recommendations would be submitted to Legislative Council Panel on Transport and the information could be accessed by the members of public.

(E) Any other business

36. There being no other business, the meeting adjourned at 4.30 p.m.

Practice Note on Training Framework for Franchised Bus Captains

Introduction

This paper sets out the "Practice Note on Training Framework for Franchised Bus Captains" (the "Practice Note") to be promulgated for reference and adoption by the franchised bus operators.

Objectives of the Practice Note

2. With a view to enhancing safety delivery in the franchised bus services, the Transport Department ("TD") has, after reviewing the franchised bus operators' training arrangements for bus captains, sought to lay down a set of industry-wide standard practices in respect of the franchised bus captains' **training framework**, including the basic requirements on modules, duration and weighting, so as to provide a common basis for internal monitoring and audit within individual franchised bus companies.

3. The objective of the Practice Note is to align the training arrangements of different franchised bus operators and to lay down a common framework of the training system for their bus captains. Given that different bus companies have different bus networks operating in different operating environment, it is necessary for them to make specific training programmes in order to suit their respective operational needs on the basis of the common standard as set out in this Practice Note. The TD will review the Practice Note with the franchised bus operators on a regular basis, in order to strive for the best standard practices to cater for the ever-changing operating needs and public expectations on safe franchised bus services.

The Practice Note

(A) Structure of training system

4. The structure of the training system for franchised bus captains should comprise at least the following :-

Types of Courses	Minimum Requirement	Target Trainees [2]	Timing
(a) Induction course (i) Classroom training	1 day (Full-time) & 0.5 day (Part-time)	New recruits	Before providing passenger service
(ii) Behind-the-wheel road training	Full–time bus captains 20 hours[1] Part-time bus captains 16 hours[1]		
(b) Refresher course	0.5 day	In-service bus captains	Once in every three years
(c) New bus route training	Behind-the-wheel road training	In-service bus captains	Before the bus captain is assigned to provide passenger service
(d) New bus type (model with new driving features) training	Behind-the-wheel road training	In-service bus captains	Before the bus captain is assigned to provide passenger service
(e) Remedial training	1 day	In-service bus captains with improper driving behavior or attitude	As and when required

Notes :

(1) After the behind-the-wheel road training, the bus captains will be subject to internal driving assessment. The bus captains must pass the internal driving assessment before they are deployed on revenue trips.

(2) Applicable to full-time and part-time bus captains.

(B) Modules for Induction and Refresher Courses

5. The Modules and the weightings recommended for induction course and refresher course are set as follows :-

Modules	Weightings in induction course (Classroom and Behind-the-wheel Road Training[3])	Weightings in refresher course (Classroom)
(a) Safe driving and road safety	70%-85%	60-75%
(b) Cognition of on-vehicle device/facilities		
(c) Handling of incident/emergency	5%-10%	20-30%
(d) Customer service & emotional management	10%-20%	
(e) Knowledge of company rules, traffic regulations, occupational health and safety		5%-10%

Notes :

(3) While behind-the-wheel road training provided during induction course enables the bus captains to be familiarized with bus types/models of the company's bus fleet and the routings of bus services, it should also cover the contents of the modules to be delivered in a practical way with on-the-ground experiences.

(C) Remedial Training

6. Remedial training should be provided to those bus captains in the following categories :-

(a) with improper driving behaviour repeatedly detected from black box data or other sources like plain-cloth inspections;
(b) having involved in serious traffic accidents;
(c) having persistently committed the same traffic offence; or
(d) having reached a certain driving offence points.

(D) Internal Monitoring and Audit Mechanism by Franchised Bus Operators

7. To ensure that adequate and appropriate trainings are provided to the bus captains, the franchised bus operators should set up an internal monitoring and audit mechanism in order to achieve the following objectives :

(a) To monitor the compliance of this Practice Note;

(b) To develop key indicators on the effectiveness of the training system provided to bus captains (e.g. accident involvement rates, complaints on driving skills and performance and etc.); and

(c) In the light of the findings of (b), to review and determine appropriate actions or measures.

8. The management of franchised bus operators should submit regular periodic reports (e.g. at least half-yearly) to their respective Boards of Directors in respect of the findings on matters in para. 7 above.

Transport Department
June 2018

Discussion on the Feasibility and Desirability of Installing Seat Belts on All Passenger Seats and Other On-vehicle Safety Devices on Franchised Buses (as at 21 June 2018)

Proposal	WG's Recommendations	Target Timeframe
(1) Bus monitoring & control system (BMCS) [An integral system with positioning function, operational information monitoring function, variable speed limiting function with geo-fencing technology] ● Phase 1 BMCS with positioning function, operational information monitoring function and geo-fencing technology for fleet management ● Phase 2 BMCS with full functions	● KMB/LW were conducting trial with a bus manufacturer to test the speed limiting by GPS ● All FB operators would develop this technology for their bus fleet monitoring & speed control system ● Phase 1 trial will include 2 routes.	● Phase 1 trial to be embarked by end 2018 ● Phase 2 trial to be embarked within 2019
(2) Electronic stability control ("ESC") and Roll stability control ("RSC")	New Buses ● All FB operators agreed that all new buses will be incorporated with ESC Existing Buses[1] ● Subject to the development result of the device for the existing bus models and the retrofitting proposal from bus manufacturers, all FB operators will retrofit such installation on all buses	New Buses ● KMB/LW : with buses delivery from Jan 2019 ● [redacted] ● Existing Buses[1] ● To complete the retrofitting within [x] years

[1] Existing Buses refer to Euro V buses of ADL Enviro 500 manufactured from 2013, Volvo B9TL and MAN A95 buses and Euro VI

Proposal	WG's Recommendations	Target Timeframe
(3) Capping the maximum speed at 70 km/hour on downhill by the speed limiter	<u>New Buses</u> • FB operators agreed that all new buses will be incorporated with this device. <u>Existing Buses[1]</u> • Subject to the development result of the device for the existing bus models and the retrofitting proposal from bus manufacturers, all FB operators will retrofit such installation.	<u>New Buses</u> • KMB/LW : with buses delivery from Jan 2019 • [redacted] • <u>Existing Buses[1]</u> • To complete the retrofitting within [x] years
(4) Collision prevention and lane keeping devices	• [redacted] • KMB/LW will explore similar devices from different suppliers and embark on a trial.	• To embark the trial by end 2018.
(5) Driver monitoring device	• KMB/LW will embark a trial on this device. • [redacted]	• To embark the trial in late June 2018. • [redacted]
(6) Speed display unit ("SDU") in passenger	Subject to consultation, all FB operators are	• To complete the installation within [x] years

Proposal	WG's Recommendations	Target Timeframe
compartment	required to install the SDU for all buses	
(7) Seat belts for all passenger seats	<u>New Buses</u> All FB operators agreed that all new buses will be incorporated with seat belts. <u>Existing Buses</u>[1] KMB/LW will retrofit seat belts phase by phase for specific routes [redacted]	<u>New Buses</u> • KMB/LW : with buses delivery from Jul 2018 • [redacted] • [redacted] <u>Existing Buses</u>[1]

Recommendations of
Installing Seat Belts on All Passenger Seats and Other On-vehicle Safety Devices and Technologies on Franchised Buses
(as at 9 July 2018)

Proposed on-vehicle safety devices/technologies	WG's Recommendations	Target Timeframe
(1) Bus monitoring & control system (BMCS) An integral system with positioning function, operational information monitoring function, variable speed limiting function with geo-fencing technology ● Phase 1 BMCS with positioning function, operational information (such as vehicle speed, brake status, deceleration, etc.) monitoring function and geo-fencing technology for fleet management to achieve detection of overspeeding and provide real time alert to the bus captains ● Phase 2 BMCS to utilize the functions developed in Phase 1 together with the 2-speed active speed limiting function being developed by bus manufacturers to achieve automatic speed limiting functions (50km/hr or 70km/hr depending on the speed limit of road section)	● KMB/LW were conducting trial with a bus manufacturer to test the speed limiting by GPS ● All FB operators would develop and trial the application of GPS technology for their bus fleet monitoring & speed control system ● Phase 1 trial on the application of GPS will include at least 2 routes for each FB operator.	● Phase 1 trial to be embarked by end 2018 ● Phase 2 trial to be embarked within 2019, subject to the satisfactory trial result of Phase 1 and the satisfactory development of device with variable speed limiting function to achieve 2-speed limiting functions.
(2) Electronic stability control ("ESC") and Roll stability control ("RSC")	New Buses ● All FB operators agreed that all new double-deck buses will be incorporated with ESC	New Buses ● KMB/LW : with buses delivered from Jan 2019 ● [redacted]

Proposed on-vehicle safety devices/technologies	WG's Recommendations	Target Timeframe
	Existing Buses[1] • Subject to the satisfactory development result and the commercial viability of the device for the existing double-deck bus models and the retrofitting proposal from bus manufacturers, all FB operators will retrofit such installation on all double-deck buses	• [redacted]
(3) Capping the maximum speed at 70 km/hour on downhill by the speed limiter	New Buses • FB operators agreed that all new buses will be incorporated with this device. Existing Buses[1] • Subject to the satisfactory development result and the commercial viability of the device for the existing bus models and the retrofitting proposal from bus manufacturers, all FB operators will retrofit such installation.	New Buses • KMB/LW : with buses delivered from Jan 2019 • [redacted] •
(4) Collision alert/ lane keeping devices	• [redacted]	• To embark the trial by end 2018.

[1] Existing Buses refer to Euro V buses of ADL Enviro 500 manufactured from 2013, Volvo B9TL and MAN A95 buses and Euro VI buses

Proposed on-vehicle safety devices/technologies	WG's Recommendations	Target Timeframe
	• KMB/LW and NLB will explore similar devices from different suppliers and embark on a trial.	
(5) Driver monitoring device	• KMB/LW will embark a trial on this device on 4 buses. • [redacted]	• To embark the trial in Q3 2018. • [redacted]
(6) Speed display unit ("SDU") in passenger compartment	Though all FB operators did not agree to install SDU, TD requested all FB operators to consider installing the SDU for all buses and to consult with the unions.	
(7) Seat belts for all passenger seats	<u>New Buses</u> • All FB operators agreed that all new buses will be incorporated with seat belts. <u>Existing Buses[1]</u> • KMB/LW will retrofit seat belts on upper deck passenger seats only or deploy buses with seat belts on all passenger seats on routes which serve long haul passengers or are operated on expressways with limited boarding or	<u>New Buses</u> • KMB/LW : with buses delivery from Jul 2018 • [redacted] <u>Existing Buses[1]</u> • All FB operators will provide the estimated no. of buses involved, cost implication and timeframe for retrofit

Proposed on-vehicle safety devices/technologies	WG's Recommendations	Target Timeframe
	alighting activities at the enroute stops. • [redacted] • All bus operators will provide the estimated no. of buses involved in bus routes serving long haul passengers, or operating on expressways with limited boarding or alighting activities at the enroute stops, cost implication and timeframe for the retrofitting seat belts on all upper deck seats.	

[Blank Page]

Working Group on
Enhancement of Safety of Franchised Buses

Notes of 3rd Meeting held on 21 June 2018 at 2.00 p.m.
at Room 4110A, 41/F, Immigration Tower, Wan Chai

Present:

Convener		
TD	Ms. Macella LEE	Deputy Commissioner for Transport/Transport Services and Management
Members – TD		
ALB	Mr. YK CHAN	Assistant Commissioner for Transport /Administration and Licensing
	Mr. William SHUM	Chief Electrical and Mechanical Engineer/Vehicle Safety and Standard
	Mr. Jimmy YEUNG	Senior Engineer/Vehicle Safety
	Mr. Danny CHAN	Engineer/Bus Safety
BRB	Mr. Patrick WONG	Assistant Commissioner for Transport /Bus and Railway
	Ms. Amy LEE	Chief Transport Officer/Special Duties
RSSD	Mr. Tony YAU	Chief Engineer/Road Safety and Standards
	Mr. Gary WONG	Senior Engineer/Road Safety 2
Members – Bus Operators		
KMB/LW	Mr. Godwin SO	General Manager, Corporate Planning & Business Development
	Mr. LEUNG Kin Wang	Operations Director
	Mr. James WONG	Head of Training and Quality Assurance Department
CTB/NWFB	Mr. William CHUNG	Head of Operations
	Mr. Paul LI	Head of Engineering
	Mr. Vincent FUNG	Senior Operations Manager

NLB	Mr. Timothy WONG	Director
	Mr. Patrick YEUNG	Head of Service and Training
	Mr. Billy WONG	Assistant Manager, Operation Support

Note-taker

TD	Miss Natalie YU	Senior Transport Officer/Railway 6

Action

DISCUSSION

(A) Confirmation of notes of meeting

The Convener advised that the revised draft notes of the last meeting had been circulated to Members incorporating comments from Members. As Members did not have further amendments, the Meeting confirmed the notes of the last meeting.

(B) Progress of the discussions of the following items discussed in respective technical meetings and proposed way forward

(i) Training arrangements for bus captains

2. A set of guidelines (which was subsequently turned into a practice note) on training arrangements for the bus captains were fully deliberated in the previous working group meetings and agreed at the technical group meeting on 4 June. Having regard to the large number of bus captains of KMB/LW, there would be a need to avoid bunching in bus captains for refresher training, the proposed refresher course would be implemented by phases with full implementation in three-year's time in accordance with the requirement. The Meeting agreed that to start implementing their training with reference to the practice note by phases starting from October 2018. The TD also reminded that, as agreed at the last technical meeting, all franchised bus ("FB") operators should submit their internal monitoring and audit mechanism by end of June or early July 2018.

All FB operators

(Post-meeting note : The TD circulated the agreed Practice Note on Training Framework for Franchised Bus Captains at **Annex A** to all FB operator for implementation on 29 June 2018.)

3. In addition to the training courses, the TD explored with all FB operators on any other alternative training measures with an aim to

	Action
enhance bus captains' training on driving such as driving simulators internet training, and contracting out bus captains' training.	
4. Upon TD's enquiry on the application of driving simulator as part of their training, CTB/NWFB said that they learnt that simulator was deployed for driving training in Singapore. KMB/LW replied that they had deployed driving simulators from 2007 to 2015, and opinion from their senior driving instructors that simulator training was not an essential element and could be replaced by more on-road training, and most of the users of their simulators reflected that they felt dizzy after using the driving simulator. Taking this opinion into the account, KMB/LW indicated that they have conducted more on-road training instead of deploying driving simulator from 2015.	
5. Provided that the cost for virtual reality simulator was relatively low and it also allowed higher flexibility compared to the traditional simulator, NLB said that they planned to explore the use of virtual reality simulator for bus captains to enhance their ability to handle emergency situations that might be encountered during bus operations. The TD welcomed the initiative and suggested other FB operators to explore the use of virtual reality simulator as appropriate.	All FB operators
6. As for internet training, KMB/LW currently incorporated internet training as a part of their induction course. CTB/NWFB said that they uploaded training videos onto the intranet while NLB said that they disseminated messages to bus captains directly by use of instant message app. The TD encouraged all FB operators to make use of intranet as a training channel to deliver safety awareness messages to bus captains.	All FB operators
7. The Meeting noted that CTB/NWFB and KMB/LW delivered their bus captain training courses through in-house instructors, and had no plan to outsource their trainings to other institutions. That said, they would continue to encourage their bus captains to join the road safety seminars organized by the TD. NLB supplemented that they had once engaged an external organization, viz. Institute of Advanced Motorists, for delivering safety talks/seminars to their bus captains, but such engagement had stopped as the company had been developing their own in-house training arrangement.	
8. The Meeting also noted that the FB operators had an on-going practice to put up notices and posters in order to keep up bus captains' safety awareness. All FB operators were encouraged to continue the practice to enhance safety awareness of the bus captains.	All FB operators

Action

(ii) Installation of in-vehicle safety device

9. With the help of a summary table at **Annex B**, the meeting discussed the feasibility and desirability of installing seat belts on all passenger seats and other in-vehicle safety devices on FBs was tabled to facilitate members' discussion. The main points raised at the meeting were set out below.

(a) General

10. The Meeting had discussed and reached an agreed views that that in order to enable the FB operators to step up their management and control of their bus fleet, and reduce the potential risks arising from human errors or effect of careless / dangerous driving behaviour, any new on-vehicle safety technology which can assist the FB operators and drivers to enhance safety should be actively explored. Generally, the FB operators agreed to explore sources of supply of the appropriate safety devices/technology and launch trials with a view to establish the technical and operational feasibility of such technology. Without appropriate trials, it was difficult to prove to the travelling public the technical feasibility or infeasibility in adopting the new technology. The Meeting well noted that extended application of certain technologies/devices to part of whole bus fleet had to be very carefully studied having regard to their technical and operational feasibility, cost-effectiveness, as well as commercial viability.

(b) Bus monitoring and control system ("BMCS")

11. In view of the latest technology development in bus fleet management system and black box with functions on real time fleet supervision, estimated time of bus arrival or departure, bus speed recording, GPS location recording, etc., the TD proposed that a BMCS, an integral system with positioning function, operational information monitoring function, variable speed limiting function with geo-fencing technology, should be considered, developed or deployed by all FB operators, and suggested all FB operators to carry out trials on the BMCS by phases.

12. Upon the FB operators' enquiry, the TD clarified that Phase 1 trial aimed to conduct trial on BMCS with positioning function, operational information (such as vehicle speed, brake status, deceleration, etc.) monitoring function and geo-fencing technology for fleet management to achieve detection of over speeding and provide real time alert to the bus captains. Subject to the successful

	Action
development of the Phase 1 trial and successful development of speed limiter with variable speed limiting function, Phase 2 trial would be conducted with the BMCS developed in Phase 1 incorporated with additional application of speed limiter of enhanced design being developed by bus manufacturers for compliance with respective speed limits of different road sections.	
13. CTB/NWFB raised concerns on the legal implication when the automatic speed limiting function involving the application of braking system or other speed reduction device. The TD noted and replied that reference would be made to other international standards and bus manufacturers' proposals to approve the relevant device. The TD added that without knowing how the device would work during trials with details, it was difficult to evaluate the implications, and hence the TD stressed that the purpose of conducting trials was to find out the technical feasibility and implications.	
14. After deliberation, all FB operators were committed to embark Phase 1 trial by end of 2018 on selected routes. Subject to the trial results of Phase 1 and the development of speed limiter with variable speed limiting function to achieve 2-speed limiting function, all FB operators agreed to set the working target for embarking the Phase 2 trial within 2019.	All FB operators
15. The Meeting concluded that it would be a medium-term goal for FB operators to develop a comprehensive BMCS with the objective to enable all FB operators to monitor their bus fleet closely and to take appropriate management action against over bus captains' malpractice, such as speeding.	
(b) Electronic stability control ("ESC") and retarders for capping the maximum speed of the speed limiter on downhill ("speed limiting retarder")	
16. Having deliberated in the previous working group meetings and technical meetings, the Meeting noted that all FB operators agreed that all new buses would be incorporated with ESC and speed limiting retarder. All FB operators also agreed to retrofit ESC and speed limiting retarder on the existing buses[1], subject to the satisfactory development results of these devices for retro-fitting on the existing bus models, the retrofitting proposal from the bus manufacturers and	All FB operators

[1] Existing buses refer to Euro V buses of ADL Enviro 500 manufactured from 2013, Volvo B9TL and MAN A95 buses and Euro VI.

	Action
the commercial viability. The Meeting hence recommended that all FB operators should liaise with and commission the bus manufacturers on the development of these devices with the working target to commence the trials/tests of the devices and retrofitting work in about 12 to 18 months, that is within 2019.	
(c) Collision alert/ lane keeping devices	
17. With regard to the installation of collision alert/ lane keeping devices, CTB/NWFB said that they would trial a device of this function in five buses for training and assessment purposes. The Meeting also noted that these five buses would also be deployed to operate revenue trips. The TD requested CTB/NWFB to share with the TD and other FB operators on the results of the trial in due course.	CTB/NWFB
18. The TD pointed out that there were similar devices available in the market. KMB/LW and NLB agreed to explore similar devices from different suppliers and embark a trial, if feasible.	KMB/LW & NLB
(d) Driving monitoring device	
19. The Meeting noted that KMB/LW had already embarked a trial on driving monitoring device on a couple of buses. The TD requested KMB/LW to share the results of the trial with the TD and other FB operators. CTB/NWFB and NLB were also requested to explore similar devices from different suppliers and embark a trial, if feasible.	KMB/LW CTB/NWFB & NLB
(e) Speed display unit ("SDU") in passenger compartment	
20. In order to provide visual display of the current speed of FBs to the passengers on-board, the proposal for installation SDUs in passenger compartments of FBs was explored.	
21. The TD advised all FB operators on the analysis of the public light buses' ("PLBs") involvement rates upon the launch of the speed display device ("SDD") installation since 2002. The statistics analysis was based on limited available information as the installation date of the SDD in each PLB was not available as there was no legal requirement for PLB operators to report this to the TD. Limited by the availability of data, and considering the possibility that other factors might have an effect on the number of accidents involving PLBs during the period, conducting any statistical analysis for	

Action

drawing a conclusive statement merely on the effect of the installation of SDDs on the accident rate was not conceivable.

22. CTB/NWFB and NLB expressed grave concern on installation of SDU with the consideration that it might generate conflicts between bus captains and passengers. NLB also considered that FBs, different from PLBs, had already been installed with other devices monitoring bus captains' driving behaviour. NLB also expressed that it would be a nuisance and complicate procedure to handle a complaint of bus captain's driving performance when passengers took a photo on the SDU showing an improper vehicle speed. KMB/LW also expressed that the SDU would intensify the conflict between bus captains and passengers and that there was no correlation between SDU and accident in the case of PLBs with reference to the information orally provided by the TD in the Meeting. Therefore, all FB operators had reservations to install SDU on FBs.

23. After some discussions, the Meeting generally concluded that the SDU might not be conducive to safety if passengers were playing an active monitoring role. The FB operators should focus on the development and trials of the BMCS instead, which was a more effective total solution for monitoring the bus operation, managing and control their fleet as well as speeding and other driving mis-behavior of bus captains.

24. The TD, however, added that, as the Government, it was also necessary for the TD to gather views of the driver unions and the public/passengers as a whole. The TD, in conjunction with the bus companies, should examine how best we could deliver the above views to the public.

The TD and all FB operators

(iii) Installation of seat belts on all seats other than exposed seats

25. The Meeting noted that it was technically feasible to supply all new buses with seat belts for all passenger seats conforming to relevant international standards and all FB operators committed that all new FBs would be incorporated with seat belts on all passengers seats.

26. As for existing buses[1], the Meeting noted that retrofitting seat belts on all passenger seats of the upper deck of some existing double-deck bus models should be feasible. KMB/LW advised that they would retrofit seat belts on all passenger seats of the upper deck or deploy buses with seat belts on all passenger seats on routes which

Action

serve long haul passengers or are operated on expressways with limited boarding or alighting activities at the enroute stops.

[Post-meeting note : KMB/LW advised that there would be about 400 new buses with seat belts on all passengers seats by mid-2019. KMB/LW would deploy these buses to the required routes. Retrofitting seat belts to existing buses would depend on the actual situation/ requirement at that moment.]

27. In the light of KMB/LW's initiative, the Meeting had discussed and come to the views that having regard to the technical feasibility in retrofitting seat belts on existing buses; operation of FBs in Hong Kong which were mostly deployed on urban routes with standing passengers; and the costs and downtime incurred to retrofit seat belts on all existing buses, as well as overseas experiences, that there were insufficient justifications to make it a mandatory requirement for all buses to be fitted with seat belts on all passenger seats. Nevertheless, Members reckoned that as in the case of exposed seats and in bus compartment with no standees allowed, seat belts might give extra protection to seated passengers to prevent passengers from falling out from these seats.

28. In this regard, CTB/NWFB was requested to consider retrofitting seat belts on all passenger seats on the upper deck for the buses operating selected bus routes for long haul passengers or operating on expressways with limited boarding and alighting activities along the routes. CTB/NWFB indicated that it would be difficult for their companies to allocate their buses to solely operate specific routes as their buses would serve a number of routes in a day under their existing operations. In addition, CTB/NWFB observed that very few passengers would make use of seat belts, it would not be financially viable to retrofit existing buses with seat belts on all passenger seats. CTB/NWFB requested the Government to fund the retrofit of seat belts to existing buses if that was what the government wanted.

29. NLB said they had approximate 35 double deckers and would consider retrofitting seat belts, subject to the technical and operational feasibility and commercial viability.

30. The Meeting agreed that it was worth exploring in more details in conjunction with the major bus manufacturers to ascertain the technical feasibility of retrofitting seat belts on the upper deck of different bus models, the operational and capacity constraints, and the timetable for completing the retrofitting works on all suitable buses for

	Action
deployment on suitable routes, as well as the commercial viability	
31. In this connection, the TD requested all FB operators to estimate the number of long-haul bus routes operating via expressway with relatively fewer bus stops and the corresponding number of buses involved, and provide the information to the TD for reference the soonest possible.	All FB operators
(Post-meeting notes : CTB/NWFB and NLB provided the information on 26 June, while KMB provided the estimates on 5 July 2018.)	
32. The TD would revise the summary table reflecting the discussions and provide to all FB operators for further comments.	
[Post-meeting notes: The TD revised the summary table and sent to all FB operators twice for further comments on 22 June and 5 July 2018. The summary table with consolidation with FB operators' comments (**Annex C**) was emailed to all FB operators on 9 July 2018 for record.]	
(C) ISO 39001 - Road Traffic Safety Management System	
33. The Meeting noted that each bus operator had its own system in safety management. Upon the TD's enquiry to all FB operators on adaptation of any management system under international standards, CTB/NWFB replied that they did not obtain any management system accreditations under international standards. KMB/LW and NLB said that they obtained accreditations of ISO 9001, ISO 14001 and OHSAS 18001.	
34. The Meeting noted that there was an international management standard for Road Traffic Safety, i.e. ISO 39001 - Road Traffic Safety Management System that was launched in 2014. While all FB operators advised that they had developed their own management systems which enabled them to manage FB operations in a safe manner, all FB operators were request to make comparison between their own management system and the ISO 39001 or other similar management systems in the market, and to report findings, including but not limited to, organization and details of the existing safety management systems in their respective companies with improvement measures, if any, by end of October 2018.	All FB operators
(D) Preparation of a report for the Working Group	
35. The Convener thanked the members' valuable contributions	

Action

to the discussions at working group meetings and technical meetings, and advised the members that the TD would start preparing the report with recommendations based on the information deliberated at the meetings. All FB operators were invited to note that the Working Group recommendations would be submitted to Legislative Council Panel on Transport and the information could be accessed by the members of public.

(E) Any other business

36. There being no other business, the meeting adjourned at 4.30 p.m.

Practice Note on Training Framework for Franchised Bus Captains

Introduction

This paper sets out the "Practice Note on Training Framework for Franchised Bus Captains" (the "Practice Note") to be promulgated for reference and adoption by the franchised bus operators.

Objectives of the Practice Note

2. With a view to enhancing safety delivery in the franchised bus services, the Transport Department ("TD") has, after reviewing the franchised bus operators' training arrangements for bus captains, sought to lay down a set of industry-wide standard practices in respect of the franchised bus captains' **training framework**, including the basic requirements on modules, duration and weighting, so as to provide a common basis for internal monitoring and audit within individual franchised bus companies.

3. The objective of the Practice Note is to align the training arrangements of different franchised bus operators and to lay down a common framework of the training system for their bus captains. Given that different bus companies have different bus networks operating in different operating environment, it is necessary for them to make specific training programmes in order to suit their respective operational needs on the basis of the common standard as set out in this Practice Note. The TD will review the Practice Note with the franchised bus operators on a regular basis, in order to strive for the best standard practices to cater for the ever-changing operating needs and public expectations on safe franchised bus services.

The Practice Note

(A) Structure of training system

4. The structure of the training system for franchised bus captains should comprise at least the following :-

Types of Courses	Minimum Requirement	Target Trainees [2]	Timing
(a) Induction course (i) Classroom training	1 day (Full-time) & 0.5 day (Part-time)	New recruits	Before providing passenger service
(ii) Behind-the-wheel road training	Full–time bus captains 20 hours[1] Part-time bus captains 16 hours[1]		
(b) Refresher course	0.5 day	In-service bus captains	Once in every three years
(c) New bus route training	Behind-the-wheel road training	In-service bus captains	Before the bus captain is assigned to provide passenger service
(d) New bus type (model with new driving features) training	Behind-the-wheel road training	In-service bus captains	Before the bus captain is assigned to provide passenger service
(e) Remedial training	1 day	In-service bus captains with improper driving behavior or attitude	As and when required

Notes :

(1) After the behind-the-wheel road training, the bus captains will be subject to internal driving assessment. The bus captains must pass the internal driving assessment before they are deployed on revenue trips.

(2) Applicable to full-time and part-time bus captains.

(B) Modules for Induction and Refresher Courses

5. The Modules and the weightings recommended for induction course and refresher course are set as follows :-

Modules	Weightings in induction course (Classroom and Behind-the-wheel Road Training[3])	Weightings in refresher course (Classroom)
(a) Safe driving and road safety	70%-85%	60-75%
(b) Cognition of on-vehicle device/facilities		
(c) Handling of incident/emergency	5%-10%	20-30%
(d) Customer service & emotional management	10%-20%	
(e) Knowledge of company rules, traffic regulations, occupational health and safety		5%-10%

Notes :

(3) While behind-the-wheel road training provided during induction course enables the bus captains to be familiarized with bus types/models of the company's bus fleet and the routings of bus services, it should also cover the contents of the modules to be delivered in a practical way with on-the-ground experiences.

(C) Remedial Training

6. Remedial training should be provided to those bus captains in the following categories :-

(a) with improper driving behaviour repeatedly detected from black box data or other sources like plain-cloth inspections;
(b) having involved in serious traffic accidents;
(c) having persistently committed the same traffic offence; or
(d) having reached a certain driving offence points.

(D) Internal Monitoring and Audit Mechanism by Franchised Bus Operators

7. To ensure that adequate and appropriate trainings are provided to the bus captains, the franchised bus operators should set up an internal monitoring and audit mechanism in order to achieve the following objectives :

(a) To monitor the compliance of this Practice Note;

(b) To develop key indicators on the effectiveness of the training system provided to bus captains (e.g. accident involvement rates, complaints on driving skills and performance and etc.); and

(c) In the light of the findings of (b), to review and determine appropriate actions or measures.

8. The management of franchised bus operators should submit regular periodic reports (e.g. at least half-yearly) to their respective Boards of Directors in respect of the findings on matters in para. 7 above.

Transport Department
June 2018

Discussion on the Feasibility and Desirability of Installing Seat Belts on All Passenger Seats and Other On-vehicle Safety Devices on Franchised Buses (as at 21 June 2018)

Proposal	WG's Recommendations	Target Timeframe
(1) Bus monitoring & control system (BMCS) [An integral system with positioning function, operational information monitoring function, variable speed limiting function with geo-fencing technology] ● Phase 1 BMCS with positioning function, operational information monitoring function and geo-fencing technology for fleet management ● Phase 2 BMCS with full functions	● KMB/LW were conducting trial with a bus manufacturer to test the speed limiting by GPS ● All FB operators would develop this technology for their bus fleet monitoring & speed control system ● Phase 1 trial will include 2 routes.	● Phase 1 trial to be embarked by end 2018 ● Phase 2 trial to be embarked within 2019
(2) Electronic stability control ("ESC") and Roll stability control ("RSC")	New Buses ● All FB operators agreed that all new buses will be incorporated with ESC Existing Buses[1] ● Subject to the development result of the device for the existing bus models and the retrofitting proposal from bus manufacturers, all FB operators will retrofit such installation on all buses	New Buses ● KMB/LW : with buses delivery from Jan 2019 ● CTB/NWFB : with buses delivery from Jun 2019 ● NLB : new bus orders to be placed in future Existing Buses[1] ● To complete the retrofitting within [x] years

[1] Existing Buses refer to Euro V buses of ADL Enviro 500 manufactured from 2013, Volvo B9TL and MAN A95 buses and Euro VI

Proposal	WG's Recommendations	Target Timeframe
(3) Capping the maximum speed at 70 km/hour on downhill by the speed limiter	New Buses • FB operators agreed that all new buses will be incorporated with this device. Existing Buses[1] • Subject to the development result of the device for the existing bus models and the retrofitting proposal from bus manufacturers, all FB operators will retrofit such installation.	New Buses • KMB/LW : with buses delivery from Jan 2019 • CTB/NWFB : with buses delivery from Jun 2019 • NLB : new bus orders to be placed in future Existing Buses[1] • To complete the retrofitting within [x] years
(4) Collision prevention and lane keeping devices	• CTB/NWFB will install this device in their training buses for training purpose and will conduct a trial on service trips in due course. • KMB/LW will explore similar devices from different suppliers and embark on a trial.	• To embark the trial by end 2018.
(5) Driver monitoring device	• KMB/LW will embark a trial on this device. • CTB/NWFB will explore similar devices from different suppliers and embark on a trial.	• To embark the trial in late June 2018. • CTB/NWFB to embark the trial by end 2018.
(6) Speed display unit ("SDU") in passenger	Subject to consultation, all FB operators are	• To complete the installation within [x] years

Proposal	WG's Recommendations	Target Timeframe
compartment	required to install the SDU for all buses	
(7) Seat belts for all passenger seats	<u>New Buses</u> All FB operators agreed that all new buses will be incorporated with seat belts. <u>Existing Buses</u>[1] KMB/LW will retrofit seat belts phase by phase for specific routes CTB/NWFB's views ? NLB's views ?	<u>New Buses</u> • KMB/LW : with buses delivery from Jul 2018 • CTB/NWFB : with buses delivery from Jun 2019 • NLB : new bus orders to be placed in future <u>Existing Buses</u>[1]

Recommendations of
Installing Seat Belts on All Passenger Seats and Other On-vehicle Safety Devices and Technologies on Franchised Buses
(as at 9 July 2018)

Proposed on-vehicle safety devices/technologies	WG's Recommendations	Target Timeframe
(1) Bus monitoring & control system (BMCS) An integral system with positioning function, operational information monitoring function, variable speed limiting function with geo-fencing technology ● Phase 1 BMCS with positioning function, operational information (such as vehicle speed, brake status, deceleration, etc.) monitoring function and geo-fencing technology for fleet management to achieve detection of overspeeding and provide real time alert to the bus captains ● Phase 2 BMCS to utilize the functions developed in Phase 1 together with the 2-speed active speed limiting function being developed by bus manufacturers to achieve automatic speed limiting functions (50km/hr or 70km/hr depending on the speed limit of road section)	● KMB/LW were conducting trial with a bus manufacturer to test the speed limiting by GPS ● All FB operators would develop and trial the application of GPS technology for their bus fleet monitoring & speed control system ● Phase 1 trial on the application of GPS will include at least 2 routes for each FB operator.	● Phase 1 trial to be embarked by end 2018 ● Phase 2 trial to be embarked within 2019, subject to the satisfactory trial result of Phase 1 and the satisfactory development of device with variable speed limiting function to achieve 2-speed limiting functions.
(2) Electronic stability control ("ESC") and Roll stability control ("RSC")	New Buses ● All FB operators agreed that all new double-deck buses will be incorporated with ESC	New Buses ● KMB/LW : with buses delivered from Jan 2019 ● CTB/NWFB : with buses delivered from Jun 2019

4981-18

Proposed on-vehicle safety devices/technologies	WG's Recommendations	Target Timeframe
	Existing Buses[1] ● Subject to the satisfactory development result and the commercial viability of the device for the existing double-deck bus models and the retrofitting proposal from bus manufacturers, all FB operators will retrofit such installation on all double-deck buses	● NLB : new bus orders to be placed in future
(3) Capping the maximum speed at 70 km/hour on downhill by the speed limiter	New Buses ● FB operators agreed that all new buses will be incorporated with this device. Existing Buses[1] ● Subject to the satisfactory development result and the commercial viability of the device for the existing bus models and the retrofitting proposal from bus manufacturers, all FB operators will retrofit such installation.	New Buses ● KMB/LW : with buses delivered from Jan 2019 ● CTB/NWFB : with buses delivery from Jun 2019 ● NLB : new bus orders to be placed in future
(4) Collision alert/ lane keeping devices	● CTB/NWFB will install this device in 5 buses for training and assessment purposes. These buses will also be deployed on service trips.	● To embark the trial by end 2018.

[1] Existing Buses refer to Euro V buses of ADL Enviro 500 manufactured from 2013, Volvo B9TL and MAN A95 buses and Euro VI buses

Proposed on-vehicle safety devices/technologies	WG's Recommendations	Target Timeframe
	• KMB/LW and NLB will explore similar devices from different suppliers and embark on a trial.	
(5) Driver monitoring device	• KMB/LW will embark a trial on this device on 4 buses. • CTB/NWFB and NLB will explore similar devices from different suppliers and embark on a trial.	• To embark the trial in Q3 2018. • CTB/NWFB to embark the trial by end 2018.
(6) Speed display unit ("SDU") in passenger compartment	Though all FB operators did not agree to install SDU, TD requested all FB operators to consider installing the SDU for all buses and to consult with the unions.	
(7) Seat belts for all passenger seats	<u>New Buses</u> • All FB operators agreed that all new buses will be incorporated with seat belts. <u>Existing Buses[1]</u> • KMB/LW will retrofit seat belts on upper deck passenger seats only or deploy buses with seat belts on all passenger seats on routes which serve long haul passengers or are operated on expressways with limited boarding or	<u>New Buses</u> • KMB/LW : with buses delivery from Jul 2018 • CTB/NWFB : with buses delivery from Jun 2019 • NLB : new bus orders to be placed in future <u>Existing Buses[1]</u> • All FB operators will provide the estimated no. of buses involved, cost implication and timeframe for retrofit

Proposed on-vehicle safety devices/technologies	WG's Recommendations	Target Timeframe
	alighting activities at the enroute stops. • Though CTB/NWFB did not agree to retrofitting as it is expected that few passengers will make use of the seat belts and it will not be financially viable to retrofit existing buses unless it is funded by the Government, TD is of the view to retrofit the seat belts for bus routes serving long haul passengers, or operating on expressways with limited boarding or alighting activities at the enroute stops where passengers tend to use them. • All bus operators will provide the estimated no. of buses involved in bus routes serving long haul passengers, or operating on expressways with limited boarding or alighting activities at the enroute stops, cost implication and timeframe for the retrofitting seat belts on all upper deck seats.	

13.5

運輸署
Transport Department

本函檔號 Our Ref.: TD BR 76/190-2C

來函檔號 Your Ref.:

電話號碼 Tel No.: 2829 5210

傳真號碼 Tel No.: 2824 0433

URGENT BY FAX

6 August 2018

Distribution

Dear Sir,

Working Group on Enhancement of Safety of Franchised Buses

Thank you for your valuable contributions to the discussions on the measures to further enhance franchised bus safety at the meetings of the Working Group on Enhancement of Safety of Franchised Buses ("Working Group") in the past months.

With reference to our discussions, we have drawn up a practice note together (as attached at the **Annex**) with the main objective to lay down a set of industry-wide standard practices on training for franchised bus captains including the basic requirements on the structure, modules and their relative weightings, so as to provide a common basis for the training framework of franchised bus captains. Noting that different bus companies have different bus networks operating in different operating environment, it is the consensus of the Working Group that flexibility should be allowed for individual franchised bus operators to provide tailor-made training programmes to cater for their respective operational needs on the basis of the common standard as set out in the aforesaid practice note.

We understand you are making any necessary adjustment to your training arrangement following the framework as set out in the practice note, with a view to starting implementing the adjusted training arrangements by phases starting from October 2018. As agreed, you will also set up an internal monitoring and audit mechanism to monitor the compliance of the practice note, to develop key indicators on the effectiveness of training for bus captains, and to review and determine appropriate actions or measures, with regular reports be submitted to your respective

香港灣仔告士打道七號入境事務大樓四十一樓
41st floor Immigration Tower 7 Gloucester Road Wan Chai Hong Kong
電話 Tel (852) 2804 2600 傳真 Fax (852) 2824 0433
網址 Web Site: http://www.td.gov.hk

Boards of Directors in the respect of the findings for monitoring. We would be grateful if you would also send copies of these reports to the Transport Department ("TD"), such that we may also monitor the effectiveness of your internal monitoring and audit mechanism as against the key indicators proposed, and take follow-up actions as necessary. The TD also plans to require all franchised bus operators to report their respective training arrangements in the context of the annual Forward Planning Programme as required in section 12A(1) of the Public Bus Services Ordinance (Cap. 230), starting from 2019-2020, and we can work out the details in due course. We will also further discuss related follow ups on this subject in our coming Working Group meeting planned to be held in September or October 2018 in more details.

Yours sincerely,

(Patrick WONG)
for Commissioner for Transport

Encl.

Distribution

KMB/ LW (Fax No.: 2745 0300)
Mr. Godwin SO General Manager, Corporate Planning & Business Development
Mr. LEUNG Kin Wang Operations Director
Mr. James WONG Head of Training and Quality Assurance Department

CTB/ NWFB (Fax No.: 2104 0543)
Mr. William CHUNG Head of Operations
Mr. Paul LI Head of Engineering
Mr. Vincent FUNG Senior Operations Manager

NLB (Fax No.: 2984 8812)
Mr. Benny CHAN Deputy General Manager
Mr. Patrick YEUNG Head of Service and Training
Mr. Billy WONG Assistant Manager, Operation Support

Annex

Practice Note on Training Framework for Franchised Bus Captains

Introduction

This Practice Note on Training Framework for Franchised Bus Captains (the "Practice Note") lays down a set of industry-wide standard practices in respect of the franchised bus captains' training framework for adoption by the franchised bus operators from October 2018.

Objectives of the Practice Note

2. With a view to enhancing safety delivery in the franchised bus services, the Transport Department ("TD") has, after reviewing the franchised bus operators' training arrangements for bus captains, sought to lay down a set of industry-wide standard practices in respect of the franchised bus captains' training framework, including the basic requirements on modules, duration and weighting, so as to provide a common basis for internal monitoring and audit within individual franchised bus companies.

3. The objective of the Practice Note is to align the training arrangements of different franchised bus operators and to lay down a common framework of the training system for their bus captains. Given that different bus companies have different bus networks operating in different operating environment, it is necessary for them to make specific training programmes in order to suit their respective operational needs on the basis of the common standard as set out in this Practice Note. The TD will review the Practice Note with the franchised bus operators on a regular basis, in order to strive for the best standard practices to cater for the ever-changing operating needs and public expectations on safe franchised bus services.

The Practice Note

(A) Structure of training system

4. The structure of the training system for franchised bus captains should comprise at least the following :-

Types of Courses	Minimum Requirement	Target Trainees (2)	Timing
(a) Induction course (i) Classroom training	1 day (Full-time) & 0.5 day (Part-time)	New recruits	Before providing passenger service
(ii) Behind-the-wheel road training	Full–time bus captains 20 hours(1) Part-time bus captains 16 hours(1)		
(b) Refresher course	0.5 day	In-service bus captains	Once in every three years
(c) New bus route training	Behind-the-wheel road training	In-service bus captains	Before the bus captain is assigned to provide passenger service
(d) New bus type (model with new driving features) training	Behind-the-wheel road training	In-service bus captains	Before the bus captain is assigned to provide passenger service
(e) Remedial training	1 day	In-service bus captains with improper driving behavior or attitude	As and when required

Notes :

(1) After the behind-the-wheel road training, the bus captains will be subject to internal driving assessment. The bus captains must pass the internal driving assessment before they are deployed on revenue trips.

(2) Applicable to full-time and part-time bus captains.

(B) Modules for Induction and Refresher Courses

5. The Modules and the weightings recommended for induction course and refresher course are set as follows :-

Modules	Weightings in induction course (Classroom and Behind-the-wheel Road Training[3])	Weightings in refresher course (Classroom)
(a) Safe driving and road safety	70%-85%	60-75%
(b) Cognition of on-vehicle device/facilities		
(c) Handling of incident/emergency	5%-10%	20-30%
(d) Customer service & emotional management	10%-20%	
(e) Knowledge of company rules, traffic regulations, occupational health and safety		5%-10%

Notes :

(3) While behind-the-wheel road training provided during induction course enables the bus captains to be familiarized with bus types/models of the company's bus fleet and the routings of bus services, it should also cover the contents of the modules to be delivered in a practical way with on-the-ground experiences.

(C) Remedial Training

6. Remedial training should be provided to those bus captains in the following categories :-

(a) with improper driving behaviour repeatedly detected from black box data or other sources like plain-cloth inspections;
(b) having involved in serious traffic accidents;
(c) having persistently committed the same traffic offence; or
(d) having reached a certain driving offence points.

(D) Internal Monitoring and Audit Mechanism by Franchised Bus Operators

7. To ensure that adequate and appropriate trainings are provided to the bus captains, the franchised bus operators should set up an internal monitoring and audit mechanism in order to achieve the following objectives :

(a) To monitor the compliance of this Practice Note;

(b) To develop key indicators on the effectiveness of the training system provided to bus captains (e.g. accident involvement rates, complaints on driving skills and performance and etc.); and

(c) In the light of the findings of (b), to review and determine appropriate actions or measures.

8. The management of franchised bus operators should submit regular periodic reports (at least half-yearly) to their respective Boards of Directors in respect of the findings on matters in para. 7 above.

Transport Department
August 2018

九龍巴士（一九三三）有限公司
THE KOWLOON MOTOR BUS CO. (1933) LTD.

Our Ref: CPBD/012L/TD/KMB/18 18 July 2018

Commissioner for Transport
Transport Department
41st Floor
Immigration Tower
7 Gloucester Road
Wan Chai
Hong Kong

Attn: Ms Macella LEE

[By Email and By Fax: 2824 0433]

Dear Commissioner,

Working Group of Enhancement of Franchised Bus Safety

The Working Group of Enhancement of Franchised Bus Safety (the "Working Group") has been an effective platform for discussing bus safety related issues among all franchised bus operators and your Department since its introduction. The third meeting of the Working Group was held on 21 June 2018.

In the meeting, it was discussed that a set of guidelines on training arrangements for the bus captains were formulated in the previous group meetings. In the post-meeting note of the Notes of Meeting, it was mentioned that the set of guidelines was turned into Practice Note on Training Framework for Franchised Bus Captains (the "Practice Note").

In relation to the above, it would be grateful if your Department could enlighten us the following:

1. The rationale for changing a set of guidelines to a practice note;
2. The authoritative status of a practice note;
3. Any other existing directive from your Department to franchised bus operators that is regulated / monitored in the form of a practice note; and
4. Difference between non-compliance with a set of guidelines and non-compliance with a practice note.

香港九龍荔枝角寶輪街九號十五樓 15/F, 9 Po Lun Street, Lai Chi Kok, Kowloon, Hong Kong
電話 Tel : (852) 2786 8888 傳真 Fax : (852) 2745 0300 網址 Website : www.kmb.hk

九巴服務 日日進步

Kindly contact the undersigned if you would like to need any clarification to our enquiries. We look forward to your reply to let us have a clear understanding of the difference between guidelines and practice notes.

Thank you for your attention.

Yours faithfully,
for and on behalf of
THE KOWLOON MOTOR BUS CO. (1933) LTD.

Godwin So
General Manager,
Corporate Planning & Business Development

c.c. Mr. Patrick Wong – Transport Department (By email)
c.c. Ms Amy LEE – Transport Department (By email)

運輸署
Transport Department

本函檔號 Our Ref.: TD BR 76/190-2C
來函檔號 Your Ref.: CPBD/012L/TD/KMB/18
電話號碼 Tel No.: 2829 5210
傳真號碼 Tel No.: 2511 4158

URGENT BY FAX
(Fax No. 2745 0300)

6 August 2018

Mr. Godwin SO
General Manager
Corporate Planning & Business Development
The Kowloon Motor Bus Co. (1933) Ltd.
9 Po Lun Street
Lai Chi Kok
Kowloon

Dear Godwin,

Working Group on the Enhancement of Safety of Franchised Buses

I refer to your letter under reference dated 18 July 2018 regarding the Practice Note on Training Framework for Franchised Bus Captains ("the Practice Note"), and would like to provide our reply to your enquiries below.

The Working Group on the Enhancement of Safety of Franchised Buses (the "Working Group") has reviewed the existing training arrangements provided by the franchised bus operators to bus captains. As a follow up to one of the recommendations of the Working Group, we have issued the Practice Note as attached in our letter ref. TD BR 76/190-2C dated 6 August 2018.

As you have pointed out rightly, the Working Group had initially considered the option of devising a set of guidelines on the standard requirements for provision of training to bus captains for the compliance of all franchised bus operators. However, after the very useful and fruitful detailed discussions, the Working Group has acknowledged that different bus operators have different bus networks operating in different operating environment, it is therefore necessary for them to tailor-make specific training programmes in order to suit their

香港灣仔告士打道七號入境事務大樓四十一樓
41st floor Immigration Tower 7 Gloucester Road Wan Chai Hong Kong
電話 Tel (852) 2804 2600 傳真 Fax (852) 2824 0433
網址 Web Site: http://www.td.gov.hk

respective operational needs with reference to the Practice Note. It is quite impracticable to have a set of standardized guidelines on training arrangements that are applicable to all bus operators.

Despite that above, the Working Group has recognised that there are areas of improvement in the training arrangements across the franchised bus industry. Notably, all franchised bus operators have agreed that all full-time and part-time bus captains should be provided with refresher course at least once every three years to update them with the latest service standards and laws and regulations, trends of complaints and etc. Besides, all bus operators considered that behind-the-wheel road training should be given to bus drivers before they are deployed to drive on all individual bus routes . Also, all operators also agreed that increasing weighting should be given to customer service and emotional management in the modules of the induction and refresher course content. In the light of these discussions, we have drawn up a practice note together with the main objective to lay down a set of industry-wide standard practices on training for franchised bus captains including the basic requirements on the structure, modules and their relative weightings, so as to provide a common basis for the training framework of franchised bus captains. Flexibility is allowed for individual franchised bus operators to provide tailor-made training programmes to cater for their respective operational needs on the basis of the common standard as set out in the aforesaid practice note. Because of this consideration, individual bus companies will set up its own internal monitoring and audit mechanism to monitor the compliance of the practice note, to develop key indicators on the effectiveness of training for bus captains, and to review and determine appropriate actions or measures, with regular reports be submitted to their respective Boards of Directors in the respect of the findings for monitoring.

Regarding the role of the Transport Department ("TD"), as mentioned in our above letter, bus companies have been requested to send the TD copies of their reports submitted to their Board of Directors such that the TD may also monitor the effectiveness of your internal monitoring and audit mechanism as against the key indicators proposed, and take follow-up actions as necessary. It is also the TD's plan to require all franchised bus operators to report and feature their respective training arrangements in the context of the annual Forward Planning Programme as required in section 12A(1) of the Public Bus Services Ordinance (Cap. 230), starting from 2019-2020. We will further work out the details and other related follow ups on the subject in our coming Working Group meeting planned to be held in September or October 2018.

Let me take this opportunity to thank KMB again for the valuable contribution and positive response in the Working Group. I hope we can continue to work together, in conjunction with other franchised bus operators, for enhancing the quality and safety of franchised bus service in Hong Kong. Should you have further enquiries on the above, please contact the undersigned.

Yours sincerely,

(Patrick WONG)
for Commissioner for Transport

Annex

Practice Note on Training Framework for Franchised Bus Captains

Introduction

This Practice Note on Training Framework for Franchised Bus Captains (the "Practice Note") lays down a set of industry-wide standard practices in respect of the franchised bus captains' training framework for adoption by the franchised bus operators from October 2018.

Objectives of the Practice Note

2. With a view to enhancing safety delivery in the franchised bus services, the Transport Department ("TD") has, after reviewing the franchised bus operators' training arrangements for bus captains, sought to lay down a set of industry-wide standard practices in respect of the franchised bus captains' training framework, including the basic requirements on modules, duration and weighting, so as to provide a common basis for internal monitoring and audit within individual franchised bus companies.

3. The objective of the Practice Note is to align the training arrangements of different franchised bus operators and to lay down a common framework of the training system for their bus captains. Given that different bus companies have different bus networks operating in different operating environment, it is necessary for them to make specific training programmes in order to suit their respective operational needs on the basis of the common standard as set out in this Practice Note. The TD will review the Practice Note with the franchised bus operators on a regular basis, in order to strive for the best standard practices to cater for the ever-changing operating needs and public expectations on safe franchised bus services.

The Practice Note

(A) Structure of training system

4. The structure of the training system for franchised bus captains should comprise at least the following :-

Types of Courses	Minimum Requirement	Target Trainees [2]	Timing
(a) Induction course (i) Classroom training	1 day (Full-time) & 0.5 day (Part-time)	New recruits	Before providing passenger service
(ii) Behind-the-wheel road training	Full–time bus captains 20 hours[1] Part-time bus captains 16 hours[1]		
(b) Refresher course	0.5 day	In-service bus captains	Once in every three years
(c) New bus route training	Behind-the-wheel road training	In-service bus captains	Before the bus captain is assigned to provide passenger service
(d) New bus type (model with new driving features) training	Behind-the-wheel road training	In-service bus captains	Before the bus captain is assigned to provide passenger service
(e) Remedial training	1 day	In-service bus captains with improper driving behavior or attitude	As and when required

Notes :

(1) After the behind-the-wheel road training, the bus captains will be subject to internal driving assessment. The bus captains must pass the internal driving assessment before they are deployed on revenue trips.

(2) Applicable to full-time and part-time bus captains.

(B) Modules for Induction and Refresher Courses

5. The Modules and the weightings recommended for induction course and refresher course are set as follows :-

Modules	Weightings in induction course (Classroom and Behind-the-wheel Road Training[(3)])	Weightings in refresher course (Classroom)
(a) Safe driving and road safety	70%-85%	60-75%
(b) Cognition of on-vehicle device/facilities		
(c) Handling of incident/emergency	5%-10%	20-30%
(d) Customer service & emotional management	10%-20%	
(e) Knowledge of company rules, traffic regulations, occupational health and safety		5%-10%

Notes :

(3) While behind-the-wheel road training provided during induction course enables the bus captains to be familiarized with bus types/models of the company's bus fleet and the routings of bus services, it should also cover the contents of the modules to be delivered in a practical way with on-the-ground experiences.

(C) Remedial Training

6. Remedial training should be provided to those bus captains in the following categories :-

(a) with improper driving behaviour repeatedly detected from black box data or other sources like plain-cloth inspections;
(b) having involved in serious traffic accidents;
(c) having persistently committed the same traffic offence; or
(d) having reached a certain driving offence points.

(D) Internal Monitoring and Audit Mechanism by Franchised Bus Operators

7. To ensure that adequate and appropriate trainings are provided to the bus captains, the franchised bus operators should set up an internal monitoring and audit mechanism in order to achieve the following objectives :

(a) To monitor the compliance of this Practice Note;

(b) To develop key indicators on the effectiveness of the training system provided to bus captains (e.g. accident involvement rates, complaints on driving skills and performance and etc.); and

(c) In the light of the findings of (b), to review and determine appropriate actions or measures.

8. The management of franchised bus operators should submit regular periodic reports (at least half-yearly) to their respective Boards of Directors in respect of the findings on matters in para. 7 above.

Transport Department
August 2018

只供內部填寫 For office Use Only
申請人編號 App. No.
參考編號 Ref. No.

九龍巴士（一九三三）有限公司職位申請書
Application Form for Employment with The Kowloon Motor Bus Co. (1933) Ltd.

申請職位 Position Applied for	車長

I. 個人資料 Personal Particulars

英文姓名 Name in English	中文姓名 Name in Chinese	
稱號* ☐ 先生 Mr ☐ 太太 Mrs ☐ 女士 Ms ☐ 小姐 Miss Title*		
香港身份證號碼 HKID No.	出生日期（日/月/年） Date of Birth (dd/mm/yy) / /	

你是否香港特別行政區永久性居民？*
Are you a permanent resident of the HKSAR?*

☐ 是 Yes
☐ 否 No（如否，你是否可以在香港合法受僱？If no, are you legally employable in Hong Kong?* ☐ 是 Yes ☐ 否 No

此欄只供非香港特別行政區永久性居民填寫 For applicants without Hong Kong Permanent Identity Card

如你是可以在香港合法受僱，請填寫有效旅遊證件資料。
If you are legally employable in Hong Kong, please state the travel document details.

旅遊證件號碼 Travel Doc. No.	簽發機關 Issuing Authority	屆滿日期 Date of Expiry

住址 Residential Address (中) _____ (英)

通訊地址 (如與上址不同)
Contact Address (If different from the above address)

住所電話 Residential Phone No.	聯絡電話 Contact Phone No.
電郵 Personal E-mail	

II. 就業詳情 Employment History

請先填寫最近的就業資料。
Please complete the information in reverse chronological order.

日期 (月/年) Date (mm/yyyy) 由 From	至 To	全職/兼職 Full/ Part Time	公司名稱 Name of Company	職位 Position Held	離職原因 Reason for Leaving

* 請在適當位置填上 "✓" Please put "✓" as appropriate

4997

III. 學歷 Education

請先列出最近取得之學歷，並提供相關證書副本作參考。
Please provide information in reverse chronological order and submit copies of the certificates for reference.

日期 (月/年) Date (mm/yyyy)		全日制/兼讀 Full/Part Time	學校 / 學院名稱 Name of School / Institute	所獲資格 # Qualification Attained #	頒發日期 (月/年) Date of Award (mm/yyyy)
由 From	至 To				

Please indicate level of qualification attained, i.e. PhD, Master's, Bachelor's, Certificate, Diploma, Post Secondary, etc.
請列明所獲取之資格，即博士、碩士、學士、證書、文憑、專上教育等。

IV. 專業資格 Professional Qualifications

請先列出最近取得之專業資格，並提供相關證書副本作參考。
Please provide information in reverse chronological order and submit copies of the certificates for reference.

持有的專業資格 / 會員類別 Professional Qualifications / Membership	頒發機構全名 Full Name of Issuing Authority	所達程度 Level Attained	獲取資格的日期 Date Obtained

V. 語言及技能 Languages and Skills

語言 Languages:

書寫 Written _____

會話 Spoken _____

電腦知識 Computer Knowledge:

請詳列 Please specify _____

駕駛 Driving:

駕駛執照類別 Class _____ 有效期至 Valid to _____

其他 Others:

請詳列 Please specify _____

* 請在適當位置填上 "✓" Please put "✓" as appropriate

VI. 其他資料 Other Information

你是否現在或曾經受僱於載通集團？* Have you ever been employed by the TIH Group?*

☐是 Yes ☐否 No 如是，請列明所屬公司名稱、部門、職位及受僱日期。
If yes, please specify the name of the company, the department, the position and the period of employment.

你是否現在或曾經受僱於其他巴士公司？* Have you ever been employed by other bus company?*

☐是 Yes ☐否 No 如是，請列明所屬公司名稱、部門、職位及受僱日期。
If yes, please specify the name of the company, the department, the position and the period of employment.

公司名稱 Name of the company	部門 Department	職位 Position	受僱日期 Period of Employment

VII. 所期薪金及可到職日期 Expected Salary and Date Available for Employment

所期薪金 Expected Salary _____ 可到職日期 Date Available _____

VIII. 聲明 Declaration

1. 本人聲明上述資料及遞交之有關文件均屬正確無訛及詳盡。本人明白如有任何虛報、誤導、隱瞞或省略，本人將不被錄用，貴公司亦有權撤回向本人發出的口頭或書面僱聘承諾而毋須負責，而縱獲錄用，亦將構成本人被即時解僱之理由。貴公司可保留就情況需要採取其認為適當行動的權利。
I declare that the information given above and the documents provided are correct, true and complete. I understand that any falsification, misrepresentation, withholding or omission of material fact / documents shall render myself liable to rejection of my application, revocation of any verbal or written offer of employment from the Company to me without any liability, or summary dismissal if employed. The Company may also reserve the right to take such action as it thinks appropriate under the circumstances.

2. 本人同意貴公司可就進行與招聘工作及僱用有關的事宜，及為核實上述資料而進行必要的查詢。本人授權貴公司、所有載通集團的其他公司及其他組織或機構可就這些查詢，透露任何有關的紀錄及資料。
I consent to the Company making any necessary enquiries for purposes relating to recruitment by and employment with the Company and for the verification of the information given above. I authorize the company, companies within TIH group and other agencies or contractors authorized to release any record or information as may be required for these enquiries.

3. 本人明白並同意倘若本人受聘於貴公司，上述所有資料會成為貴公司的人力資源紀錄，以備作人力資源管理有關事宜之用。
I understand and accept that if I am employed by the company, all information in this form will be added to the Company's personnel records and will be used from time to time by the Company in dealing with employment related matters.

申請人簽署 Applicant's Signature _____ 日期 Date _____

IX. 申請人須知 Notes for Applicants

1. 申請人必須填報申請書內要求提供的所有個人資料。本公司可能要求申請人就特定項目提供詳細資料，以支持申請個別職位。申請人如未能提供此等資料，你的申請處理及結果可能會受影響。
Provision of all the personal data requested in this form is obligatory. You should particularly note that the company may require you to provide specific details to support your application for individual vacancies. Failure to provide any of these data may affect the processing and outcome of your application.

2. 申請人所提供的資料，將用於招聘工作以及其他與僱用有關的事宜上。如有需要，有關資料可能會送交獲授權處理有關資料的載通集團的其他公司及其他組織或機構，用以進行與本公司招聘工作及僱用有關的事宜。為核實申請人所提供資料的準確性，收集的資料亦可能會披露予有關人士或機構。在一般情況下，未獲取錄申請人的資料將於其落選日期後 12 個月全部銷毀。
Information provided will be used for recruitment and other employment-related purposes. It may be disclosed to the other companies within TIH group and other agencies or contractors responsible and authorized to process the information for purposes relating to recruitment and employment. The information collected may also be disclosed to such person or organization for the purpose of verifying the accuracy of the information provided by the applicant. Information on unsuccessful applicants will normally be destroyed 12 months after the recruitment process.

3. 提交申請書後，本申請書內所提供的資料 (包括香港特別行政區永久性居民的身分) 如有任何更改時，申請人必須通知本公司。
You are required to notify the Company if there are any subsequent changes to the information provided, including the permanent resident status of the Hong Kong Special Administrative Region, after submission of the application.

4. 如欲查閱或更改所提供個人資料，請以書面向本公司「人力資源部主管」提出。(地址：九龍荔枝角寶輪街九號)
Applicant has the right to request access to and correction of personal data collected from him / her in writing to the "Head of Human Resources Department" at 9 Po Lun Street, Lai Chi Kok, Kowloon.

* 請在適當位置填上 "✓" Please put "✓" as appropriate

九龍巴士（一九三三）有限公司職位申請書 (附頁)
Application Form for Employment with The Kowloon Motor Bus Co. (1933) Ltd. (Supplement)

英文姓名 Name in English：_____ 中文姓名 Name in Chinese：_____

申請職位 Position Applied for：_____

請提供以下補充資料：

Please provide the following supplementary information：

- ☐ 曾受到專業機構或監管機構的警告、遣責、紀律聆訊或其他形式的制裁
  Warnings, reprimands, disciplinary hearings or other forms of sanctions from a professional body or regulatory body
- ☐ 刑事罪行紀錄
  Criminal records

請詳述以上適用項目：_____

Details of the above：_____

_____

收集個人資料聲明：

Declaration on collection of personal data：

1. 申請人必須填報申請書內要求提供的所有個人資料。本公司可能要求申請人就特定項目提供詳細資料，以支持申請個別職位。申請人如未能提供此等資料，申請處理及結果可能會受影響。
   Provision of all the personal data requested in this form is obligatory. You should particularly note that the Company may require you to provide specific details to support your application for individual vacancies. Failure to provide any of these data may affect the processing and outcome of the application.
2. 申請人所提供的資料，將用於招聘工作以及其他與僱用有關的事宜上。如有需要，有關資料可能會送交獲授權處理有關資料的載通集團的其他公司及其他組織或機構，用以進行與本公司招聘工作及僱用有關的事宜。為核實申請人所提供資料的準確性，收集的資料亦可能會披露予有關人士或機構。在一般情況下，未獲取錄申請人的資料將於其落選日期後 12 個月全部銷毀。
   Information provided will be used for recruitment and other employment-related purposes. It may be disclosed to the other companies within TIH group and other agencies or contractors responsible and authorized to process the information for purposes relating to recruitment and employment. The information collected may also be disclosed to such person or organization for the purpose of verifying the accuracy of the information provided by the applicant. Information on unsuccessful applicants will normally be destroyed 12 months after the recruitment process.
3. 本申請書附頁內所提供的資料如有任何更改，申請人必須通知本公司。
   You are required to notify the Company if there are any subsequent changes to the information provided.
4. 如欲查閱或更改所提供之個人資料，請以書面向本公司「人力資源部主管」提出。(地址：九龍荔枝角寶輪街九號 16 樓)
   Applicant has the right to request access to and correction of personal data collected from him / her in writing to the "Head of Human Resources Department" at 16/F, 9 Po Lun Street, Lai Chi Kok, Kowloon.

申請人簽署 Applicant's Signature：_____ 日期 Date：_____

5000

[redacted]

致運輸署牌照部：

本人[redacted]（中文）[redacted]（英文），

香港身份証號碼[redacted]（[redacted]），現投考九龍巴士（一九三三）

有限公司之 車 長 職位。現授權該公司向運輸署牌照部查詢有

關本人之駕駛紀錄。

本人簽署 [redacted]

日　　期：08.11.2017

14.3

To the Licensing Department of the Transport Department:

I, [redacted] (Chinese) [redacted] (English), Hong Kong Identity Card Number [redacted] ([redacted]), am currently applying for the position of bus captain of The Kowloon Motor Bus Co. (1933) Ltd. I hereby authorize the above company to inquire my driving record from the Licensing Department of the Transport Department.

My signature [redacted]
Date: 08.11.2017

Form No. P-45(08/08)

Name: [redacted]
DOB: [redacted] Sex:Male
X-Ray#: Date:2017/11/23
Ref Dr:Dr. Tong Ho
HKID: [redacted] Chi:3Y4F201

CONFIDENTIAL

KMB 九巴服務 日日進步 THE KOWLOON MOTOR BUS CO. (1933) LTD.

Medical Assessment Form

This is to certify that ..... ,

identity card number: ..... , *employee number:* .....

is medically ~~*(fit)*~~ / ~~*unfit*~~ *for the post of*

- ☒ *Bus Captain*
- ☐ *Apprentice*
- ☐ *Others* .....

Reason - (if unfit): .....

.....

Remarks: .....

.....

KMB Medical Centre
KMB Lai Chi Kok Bus Depot
6/F, 100 Hing Wah Street West, Kowloon
Tel: 2959 2511 Fax: 2959 2577

☐ Spectacles required

☐ Hearing aids required

*Delete whichever is inappropriate

Doctor's Signature & Chop: _____

Date: 25/11

HR/F-MC002 (03/10)

PERSONAL DATA "個人資料"

14.5

Serial No. 13110/2017
Tel. No. 2860 6332
傳真 Fax. No. 2200 4451

Traffic Conviction Records Office
Central Traffic Prosecutions Division
Traffic Branch Headquarters
Hong Kong Police Force
11/F, Arsenal House, Police Headquarters
No.1 Arsenal Street, Wan Chai, Hong Kong
香港灣仔軍器廠街一號
警察總部警政大樓11樓
香港警務處交通總部
中央交通違例檢控組
交通違例檔案紀錄室

NAME : [redacted]
姓名
DRIVING LICENCE NO. :
駕駛執照號碼
RECORD AS AT : 20/11/2017
紀錄截至

Dear Sir / Madam,
[illegible]的先生/女士:

Certificate of Previous Conviction Issued under Section 75(5) of the Road Traffic Ordinance (Cap 374) of Laws of Hong Kong
根據《道路交通條例》(第374章)第75(5)條發出的過往定罪事項證明書

In response to your application of the above made on 20/11/2017, the relevant records as at 20/11/2017 are as follows :
有關閣下於 二〇一七年十一月二十日 提交上述證明書的申請，現提供截至 二〇一七年十一月二十日 的有關紀錄如下 :

(a) Previous conviction record on the basis of Road Traffic Ordinance (Chapter 374) in the past ten years
(甲) 過去十年內根據《道路交通條例》(第374章)的定罪紀錄

OFFENCE 罪名	CASE NO. & COURT 案件編號及主審法庭	DATE OF CONVICTION 判罪日期	RESULT 結果

(NO RECORD)
(無紀錄)

(b) Payment record under the Fixed Penalty (Criminal Proceedings) Ordinance (Chapter 240) in the past five years
(乙) 過去五年內根據《定額罰款(刑事訴訟)條例》(第240章)的繳款紀錄

OFFENCE 罪名	TICKET NO. 告票號碼	OFFENCE DATE 違例日期	PAYMENT DATE 繳款日期	FINE 罰款
FAILING TO COMPLY WITH TRAFFIC SIGNALS 沒有遵從交通燈的指示	TE147763(8)	13/12/2014	20/01/2015	FINE $600.00 罰款 600元
FAILING TO DISPLAY VALID LICENCE 沒有展示有效的車輛牌照	NH133494(2)	19/12/2016	19/12/2016	FINE $320.00 罰款 320元

Total: 2 Record(s)
共 2 項紀錄

Original Seen
Leung Oi King

5004

PERSONAL DATA "個人資料"

14.5

NAME : [redacted]
姓名

DRIVING LICENCE NO. :
駕駛執照號碼

SERIAL NO. : 13110/201
編號

RECORD AS AT : 20/11/2017
紀錄截至

(c) Record of driving-offence points under Section 3(2) of the Road Traffic (Driving-Offence Points) Ordinance (Chapter 375) in the past five years
(丙) 過去五年內根據《道路交通（違例駕駛記分）條例》（第375章）第3(2)條的違例駕駛記分紀錄

OFFENCE 罪名	CASE / TICKET NO. 案件/告票號碼	OFFENCE DATE 違例日期	POINTS INCURRED 記分數目	DATE INCURRED 記分日期
FAILING TO COMPLY WITH TRAFFIC SIGNALS 沒有遵從交通燈的指示	TE147763(8)	13/12/2014	5	20/01/2015

Total: 1 Record(s)
共 1 項紀錄

- END OF RECORD -
- 紀錄完 -

If you have any enquiries, please contact our staff at 2860 6332 during office hours.
如有任何疑問，請於辦公時間內致電2860 6332 與本處職員聯絡。

Yours faithfully,

(CHEUNG CHING YEE)
for Commissioner of Police
警務處處長(張靜宜代行)

本人從沒有停牌

Original Seen

PERSONAL DATA "個人資料"

14.5

NAME : [redacted]
姓名

DRIVING LICENCE NO. :
駕駛執照號碼

SERIAL NO. : 13110/2017
編號

RECORD AS AT : 20/11/2017
紀錄截至

(c) Record of driving-offence points under Section 3(2) of the Road Traffic (Driving-Offence Points) Ordinance (Chapter 375) in the past five years

(丙) 過去五年內根據《道路交通（違例駕駛記分）條例》（第375章）第3(2)條的違例駕駛記分紀錄

OFFENCE 罪名	CASE / TICKET NO. 案件/告票號碼	OFFENCE DATE 違例日期	POINTS INCURRED 記分數目	DATE INCURRED 記分日期
FAILING TO COMPLY WITH TRAFFIC SIGNALS 沒有遵從交通燈的指示	TE147763(8)	13/12/2014	5	20/01/2015

Total: 1 Record(s)
共 1 項紀錄

- END OF RECORD -
- 紀錄完 -

If you have any enquiries, please contact our staff at 2860 6332 during office hours.
如有任何疑問，請於辦公時間內致電2860 6332 與本處職員聯絡。

Yours faithfully,

(CHEUNG CHING YEE)
for Commissioner of Police
警務處處長(張靜宜代行)

My license has never been suspended

Original Seen

運輸署
Transport Department

Our Ref.:
Your Ref.:
Tel. No. : 2804 2647
Fax No. : 2804 2592

28 February 2018

The Head of Human Resources Department
The Kowloon Motor Bus Co. (1933) Ltd.

Dear Sir/Madam,

I refer to your letter ref and enclose herewith remarks against the drivers as shown in the table that you have attached to your earlier letter to us, together with the consent the drivers concerned.

With regard to the entries in the "OFFENCES" column:-

(a) "Nil": no scheduled convictions are recorded within the past three years.

(b) Three asterisks (***) plus a number: the record shows one or more convictions within the three year period for a "very serious scheduled offence", the number representing the number of convictions for such offence.

(c) Two asterisk (**) plus a number: the record shows one or more convictions within the three year period for a "serious scheduled offence", the number representing the number of convictions for such offences.

(d) One asterisk (*) plus a number: the record shows one or more convictions for a "scheduled offence" other than those considered to be serious within the three year period.

The information so provided is upon the consent of the persons concerned. Pursuant to the Personal Data (Privacy) Ordinance, it should be noted that the respective information shall not be released to any third party and should only be used for the purpose of recruitment of bus drivers.

It should be noted that under no circumstances shall the Government be liable for any loss to your company arising from the information given above.

Yours faithfully,

(Kelvin YEUNG)
for Commissioner for Transport

牌照事務組
Licensing Section
香港金鐘道九十五號統一中心三樓
3rd Floor United Centre 95 Queensway Hong Kong
網址 Web Site: http://www.td.gov.hk

CONFIDENTIAL

Appendix II

From : The Head of Human Resources Department
The Kowloon Motor Bus Co. (1933) Ltd.

To : Commissioner for Transport
[Attn : EO (Direct Issue)]
Hong Kong Licensing Office

Ref. :
Date : 27 Feb 2018

Employment of Bus Captain

The particulars of applicants for employment as Bus Captain with this Company are listed as follows :-

Consecutive Number	Name of Applicant	HKID No.	For T.D. Use Only	
			Offences	Remarks
			NIL	

In accordance with our standing arrangement please advise whether the above-mentioned person(s) have committed any of the scheduled offences in the past three years.

TRANSPORT DEPARTMENT
27 FEB 2018
(COMMON SERVICES REGISTRY)

THE KOWLOON MOTOR BUS COMPANY (1933) LTD. * HUMAN RESOURCES DEPARTMENT

(Authorized Signature and Company Chop)

Issue 1

5008

機密 CONFIDENTIAL

九龍巴士（一九三三）有限公司
THE KOWLOON MOTOR BUS CO. (1933) LTD.

體格檢查－健康狀況聲明
Medical Examination – Health Status Declaration

僱員編號 Emp. No. :		身份證號碼 HKID No. : [redacted]	姓名 Name : [redacted]
職位 Position :			聯絡電話 Contact No. : [redacted]
部門 / 廠別 Department / Depot :			性別 Sex : M	年齡 Age : [redacted]

茲聲明本人在過去或現在有 / 否以下之疾病 / 習慣
I hereby declare that I have / have not in the past or at present had the following sickness / habit :

請在適當方格加上 ✓ 號。 Please put a ✓ in the appropriate box.

		有 Yes	否 No
(1)	癲癇症 Epilepsy	☐	☑
(2)	高血壓 Hypertension	☐	☑
(3)	心血管病 (例如：冠心病) Cardiovascular diseases (e.g. coronary heart disease)	☐	☑
(4)	腦血管病 / 意外 (例如：中風) Cerebrovascular diseases / accident (e.g. stroke)	☐	☑
(5)	精神紊亂 Mental disorder	☐	☑
(6)	四肢 / 關節活動能力缺損 Impairment of limbs / joint movements	☐	☑
(7)	任何導致肌肉不受控制的狀況 Any condition causing muscular incoordination	☐	☑
(8)	未受控制的糖尿病 Uncontrolled diabetes mellitus	☐	☑
(9)	任何引致不能有效地駕駛汽車的其他疾病或傷殘。(失聰除外) Any disease or disability which is likely to render a person incapable of effectively driving a motor vehicle. (except for deafness)	☐	☑
(10)	其他會引致昏暈發作的疾病 Other attacks of disabling giddiness or faintness	☐	☑
(11)	眼部或視覺疾病 Eye or vision problems	☐	☑
(12)	聽覺能力減退或耳部疾病 Hearing loss or ear disease	☐	☑
(13)	運動時胸部痛楚 Chest pain on exercise	☐	☑
(14)	腰背痛 (嚴重的或經常復發) 或 坐骨神經痛 Backache (severe / recurrent) or sciatica	☐	☑
(15)	關節炎或風濕病 Arthritis or rheumatism	☐	☑
(16)	接受長期藥物治療 Long-term medication	☐	☑
(17)	高膽固醇 High Cholesterol	☐	☑
(18)	嚴重意外受傷或曾接受任何手術 Serious accident or any operation	☐	☑
(19)	染上毒癮 Drug addiction	☐	☑
(20)	吸煙習慣 Smoke as a habit	☐	☑
(21)	喝酒習慣 Drink alcohol as a habit	☐	☑
(22)	做運動習慣 Do exercise as a habit	☐	☑

Statistics of the venue of taking midday rest by KMB and LWB special shift bus captains

KMB

Depot	Daily No. of BCs Who Will Take Midday Rest At (as on 2018-08-15)		
	Depot	Terminus	Home
LCKD	55	72	148
KBD	29	51	283
STD	20	89	406
TMD	30	50	280
Total	134 (9%)	262 (17%)	1117 (74%)

LWB

Depot	Daily No. of BCs Who Will Take Midday Rest At (as on 2018-08-15)		
	Depot	Terminus	Home
LWB	5 (8%)	18 (31%)	36 (61%)

KMB and LWB

Depot	Daily No. of BCs Who Will Take Midday Rest At (as on 2018-08-15)		
	Depot	Terminus	Home
LCKD	55	72	148
KBD	29	51	283
STD	20	89	406
TMD	30	50	280
LWB	5	18	36
Total	139 (9%)	280 (18%)	1153 (73%)

8. KMB - BUS SAFETY

8.1 Introduction

8.1.1. KMB is committed to providing safe, reliable and quality bus services in Hong Kong. Safety is an absolute pre-requisite in everything we do. We accord top priority to safety in our daily agenda to meet or exceed customers' expectations.

8.1.2. This chapter starts with an analysis of the types/causes of accidents in the past few years and the correlation of accident rates with respect to different factors, e.g. bus route, bus model, bus type, vehicle age, etc.

8.1.3. This chapter further discusses the various measures that have been or are being undertaken to enhance safety.

8.2 Analysis of Bus Accidents in accordance to the requirement stated by the Transport Department

Table 8.0 Overview of Analysis performed

Part I – Analysis of Traffic Accident

8.2.1	Trend of Accident Rates
8.2.2	Accidents by Nature
8.2.3	Accidents by Cause
8.2.4	Number of Non-collision Franchised Bus Accidents Involving Passenger Casualty
8.2.5	Casualties
8.2.6	Accident Collision and Non-collision

Part II - Analysis on Traffic Accident Related to Non-driver Factors

8.2.7	Accident by Location
8.2.8	Accident by Bus Routes
8.2.9	Accident by District
8.2.10	Accident by Bus Type Bus Model Single or Double Deck Buses Bus Length
8.2.11	Accidents by Vehicle Age
8.2.12	Accidents by Stairway Type of Bus

Part I – Analysis of Traffic Accident

8.2.0.1. The Number of Injury/Death caused by Traffic Accidents involving KMB from 2015 to 2017 are shown in Table 8.1a. And the Number of Traffic Accidents involving KMB from 2015 to 2017 are shown in Table 8.1b.

Table 8.1a The number of injury/death on traffic accidents involving KMB from 2015-2017

	2015	2016	2017	
Injury	1278	1165	1460	
Death	11	5	4	
Total	1289	1170	1464	Further analysis Table 8.3a, 8.3b

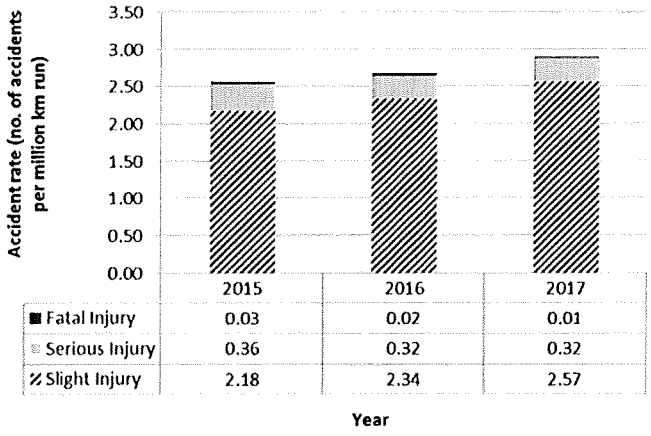
Table 8.1b Number of Traffic Accidents involving KMB

	2015	2016	2017
Number of Traffic Accidents involving KMB	853	881	956

8.2.1. Trend of Accident Rates

8.2.1.1. Accident rates from 2015 to 2017 are shown in Figure 8.1.

Figure 8.1 KMB - Accident rates involving personal injuries and deaths (per million km run)



8.2.1.2. Table 8.2 showed the Contributory Factors of Traffic Accidents.

Table 8.2 Contributory Factors of Traffic Accidents

Contributory Factors	2015 no. of bus captains	2015 %	2016 no. of bus captains	2016 %	2017 no. of bus captains	2017 %	
Bus captain not blameworthy factors	671	79%	638	72%	755	79%	Further analysis Table 8.3a, 8.3b 8.4, 8.8, 8.10
Bus captain blameworthy factors	182	21%	243	28%	201	21%	
Total	**853**	**100%**	**881**	**100%**	**956**	**100%**	

8.2.1.3. The training of Bus Captain should further emphasis on defensive training to avoid accidents caused by improper driving behaviour of drivers of other vehicle, and misbehaviour of other road users/ passengers.

Mechanical Factors

8.2.1.4. In 2015-2017. Total 2 accidents which were bus captains not blameworthy related to mechanical factor, breakdown as below:

Year	2015	2016	2017
Count	1	1	0

2015
- One accident with injury to boarding passenger due to malfunction of the front gate platform.

2016
- One accident on Collision with other vehicle due to due to no brake efficiency in one wheel caused by failure of slack adjuster. The brake of the rest 5 wheels are functioning properly.

Corrective action on the concerned vehicles were performed after inspection.

Accident Rate by Bus Captain's Years of Service

8.2.1.5. The results of an analysis on accident rate by experience in terms of years of service in the Company are shown in the below table:

Bus Captain's Service Period	Accident Rate*	
	2016	2017
0 - <1 year	0.16	0.15
1 - <2 year	0.14	0.19
2 - <3 year	0.14	0.16
3 - <4 year	0.13	0.18
4 - <5 year	0.13	0.15
5 - <6 year	0.10	0.13
6 - <7 year	0.11	0.15
7 - <8 year	0.10	0.13
8 - <9 year	0.08	0.09
9 - <10 year	0.09	0.11
10 - <15 year	0.09	0.10
15 - <20 year	0.06	0.06
20 year or above	0.08	0.07

*The Accident Rate is calculated by:

$$\frac{\text{Count of bus captain involved in accident in the service period}}{\text{Total number of bus captain in the service period}}$$

8.2.1.6. The overall accident rate decrease when the bus captains accumulate experience of service.

8.2.1.7. Bus Captains with service experience between 0-1 year, the situation recorded improvement with accident rate noted 0.16 in 2016 and 0.15 in 2017. While for bus captains with service experience in 1-5 years, the situation recorded deteriorated.

8.2.1.8. KMB revamped the basic training programme. Apart from basic training including classroom lectures and on road training, buddy driver will be assigned to new bus captains. And the training program is revamped to standard driven from day driven. All route trainings has been converted to training on the wheel under the supervision of driving instructor.

8.2.1.9. Service monitoring will be more focus on Bus Captains in relatively short service period. On board checking will be conducted within half year from the first day of service for new bus captains.

8.2.2 Accidents by Nature

8.2.2.1. The results of an analysis of accident nature are shown in Table 8.3 below. The results are expressed in terms of absolute count and percentage of accidents during years 2015-2017.

Table 8.3a Accidents by nature by absolute count & percentage allocation, and the number of injury and death in 2015, 2016

Accident Nature	2015						2016					
	Number of accident	%	Number of injury	Number of death	Total injury/ death	%	Number of accident	%	Number of injury	Number of death	Total injury/ death	%
Non-Collision												
Loss of Balance	445	52%	499	2	501	39%	448	51%	504	1	505	43%
Other non-collision nature												
Injury To Alighting/Boarding Passenger	22	3%	23	-	23	2%	33	4%	33	-	33	3%
Injury To Passenger Inside Bus	17	2%	19	-	19	1%	13	1%	14	-	14	1%
Others	4	0%	22	1	23	2%	6	1%	10	-	10	1%
Non-Collision - sub-total	**488**	**57%**	**563**	**3**	**566**	**44%**	**500**	**57%**	**561**	**1**	**562**	**48%**
Collision												
Collision With Third Party Vehicle (changing lane)	88	10%	117	-	117	9%	109	12%	151	-	151	13%
Head On/Tail Collision	128	15%	361	1	362	28%	106	12%	238	1	239	20%
Glancing Collision	30	4%	37	-	37	3%	43	5%	51	-	51	4%
Injury To Pedestrian	43	5%	42	5	47	4%	40	5%	41	3	44	4%
Junction Collision	56	7%	100	2	102	8%	48	5%	64	-	64	5%
Hit Stationary Object/Vehicle/Animal	12	1%	43	-	43	3%	27	3%	51	-	51	4%
Collision With Other Vehicle (rolling back/ forward/ reversing)	5	1%	5	-	5	0%	6	1%	6	-	6	1%
Entering Roundabout Collision	3	0%	10	-	10	1%	1	0%	1	-	1	0%
Bus Overturn/Topple	0	0%	0	-	0	0%	1	0%	1	-	1	0%
Collision - sub-total	**365**	**43%**	**715**	**8**	**723**	**56%**	**381**	**43%**	**604**	**4**	**608**	**52%**
					Further analysis Table 8.6b						Further analysis Table 8.6b	
Grand Total	**853**	**100%**	**1278**	**11**	**1289**	**100%**	**881**	**100%**	**1165**	**5**	**1170**	**100%**
					Note 8.3.2						Note 8.3.2	

Table 8.3b Accidents by nature by absolute count & percentage allocation, and the number of injury and death in 2017

Accident Nature	2017									
	Bus captain not blame-worthy	% (of total)	Bus captain blame-worthy	% (of total)	Number of accident	%	Number of injury	Number of death	Total injury/ death	%
Non-Collision										
Loss of Balance	**429**	**45%**	**31**	**3%**	**460**	**48%**	**542**	**-**	**542**	**37%**
Other non-collision nature							Further analysis Table 8.5			
Injury To Alighting/Boarding Passenger	17	2%	14	1%	31	3%	31	-	31	2%
Injury To Passenger Inside Bus	13	1%	7	1%	20	2%	20	-	20	1%
Others	4	0%	1	0%	5	1%	4	-	4	0%
Non-Collision - sub-total	**463**	**48%**	**53**	**6%**	**516**	**54%**	**597**	**0**	**597**	**41%**
							Further analysis Table 8.5			
Collision										
Collision With Third Party Vehicle (changing lane)	132	14%	18	2%	150	16%	213	-	213	15%
Head On/Tail Collision	41	4%	79	8%	120	13%	397	1	398	27%
Glancing Collision	47	5%	12	1%	59	6%	66	-	66	5%
Injury To Pedestrian	34	4%	14	1%	48	5%	56	3	59	4%
Junction Collision	34	4%	10	1%	44	5%	77	-	77	5%
Hit Stationary Object/Vehicle/Animal	1	0%	14	1%	15	2%	50	-	50	3%
Collision With Other Vehicle (rolling back/ forward/ reversing)	3	0%	1	0%	4	0%	4	-	4	0%
Entering Roundabout Collision	0	0%	0	0%	0	0%	0	-	0	0%
Bus Overturn/Topple	0	0%	0	0%	0	0%	0	-	0	0%
Collision - sub-total	**292**	**31%**	**148**	**15%**	**440**	**46%**	**863**	**4**	**867**	**59%**
									Further analysis Table 8.6b	
Grand Total	**755**	**79%**	**201**	**21%**	**956**	**100%**	**1460**	**4**	**1464**	**100%**
					Note 8.3.2 Further analysisTable 8.8				Note 8.3.2	

Note 8.3.1 Further analysis on number of Non-collision Franchised Bus Accidents Involving Passenger Casualty in 2017 was conducted. Total 511 (460 in nature of loss of balance, 31 in nautre of injury during alighting/boarding, 20 in nature of injury inside bus) accidents noted. Please refer to Table 8.5 in section 8.2.4

Note 8.3.2 Refer Table 8.1a, 8.1b

Note 8.3.3 The breakdown of bus captain blame worthy and bus captain not blameworthy in 2015 and 2016 is exlcuded as the value for reference is low.

8.2.2.2. In 2017, non-collision accidents contributed 516 (54%) out of 956. Among it 460 cases were Passengers Loss of Balance (LOB). 429 out of 460 LOB cases were Bus Captain not blameworthy. It is suggested more passenger education is needed. On the other hand, 31 out of 416 LOB cases were Bus Captain blameworthy. The training of Bus Captain should further emphasis on avoiding harsh braking.

8.2.2.3. Table 8.3c shows the cause of the LOB cases from 2015-2017.

Table 8.3c Cause of Loss of Balance cases in 2015-2017

	2015				2016			
	Accident Count		Casualties Count		Accident Count		Casualties Count	
	No. of accident	%	No. of casualties (all type) *Note 8.3.4*	%	No. of accident	%	No. of casualties (all type) *Note 8.3.4*	%
Accelerating - pull out from bus stop	84	19%	87	17%	70	16%	70	14%
Accelerating - start in traffic	27	6%	28	6%	26	6%	30	6%
Accelerating sub-total	**111**	**25%**	**115**	**23%**	**96**	**21%**	**100**	**20%**
Bus braking in traffic	247	56%	299	60%	269	60%	321	64%
Bus braking for stopping for passengers when pulling leaving bus stop	34	8%	34	7%	27	6%	27	5%
Braking sub-total	**281**	**63%**	**333**	**66%**	**296**	**66%**	**348**	**69%**
Bus Moving in traffic	**53**	**12%**	**53**	**11%**	56	13%	**57**	11%
Total Loss of Balance	**445**	**100%**	**501**	**100%**	**448**	**100%**	**505**	**100%**

	2017							
	Accident Count				Casualties Count			
	Bus captain not blame-worthy	Bus captain blame-worthy	No. of accident	%	Bus captain not blame-worthy	Bus captain blame-worthy	No. of casualties (all type) *Note 8.3.4*	%
Accelerating - pull out from bus stop	71	0	**71**	15%	74	0	**74**	14%
Accelerating - start in traffic	16	0	**16**	3%	17	0	**17**	3%
Accelerating sub-total	**87**	**0**	**87**	**19%**	**91**	**0**	**91**	**17%**
Bus braking in traffic	260	28	**288**	63%	328	35	**363**	67%
Bus braking for stopping for passengers when pulling leaving bus stop	17	1	**18**	4%	18	1	**19**	4%
Braking sub-total	**277**	**29**	**306**	**67%**	**346**	**36**	**382**	**70%**
Bus Moving in traffic	65	2	**67**	15%	67	2	**69**	13%
Total Loss of Balance	**429**	**31**	**460**	**100%**	**504**	**38**	**542**	**100%**

Note 8.3.4
Number of casulaties includes all injury person count in an account including passengers, bus captains, other road users...etc

8.2.2.4. 87 (19%) out of 460 cases recorded in 2017 resulted from accelerating. Among these 71 cases occurred during the pull out of bus from bus stop. Better traffic management on enforcing the illegal occupy of bus stop by other vehicles, and education of other road users to give way to buses pulling out from bus stops will be able to improve the situation.

8.2.2.5. 306 (67%) out of 460 cases recorded in 2017 resulted from braking. KMB continue to enforce defensive driving for bus captains. Apart from this, several safety measures are adopted, examples as below:

a) Educate passengers to hold the handrails via on board stickers and through Bus Stop Announcement System.

b) Installations of safety features on buses to prevent/lower the harm when passengers loss of balance, for example, installation of cushion pads at the step well panel of straight staircase buses; installation of additional inner vertical handpoles on buses with straight staircases.

8.2.2.6. Collision related accidents contributed 440 (46%) out of 956. Among it 292 cases were Bus Captain not blameworthy and 148 cases were Bus Captains blameworthy. The training on bus captains should be enhanced. Remedial driving training will be arranged for bus captains who are involved in serious traffic accidents. Bus captains who are involved in repeated blameworthy traffic accidents are referred to the Bus Captain Training School to attend training. The training course includes defensive driving concepts, case studies, experience sharing and assessment.

8.2.2.7. Bus speed will be monitored by using the black box system. Raw data of speeding, harsh braking and abrupt acceleration will be generated weekly. For speeding cases, the Company will remind respective bus captains. For harsh braking and abrupt acceleration, plain clothes driving instructors will be deployed to conduct on-board check within one week. Disciplinary actions will be taken against bus captains with poor driving performance.

8.2.3 Accidents by Cause

8.2.3.1. For accidents caused by bus captain not blameworthy factors, the improvement measure focus on training of defensive driving. No further detail breakdown of factors to show.

8.2.3.2. For accidents caused by bus captain blameworthy factors. The results of an analysis of accident cause are shown in Table 8.4 below. The results are expressed by absolute count & percentage allocation and percentage of accidents during years 2015-2017.

Table 8.4 Accidents with Bus captains blameworthy factors by absolute count & percentage allocation

	2015		2016		2017		
Bus captains blameworthy factors	**count**	**%**	**count**	**%**	**count**	**%**	
Non-Collision type accidents							
Improper Braking	6	3%	36	15%	20	10%	
Failing To Ensure Safety Of Boarding Passenger	5	3%	14	6%	7	3%	
Insufficient Lookout	1	1%	2	1%	7	3%	
Failing To Ensure Safety Of Alighting Passenger	8	4%	5	2%	5	2%	
Improper Judgement	2	1%	4	2%	2	1%	
Disobeying Traffic Light	0	0%	0	0%	1	0%	
Improper Changing Lane	2	1%	0	0%	1	0%	
Disobeying Other Road Sign	0	0%	1	0%	0	0%	
Inappropriate Speed In Particular Condition	0	0%	2	1%	0	0%	
Others	0	0%	13	5%	10	5%	
Non-Collision sub-total	**24**	**13%**	**77**	**32%**	**53**	**26%**	
Collision type accidents							
Failing To Keep Safe Distance From Front Veh	71	39%	60	25%	67	33%	
Insufficient Lookout	32	18%	17	7%	20	10%	
Improper Steering	10	5%	15	6%	16	8%	
Improper Changing Lane	17	9%	24	10%	15	7%	
Improper Braking	5	3%	4	2%	5	2%	
Improper Judgement	3	2%	9	4%	5	2%	
Disobeying Give Way Sign	4	2%	1	0%	4	2%	
Disobeying Traffic Light	5	3%	2	1%	3	1%	
Disobeying Stop Sign	0	0%	3	1%	2	1%	
Driving Too Close To Road Side	0	0%	2	1%	2	1%	
Failing To Apply Hand Brake Properly	1	1%	5	2%	2	1%	
Failing To Give Way To Veh In Main Road	3	2%	1	0%	0	0%	
Failing To Keep Proper Lane	2	1%	4	2%	0	0%	
Failing To Stop at Zebra Crossing	1	1%	0	0%	0	0%	
Improper Reversing	1	1%	2	1%	0	0%	
Inappropriate Speed In Particular Condition	3	2%	6	2%	0	0%	
Speeding	0	0%	0	0%	0	0%	
Others	0	0%	11	5%	7	3%	
Collisioin sub-total	**158**	**87%**	**166**	**68%**	**148**	**74%**	
Total	**182**	**100%**	**243**	**100%**	**201**	**100%**	Ref. to Table 8.2

8.2.3.3. Three key factors related to bus captains in 2017 were:

a) Failing to keep safe distance from front vehicle (33%, all from collision);
b) Insufficient lookout (non-collision 3%, collision 10%, total 13%); and
c) Improper braking (non-collision 10%, collision 2%, total 12%)

8.2.3.4. Bus Captain Training School will emphasis further in all bus captain training course, regardless of type, in respect to the factors shown on Table 8.4. Training & Quality Assurance Department will issue internal notice quarterly to remind bus captains on the major causes of accident that related to bus captains' driving behaviour.

8.2.4 Number of Non-collision Accidents Involving Passenger Casualty

8.2.4.1. Table 8.5 below shows the Number of Non-collision Franchised Bus Accidents Involving Passenger Casualty in 2017.

Table 8.5 Number of Non-collision Accidents Involving Passenger Casualty in 2017

	Count of Accidents where bus captain not blameworthy	No. of passenger casualties	Count of Accidents where bus captain blameworthy	No. of passenger casualties	Total count of accidents	No. of passenger casualties	
Accidents involving passenger losing balance on stairway	79	81	2	2	81	83	Further analysis Section 8.2.12 Table 8.21
Accidents involving passenger losing balance elsewhere except on stairway	350	418	29	36	379	454	
Accidents							
Sub-total related to Loss Of Balance	***429***	***499***	***31***	***38***	***460***	***537***	Note 8.5.1
Accidents involving passenger injured by door	12	12	12	12	24	24	
Accidents involving passenger falling down or hitting bus fixture when the bus not in motion	18	18	9	9	27	27	
Number of Non-collision Accidents involving passenger casualty in 2017	**459 (89% of 511)**	**529**	**52 (11% of 511)**	**59**	**511**	**588**	Ref. to Table 8.3 Further analysis on Table 8.6 Note 8.5.2
Percentage over all accidents (Total 956)	**48%**	**-**	**5%**	**-**	**53%**	**-**	

Note 8.5.1
537 prepresents no. of PASSENGER casualties on LOB cases in 2017.
The number of casualties of ALL person type for LOB is 542, see breakdown 1:

Note 8.5.1 Breakdown 1

Casulties	Count
Passenger	537
Bus captain	3
Pedestrian	1
Other driver	1
	542 <Table 8.3b>

Note 8.5.2
588 represents no. of PASSENGER casualties on all Non- collision accidents in 2017.
The number of casualties of ALL person type in 597, see breakdown 2:

Note 8.5.2 Breakdown 2

Casulties	Count
Passenger	588
Bus captain	4
Pedestrian	2
Other vehicle driver	2
Other vehicle passenger	1
	597 <Table 8.3b>

8.2.4.2. Among the 511 non-collision accidents involving passenger casualty recorded in 2017, 459 (89%) were contributed by factors not related to Bus Captains.

8.2.4.3. Among these 459 accidents 429 were accidents involving passenger losing balance of which 79 accident incurred on stairway.

8.2.4.4. More passenger education on bus safety will help to arise the awareness of passengers and prevent accidents.

8.2.4.5. On Bus Captain trainings side, KMB produces its "Bus Captain Safe Driving Handbook" which is posted at staff website for all bus captains currently in its seventh edition (6 July 2018), the handbook includes driving regulations and points to note about safe driving, covering every aspect of a bus captain's daily work. It is aimed at assisting bus captains in establishing a proper safe driving attitude and encouraging them to take all practical steps aimed at achieving safe driving.

8.2.4.6. Apart from the "Bus Captain Safe Driving Handbook", KMB's Bus Captain Training School provides intensive training for bus captains including bus type training, route trainings and the driver instructor will remind bus captains on different safety measures. Regular internal notice on safe driving are also issued to alert bus captains.

8.2.5 Casualties

8.2.5.1. Table 8.6a shows the number of passenger casualties in non-collision accidents by casualty position. More than one casualty can be noted in one accident. Should have better cross reference, in previous Loss of Balance analysis, add further analysis of the location of accident will be shown on 8.2.5.

Table 8.6a Passenger Casualties in Non-Collision Accidents by Casualty Position

	No. of passenger casualties & Percentage allocation										
	2013		2014		2015		2016		2017		
Casualty Position	**count**	**%**	**count**	**%**	**count**	**%**	**count**	**%**	**count**	**%**	
Lower deck_standing	144	21%	138	23%	120	22%	101	18%	121	21%	
Lower deck_moving	177	25%	130	21%	115	21%	124	23%	112	19%	
Lower deck_sitting	115	16%	111	18%	96	18%	103	19%	107	18%	
Stairways	161	23%	120	20%	110	20%	113	21%	86	15%	Note 8.6.1
Entrance/exit door	41	6%	32	5%	28	5%	40	7%	42	7%	
Upper deck_seating	22	3%	16	3%	9	2%	13	2%	20	3%	
Record unavailable Note 8.6.2	38	5%	60	10%	63	12%	54	10%	100	17%	
Total	**698**	**100%**	**607**	**100%**	**541**	**100%**	**548**	**100%**	**588**	**100%**	
									Ref to Table 8.5		
No. of fleet size as at 30 Jun of the year	**3782**		**3840**		**3842**		**3810**		**3939**		

Note 8.6.1	The number record (86) for casualty poisition in Stairways includes all accidents and 83(recorded in Table 8.5) out of 86 were cause from Losing of Balance.
Note 8.6.2	Not all the casualty position can be recorded in all traffic accidents. In some cases, casualty unable to provide this information
Note 8.6.3	TD requested analysis on the number of casualties with categories by with and without seatbelt is not available as it has not been recorded.
Note 8.6.4	The table only indicated PASSENGER casualties, other type of casualties were exculded.

8.2.5.2. Table 8.6b shows the number of casualties (all type) in collision accidents by casualty position. The ratio is around 6:4 for casualty position inside and outside bus, where casualties recorded outside bus are other road users including pedestrians, cyclists, other vehicle drivers/passengers...etc

Table 8.6b Casualties in Collision Accidents by Casualty Position

	No. of casualties & Percentage allocation									
	2013		2014		2015		2016		2017	
	count	%	count	%	count	%	count	%	count	%
Casualty Position										
Inside Bus	537	61%	409	56%	439	61%	357	59%	504	58%
Outside Bus	348	39%	318	44%	284	39%	251	41%	363	42%
Total	**885**	**100%**	**727**	**100%**	**723**	**100%**	**608**	**100%**	**867**	**100%**
					Ref. table 8.3a		Ref. table 8.3a		Ref. table 8.3b	

8.2.5.3. The allocation of the top four casualty position identified was similar from 2013-2017 in about 20% each out of the total number of casualties.

8.2.5.4. 2017 figures are similar to 2016. Passengers education should focus on the below:

- Reminding passengers to hold the handrail

- Avoid or be more mindful in use mobile devices while standing, leave the seats to get ready for alighting or change seats inside bus compartments when the buses were in motion

8.2.5.5. Table 8.7 shows the passenger casualties in non-collision accidents per 1000 buses.

Table 8.7 Passenger Casualties in Non-Collision Accidents (per 1000 buses)

	No. of passenger casualties/1000 buses				
Casualty Position	**2013**	**2014**	**2015**	**2016**	**2017**
Lower deck_standing	38	36	31	27	31
Lower deck_moving	47	34	30	33	28
Lower deck_sitting	30	29	25	27	27
Stairways	43	31	29	30	22
Entrance/exit door	11	8	7	10	11
Upper deck_seating	6	4	2	3	5
Others	10	16	16	14	25
Total	**185**	**158**	**141**	**144**	**149**

8.2.6 Accidents by Types – Collision and Non-collision

8.2.6.1. Table 8.8 shows the number accident by type of collision or non-collision with 2017 accidents figures further breakdown into accidents of Bus Captain blameworthy and bus captain not blameworthy factors.

Table 8.8 Accident Type (Collision or Non-Collision)

Accident Type	2013 count	2013 %	2014 count	2014 %	2015 count	2015 %	2016 count	2016 %	2017 count	2017 %	
Non-Collision sub-total	**644**	**60%**	**542**	**57%**	**488**	**57%**	**500**	**57%**	**516**	**54%**	Ref. to Table 8.3b
Collision											
Vehicle-pedestrian	69	6%	35	4%	43	5%	40	5%	48	5%	
Vehicle-vehicle collision	343	32%	348	37%	310	36%	314	36%	377	39%	
Vehicle-object collision	23	2%	21	2%	12	1%	27	3%	15	2%	
Collission sub-total	**435**	**40%**	**404**	**43%**	**365**	**42%**	**381**	**44%**	**440**	**46%**	Ref. to Table 8.3b
Grand Total	**1079**	**100%**	**946**	**100%**	**853**	**100%**	**881**	**100%**	**956**	**100%**	Ref. to Table 8.2
No. of fleet size as at 30 Jun of the year	**3782**		**3840**		**3842**		**3810**		**3939**		

8.2.6.2. In 2017, 516 (54%) out of 956 of the accidents were non-collision. Among the 516 non-collision accidents, 463 cases were bus captain not blameworthy and 53 cases were bus captain blameworthy.

8.2.6.3. KMB provided proper training to our bus captains, and we have included defensive driving awareness in 車長安全駕駛手冊.

8.2.6.4. Apart from this, 440 (46%) out of 956 of the accidents were collision accidents. Among it 377 were vehicle-vehicle collision in which 257 were bus captain not blameworthy.

8.2.6.5. KMB was aware of the traffic condition in the road network, and keep proposing measures to the Government to ensure the smoothness of bus operations. Typical examples included recommend the Government to set up more Bus Only Lanes. On the other hand, KMB used to urge and facilitate the Government to resolve illegal parking problems. Accidents can be reduced with less other obstructions on the road.

8.2.6.6. Control of number of private cars can be one of the effective measures to reduce Vehicle-vehicle collision. With the Transport Advisory Committee's 2014 Report on Study of Road Traffic Congestion in Hong Kong warning that "Hong Kong's vehicle fleet size has been growing at an alarming rate". KMB share the same view and strongly recommend the Government should consider setting a limit on the number of private cars.

8.2.6.7. Driving attitude of other road users is one of the key in preventing accidents not blameworthy to Bus Captains. Promoting driving courtesy in respect of public transport vehicles is essential to road safety, as many bus related accidents are caused by improper driving attitude. Passengers on buses are more vulnerable to traffic accidents, so the Government should proactively educate drivers to give way to buses.

8.2.6.8. Regarding vehicle-pedestrians and vehicle-object collisions, KMB keeps proposing improvements on bus stops, bus termini and other observed safety hazard to Transport Department. Timely process of the proposals is required to minimize the hazard. It is also important for the Government to enforce traffic regulation and education to public in order to increase the awareness of road safety.

8.2.6.9. Table 8.9 shows the number accident by type of collision or non-collision per every 1000 buses.

Table 8.9 Accident Type (Collision or Non-Collision per 1000 buses)

	No. of accidents/1000 buses				
Accident Type	**2013**	**2014**	**2015**	**2016**	**2017**
Non-Collision	**170**	**141**	**127**	**131**	**131**
Collision					
Vehicle-pedestrian collision	18	9	11	10	12
Vehicle-vehicle collision	91	91	81	83	96
Vehicle-object collision	6	5	3	7	4
Collision sub-total	**115**	**105**	**95**	**100**	**112**
Grand Total	**285**	**246**	**222**	**231**	**243**

Part II - Analysis on Traffic Accident Related to Non-driver Factors

8.2.7 Accidents by Location

8.2.7.1. Table 8.10 shows the number accident by with 2017 accidents figures further breakdown into accidents contributed from factors related or not related to bus captains.

Table 8.10 Accident Location (by count and percentage allocation)

Accident Location	2013		2014		2015		2016		2017	
	count	%	count	%	count	%	count	%	count	%
On the Road										
Junction	33	3%	41	4%	43	5%	30	3%	43	4%
Roundabout	19	2%	28	3%	19	2%	20	2%	16	1%
Other than Junction and Roundabout	894	83%	732	77%	660	77%	701	80%	737	78%
Total On The Road	946	88%	801	84%	722	84%	751	85%	796	83%
Bus Stop and Terminus										
Bus Stop	98	9%	111	12%	107	13%	100	11%	130	13%
Bus Terminus	35	3%	33	3%	22	3%	27	3%	28	3%
Total at Bus Stop/Terminus	133	12%	144	15%	129	16%	127	14%	158	16%
Depot	0	12%	1	0%	2	0%	3	0%	2	0%
Total	1079	100%	946	100%	853	100%	881	100%	956	100%
					Ref. to Table 8.2		Ref. to Table 8.2		Ref. to Table 8.2	

* The requested analysis on vehicle direction is not available as it has not been recorded separately. Please refer to Tables 8.1 and 8.2 where parts of the vehicle direction are shown.

8.2.7.2. In 2017, among the locations with specific identification, 796 (83%) out of 956 accidents were recorded to happen on the road outside bus stops, termini and depots. Total 737 (78%) cases were recorded to happen on road sections other than roundabout and junction and 579 out of these 737 cases were not blameworthy to bus captains.

8.2.7.3. Transport Department encouraged the Company to submit proposals on improving bus safety, and committed will continue put effort to resolve the problems on illegal parking and loading/unloading activities at bus stops; traffic congestion; and traffic black spots. In fact, the Company used to regularly review potential safety hazard which threaten bus safety, and already submitted numerous concrete proposals to Transport Department to alert the problem identified and request for follow up.

8.2.7.4. The majority of bus termini in Hong Kong adopt the "multiple boarding islands" design, a bus terminus design in use since the 1970s. The design potentially induces crossing conflict, as passengers have to use the same lanes as buses. The design should be reviewed.

8.2.7.5. Illegal parking at bus stops is one of the cause of improper stopping of buses, by which road users' safety will be jeopardised as passengers have to board and alight on the roadway instead of using the bus stop. The increased the chance of traffic accidents. Buses and other vehicles overtaking illegally parked vehicles pose safety concerns for boarding and alighting passengers, as well as other road users.

8.2.7.6. The Company views effective measures should put in place to tackle the safety problem stemming from illegal parking.

8.2.7.7. Table 8.11 shows the number accident by location per 1000 buses with 2017 accidents figures further breakdown into accidents contributed from factors related or not related to bus captains.

Table 8.11 Accident Location (per 1000 buses)

Accident Location	2013	2014	2015	2016	2017
On the Road					
Junction	9	11	11	8	11
Roundabout	5	7	5	5	4
Other than Junction and Roundabout	236	191	172	184	187
Total On The Road	**250**	**209**	**188**	**197**	**202**
Bus Stop and Terminus					
Bus Stop	26	29	28	26	33
Bus Terminus	9	9	6	7	7
Total at Bus Stop/Terminus	**35**	**38**	**34**	**33**	**40**
Depot	**0**	**0**	**1**	**1**	**1**
Total	**285**	**246**	**222**	**231**	**243**

8.2.8 Accidents by Bus Routes

8.2.8.1. Table 8.12 shows the number accident by Bus Routes between 2013-2017. Table 8.13 shows the number accident by Bus Routes per million km run between 2013-2017.

Table 8.12 Accident by Bus Route

No. of accidents

Bus Route	2013			2014			2015			2016			2017		
	Bus Captain Blameworthy	Bus Captain not blameworthy	Total	Bus Captain Blameworthy	Bus Captain not blameworthy	Total	Bus Captain Blameworthy	Bus Captain not blameworthy	Total	Bus Captain Blameworthy	Bus Captain not blameworthy	Total	Bus Captain Blameworthy	Bus Captain not blameworthy	Total
1A	3	16	**19**	1	20	**21**	1	12	**13**	8	10	**18**	6	9	**15**
6	1	4	**5**	2	4	**6**	0	4	**4**	0	3	**3**	0	13	**13**
64K	2	6	**8**	3	11	**14**	1	7	**8**	4	10	**14**	1	12	**13**
59X	0	5	**5**	1	2	**3**	1	4	**5**	2	5	**7**	3	8	**11**
74X	3	12	**15**	3	7	**10**	1	4	**5**	2	9	**11**	4	7	**11**
101	0	6	**6**	0	5	**5**	0	9	**9**	0	3	**3**	3	8	**11**
Total	**9**	**49**	**58**	**10**	**49**	**59**	**4**	**40**	**44**	**16**	**40**	**56**	**17**	**57**	**74**

* Bus routes with no. of accidents more than 10 in 2017 are listed in this table.

Table 8.13 Accident by Bus Route (per million km run)

Bus route	Journey distance	No. of accidents/ million km run 2013	2014	2015	2016	2017
1A	10.5km	10.7	11.9	7.2	9.9	8.2
6	8.3km	5.8	7.4	4.9	3.7	16.1
64K	22.5km	3.6	6.6	3.7	6.4	6.0
59X	31.1km	1.3	0.8	1.2	1.6	2.6
74X	24.1km	3.7	2.5	1.2	2.6	2.7
101	19.4km	3.5	3.0	5.4	2.0	7.8

* Only Bus routes with no. of accidents more than 10 in 2017 are listed in this table.

8.2.8.2. Bus Routes 1A, 6, 64K, 59X, 74X and 101 had more than 10 accidents in 2017.

8.2.8.3. Route 6 noted the highest rate of number of accident per million km run. This is due to the short journey distance (8.3 km) of the route compare to the rest five routes. With similar number of accident counts, the rate will be affected by the mileage the route operated.

8.2.8.4. Since the whole section of Route 6 (Lai Chi Kok to Tsim Sha Tsui) concentrated in busy districts. The utilisation of Route is high along whole route. Therefore even the journey distance is short, the busy nature contributed to high rate of accident per mileage run noted in Table 8.13.

8.2.8.5. There is no direct correlation on accidents and bus routes.

8.2.8.6. KMB will also remind the bus captains operating these routes to take care in view of the number of accidents noted.

8.2.9 Accidents by District

8.2.9.1. Table 8.14 shows the number accident by districts between 2013-2017.

Table 8.14 Accidents by District (count and percentage allocation)

District	No. of accidents & Percentage allocation									
	2013		2014		2015		2016		2017	
	count	%	count	%	count	%	count	%	count	%
Klowloon and NT										
Yau Tsim Mong	150	14%	124	13%	106	12%	111	13%	148	15%
Sham Shui Po	134	12%	101	11%	108	13%	114	13%	121	13%
Kowloon City	135	13%	112	12%	81	9%	79	9%	113	12%
Kwun Tong	120	11%	111	12%	120	14%	114	13%	111	12%
Wong Tai Sin	51	5%	56	6%	59	7%	63	7%	66	7%
Shatin	88	8%	72	8%	61	7%	60	7%	59	6%
Kwai Tsing	68	6%	63	7%	56	7%	54	6%	46	5%
Yuen Long	43	4%	50	5%	23	3%	42	5%	41	4%
Tuen Mun	42	4%	47	5%	28	3%	39	4%	40	4%
North	27	3%	28	3%	37	4%	38	4%	37	4%
Tai Po	47	4%	44	5%	31	4%	35	4%	37	4%
Tsuen Wan	53	5%	30	3%	24	3%	26	3%	28	3%
Sai Kung	35	3%	32	3%	49	6%	43	5%	27	3%
Sub total - Kln & NT	**993**	**92%**	**870**	**92%**	**783**	**92%**	**818**	**93%**	**874**	**91%**
Hong Kong Island										
Central & Western	25	2%	22	2%	21	2%	26	3%	35	4%
Wan Chai	28	3%	28	3%	22	3%	16	2%	25	3%
Eastern	22	2%	20	2%	20	2%	16	2%	19	2%
Islands	3	0%	2	0%	2	0%	1	0%	3	0%
Southern	8	1%	4	0%	5	1%	4	0%	0	0%
Sub total - HKI	**86**	**8%**	**76**	**8%**	**70**	**8%**	**63**	**7%**	**82**	**9%**
Total	**1079**	**100%**	**946**	**100%**	**853**	**100%**	**881**	**100%**	**956**	**100%**

8.2.9.2. 874 (91%) out of 956 accidents was recorded in Kowloon and NT area, which are KMB's prime operating areas. Over 10% of accidents occurred in Kowloon City, Kwun Tong, Sham Shui Po and Yau Tsim Mong respectively in 2017. These districts had high traffic flow and the correlation between number of accident is reasonable.

8.2.9.3. Traffic congestion is one of the causes of the high percentage of accidents noted in the busy districts. The Company recommends that proactive measures should be taken to resolve the congestion problem. We will discuss with the Government.

8.2.9.4. Bus priority is one of the key measures in smoothen bus operation and improve bus efficiency especially in congested road sections. The Company recommends the Government further enhance bus priority like introduce more Bus Only Lane in which KMB used to submit different proposals to Transport Department.

8.2.9.5. The analysis included only accident counts related to KMB with districts as requested by Transport Department. This analysis cannot reflect the full picture on the relationship between district and accident. The Company recommends the Government to investigate and analysis on the correlation by taking into account of other factors like accident rate on other transport modes. And derive concrete proposals to enhance road safety.

8.2.10 Accidents by Bus Type

8.2.10.1 Bus Type – Bus Model

8.2.10.1.1. The analysis of accidents by bus model is conducted by bus type, bus length and Single Deck/Double Deck.

8.2.10.1.2. Table 8.15 shows the number of accident per bus of the concerned bus model (between 2013-2017).

Table 8.15 Accidents by Bus Model (per bus of concerned bus model)

Bus Model	2013		2014		2015		2016		2017	
	Accident per bus of the concerned bus model	Count of accident of the bus model	Accident per bus of the concerned bus model	Count of accident of the bus model	Accident per bus of the concerned bus model	Count of accident of the bus model	Accident per bus of the concerned bus model	Count of accident of the bus model	Accident per bus of the concerned bus model	Count of accident of the bus model
DENNIS DRAGON 10M (A/C)	0.26	52	0.26	23	0.16	8	0.28	14	0.50	1
SCANIA K280UD 12M	N/A	0	N/A	0	0.00	0	0.50	1	0.50	1
VOLVO B9TL Wright Body EuroV	0.32	92	0.30	98	0.23	94	0.29	129	0.31	175
SCANIA K310UD 12M Caetano Body	0.25	5	0.40	8	0.30	6	0.10	2	0.30	6
VOLVO B9TL Wright Body	0.33	21	0.32	20	0.17	11	0.24	15	0.30	19
Trident Enviro500	0.38	102	0.30	80	0.33	88	0.31	85	0.29	77
VOLVO B7RLE MCV SD	0.16	11	0.11	8	0.33	23	0.27	19	0.29	16
DENNIS TRIDENT 12M (A/C)	0.36	156	0.28	130	0.22	110	0.21	81	0.28	61
MAN 12M (A/C)	0.32	15	0.19	9	0.13	6	0.15	7	0.28	13
DENNIS TRIDENT 10.6M (A/C)	0.38	57	0.44	65	0.32	48	0.30	45	0.26	38
Trident E500 Turbo	0.45	13	0.19	58	0.17	99	0.21	234	0.25	310
VOLVO SUPER OLY 12M (A/C)	0.24	118	0.24	116	0.24	116	0.18	87	0.22	105
Trident E500 Turbo 12.8M	N/A	0	N/A	0	0.50	1	0.34	22	0.21	32
VOLVO B9TL Enviro500	0.41	35	0.26	22	0.28	24	0.13	11	0.19	16
Dart E200 Single Door 10.4M SD	N/A	1	0.09	1	0.00	0	0.00	0	0.18	2
Trident Enviro400 EuroV	0.27	14	0.22	11	0.20	10	0.31	16	0.18	9
VOLVO SUPER OLY 10.6M	0.41	41	0.29	29	0.19	19	0.21	21	0.18	18
SCANIA Caetano 12M EuroIV SD	0.17	5	0.17	5	0.34	10	0.14	4	0.17	5
Trident Enviro500 EuroIV	0.23	8	0.17	6	0.31	11	0.14	5	0.17	6
Trident Enviro500 EuroV	0.33	2	0.00	0	0.00	0	0.17	1	0.17	1
VOLVO Super Oly Wright Body	0.26	26	0.27	27	0.18	18	0.14	14	0.16	16
NEOPLAN SLF 12M (A/C)	0.26	42	0.17	27	0.11	17	0.17	27	0.14	21
Dart Enviro200 EuroV SD	0.27	8	0.17	5	0.10	3	0.30	9	0.13	4
MAN ND323F 12M	N/A	0	N/A	0	N/A	0	N/A	1	0.10	2
SCANIA Caetano 10.6M EuroIV SD	0.40	8	0.15	3	0.20	4	0.40	8	0.10	2
NEO-MAN	0.00	0	0.00	0	0.00	0	1.00	1	0.00	0
Trident E500 Hybrid 12M	N/A	0	N/A	0	0.67	2	0.33	1	0.00	0
VOLVO B9TL Wright Body 10.6M	0.00	0	1.00	1	0.00	0	0.00	0	0.00	0
VOLVO B9TL Wright Body 12.8M	N/A	N/A	N/A	N/A	0.00	0	0.50	0	0.00	0
DENNIS DART SLF 10.7M	0.30	3	0.20	2	0.22	2	0.00	0	N/A	0
DENNIS DART SLF 10M	0.20	1	0.00	0	N/A	0	N/A	0	N/A	0
DENNIS DRAGON 11M (A/C)	0.16	27	0.25	20	N/A	1	N/A	0	N/A	0
DENNIS DRAGON 12M (A/C)	0.15	26	0.17	28	0.14	24	2.00	4	N/A	0
SCANIA 11.5M (A/C)	0.30	6	0.22	2	N/A	0	N/A	0	N/A	0
VOLVO 11.3M (A/C)	0.23	96	0.20	83	0.23	70	1.14	16	N/A	0

* N/A: there was no bus of such bus model as at 30 Jun of the year.

8.2.10.1.3. Refer to Table 8.15, Dennis Trident 10m (A/C) and Scania K280UD 12m recorded accident per bus of 0.50 respectively in 2017. The reason is there were only 2 buses of these 2 bus types respectively in 2017. And each of them recorded 1 accident. Therefore the resulting figure was impacted by the small population.

8.2.10.1.4. Volvo B9TL Wright Body EuroV, Scania K310UD 12M Caetano Body, Volvo B9TL Wright Body recorded accident rate per bus of 0.30 – 0.31. No significant reason on the mechanical side The count of number of accident on the bus type and the accident per bus is being impacted by the fleet size of that bus model.

8.2.10.1.5. This result shows that no specific bus model contributed a high accident rate in general. And there is no direct correlation between accident rate and bus. Traffic accidents can be caused by factors in operating environments, routes, road conditions, bus captains, fleet sizes and other factors.

8.2.10.1.6. Table 8.16 shows the number accident per bus model (between 2013 - 2017). The bus model with more count of accidents in general in line with the number of that bus model in the fleet. No specific bus model got irregular record of accident rate. The Company view there is no specific relationship between accident rate and bus models.

Table 8.16 Accidents by Bus Model

	No. of accidents				
Bus Model	**2013**	**2014**	**2015**	**2016**	**2017**
Trident E500 Turbo	13	58	99	234	310
VOLVO B9TL Wright Body EuroV	92	98	94	129	175
VOLVO SUPER OLY 12M (A/C)	118	116	116	87	105
Trident Enviro500	102	80	88	85	77
DENNIS TRIDENT 12M (A/C)	156	130	110	81	61
DENNIS TRIDENT 10.6M (A/C)	57	65	48	45	38
Trident E500 Turbo 12.8M	0	0	1	22	32
NEOPLAN SLF 12M (A/C)	42	27	17	27	21
VOLVO B9TL Wright Body	21	20	11	15	19
VOLVO SUPER OLY 10.6M	41	29	19	21	18
VOLVO B7RLE MCV SD	11	8	23	19	16
VOLVO B9TL Enviro500	35	22	24	11	16
VOLVO Super Oly Wright Body	26	27	18	14	16
MAN 12M (A/C)	15	9	6	7	13
Trident Enviro400 EuroV	14	11	10	16	9
SCANIA K310UD 12M Caetano Body	5	8	6	2	6
Trident Enviro500 EuroIV	8	6	11	5	6
SCANIA Caetano 12M EuroIV SD	5	5	10	4	5
Dart Enviro200 EuroV SD	8	5	3	9	4
Dart E200 Single Door 10.4M SD	1	1	0	0	2
MAN ND323F 12M	0	0	0	1	2
SCANIA Caetano 10.6M EuroIV SD	8	3	4	8	2
DENNIS DRAGON 10M (A/C)	52	23	8	14	1
SCANIA K280UD 12M	0	0	0	1	1
Trident Enviro500 EuroV	2	0	0	1	1
DENNIS DART SLF 10.7M	3	2	2	0	0
DENNIS DART SLF 10M	1	0	0	0	0
DENNIS DRAGON 11M (A/C)	27	20	1	0	0
DENNIS DRAGON 12M (A/C)	26	28	24	4	0
NEO-MAN	0	0	0	1	0
SCANIA 11.5M (A/C)	6	2	0	0	0
Trident E500 Hybrid 12M	0	0	2	1	0
VOLVO 11.3M (A/C)	96	83	70	16	0
VOLVO 12M (A/C)	88	59	28	0	0
VOLVO B9TL Wright Body 10.6M	0	1	0	0	0
VOLVO B9TL WrightBody 12.8M	0	0	0	1	0
Total	**1079**	**946**	**853**	**881**	**956**

8.2.10.2 Bus Type – Single or Double Deck Buses

8.2.10.2.1. Table 8.17 shows the number of accident per bus of Single/Double Deck Buses, and the count of accident recorded for Single/Double Deck Buses (between 2013-2017).

Table 8.17 Accidents by Bus Type

Bus Type	2013		2014		2015		2016		2017	
	Per bus of the concerned bus type	Count of accident of the bus model	Per bus of the concerned bus type	Count of accident of the bus model	Per bus of the concerned bus type	Count of accident of the bus model	Per bus of the concerned bus type	Count of accident of the bus model	Per bus of the concerned bus type	Count of accident of the bus model
Double Deck Bus	0.29	1046	0.25	924	0.22	813	0.23	841	0.25	927
Single Deck Bus	0.22	33	0.14	22	0.25	40	0.24	40	0.18	29
Total	**0.29**	**1079**	**0.25**	**946**	**0.22**	**853**	**0.23**	**881**	**0.24**	**956**

8.2.10.2.2. Accident rates (no. of accidents per bus of the concerned bus type) of double deck bus and single deck bus were 0.25 and 0.18 respectively in 2017.

8.2.10.2.3. Single Deck buses account for 3% of the Company's bus fleet in 2017. The number of accident of Single Deck buses is reasonably to be recorded lower than Double Deck buses.

8.2.10.2.4. All vehicle deployment of a route on a particular road section was approved by the Transport Department before the route comes to operation. As an operator, KMB will deploy suitable bus types to in accordance to different road constraints.

8.2.10.2.5. There is no direct correlation between Bus Accidents and Single or Double Deck Buses.

8.2.10.3 Bus Type – Bus Length

8.2.10.3.1. Table 8.18 and 8.19 shows the number of accident per bus and the count of accident recorded of buses in different bus length (between 2013-2017).

Table 8.18 Accidents by Bus Length (per bus with the concerned bus length)

	No. of accidents per bus				
Bus Length (m)	2013	2014	2015	2016	2017
10	0.25	0.25	0.16	0.28	0.50
12	0.29	0.24	0.22	0.22	0.25
12.8	N/A	N/A	0.25	0.35	0.21
10.6	0.37	0.34	0.25	0.28	0.21
10.4	0.30	0.15	0.07	0.22	0.15
10.7	0.30	0.20	0.22	-	N/A
11	0.16	0.25	N/A	N/A	N/A
11.3	0.23	0.20	0.23	1.14	N/A
11.5	0.30	0.22	N/A	N/A	N/A

* N/A: there was no bus with such length as at 30 Jun of the year.

Table 8.19 Accidents by Bus Length

	No. of accidents				
Bus Length (m)	2013	2014	2015	2016	2017
12	765	701	687	729	850
10.6	120	109	81	90	67
12.8	0	0	1	23	32
10.4	9	6	3	9	6
10	53	23	8	14	1
10.7	3	2	2	0	0
11	27	20	1	0	0
11.3	96	83	70	16	0
11.5	6	2	0	0	0
Total	**1079**	**946**	**853**	**881**	**956**

8.2.10.3.2. Accident rate of bus with length of 10m was the highest, 0.50 in 2017. However, there were just two 10m buses. The accident rate is be distorted by the small population.

8.2.10.3.3. The count of bus accidents on 12m buses record highest in past 5 years, it is merely due to 12m buses are the major length of buses in KMB's fleet. Table 8.18 shows there number of accidents per bus is 0.25 for 12m buses. Compare to 0.21 for 12.8m buses and 10.6m buses, the difference is 0.04.

8.2.10.3.4. All vehicle deployment of a route on a particular road section was approved by the Transport Department before the route comes to operation.

8.2.10.3.5. Internally, trial run will be conducted before bus routes comes to operation.

8.2.10.3.6. For bus routes to be operated by 12.8m buses, approval will be obtained by the Transport Department in advance. Bus captains will also receive additional training for driving 12.8m buses.

8.2.10.3.7. There is no direct correlation between Bus Accidents and Bus length.

8.2.11 Accident by Vehicle Age

8.2.11.1. Table 8.20 shows the count of accident and number of accident per bus to the year the bus is first licensed (between 2013-2017).

Table 8.20 Accidents by Vehicle Age (Count of accidents and per bus of the concerned age)

	2013		2014		2015		2016		2017	
Year of bus licensed	Count	Accident per bus	Count	Accident per bus	Count	Accident per bus	Count	Accident per bus	Count	Accident per bus
2000 or before	494	0.25	391	0.23	275	0.21	166	0.25	90	0.22
2001	89	0.29	71	0.23	67	0.22	59	0.19	57	0.18
2002	114	0.32	111	0.31	90	0.25	65	0.18	89	0.25
2003	79	0.41	56	0.29	50	0.26	45	0.24	54	0.28
2004	53	0.30	55	0.31	58	0.33	46	0.26	41	0.23
2005	10	0.21	16	0.34	10	0.21	10	0.21	12	0.26
2006	43	0.40	26	0.24	21	0.19	30	0.28	28	0.26
2007	18	0.34	11	0.21	12	0.23	6	0.11	10	0.19
2008	12	0.60	5	0.25	7	0.35	2	0.10	4	0.20
2009	14	0.27	6	0.12	12	0.24	13	0.25	5	0.10
2010	33	0.25	29	0.22	39	0.30	29	0.22	35	0.30
2011	62	0.27	59	0.26	39	0.17	52	0.23	52	0.23
2012	38	0.32	39	0.33	29	0.24	36	0.30	32	0.27
2013	20	0.41	49	0.20	30	0.12	44	0.18	52	0.21
2014	0	N/A	22	0.18	61	0.23	70	0.27	70	0.27
2015	0	N/A	0	N/A	53	0.22	136	0.23	177	0.30
2016	0	N/A	0	N/A	0	N/A	72	0.27	103	0.21
2017	0	N/A	0	N/A	0	N/A	0	N/A	45	0.27
Total	**1079**		**946**		**853**		**881**		**956**	

* N/A: there was no bus licensed on the year as at 30 Jun of the year.

8.2.11.2. The accident rates by the first licensed year of the buses ranged from 0.10 to 0.30 in 2017.

8.2.11.3. There is no direct correlation between Bus Accidents and vehicle age.

8.2.12 Accidents by Stairway Type of Bus

8.2.12.1. Table 8.21 shows the count of accidents involving passenger losing balance on stairway in 2017.

Table 8.21 Accidents involving passenger losing balance on stairway

	2017			
Stairway Type	**Bus captain blame-worthy**	**Bus captain not blame-worthy**	**Total**	(%)
Spiral	23	-	**23**	28%
Straight	56	2	**58**	72%
Total	**79**	**2**	**81**	

Ref. to Table 8.5

8.2.12.2. 23 (28%) out of 81 cases recorded on buses with spiral stairway and 58 (72%) out of 81 cases recorded on buses with straight stairway. The proportion aligns with the number of spiral and straight stairway type buses in KMB's fleet in 2017.[Note] This shows the stairway type does not direct correlated to accident rate.

Note: At end 2017, the proportion of spiral and straight stairway type buses in KMB Fleet was 27:73.

8.2.12.3. Table 8.22 shows the count of accident and number of accident per bus to the year the bus is first licensed. Table 8.22 shows the accident rates of buses with spiral stairways and straight stairways (between 2013-2017).

8.2.12.4. Table 8.23 shows there is no significant difference in the accidents by stairway types per bus in spiral/straight stairway types. The Company views there is no direct correlation between Bus Accidents and stairway type of the bus.

Table 8.22 Accidents by Stairway Type of Bus

	No. of accidents				
Stairway type	**2013**	**2014**	**2015**	**2016**	**2017**
Spiral	724	591	447	303	262
Straight	318	331	364	538	665
Single Deck	37	24	42	40	29
Total	**1079**	**946**	**853**	**881**	**956**

Table 8.23 Accidents by Stairway Type of Bus (per bus of the concerned bus type)

	No. of accidents per bus				
Stairway type	**2013**	**2014**	**2015**	**2016**	**2017**
Spiral	0.27	0.25	0.22	0.22	0.22
Straight	0.33	0.26	0.22	0.24	0.26

8.3 Improvement Measures

8.3.1. Further to the analysis in Section 8.2, bus safety can be improved in the following aspects in addition to bus safety features, training and performance monitoring of bus captains:

- Passenger Education (refer to 8.6.13-14)
- Road User Education (refer to 8.6.11-12)
- Traffic Management (refer to 8.6.3-10)
- Training in Defensive Driving (refer to 8.6.15)

8.3.2. Apart from this, KMB has taken the below new initiatives in 2018-2019:

a) Conducted an expedition to United Kingdom, and is cooperating with the Queen's University of Belfast to conduct a study and develop the Advanced Driver Assistance System (ADAS).

b) Engaged an external consultant - The Direx Solutions, to conduct a review on our bus operation.

c) To adopt the Government's Digital Map system in updating the operational information

d) To shorten the transmission of data from 'black box' from every 30s to every 10s.

e) To enhance the speeding alert function of Openmatics black box. (ref to 8.3.4)

8.3.3. After the Tai Po Road Bus Accident, KMB set up a special committee, which came up recommendations on bus safety. Subsequently, the management formulated the action plan for implementation. Please refer to page 32 to 43 for the progress of implementation as of 1 August 2018.

Action plan for implementation of the Key Recommendations

<table>
<tr><th>Topic</th><th>Action plan with milestone and date
(as of 10 April 2018)</th><th>Action plan with milestone and date
(as of 1 August 2018)</th></tr>
<tr><td colspan="3">Recruitment</td></tr>
<tr><td>1. To discontinue the employment of part time BCs whose working hours fall below 18 hours per week.</td><td>No more new employment of part time BC with working hours below 18 hours per week since 15 February 2018.

<u>Milestone</u>
15 February 2018</td><td>Same as before.</td></tr>
<tr><td>2. To offer the previous part time BCs the option to convert to contract hourly rated BCs or to take up alternative duties in the Company.</td><td>Status of the 209 previous part time BCs:

<table><tr><td>Agreed to work ≥18 hours a week</td><td>78</td></tr><tr><td>Agreed to work over 10 hours a week; declare doing part-time BCs at KMB will not breach the employment contract with their employer.</td><td>123</td></tr><tr><td>Quitted</td><td>8</td></tr></table></td><td>Status of the 209 previous Hourly Rated BCs:

<table><tr><td>Contract signed (work ≥18 hours a week)</td><td>73</td></tr><tr><td>Contract signed (work over 10 hours a week); declared doing Hourly Rated BC at KMB will not breach the employment contract with their employer</td><td>109</td></tr><tr><td>Quitted</td><td>27</td></tr></table></td></tr>
</table>

Topic	Action plan with milestone and date (as of 10 April 2018)	Action plan with milestone and date (as of 1 August 2018)
Training		
3. All newly recruited BC candidates should be subject to the same standard of training i.e. phase 1 of training to meet the standard of passing 17 (public bus (franchised)) driving test conducted by TD; and phase 2 of training to meet the standard required by KMB including safe driving techniques, emotional control and route training.	New recruits that only possess driving licenses 1 & 2, should undergo both Phase 1 and Phase 2 of training. Those who have already possessed driving license 10 or 17, and passed BCTS' pre-course driving assessment, are allowed to join Phase 2. In case he/she failed the pre-course driving assessment, he/she has to start from Phase 1. The same rule also applies to internal staff members. <u>Milestone</u> The above action has been implemented from 14 March 2018.	Same as before.

Topic	Action plan with milestone and date (as of 10 April 2018)	Action plan with milestone and date (as of 1 August 2018)
4. Bus Captain Training School should extend the route training to all bus routes operated by KMB. Each BC is required to get trained with an instructor for each new route.	Each BC is required to receive formal route training delivered by a BCTS' driving instructor ("DI") in the ratio of 1:6 before he/she is deployed to drive a new route. After the training, a DI will authorize the BC to drive the new route and the BC will also sign an agreement that he/she is familiar with the route. The record will be kept in computer. Milestone The above action plan has taken effect from 15 February 2018.	Same as before.
5. Any BC who is convicted of careless driving or has committed multiple traffic contraventions should attend remedial training.	Performance mangers will refer BCs who were convicted of careless driving or with poor driving record to BCTS for remedial training. Milestone On-going (it has been an established practice).	Same as before.

Topic	Action plan with milestone and date (as of 10 April 2018)	Action plan with milestone and date (as of 1 August 2018)
6. Any BC who has taken a consecutive period of leave for 30 days or more or has been cumulatively absent from work for 30 days in a 2 month period should attend a full day remedial training.	HRD and Operations will refer BCs who have not performed consecutive driving duty for 30 days or more, due to sick leave and injury leave or due to operational reasons, to BCTS for a full day remedial training respectively. A full day remedial training for BCs who have been cumulatively absent from duty for over 30 days or more in a 2-month period will be required subject to consultation and subsequent agreement with the trade unions. Milestone On-going	On-going. No consultation and agreement yet.
7. The number of KMB driving instructors should be increased to a total of 110.	An additional 15 DI licenses have been approved by TD. The selection of DI candidates was completed on 19 March 2018. The DI candidates would complete all training and necessary TD's exams before 30 June 2018 to form a cadre of 81 DIs. Milestone With the capacity of 81 DIs, the workload of DIs and the necessity of additional DIs will be reviewed in Q3 2018 and an application of additional 29 DI licenses, to form a cadre of 110, will be submitted.	16 DI candidates have attended and passed TD's written examination and driving test by June 2018 and joined BCTS to form a cadre of 81 DIs. Milestone Same as before.

Topic	Action plan with milestone and date (as of 10 April 2018)	Action plan with milestone and date (as of 1 August 2018)
Performance		
8. Each newly recruited BC should declare his employment, whether on a part time or full time basis; any serious illness that would affect road safety, and criminal records. KMB should conduct a formal assessment on each BC.	The following requirements have been implemented for all newly hired BCs: - declaration of illness; - declaration of criminal record; and - traffic conviction check. Remark: No new hire of part-time BC since 15 February 2018.	Same as before.
9. KMB should conduct a traffic conviction search for each contract hourly rated BC every 6 months whereas all full time BCs including employed retirees on an annual basis.	New BCs are required to submit their traffic conviction records during recruitment. In-service contract hourly rate BCs (previously known as part-time BCs) have to submit their traffic conviction records every 6 months. Checking the traffic conviction record of in-service full-time BCs will be subject to consultation and subsequent agreement with the trade unions.	For new hire: traffic conviction check has been implemented and has become an on-going measure. For in service contract hourly rated BCs: the first round of traffic conviction check was completed in April 2018. Next round will be done in October 2018. For in service full time BCs: will consult the trade unions and the BCs affected by end of September 2018.

Topic	Action plan with milestone and date (as of 10 April 2018)	Action plan with milestone and date (as of 1 August 2018)
10. KMB should monitor BCs' performance by analyzing his driving record from the black box installed on buses and improve the effectiveness and timeliness of follow up disciplinary actions on BCs' inappropriate driving behavior and attitude.	Operations Sections will continue monitoring bus speed by using the "BOP 207" functions in the black box system. Checking is done on a daily basis. BOP 207 is capable of checking speeding that occurred 10 days before. Any abnormalities will be dealt with and reported promptly to TQD, which will then commence disciplinary procedures. Milestone IT Dept. is in the process of enhancing the presentation of the Bus Performance Reports to facilitate monitoring speeding, harsh braking and abrupt acceleration. After the enhancement of BOM System, Operation Sections will analyze the data of preceding 8 days twice a week to provide driving records of BCs with irregularities. The reports will be passed to TQD twice a week. Immediate actions will be taken to alert respective BCs to deter them from committing the same faults. The whole process will finish in 14 working days. Upon confirmation of the speedometer check is correct, a follow-up action of issuing warning letter or appropriate disciplinary actions will be taken.	Operations Sections will continue monitoring bus speed by using the "BOP 207" functions in the black box system. Checking is done on a daily basis. BOP 207 is capable of checking speeding that occurred 4 days before. Any abnormalities will be dealt with and reported promptly to TQD, which will then commence disciplinary procedures. Raw data of speeding, harsh braking and abrupt acceleration will be generated weekly. For speeding cases, Operation Sections will be informed to remind respective BCs. For harsh braking and abrupt acceleration, plain clothes driving instructors will be deployed to conduct on-board check within one week. TQD will take disciplinary actions against BCs with poor driving performance.

Topic	Action plan with milestone and date (as of 10 April 2018)	Action plan with milestone and date (as of 1 August 2018)
11. The Training and Quality Assurance Department of KMB should take disciplinary actions against BCs with problems of speeding, abrupt acceleration, harsh braking and other poor performance within 14 working days.	Refer to the answer to item 10 above.	Refer to the answer to item 10 above.

Topic	Action plan with milestone and date (as of 10 April 2018)	Action plan with milestone and date (as of 1 August 2018)
Working conditions		
12. KMB should implement the revised Guidelines on Bus Captain Working Hours, Rest times and Meal Breaks by the end of 2018 and reduce the maximum working hours for split duties to 13 hours.	The implementation plan of the revised Guidelines will be as follows: - 1. Computer system modifications below will be conducted between April and December 2018: - scheduling system modifications between April and May 2018 - duty rostering system modifications between May and September 2018 - duty dispatching system modifications between July and October 2018 - modifications of reports for guidelines checking for actual duty between November and December 2018 2. Guideline number (2) will be fully complied effective from 1 November 2018 3. Rescheduling bus and crew duties will be implemented by phases starting from October 2018, and to be completed by end of April 2019 4. Guideline number (1)(a), (1)(b), (3) will be fully complied effective from 1 May 2019 Reduction of maximum working hours for split duties to 13 hours will be reviewed upon the full implementation of the revised Guidelines.	Same as before. Everything is on schedule. Scheduling system modification was completed in May 2018.

Topic	Action plan with milestone and date (as of 10 April 2018)	Action plan with milestone and date (as of 1 August 2018)
Psychological support		
13. KMB should engage a professional consultant to provide a comprehensive review of the current practice and recommendations will be implemented phase by phase to address immediate concerns.	A restricted tender has been sent out to invite professional consultants to provide such service. All the interested consultants will be invited to present their proposal in early May 2018 and the Task Force will appoint the consultant in mid May 2018. The consultancy service should be completed within 6 to 9 months. It is expected the consultant will make recommendations on psychological well being issues including but not limited to recruitment, training, performance management as well as developing tools and training programs that fit our needs.	The consultancy team from the psychology department of a local university was appointed on 31 May 2018. In June 2018, the team has kicked off its review of the current practice in relation to the provision of emotional support through visiting depots, BCTS and Hotline Center, and meetings with Deputy Operations Director, depot staff, zone heads, driving instructors, recruitment team and employee relations team of HR department. In July 2018, the consultancy team has shared their initial observations with the Task Force. Both parties have worked out the general approach in delivering the project and the key activities in the coming months, namely to set up some focus groups to collect views directly from BCs and frontline staff on their needs in terms of psychological support and well being, to plan the training of driving instructors which was scheduled to start in September 2018, to further review the recruitment process so as to maximize its effectiveness, and to develop supporting activities for building a balanced and healthy work life.

Topic	Action plan with milestone and date (as of 10 April 2018)	Action plan with milestone and date (as of 1 August 2018)
Measures to enhance bus safety		
14. Safety belts- KMB has already requested its suppliers to install safety belts on all seats as a standard feature for new buses ordered after 5 March 2018. As for buses that are currently in service, where certain routes so required, safety belts will be installed on the bus upper decks phase by phase.	<u>Installation of safety belts on new buses ordered after 5 March 2018</u> Safety belts on all seats have been requested on new ordered buses after 5 March 2018. <u>Installation of safety belts on all seats of existing buses</u> Installation of safety belts on lower deck of existing buses is not feasible as this will involve major structural alternation. The feasibility of "installing safety belts on upper deck seats only" will be updated by our suppliers in due course.	<u>Installation of safety belts on new buses ordered after 5 March 2018</u> Completed. <u>Installation of safety belts on all seats of existing buses</u> Volvo and ADL advise that installation of safety belts on upper deck of certain existing buses is feasible. Volvo and ADL will provide technical details. Reduction in carrying capacity and bus down time for retrofit should be considered.
15. Electronic Stability Program – KMB should test and verify with bus suppliers the installation of ESP in EURO V and EURO VI to reduce the risk of skidding and rolling over.	New ordered Euro VI buses will have ESP installed. Feasibility for retrofitting on existing buses will be updated in due course.	New Euro VI buses to be delivered in 2019 will have ESP installed. Volvo indicated that lead time of 18-24 months will be required for developing a retrofitting solution for the existing Euro V buses. ADL has yet to confirm the retrofitting solution in due course.

Topic	Action plan with milestone and date (as of 10 April 2018)	Action plan with milestone and date (as of 1 August 2018)
16. Geo-fencing—KMB should set speed limits of buses running through specific geo-fences. Upon satisfactory testing, they should consider using the technology in the fleet in particular routes with steep slopes or sharp bends.	Bus suppliers are studying how to implement this feature. Feasibility study is ongoing.	A test drive was arranged with Volvo on 28 June 2018. The test drive showed that the speed limiter could change its threshold according to the defined 50 km/h and 70 km/h speed limit zones. Another test drive on a specific route will be arranged by August 2018. A test drive was arranged with Openmatics on 31 July 2018. The test drive showed that speed alert could be produced according to the defined 50 km/h and 70 km/h speed limit zones.
17. Tilt alarm – tilt alarm should be installed on the entire fleet to alert BCs when the bus has reached a specific inclination.	Bus suppliers have been urged to study and suggest the inclination threshold. Feasibility will be updated in due course.	All bus manufacturers do not recommend a tilt alarm as the signal may be either too early or too late. Should the threshold be set at a level that a warning is sent to the BC in time for him/her to react, that might cause a number of nuisance activations which may lead to the BC ignoring the warning. Should the threshold be set to a higher level, by the time the BC has the chance to react to the warning, there is a danger that it may be too late. It is also hard to predict what action the BC will have, such as harsh braking or over-steering.
18. Speed alarm—an audible alert and a warning light should be activated to warn BC when the bus speed is beyond 70km/hr.	Completed.	Completed.

Topic	Action plan with milestone and date (as of 10 April 2018)	Action plan with milestone and date (as of 1 August 2018)
19. Speed limitation—speed limitation system which will automatically activate the brakes to slow down the gearbox should be installed on new buses after a period of engineering and testing.	Both ADL and Volvo are studying how this system could be implemented on new bus. Feasibility will be updated in due course.	ADL Euro VI new buses will come with this feature. Volvo will have this feature available in July 2019 and their Euro VI new buses delivered before this time will have the feature retrofitted.
20. Condensation - either hot air demisters or heated windscreens should be adopted for more effective and faster dehumidification.	Either hot air demisters or heated windscreen has been adopted as standard features on new ordered buses after March 2018. Existing buses will be retrofitted with hot air demisters or heated wind screens by phase within the next 12 months.	Completed. On schedule.
21. Drowsiness of bus captain – KMB should test device to monitor drowsiness of BCs while they are driving and install such system in all buses if the result is satisfactory.	This drowsiness monitoring system will be installed into 4 buses for trial at the end of April 2018.	Initial trial in June 2018 showed that the drowsiness monitoring system could perform its functions. Trial run of the system in 4 buses has started since end of June 2018. The device is positioned to help BCs rather than to take disciplinary action against them. Recording function is not enabled.

8.3.4 To enhance the speeding alert functions of Openmatics black box

Current system

Openmatics is the current supplier of black box on KMB / LWB buses. On speeding alert, the Openmatics black box compares the actual speed from Controller Area Network System onboard with the speed limit threshold, which is currently set at 70 kph.

1. Real-time onboard speed alert at 70 kph.

2. The black box data are being uploaded to the KMB server from buses for processing and further merging with KMB systems. The processing time is currently 4 days.

Challenges

Challenges	**Suggested solutions**
Unable to identify the speed limit on actual locations	• Live digital map with accurate speed limits from the Government
Lengthy data processing time for speeding offences	• Live digital map with accurate speed limits from the Government • Improve internal data processing

Works undertaken

A number of initiatives have being carried out to improve the above.

Openmatics has manually defined 50 kph and 70 kph zonings (please refer to Annex). KMB had started a conceptual trial on 31 July 2018 by comparing the above speed limits with the actual speed. Such trial is to verify whether the real-time onboard speed alert would notify the bus captains upon the actual speed of the trial bus exceeds the speed limit of the road. The result of the initial trial is so far positive. Further testing will be carried out. We are prepared to introduce the Government's digital map into the Openmatics black box, which will take three to four months. However, the Government's digital map does not contain live information, and can only be updated every 6 months.

In order to shorten the backend 4 day processing, KMB will adopt the blackbox as source to eliminate the duplicated information within KMB systems.

In parallel, we are also working with bus manufacturers to explore the feasibility of geo-fencing. With the new technology, the black box has potential to assist the control of the buses when certain parameters are met (i.e. speed limiter includes cutting off fuel supply or braking).

Timeline

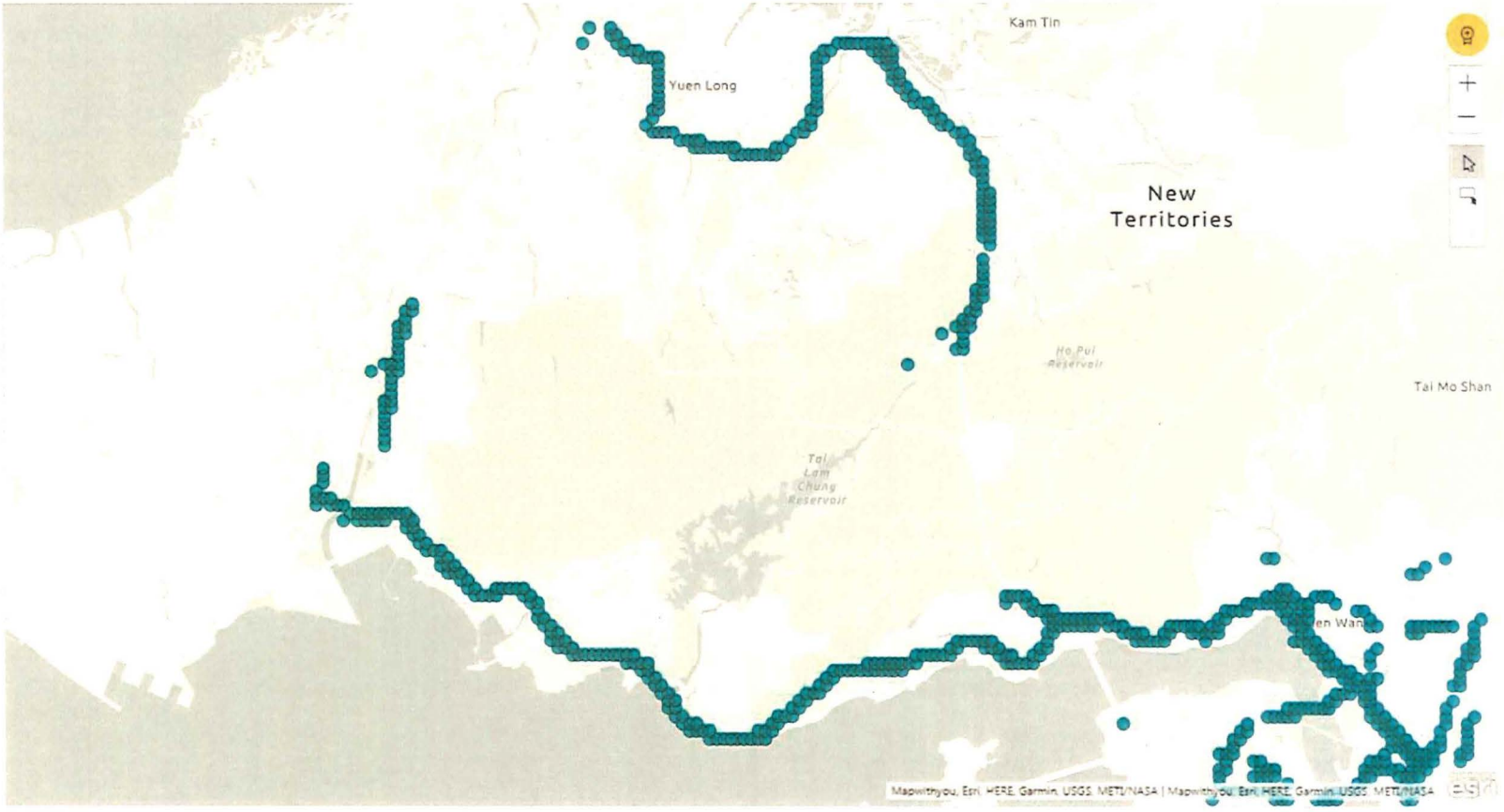
	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19
Real-time alert								
Incorporate speed limit into black box by Openmatics								
Validate the speed limit accuracy								
Carry out internal trial								
Consultation with frontline staff								
Implementation to full fleet								
Data processing								
Integration of internal systems								
Geo-fencing (fuel cutting)								
Discussion with bus manufacturers								
Development by bus manufacturers								
Carry out internal trial								
Consultation with frontline staff								
Implementation to full fleet								

Target

Current	**Future**
Activation of speed alert when the speed exceeds 70 kph	Activation of speed alert when the speed exceeds the actual speed limit
Activation of fuel cutting when the speed exceeds 70 kph	Activation of geo-fencing (including fuel cutting, gear lowering and braking) when the speed exceeds the actual speed limit
Processing time of 4 days in the back-end for speeding offences	Processing time can be shorten further in the back-end for speeding offences

Annex: Speed zones defined for the trial on 31 July 2018

- Green dots: speed limit of 70 kph
- Other areas: speed limit of 50 kph



8.4 Proposed Target Accident Rate

8.4.1. Accident Rate in this context is defined as the average number of bus accidents involving personal injuries or deaths per million vehicle/km operated in the reporting year. This definition used is in line with the previous practice and different franchised bus operators.

8.4.2. Accident Rates of KMB in the past 5 years are as follows.

Year	2013	2014	2015	2016	2017
Accident Rate	3.17	2.89	2.57	2.68	2.90

8.4.3 In setting the target accident rate for the period covered by this Forward Planning Programme, consideration should be given to (i) the historical accident rate of KMB, (ii) the improvement measures formulated and its expected benefits.

8.4.4 Accident rate of a franchised bus operator is highly correlated to the network the operator served. Accident rates of different franchisees vary by the network they served. Both KMB and LWB are managed under the same management system, their accident rate vary due mainly to different networks they served. Likewise, other franchisees A, B and C are managed by the same management, their accident rate vary too.

	Major coverage	Period	Accident Rate
KMB	Kowloon, NT	2017	2.90
LWB	Tung Chung, NT	2017	1.21
Other franchise A	HK Island	2016/2017	6.05*
Other franchise B	HK Island	2016/2017	4.94*
Other franchise C	Tung Chung, HK Island	2016/2017	1.55*
Other franchise D	Lantau Island	2016/2017	1.92

* provisional figure

8.4.5 The bus network served by KMB has changed over time. Every year, there are addition of new routes, adjustment of service frequency of certain roués and cancellation of routes. More reference value will have for the figure in recent years. In the past 3 years (i.e. 2015, 2016 and 2017), the lowest accident rate is 2.57 in 2015. The target accident rate going to set should be lower than this level.

8.4.6 A number of initiatives for improvement of bus safety are taken in 2018/19. Details see section 8.3. It is anticipated that these measures, after implementation, will improve the accident rate over time. KMB set the target rate for the period covered by this Forward Planning Programme as 2.10, representing an improvement from 2017.

8.5 Safety Suggestions to Transport Department

8.5.1. An effective way to reduce accidents is to eliminate hazards at source. Apart from enhancing training and monitoring for bus captains, improving duty rostering and scheduling, promoting safety to passengers and upgrading bus safety features, KMB has provided safety suggestions to the Transport Department with the aim of eliminating or minimising hazards.

8.5.2. KMB has been actively in raising ideas to eliminate or minimise road hazards. The safety suggestions include provision of proper road markings/signage, re-arrangement of bus stops, strengthening of enforcement of illegal parking and jaywalking, extension of prohibited zones, correction of misleading road markings/signage, provision/removal of guard railings, modification of bus termini, and provision of lighting.

Table 8. 24 Safety Suggestions to Transport Department

	2017	2018 1H
No. of safety suggestion letters first issued (reminders excluded)	225	189

8.5.3. KMB has followed up with the Transport Department on the reply regularly.

8.6 Complementary Policies and Measures

Rest environment

8.6.1. KMB have been upgrading the working environment for their frontline staff, for example, by adding staff rest kiosks with air-conditioners at bus termini, as part of their bid to enhance driving safety. The setting up of rest kiosks cannot be timely done without the support and collaboration of the Government. We are working together with the TD to take the lead in coordinating the authorities involved to speed up the process.

Database for conviction record of bus captains

8.6.2. KMB plans to strengthen the checking of traffic conviction record on existing bus captains. Currently the existing database of TD for checking bus captain's traffic conviction record only applies to new recruitments. If the scope can extend to in service bus captains, it can facilitate the work. KMB views it is better to simplify the procedure by establishing a central database of the conviction records of drivers to facilitate timely safety assessment of drivers. We will discuss this further with TD.

Setting up Bus-only Lanes

8.6.3. Bus safety will be enhanced by an effectively implemented bus priority policy, especially the setting up of bus-only lanes. Unlike other road-based public transport modes, franchised buses operate in a volatile road environment with standees on board, and they are prone to injury even under minimal impact. In view of the vulnerability of passengers on franchised buses, setting up more bus-only lanes would significantly reduce competition for space on the road, which in turn will enhance safety for bus passengers. The setting up of more bus-only lanes is also part of the recommendation stated in the Public Transport Strategy Study (PTSS) published in June 2017.

8.6.4. As some cyclists use the roads along with other vehicles, cyclists may be exposed to danger when motor vehicles overtake them. Since cyclists are permitted to use bus lanes unless there are signs banning them, setting up more bus-only lanes would provide a safer cycling and driving environment.

Illegal parking

8.6.5. Illegal parking at bus stops is a major cause of improper stopping of buses, by which road users' safety will be jeopardised as passengers have to board and alight on the road instead of at the bus stop. Moreover, due to illegal on-street parking, the incidence of forced lane changes increases. Buses and other vehicles overtaking illegally parked vehicles pose a safety concern for boarding and alighting passengers, as well as other road users.

8.6.6. KMB have appealed to the Transport Department and other relevant authorities in respect of this issue. We hope effective measures will be put in place to tackle the passenger safety problem stemming from illegal parking. On the other hand, KMB is working close with the Police to facilitate the enforcement on this matter.

Bus terminus design

8.6.7. The majority of bus termini in Hong Kong adopt the "multiple boarding islands" design, a bus terminus design in use since the 1970s. The design potentially induces crossing conflict, as passengers have to use the same lanes as buses. KMB will also offer the view on the design of new bus termini in future.

Government support for safety technology

8.6.8. Safety technology needs considerable amount of investment. Given that safety is an industry concern, if the Government should consider expanding its sponsorship/subsidy schemes to fund part of research and development costs in respect of various safety-related and traffic management technologies and make them available to all franchised bus operators, it will help accelerate the pace of development.

Enforcement of Public Bus Services Regulations (Cap. 230A)

8.6.9. Safe driving is vital to the interests not just of bus passengers, but also of all other road users. Bus captains should be free from disruptions or unnecessary distractions of any kind. In recent years, there have been many cases of KMB bus captains being disturbed or assaulted in the course of conducting their driving duty. However, we note that offenders have been charged only with common assault, while another criminal charge stipulated in "Public Bus Services Regulations (Cap. 230A)" ("the Regulations") is rarely brought.

8.6.10. We continue discussing with relevant Government Departments to consider bringing additional charges as per the Regulations, apart from the common assault charge, to safeguard public safety on buses.

Other road user education

8.6.11. Promoting driving courtesy in respect of public transport vehicles is essential to road safety, as many bus related accidents are caused by improper driving attitude, inter alia, the failure to give way to buses. As stated above, passengers on buses are more vulnerable to traffic accidents, so the Government should proactively educate drivers to give way to buses.

8.6.12. KMB has looked into overseas experiences and will share our findings with TD. The Government of South Australia stipulates that drivers must give way to a bus if the bus is indicating that it intends to move away from the kerb. (The Driver's Handbook: http://mylicence.sa.gov.au/road-rules/the-drivers-handbook/giving-way) The Hong Kong Government may draw on this precedent to amend the Road Users' Code to instruct drivers to give way to buses. In fact, the Transport and Housing Bureau began updating the Road Users' Code in 2018, to include advice for cyclists, the elderly and the disabled on the safe use of roads and related facilities. KMB looks forward to seeing a further enhancement in respect of this suggestion soon.

Enhancement of public education

8.6.13. With regard to the growing number of cases of verbal and physical harassment of frontline staff, as a responsible public bus operator, KMB has put up notices inside bus compartments informing people on board that "It is an offence to talk to the bus captain while the vehicle is in motion" and "Disturbing a bus captain is a criminal offence". Comprehensive training and improvement courses are also regularly provided to KMB bus captains to ensure the continued provision of safe and comfortable bus journeys to the public. The Government may also consider enhancing public education by introducing Announcements in the Public Interest (API) in relation to the etiquette of using bus services.

8.6.14. Transport Department is undergoing a Courtesy Campaign for Public Transport which will launch in November 2018. The campaign aims at raising public awareness and promotes courteous behavior in public transport. KMB has participated actively in this Campaign

KMB will discuss with Transport Department of the initiatives mentioned in paragraphs 8.6.1 - 8.6.14.

Defensive driving

8.6.15. In view of a large portion of traffic accidents recorded in 2017 is bus captain not blameworthy, the awareness of other road user and driving environment will be important to minimise the chance of traffic accidents. KMB will further emphasis defensive driving in the bus captain training programme.

8.6.16. Details of training provided to new and serving bus captains are given in Annex 8.1.

Annex 8.1

A. Regular Training for New Bus Captains

	Training Type	Nature	Duration	Frequency	No. of route / bus type trained
1.	Basic Training	To teach bus driving technique to prepare for Transport Department class 17 licence tests and to equip trainees with the skills required to carry out the duties of a bus captain. Classroom lectures on company rules, passenger safety, accident blackspot analysis, emergency handling procedure and concept of quality service. On road training on defensive driving technique, bus type familiarisation and route training (night drive included).	18 days full time (68 hours on road driving practice by each trainee and 17 hours classroom training plus 6.5 hours online training of self-study mode)	Before posting to duty	2 routes 3-4 bus types

B. Regular Training for Serving Bus Captains

	Training Type	Nature	Duration	Frequency	No. of route / bus type trained
1.	Refresher Training	This training covers: ✧ strengthen the bus manoeuvring skills and defensive driving technique ✧ bus fire evacuation revision training ✧ customer service improvement training ✧ stress management training ✧ training on bus ramp operating	0.5 day	Once every three years for all Bus captains	N/A
2.	Remedial Training	Aimed at bus captains who are found to be inadequate in certain driving areas or service level. The training will specifically tackle these areas until the bus captain reaches an acceptable level before he/she is released to perform normal duties.	1 full day	For bus captains who are found to have driving irregularities or away from driving duties for a period of time.	N/A The bus type that the in-service BCs usually use
3.	Route Training	Familiarise the route on-the wheel under the supervision of Driving Instructor	1 full day	Before an in-service BCs to be posted to a new route	1 mother route and 1 sub-route (if any)
4.	Bus Type Training	Familiarise a new bus type on-the-wheel under the supervision of Driving Instructor	1full day	Before driving a new bus type	1 bus type 1 bus route

- Training protocols are subject to ongoing review, albeit that the aim will be to continue to do all that is reasonably practicable to ensure the safety and comfort of passengers, staff and other road users at all times

8. LWB - BUS SAFETY

8.1 Introduction

8.1.1 LWB is committed to providing safe, reliable and quality bus services in Hong Kong. Safety is an absolute pre-requisite in everything we do. We accord top priority to safety in our daily agenda to meet or exceed customers' expectations.

8.1.2 This chapter starts with an analysis of the types/causes of accidents for the past few years and the relationship of accident rates with respect to different factors, e.g. bus route, bus model, bus type, vehicle age, etc.

8.1.3 This chapter further discusses the various measures that have been or are being undertaken to enhance safety.

8.2 Analysis of Bus Accidents in accordance to the requirement stated by the Transport Department

Table 8.0 Overview of Analysis performed

Part I – Analysis of Traffic Accident

8.2.1	Trend of Accident Rates
8.2.2	Accidents by Nature
8.2.3	Accidents by Cause
8.2.4	Number of Non-collision Franchised Bus Accidents Involving Passenger Casualty
8.2.5	Casualties
8.2.6	Accident Collision and Non-collision

Part II - Analysis on Traffic Accident Related to Non-driver Factors

8.2.7	Accident by Location
8.2.8	Accident by Bus Routes
8.2.9	Accident by District
8.2.10	Accident by Bus Type Bus Model Single or Double Deck Buses Bus Length
8.2.11	Accidents by Vehicle Age
8.2.12	Accidents by Stairway Type of Bus

Part I – Analysis of traffic accidents

8.2.1 Trend of Accident Rates

8.2.1.1 Number of Traffic Accidents involving LWB from 2015 to 2017 are shown in Table 8.1.

Table 8.1a
The number of injury/death on traffic accidents involving from 2015-2017

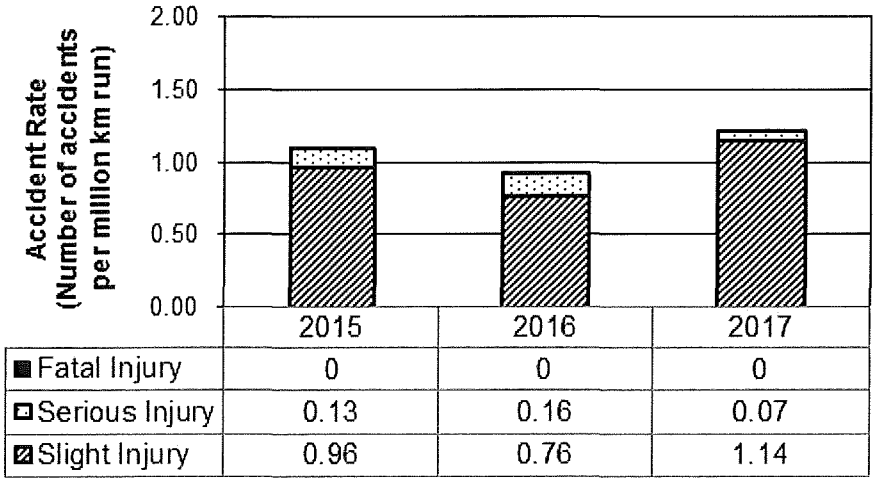
	2015	2016	2017
Injury	47	85	86
Death	-	-	-
Total	47	85	86

Table 8.1b Number of Traffic Accidents involving LWB

	2015	2016	2017
Number of Traffic Accidents involving LWB	34	34	52

8.2.1.2 Accident rates from 2015 to 2017 are shown in Figure 8.1.

Figure 8.1 LWB - Number of accidents involving personal injuries and deaths (per million km run)



8.2.1.3 Table 8.2 showed the Contributory Factors of Traffic Accidents.

Table 8.2 Contributory Factors of Traffic Accidents

Contributory Factors	2015		2016		2017		
	count	%	count	%	count	%	
Bus captains blameworthy factors	8	24%	15	44%	22	42%	Further Analysis Table 8.3a, 8.3b, 8.4, 8.8, 8.10
Bus captains not blameworthy factors	26	76%	19	56%	30	58%	
Total	**34**	**100%**	**34**	**100%**	**52**	**100%**	

8.2.1.4 There was no accidents related to mechanical factor in the reporting period.

8.2.1.5 The training of Bus Captain should further emphasis on defensive training to avoid accidents caused by improper driving behaviour of drivers of other vehicle, and misbehaviour of other road users/ passengers.

Accident Rate by Years of Service

8.2.1.6. The results of an analysis on accident rate by experience in terms of years of service in the Company are shown in the below table:

Bus Captain Service Period	Accident Rate*	
	2016	2017
0 - < 1 year	0.16	0.11
1 - < 2 year	0.04	0.09
2 - < 3 year	0.03	0.05
3 - < 4 year	0.03	0.11
4 - < 5 year	0.00	0.08
5 - < 6 year	0.14	0.12
6 - < 7 year	0.00	0.16
7 - < 8 year	0.09	0.18
8 - < 9 year	0.00	0.20
9 - < 10 year	0.00	0.07
10 - < 15 year	0.11	0.00
15 - < 20 year	0.03	0.08
20 year or above	0.03	0.14

*The Accident Rate is calculated by:

$$\frac{\text{Count of bus captain involved in accident in the service period}}{\text{Total number of bus captain in the service period}}$$

8.2.1.7. The overall accident rate decrease when the bus captains accumulate experience of service.

8.2.1.8. Bus Captains with service experience between 0-1 year, the situation recorded improvement with accident rate noted 0.16 in 2016 and 0.11 in 2017. While for bus captains with service experience in 1-5 years, the situation recorded deteriorated.

8.2.1.9. LWB revamped the basic training programme. Apart from basic training including classroom lectures and on road training, buddy drivers will be assigned to new bus captains. And the training program is revamped to 'standard driven' from 'day-driven'. All route training has been converted to training on the wheel under the supervision of driving instructor.

8.2.1.10. Service monitoring will be more focus on Bus Captains in relatively short service period. On board checking will be conducted within half year from the first day of service for new bus captains.

8.2.1.11. For other bus captains, refresher Training will be provided once every three years for all Bus captains.

8.2.1.12. For bus captains who are found to have driving irregularities or away from driving duties for a period of time. Remedial Training will be provided for bus captains who are found to be inadequate in certain driving areas or service level. The training will specifically tackle these areas.

8.2.2 Accidents by Nature

8.2.2.1 The results of an analysis of accident nature are shown in Table 8.3 below. The results are expressed in terms of absolute count and percentage of accidents during years 2015-2017.

Table 8.3a Accident by nature in absolute count & percentage allocation, and thenumber of injury and death in 2015, 2016

	2015						2016					
Accident Nature	Number of accident	%	Number of injury	Number of death	Total injury / death	%	Number of accident	%	Number of injury	Number of death	Total injury / death	%
Non-Collision												
Loss Of Balance	12	35%	13	-	13	28%	9	26%	15	-	15	18%
Other Non-collision nature												
Injury To Alighting/Boarding Passenger	0	0%	0	-	0	0%	0	0%	0	-	0	0%
Injury To Passenger Inside Bus	1	3%	1	-	1	2%	1	3%	1	-	1	1%
Non-collision Sub-total	***13***	***38%***	***14***	***-***	***14***	***30%***	***10***	***29%***	***16***	***-***	***16***	***19%***
Collision												
Head On/Tail Collision	8	24%	16	-	16	34%	7	21%	7	-	7	8%
Collision With Third Party Vehicle (changing lane)	5	15%	6	-	6	13%	5	15%	6	-	6	7%
Junction Collision	4	12%	5	-	5	11%	3	9%	6	-	6	7%
Glancing Collision	2	6%	4	-	4	9%	1	3%	0	-	0	0%
Hit Stationary Object/Vehicle/Animal	0	0%	0	-	0	0%	5	15%	47	-	47	55%
Injury To Pedestrian	2	6%	2	-	2	4%	3	9%	3	-	3	4%
Collision With Other Vehicle (rolling back/forward/reversing)	0	0%	0	-	0	0%	0	0%	0	-	0	0%
Hit Stationary object/vehicle/animal	0	0%	0	-	0	0%	0	0%	0	-	0	0%
Entering Roundabout Collision	0	0%	0	-	0	0%	0	0%	0	-	0	0%
Collision Sub-total	***21***	***62%***	***33***	***-***	***33***	***70%***	***24***	***71%***	***69***	***-***	***69***	***81%***
Grand Total	**34**	**100%**	**47**	**-**	**47**	**100%**	**34**	**100%**	**85**	**-**	**85**	**100%**
	Ref Table 8.2			Note 8.3.2 Further Analysis Table 8.6b			Ref Table 8.2			Note 8.3.2 Further Analysis Table 8.6b		

Table 8.3b Accident by nature in absolute count & percentage allocation, and thenumber of injury and death in 2017

Accident Nature	2017									
	Bus Captain not blame-worthy	% (of total)	Bus Captain blame-worthy	% (of total)	Number of accident	%	Number of injury	Number of death	Total injury / death	%
Non-Collision										
Loss Of Balance	12	23%	1	2%	13	25%	14	-	14	16%
Other Non-collision nature										
Injury To Alighting/Boarding Passenger	2	4%	0	0%	2	4%	2	-	2	2%
Injury To Passenger Inside Bus	2	4%	0	0%	2	4%	2	-	2	2%
Non-collision Sub-total	***16***	***31%***	***1***	***2%***	***17***	***33%***	***18***	***-***	***18***	***21%***
					Further Analysis Table 8.5					
Collision										
Head On/Tail Collision	3	6%	13	25%	16	31%	24	-	24	28%
Collision With Third Party Vehicle (changing lane)	3	6%	2	4%	5	10%	9	-	9	10%
Junction Collision	3	6%	1	2%	4	8%	4	-	4	5%
Glancing Collision	2	4%	1	2%	3	6%	6	-	6	7%
Hit Stationary Object/Vehicle/Animal	1	2%	2	4%	3	6%	21	-	21	24%
Injury To Pedestrian	1	2%	1	2%	2	4%	2	-	2	2%
Collision With Other Vehicle (rolling back/forward/reversing)	1	2%	0	0%	1	2%	1	-	1	1%
Entering Roundabout Collision	0	0%	1	2%	1	2%	1	-	1	1%
Collision Sub-total	***14***	***27%***	***21***	***40%***	***35***	***67%***	***68***	***-***	***68***	***79%***
Grand Total	**30**	**58%**	**22**	**42%**	**52**	**100%**	**86**	**-**	**86**	**100%**
					Note 8.3.2 Ref Table 8.2 Further analysis Table 8.6b				Note 8.3.2 Further analysis Table 8.6b	

Note 8.3.1 Further Analysis on the number of non-collision Franchised Bus Accidents involving Passenger Casualty in 2017 was conducted. Total 17 (13 in nature of loss of balance, 2 in nature of injury during alighting/boarding, 2 in nature of injury inside buses) accidents noted. Please refer to Table 8.5 in section 8.2.4.

Note 8.3.2 Refer to Table 8.1a, 8.1b

Note 8.3.3 The breakdown of bus captain blameworthy and bus captain not blameworthy in 2015 and 2016 is excluded as the value for reference is low.

8.2.2.2 In 2017, non-collision accidents contributed 17 (33%) out of 52. Among it 13 cases were Passengers Loss of Balance (LOB). 12 out of 13 LOB cases were Bus Captain not blameworthy. It is suggested more passenger education is needed. On the other hand, 1 out of 13 LOB cases were Bus Captain blameworthy. The training of Bus Captain should cover more on avoiding harsh braking.

8.2.2.3 Table 8.3c shows the cause of the LOB cases from 2015-2017.

Table 8.3c Cause of Loss o Balance cases in 2015-2017

	2015				2016			
	Accident Count		Casualties Count		Accident Count		Casualties Count	
	Number of accident	%	Number of casualties (all type) Note 8.3.4	%	Number of accident	%	Number of casualties (all type) Note 8.3.4	%
Accelerating - pull out from bus stop	2	17%	2	15%	2	22%	2	13%
Accelerating - start in traffic	1	8%	1	8%		0%		0%
Accelerating sub-total	**3**	**25%**	**3**	**23%**	**2**	**22%**	**2**	**13%**
Bus braking in traffic	8	67%	9	69%	5	56%	10	67%
Bus braking for stopping for passengers when pulling leaving bus stop	0	0%	0	0%	1	11%	1	7%
Braking sub-total	**8**	**67%**	**9**	**69%**	**6**	**67%**	**11**	**73%**
Bus Moving in traffic	**1**	**8%**	**1**	**8%**	**1**	**11%**	**2**	**13%**
Total Loss of Balance	**12**	**100%**	**13**	**100%**	**9**	**100%**	**15**	**100%**

	2017							
	Accident Count				Casualties Count			
	Bus Captain not blame-worthy	Bus Captain blame-worthy	Number of accident	%	Bus Captain not blame-worthy	Bus Captain blame-worthy	Number of casualties (all type) Note 8.3.4	%
Accelerating - pull out from bus stop	1	0	1	8%	1	0	1	7%
Accelerating - start in traffic	0	0	0	0%	0	0	0	0%
Accelerating sub-total	**1**	**0**	**1**	**8%**	**1**	**0**	**1**	**7%**
Bus braking in traffic	7	1	8	62%	8	1	9	64%
Bus braking for stopping for passengers when pulling leaving bus stop	2	0	2	15%	2	0	2	14%
Braking sub-total	**9**	**1**	**10**	**77%**	**10**	**1**	**11**	**79%**
Bus Moving in traffic	**2**	**0**	**2**	**15%**	**2**	**0**	**2**	**14%**
Total Loss of Balance	**12**	**1**	**13**	**100%**	**13**	**1**	**14**	**100%**

Note 8.3.4 Note Number of casualties includes all injury persons count in an account includign passengers, bus captains, other road users,... etc.

8.2.2.4 1 (8%) out of 13 cases recorded in 2017 resulted from accelerating. This case occurred during the pull out of bus from bus stop. Better traffic management on enforcing the illegal occupy of bus stop by other vehicles, and education of other road users to give way to buses pulling out from bus stops will be able to improve the situation.

8.2.2.5 10 (77%) out of 13 cases recorded in 2017 resulted from braking. LWB continue to enforce defensive driving for bus captains. Apart from this, several safety measures are adopted, examples as below:

a. Educate passengers to hold the handrails via on board stickers and through Bus Stop Announcement System;

b. Installations of safety features on buses to prevent/lower the harm when passengers loss of balance, for example, installation of cushion pads at the step well panel of straight staircase buses; installation of additional inner vertical handpoles on buses with straight staircases.

8.2.2.6 Collision related accidents contributed 35 (67%) out of 52. Among it 14 cases were Bus Captain not blameworthy and 21 cases were Bus Captains blameworthy. The training on bus captains should be enhanced. Remedial driving training will be arranged for bus captains who are involved in serious traffic accidents. Bus captains who are involved in repeated blameworthy traffic accidents are referred to the Bus Captain Training School to attend training. The training course includes defensive driving concepts, case studies, experience sharing and assessment

8.2.2.7 Bus speed will be monitored by using the black box system. Raw data of speeding, harsh braking and abrupt acceleration will be generated weekly. For speeding cases, the Company will remind respective bus captains. For harsh braking and abrupt acceleration, plain clothes driving instructors will be deployed to conduct on-board check within one week. Disciplinary actions will be taken against bus captains with poor driving performance.

8.2.3 Accidents by Cause

8.2.3.1 The results of an analysis of accident cause are shown in Table 8.4 below. The results are expressed in terms of contributing factors related to bus captains by absolute count & percentage allocation and percentage of accidents during years 2015-2017.

Table 8.4 Accident with Bus Captain blameworthy factors by absolute count & percentage allocation

	2015		2016		2017		
Bus Captain blameworthy factors	count	%	count	%	count	%	
Non-Collision type accidents							
Improper Braking	0	0%	1	7%	1	5%	
Insufficient Lookout	0	0%	1	7%	0	0%	
Non-Collision Sub-total	**0**	**0%**	**2**	**13%**	**1**	**5%**	
Collision type accidents							
Failing To Keep Safe Distance From Front Veh	4	50%	2	13%	10	45%	
Insufficient Lookout	1	13%	2	13%	6	27%	
Disobeying Give Way Sign	0	0%	0	0%	2	9%	
Improper Changing Lane	0	0%	1	7%	1	5%	
Inappropriate Speed In Particular Condition	0	0%	1	7%	1	5%	
Speeding	0	0%	0	0%	1	5%	
Improper Steering	0	0%	3	20%	0	0%	
Improper Braking	1	13%	1	7%	0	0%	
Improper Judgement	1	13%	1	7%	0	0%	
Disobeying Traffic Light	0	0%	1	7%	0	0%	
Failing To Keep Proper Lane	0	0%	1	7%	0	0%	
Disobeying Stop Sign	1	13%	0	0%	0	0%	
Collision Sub-total	**8**	**100%**	**13**	**87%**	**21**	**95%**	
Total	**8**	**100%**	**15**	**100%**	**22**	**100%**	Ref. to Table 8.2

8.2.3.2 Three key factors related to bus captains in 2017 were:

a. Failing to keep safe distance from front vehicle (45%, all from collision);
b. Insufficient lookout (27%, all from collision); and
c. Disobeying give way sign (9%, all from collision).

8.2.3.3 Bus Captain Training School will emphasis further in all bus captain training course, regardless of type, in respect to the factors shown on Table 8.4. Training & Quality Assurance Department will issue internal notice quarterly to remind bus captains on the major causes of accident that related to bus captains' driving behaviour.

8.2.4 Number of Non-collision Franchised Bus Accidents Involving Passenger Casualty

8.2.4.1 Table 8.5 below shows the Number of Non-collision Franchised Bus Accidents Involving Passenger Casualty in 2017.

Table 8.5 Number of Non-collision Accidents Involving Passenger Casualty in 2017

	Count of accidents where bus captains not blame-worthy	No. of passenger casualties	Count of accidents where bus captains blame-worthy	No. of passenger casualties	Total count of accidents	No. of passenger casualties	
Accidents involving passenger losing balance on stairway	4	4	0	0	4	4	Further analysis Section 8.2.12 Table 8.23
Accidents involving passenger losing balance elsewhere except on stairway	8	8	1	1	9	9	
Sub-total related to Loss Of Balance	***12***	***12***	***1***	***1***	***13***	***13***	Note 8.5.1
Accidents involving passenger injured by door	2	2	0	0	2	2	
Accidents involving passenger falling down or hitting bus fixture when the bus not in motion	2	2	0	0	2	2	
Number of Non-collision Franchised Bus Accidents involving passenger casualty in 2017	**16 (94% of 17)**	**16**	**1 (6% of 17)**	**1**	**17**	**17**	Ref. to Table 8.3b Further analysis Table 8.6 Note 8.5.2
Percentage over all accidents (Total 52)	**31%**	**-**	**2%**	**-**	**33%**	**-**	

Note 8.5.1
13 represents no. of PASSENGER casualties on LOB cases in 2017. The number of casualites of ALL person type for LOB is 14, see breakdown 1:

Note 8.5.2
17 represents no. of PASSENGER casualties on all non-collision accidents in 2017. The number of casualites of ALL person type is 18, see breakdown 2:

Note 8.5.1 Breakdown 1

Casualties	Count	
Passenger	13	
Bus Captain	1	
Pedestrian	0	
Other driver	0	
	14	<Table 8.3b>

Note 8.5.2 Breakdown 2

Casualties	Count	
Passenger	17	
Bus Captain	1	
Pedestrian	0	
Other vehicle driver	0	
Other vehicle passenger	0	
	18	<Table 8.3b>

8.2.4.2 Among the 17 non-collision accidents involving passenger casualty recorded in 2017, 16 (94%) were contributed by factors not related to Bus Captains.

8.2.4.3 Among these 16 accidents, 12 were accidents involving passenger losing balance of which 4 accidents incurred on stairway.

8.2.4.4 More passenger education on bus safety will help to arise the awareness of passengers and prevent accidents.

8.2.4.5 On Bus Captain trainings side, LWB produces its "Bus Captain Safe Driving Handbook" which is posted at staff website for all bus captains currently in its seventh edition (6 July 2018), the handbook includes driving regulations and points to note about safe driving, covering every aspect of a bus captain's daily work. It is aimed at assisting bus captains in establishing a proper safe driving attitude and encouraging them to take all practical steps aimed at achieving safe driving.

8.2.4.6 Apart from the "Bus Captain Safe Driving Handbook", the Bus Captain Training School provides intensive training for LWB bus captains including bus type training, route trainings and the driver instructor will remind bus captains on different safety measures. Regular internal notice on safe driving are also issued to alert bus captains.

8.2.5 Casualties

8.2.5.1 Table 8.6a shows the number of passenger casualties in non-collision accidents by casualty position. More than one casualty can be noted in one accident. Should have better cross reference, in previous Loss of Balance analysis, add further analysis of the location of accident will be shown on 8.2.5.

Table 8.6a Passenger Casualties in Non-collision Accidents by Casualty Position

	Number of Passenger Casualties and Percentage Allocation										
	2013		2014		2015		2016		2017		
Casualty Position	count	%	count	%	count	%	count	%	count	%	
Lower deck_standing	4	15%	3	14%	7	50%	9	56%	5	29%	
Stairways	8	30%	3	14%	2	14%	3	19%	4	24%	Note 8.6.1
Entrance/exit door	4	15%	2	10%	0	0%	1	6%	2	12%	
Lower deck_sitting	2	7%	6	29%	3	21%	0	0%	2	12%	
Lower deck_moving	5	19%	1	5%	1	7%	0	0%	2	12%	
Upper deck_seating	1	4%	3	14%	0	0%	1	6%	1	6%	
Record Unavailable	3	11%	3	14%	1	7%	2	13%	1	6%	Note 8.6.2
Total	**27**	**100%**	**21**	**100%**	**14**	**100%**	**16**	**100%**	**17**	**100%**	Ref. to Table 8.5
Number of fleet size as at 30 June of the year	**167**		**172**		**183**		**193**		**243**		

Note 8.6.1 The number recorded (4) for casualty position in Stairways includes all accidents and all these 4 (recorded in Table 8.5) were cause from Losing of Balance.

Note 8.6.2 Not all the casualty position can be recorded in the traffic accident. In some cases, casualty unable to provide this information.

Note 8.6.3 TD request analysis on the number of casualties with categories by with and without seatbelt is not available as it has not been recorded.

Note 8.6.4 The table only indicated PASSENGER casualties, other types of casualties were excluded.

8.2.5.2 Table 8.6b shows the number of casualties (all type) in collision accidents by casualty position. The ratio is around 7:3 for casualty position inside and outside bus, where casualties recorded outside bus are other road users including pedestrians, cyclists, other vehicle drivers/passengers...etc.

Table 8.6b Casualties in Collision Accidents by Casualty Position

	No. of casualties & Percentage allocation					
	2015		**2016**		**2017**	
	count	**%**	**count**	**%**	**count**	**%**
Casualty Position						
Inside Bus	25	53%	59	69%	64	74%
Outside Bus	22	47%	26	31%	22	26%
Total	**47**	**100%**	**85**	**100%**	**86**	**100%**
	Ref. table 8.3a		Ref. table 8.3a		Ref. table 8.3b	

8.2.5.3 2017 figures are similar to 2016. Passengers education should focus on the below:

- Reminding passengers to hold the handrail

- Avoid or be more mindful in use mobile devices while standing, leave the seats to get ready for alighting or change seats inside bus compartments when the buses were in motion.

8.2.5.4 Table 8.7 shows the passenger casualties in non-collision accidents per 1000 buses.

Table 8.7 Passenger Casualties in Non-collision Accidents (per 1000 buses)

	Number of Passenger Casualties / 1000 buses				
Casualty Position	**2013**	**2014**	**2015**	**2016**	**2017**
Lower deck_standing	24	17	38	47	21
Stairways	48	17	11	16	16
Entrance/exit door	24	12	0	5	8
Lower deck_sitting	12	35	16	0	8
Lower deck_moving	30	6	5	0	8
Upper deck_seating	6	17	0	5	4
Record Unavailable	18	17	5	10	4
Total	**162**	**122**	**77**	**83**	**70**

8.2.6 Accidents by Types – Collision and Non-collision

8.2.6.1 Table 8.8 shows the number accident by type of collision or non-collision with 2017 accidents figures further breakdown into accidents contributed from factors related or not related to bus captains.

Table 8.8 Accident Type (Collision or Non-Collision)

Accident Type	2013 count	2013 %	2014 count	2014 %	2015 count	2015 %	2016 count	2016 %	2017 count	2017 %
Non-collision sub-total	**25**	**45%**	**19**	**49%**	**13**	**38%**	**10**	**29%**	**17**	**33%**
					Ref Table 8.3a		Ref Table 8.3a		Ref Table 8.3b	
Collision										
Vehicle-pedestrian	2	4%	5	13%	2	6%	3	9%	2	4%
Vehicle-vehicle collision	25	45%	14	36%	19	56%	16	47%	30	58%
Vehicle-object collision	3	5%	1	3%	0	0%	5	15%	3	6%
Collision sub-total	**30**	**54%**	**20**	**52%**	**21**	**62%**	**24**	**71%**	**35**	**68%**
					Ref Table 8.3a		Ref Table 8.3a		Ref Table 8.3b	
Grand Total	**55**	**100%**	**39**	**100%**	**34**	**100%**	**34**	**100%**	**52**	**100%**
No. of fleet size as at 30 Jun of the year	**167**		**172**		**183**		**193**		**243**	

8.2.6.2 In 2017, 17 (33%) out of 52 of the accidents were non-collision. Among the 17 non-collision accidents, 16 cases were bus captain non-liable and 1 case was bus captain liable.

8.2.6.3 LWB provided proper training to our bus captains, and we have included defensive driving awareness in 車長安全駕駛手冊.

8.2.6.4 Apart from this, 35 (67%) out of 52 accidents were collision accidents in 2017. Among it 30 were vehicle-vehicle collision in which 12 were bus captain non-liable.

8.2.6.5 Vehicle-vehicle collisions were observed to be the highest among different collision type accidents. LWB was aware of the traffic condition in the road network, and keep proposing measures to the Government to ensure the smoothness of bus operations. Typical examples included recommend the Government to set up more Bus Only Lanes. On the other hand, LWB used to launch complaints and urge the Government to resolve illegal parking problems. Accidents can be reduced with less other obstructions on the road.

8.2.6.6 Control of number of private cars can be one of the effective measures to reduce Vehicle-vehicle collision. With the Transport Advisory Committee's 2014 Report on Study of Road Traffic Congestion in Hong Kong warning that "Hong Kong's vehicle fleet size has been growing at an alarming rate". The Company views the Government should consider setting a limit on the number of private cars.

8.2.6.7 Driving attitude of other road users is one of the key in preventing accidents not liable to Bus Captains. Promoting driving courtesy in respect of public transport vehicles is essential to road safety, as many bus related accidents are caused by improper driving attitude. Passengers on buses are more vulnerable to traffic accidents, so the Government should proactively educate drivers to give way to buses.

8.2.6.8 Regarding vehicle-pedestrians and vehicle-object collisions, LWB keeps proposing improvements on bus stops, bus termini and other observed safety hazard to Transport Department. Timely process of the proposals is required to minimize the hazard. It is also important for the Government to enforce traffic regulation and education to public in order to increase the awareness of road safety.

8.2.6.9 Table 8.9 shows the number accident by type of collision or non-collision per every 1000 buses.

Table 8.9 Accident Type (Collision or Non-Collision per 1000 buses)

	No. of accidents/1000 buses				
Accident Type	**2013**	**2014**	**2015**	**2016**	**2017**
Non-collision	**150**	**110**	**71**	**52**	**70**
Collision					
Vehicle-pedestrian	**12**	**29**	**11**	**16**	**8**
Vehicle-vehicle collision	**150**	**81**	**104**	**83**	**123**
Vehicle-object collision	**18**	**6**	**0**	**26**	**12**
Total	**329**	**227**	**186**	**176**	**214**

Part II - Analysis on Traffic Accident Related to Non-driver Factors

8.2.7 Accidents by Locations

8.2.7.1. Table 8.10 shows the number accident by with 2017 accidents figures further breakdown into accidents contributed from factors related or not related to bus captains.

Table 8.10 Accident Location (by count and percentage allocation)

Accident Location	2013		2014		2015		2016		2017	
	count	%	count	%	count	%	count	%	count	%
On the Road										
Junction	3	5%	0	0%	4	12%	3	9%	4	8%
Roundabout	1	2%	0	0%	1	3%	2	6%	8	15%
Other than Junction and Roundabout	41	75%	27	69%	26	76%	20	59%	26	50%
Total On The Road	45	82%	27	69%	31	91%	25	74%	38	73%
Bus Stop and Terminus										
Bus Stop	10	18%	9	23%	3	9%	6	18%	11	21%
Bus Terminus	0	0%	3	8%	0	0%	3	9%	3	6%
Total at Bus Stop/Terminus	10	18%	12	31%	3	9%	9	27%	14	27%
Depot										
Depot										
Total in Depot	0	0%	0	0%	0	0%	0	0%	0	0%
Grand Total	55	100%	39	100%	34	100%	34	100%	52	100%
					Ref Table 8.2		Ref Table 8.2		Ref Table 8.2	
No. of fleet size as at 30 Jun of the year	167		172		183		193		243	

* The requested analysis on vehicle direction is not available as it has not been recorded separately. Please refer to Tables 8.1 and 8.2 where parts of the vehicle direction are shown.

8.2.7.2. In 2017, among the locations with specific identification, 38 (73%) out of 52 accidents were recorded to happen on the road outside bus stops, termini and depots. Total 26 (50%) cases were recorded to happen on road sections other than roundabout and junction and 13 out of these 26 cases were not liable to bus captain.

8.2.7.3. Transport Department encouraged the Company to submit proposals on improving bus safety, and committed will continue put effort to resolve the problems on illegal parking and loading/unloading activities at bus stops; traffic congestion; and traffic black spots. In fact, the Company used to regularly review potential safety hazard which threaten bus safety, and already submitted numerous concrete proposals to Transport Department to alert the problem identified and request for follow up.

8.2.7.4. The majority of bus termini in Hong Kong adopt the "multiple boarding islands" design, a bus terminus design in use since the 1970s. The design potentially induces crossing conflict, as passengers have to use the same lanes as buses. The design should be reviewed.

8.2.7.5. Illegal parking at bus stops is one of the cause of improper stopping of buses, by which road users' safety will be jeopardised as passengers have to board and alight on the roadway instead of using the bus stop. The increased the chance of traffic

accidents. Buses and other vehicles overtaking illegally parked vehicles pose safety concerns for boarding and alighting passengers, as well as other road users.

8.2.7.6. Table 8.11 shows the number accident by location per 1000 buses with 2017 accidents figures further breakdown into accidents contributed from factors related or not related to bus captains.

Table 8.11 Accident Location (per 1000 buses)

Accident Location	2013	2014	2015	2016	2017
On the Road					
Junction	**18**	**0**	**22**	**16**	**16**
Roundabout	**6**	**0**	**5**	**10**	**33**
Other than Junction and Roundabout	**246**	**157**	**142**	**104**	**107**
Total On The Road	**270**	**157**	**169**	**130**	**156**
Bus Stop and Terminus					
Bus Stop	60	52	16	31	45
Bus Terminus	0	17	0	16	12
Total at Bus Stop/Terminus	**60**	**69**	**16**	**47**	**57**
Depot					
Depot					
Total in Depot	**0**	**0**	**0**	**0**	**0**
Grand Total	**329**	**227**	**186**	**176**	**214**

8.2.8 Accidents by Routes

8.2.8.1 Table 8.12 shows the number of accident by Bus Routes between 2013-2017. Table 8.13 shows the number of accident by Bus Routes per million km run between 2013-2017.

Table 8.12 Accident by Bus Route

No. of accidents

Bus Route	2013			2014			2015			2016			2017		
	Bus Captain blameworthy	Bus Captain not blameworthy	Total	Bus Captain blameworthy	Bus Captain not blameworthy	Total	Bus Captain blameworthy	Bus Captain not blameworthy	Total	Bus Captain blameworthy	Bus Captain not blameworthy	Total	Bus Captain blameworthy	Bus Captain not blameworthy	Total
E41	1	0	1	0	0	0	1	2	3	3	4	7	4	6	10
E33	0	2	2	2	3	5	2	4	6	2	5	7	3	6	9
E34B	N/A	N/A	N/A	0	0	0	1	2	3	2	0	2	1	4	5
E34A	N/A	N/A	N/A	0	0	0	1	4	5	1	0	1	3	1	4
E42	3	5	8	1	3	4	1	1	2	1	1	2	1	2	3
E32	1	3	4	1	4	5	0	0	0	0	1	1	1	2	3
A32	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1	0	1	1	2	3
Total	5	10	15	4	10	14	6	13	19	10	11	21	14	23	37

* Bus routes with no. of accidents more than or equal to 3 in 2017 are listed in this table.

Table 8.13 Accident by Bus Route (per million km run)

Bus route	Journey distance	No. of accidents/ million km run				
		2013	2014	2015	2016	2017
E41	57.1	0.3	0.0	1.0	2.1	3.2
E33	44.7	0.6	1.4	1.6	1.7	2.0
E34B	44.1	N/A	0.0	1.1	0.7	1.9
E34A	53.3	N/A	0.0	1.5	0.3	1.1
E42	46.1	2.7	1.4	0.7	0.6	1.0
E32	39.8	1.9	2.4	0.0	0.5	1.4
A32	32.2	N/A	N/A	N/A	9.5	2.3

* Only Bus routes with no. of accidents more than or equal to 3 in 2017 are listed in this table.

8.2.8.2 Bus Routes E41, E33, E34B, E34A, E42, E32 and A32 had more than or equal to 3 accidents in 2017.

8.2.8.3 Route E41 noted the highest rate of number of accident per million km run in 2017. This is due to the long journey distance (55.8 km) of the route compare to the rest LWB routes. With the highest number of accident counts in 2017, the rate will be affected by the mileage the route operated.

8.2.8.4 Most of these routes are "E" routes with high number of departures per day in LWB network, the accidents on routes will not only be impacted by the mileage operated.

8.2.8.5 There is no direct correlation on accidents and bus routes.

8.2.8.6 LWB will also remind the bus captains operating these routes to take care in view of the number of accidents noted.

8.2.9 Accidents by District

8.2.9.1 Table 8.14 shows the number accident by districts between 2013-2017.

Table 8.14 Accidents by District (count and percentage allocation)

	Number of Accidents and Percentage Allocation									
	2013		2014		2015		2016		2017	
District	count	%	count	%	count	%	count	%	count	%
Islands	17	31%	10	26%	14	41%	9	26%	19	37%
Tsuen Wan	14	25%	7	18%	5	15%	6	18%	7	13%
Yuen Long	7	13%	8	21%	6	18%	5	15%	6	12%
Tuen Mun	1	2%	4	10%	5	15%	1	3%	6	12%
Kwai Tsing	5	9%	3	8%	1	3%	5	15%	5	10%
Tai Po	1	2%	0	0%	0	0%	3	9%	4	8%
Shatin	8	15%	5	13%	3	9%	4	12%	3	6%
North	2	4%	1	3%	0	0%	1	3%	1	2%
Record Undefined	0	0%	1	3%	0	0%	0	0%	1	2%
Total	**55**	**100%**	**39**	**100%**	**34**	**100%**	**34**	**100%**	**52**	**100%**

8.2.9.2 37% and 13% of accidents occurred in Islands and Tsuen Wan respectively in 2017. The percentage of accidents occurred in Yuen Long and Tuen Mun contributed 12% each in 2017. These four districts were the main catchment for LWB with more number of departures than other districts, and the correlation between number of accident is deemed to be reasonable.

8.2.9.3 With the recent development in North Lantau and the Airport, the change in traffic condition in the Islands Districts below is noted:

a. High traffic flow induced by the additional road usage of the construction site vehicles; and

b. Increase number of temporary road closure and diversion in North Lantau and the Airport, especially for the roadworks related to the project of Hong Kong-Zhuhai-Macao Bridge in the previous years.

8.2.9.4 The Company recommends the Government to proactively take measures to resolve the high traffic flow problem. We will discuss with the Government.

8.2.9.5 The analysis included only accident counts related to LWB with districts as requested by Transport Department. This analysis cannot reflect the full picture on the relationship between district and accident. The Company recommends the Government to have deeper investigation and analysis on the correlation by taking into account of other factors like accident rate on other transport modes, and derive concrete proposals to enhance road safety.

8.2.10 Accidents by Bus Type

8.2.10.1 Bus Type – Bus Model

8.2.10.1.1 Table 8.15 shows the number of accident per bus of the concerned bus model (between 2013-2017).

Table 8.15 Accidents by Bus Model (Per bus of concerned bus model)

Bus Model	2013			2014			2015			2016			2017		
	Acc. per bus of the bus model	Acc. count	Count by bus model in the fleet	Acc. per bus of the bus model	Acc. count	Count by bus model in the fleet	Acc. per bus of the bus model	Acc. count	Count by bus model in the fleet	Acc. per bus of the bus model	Acc. count	Count by bus model in the fleet	Acc. per bus of the bus model	Acc. count	Count by bus model in the fleet
Trident Enviro500	0.38	3	8	0.25	2	8	0.43	3	7	0.00	0	8	0.63	5	8
VOLVO B9TL Enviro500	0.11	1	9	0.00	0	10	0.10	1	10	0.10	1	10	0.40	4	10
Trident E500 Lux	N/A	N/A	N/A	N/A	N/A	N/A	0.35	7	20	0.08	2	26	0.27	7	26
Trident Enviro500 EuroV	0.31	11	35	0.19	7	36	0.19	7	36	0.33	12	36	0.25	9	36
Trident Enviro500 EuroIV	0.41	13	32	0.13	4	32	0.16	5	32	0.13	4	32	0.25	8	32
Trident E500 Turbo	N/A	N/A	N/A	0.26	8	31	0.13	6	47	0.13	6	47	0.21	10	47
Enviro 500 Turbo 12M Premium	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.05	1	21	0.13	5	40
Enviro 500 Turbo 12.8M Premium	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.67	8	12	0.10	4	41
DENNIS TRIDENT 12M	0.33	27	83	0.33	18	55	0.16	5	31	0.00	0	1	0.00	0	1

* N/A: there was no bus of such bus model as at 30 Jun of the year.

8.2.10.1.2 Refer to Table 8.15, Trident Enviro500 and VOLVO B9TL Enviro500 recorded accident per bus of 0.63 and 0.40 respectively in 2017. The reason is there were only 8 (3.3% of the fleet) and 10 buses (4.1% of the fleet) of these 2 bus types respectively in 2017. And each of them recorded 5 and 4 accidents respectively. Therefore the resulting figure was impacted by the small population.

8.2.10.1.3 Trident E500 Lux, Trident Enviro500 EuroV, Trident Enviro500 EuroIV recorded accident rate per bus of 0.25 – 0.27. No significant reason on the mechanical side. The count of number of accident on the bus type and the accident per bus is being impacted by the fleet size of that bus model.

8.2.10.1.4 Table 8.16 shows the number accident per bus model (between 2013 - 2017). The bus model with more count of accidents in general in line with the number of that bus model in the fleet.

Table 8.16 Accidents by Bus Model (by count)

Bus Model	2013	2014	2015	2016	2017
Trident E500 Turbo	N/A	8	6	6	10
Trident Enviro500 EuroV	11	7	7	12	9
Trident Enviro500 EurolV	13	4	5	4	8
Trident E500 Lux	N/A	N/A	7	2	7
Enviro 500 Turbo 12M Premium	N/A	N/A	N/A	1	5
Trident Enviro500	3	2	3	0	5
Enviro 500 Turbo 12.8M Premium	N/A	N/A	N/A	8	4
VOLVO B9TL Enviro500	1	0	1	1	4
DENNIS TRIDENT 12M	27	18	5	0	0
Total	**55**	**39**	**34**	**34**	**52**

* N/A: there was no bus of such bus model as at 30 Jun of the year.

8.2.10.1.5 There is no direct correlation between accident rate and bus model.

8.2.10.2 Bus Type – Single or Double Deck Buses

8.2.10.2.1 There is no Single Deck buses in LWB's gazette fleet. Table 8.17 shows the number of accident per bus of Double Deck Buses, and the count of accident recorded between 2013-2017.

Table 8.17 Accidents by Bus Type

Bus Type	2013			2014			2015			2016			2017		
	Acc. per bus of the bus type	Acc. count	Count by bus type in the fleet	Acc. per bus of the bus type	Acc. count	Count by bus type in the fleet	Acc. per bus of the bus type	Acc. count	Count by bus type in the fleet	Acc. per bus of the bus type	Acc. count	Count by bus type in the fleet	Acc. per bus of the bus type	Acc. count	Count by bus type in the fleet
Double Deck Bus	0.33	55	167	0.23	39	172	0.19	34	183	0.18	34	193	0.22	52	241

8.2.10.2.2 Accident rates (no. of accidents per bus of the concerned bus type) of bus recorded at 0.22 in 2017.

8.2.10.2.3 All vehicle deployment of a route on a particular road section was approved by the Transport Department before the route comes to operation. As an operator, LWB will only deploy suitable bus types in accordance to different road constraints.

8.2.10.3 Bus Type – Bus Length

8.2.10.3.1 Table 8.18 and 8.19 shows the number of accident per bus and the count of accident recorded of buses in different bus length (between 2013-2017).

Table 8.18 Accidents by Bus Length (Per bus with concerned bus length)

	Number of accidents per bus				
Bus Length (m)	**2013**	**2014**	**2015**	**2016**	**2017**
12	0.33	0.23	0.19	0.14	0.24
12.8	N/A	N/A	N/A	0.67	0.10

* N/A: there was no bus of such bus length as at 30 Jun of the year.

Table 8.19 Accidents by Bus Length (by count)

	Number of accidents				
Bus Length (m)	**2013**	**2014**	**2015**	**2016**	**2017**
12	55	39	34	26	48
12.8	N/A	N/A	N/A	8	4
Total	**55**	**39**	**34**	**34**	**52**

* N/A: there was no bus of such bus length as at 30 Jun of the year.

8.2.10.3.2 Accident rate of bus with length of 12m was 0.24 in 2017. However, there were only 12m and 12.8m buses for LWB, and about 83% of the bus fleet is 12m buses. The accident rate was distorted by the proportion distribution.

8.2.10.3.3 The number of accidents per bus on 12.8m buses record higher than 12m in 2016, it is because there were just twelve 12.8m buses in 2016 (6% of the fleet). The accident rate was distorted by the small proportion.

8.2.10.3.4. All vehicle deployment of a route on a particular road section was approved by the Transport Department before the route comes to operation.

8.2.10.3.5. Internally, trial run will be conducted before bus routes comes to operation.

8.2.10.3.6. For bus routes to be operated by 12.8m buses, approval will be obtained by the Transport Department in advance. Bus captains will also receive additional training for driving 12.8m buses.

8.2.10.3.7. There is no direct correlation between Bus Accidents and Bus length.

8.2.11 Accidents by Vehicle Age

8.2.11.1 Table 8.20 shows the count of accident and number of accident per bus to the year the bus is first licensed (between 2013-2017).

Year of bus licensed	2013		2014		2015		2016		2017	
	Count	Accident per bus	Count	Accident per bus	Count	Accident per bus	Count	Accident per bus	Count	Accident per bus
2000 or before	27	0.33	18	0.33	5	0.16	0	0.00	0	0.00
2001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2003	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2004	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005	1	0.33	1	0.33	1	0.33	0	0.00	3	1.00
2006	2	0.40	1	0.20	2	0.50	0	0.00	2	0.40
2007	1	0.14	0	0.00	0	0.00	0	0.00	4	0.50
2008	0	0.00	0	0.00	1	0.50	1	0.50	0	0.00
2009	6	0.55	0	0.00	2	0.18	1	0.09	2	0.18
2010	7	0.33	4	0.19	3	0.14	3	0.14	6	0.29
2011	5	0.36	3	0.20	2	0.13	4	0.27	2	0.13
2012	6	0.33	4	0.22	3	0.17	7	0.39	6	0.33
2013	0	0.00	1	0.10	3	0.30	1	0.10	3	0.30
2014	N/A	N/A	7	0.29	5	0.13	6	0.15	8	0.20
2015	N/A	N/A	N/A	N/A	7	0.35	2	0.08	7	0.27
2016	N/A	N/A	N/A	N/A	N/A	N/A	9	0.27	9	0.11
2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0	0.00
Total	**55**		**39**		**34**		**34**		**52**	

* N/A: there was no bus licensed on the year as at 30 Jun of the year.

8.2.11.2 The accident rates by the first licensed year of the buses ranged from 0.00 to 1.00 in 2017.

8.2.11.3 There is no direct correlation between Bus Accidents and vehicle age.

8.2.12 Accidents by Stairway Type of Bus

8.2.12.1 Table 8.21 shows the number of accident by stairway type between 2013-2017. Table 8.22 shows the number of accident per bus of the concerned stairway type between 2013-2017.

8.2.12.2 Table 8.22 shows there is no significant difference in the accidents by stairway types per bus in spiral/straight stairway types in 2013 to 2015. There was only one spiral stairway type bus in LWB fleet in 2016 and 2017 and no accident was recorded.

Table 8.21 Accidents by Stairway Type of Bus

	Number of accidents				
Stairway Type	**2013**	**2014**	**2015**	**2016**	**2017**
Straight	28	21	29	34	52
Spiral	27	18	5	0	0
Total	**55**	**39**	**34**	**34**	**52**

Table 8.22 Accidents by Stairway Type of Bus (per bus of the concerned stairway type)

	Number of accidents per bus				
Stairway Type	**2013**	**2014**	**2015**	**2016**	**2017**
Straight	0.33	0.18	0.19	0.18	0.22
Spiral	0.33	0.33	0.16	0.00	0.00

8.2.12.3 Table 8.23 shows the count of accidents involving passenger losing balance on stairway in 2017.

Table 8.23 Accidents involving passenger losing balance on stairway

	2017				
Stairway Type	**Bus Captain blameworthy**	**Bus Captain not blameworthy**	**Total**	(%)	
Straight	0	4	**4**	100%	
Spiral	0	0	**0**	0%	Note 8.23.1 Ref. Table 8.5
Total	**52**	**4**	**52**	100%	
Note 8.23.1	There was only one spiral stairway type bus in LWB bus fleet as at 30 June 2017, and it was retired as at 31 December 2017				

8.2.12.4 All of the 4 cases recorded on buses with straight stairway. As there was only one spiral stairway type in LWB in 2017, the record deemed to be reasonable. The analysis did not derive any direct correlation between Bus Accidents and stairway type of the bus.

8.3 Improvement Measures

8.3.1. Further to the analysis in Section 8.2, bus safety can be improved in the following aspects in addition to bus safety features, training and performance monitoring of bus captains:

- Passenger Education (ref to 8.6.13-14)
- Road User Education (ref to 8.6.11-12)
- Traffic Management (ref to 8.6.3-10)
- Training in Defensive Driving (ref to 8.6.15)

8.3.2. Apart from this, LWB has taken the below new initiatives in 2018-2019:

a) Conducted an expedition to United Kingdom, and is cooperating with the Queen's University of Belfast to conduct a study and develop the Advanced Driver Assistance System (ADAS).

b) Engaged external consultant - The Direx Solutions, to conduct a review on our bus operation.

c) To adopt the Government's Digital Map system in updating the operational information

d) To shorten the transmission of data from 'black box' from every 30s to every 10s.

e) To enhance the speeding alert function of Openmatics black box. (ref to 8.3.4)

8.3.3. After the Tai Po Road Bus Accident, the management set up an Investigation Committee, which comes up recommendations on bus safety. Subsequently, the an action plan is formed for implementation. Please refer to page 28 to 39 for the progress of implementation.

Action plan for implementation of the Key Recommendations

<table>
<tr><th>Topic</th><th>Action plan with milestone and date
(as of 10 April 2018)</th><th>Action plan with milestone and date
(as of 1 August 2018)</th></tr>
<tr><td colspan="3">Recruitment</td></tr>
<tr><td>1. To discontinue the employment of part time BCs whose working hours fall below 18 hours per week.</td><td>No more new employment of part time BC with working hours below 18 hours per week since 15 February 2018.

<u>Milestone</u>
15 February 2018</td><td>Same as before.</td></tr>
<tr><td>2. To offer the previous part time BCs the option to convert to contract hourly rated BCs or to take up alternative duties in the Company.</td><td>Status of the 209 previous part time BCs:

<table><tr><td>Agreed to work ≥18 hours a week</td><td>78</td></tr><tr><td>Agreed to work over 10 hours a week; declare doing part-time BCs at KMB/LWB will not breach the employment contract with their employer.</td><td>123</td></tr><tr><td>Quitted</td><td>8</td></tr></table></td><td>Status of the 209 previous Hourly Rated BCs:

<table><tr><td>Contract signed (work ≥18 hours a week)</td><td>73</td></tr><tr><td>Contract signed (work over 10 hours a week); declared doing Hourly Rated BC at KMB/LWB will not breach the employment contract with their employer</td><td>109</td></tr><tr><td>Quitted</td><td>27</td></tr></table></td></tr>
</table>

Topic	Action plan with milestone and date (as of 10 April 2018)	Action plan with milestone and date (as of 1 August 2018)
Training		
3. All newly recruited BC candidates should be subject to the same standard of training i.e. phase 1 of training to meet the standard of passing 17 (public bus (franchised)) driving test conducted by TD; and phase 2 of training to meet the standard required by KMB/LWB including safe driving techniques, emotional control and route training.	New recruits that only possess driving licenses 1 & 2, should undergo both Phase 1 and Phase 2 of training. Those who have already possessed driving license 10 or 17, and passed BCTS' pre-course driving assessment, are allowed to join Phase 2. In case he/she failed the pre-course driving assessment, he/she has to start from Phase 1. The same rule also applies to internal staff members. <u>Milestone</u> The above action has been implemented from 14 March 2018.	Same as before.

Topic	Action plan with milestone and date (as of 10 April 2018)	Action plan with milestone and date (as of 1 August 2018)
4. Bus Captain Training School should extend the route training to all bus routes operated by KMB. Each BC is required to get trained with an instructor for each new route.	Each BC is required to receive formal route training delivered by a BCTS' driving instructor ("DI") in the ratio of 1:6 before he/she is deployed to drive a new route. After the training, a DI will authorize the BC to drive the new route and the BC will also sign an agreement that he/she is familiar with the route. The record will be kept in computer. Milestone The above action plan has taken effect from 15 February 2018.	Same as before.
5. Any BC who is convicted of careless driving or has committed multiple traffic contraventions should attend remedial training.	Performance mangers will refer BCs who were convicted of careless driving or with poor driving record to BCTS for remedial training. Milestone On-going (it has been an established practice).	Same as before.

Topic	Action plan with milestone and date (as of 10 April 2018)	Action plan with milestone and date (as of 1 August 2018)
6. Any BC who has taken a consecutive period of leave for 30 days or more or has been cumulatively absent from work for 30 days in a 2 month period should attend a full day remedial training.	HRD and Operations will refer BCs who have not performed consecutive driving duty for 30 days or more, due to sick leave and injury leave or due to operational reasons, to BCTS for a full day remedial training respectively. A full day remedial training for BCs who have been cumulatively absent from duty for over 30 days or more in a 2-month period will be required subject to consultation and subsequent agreement with the trade unions. <u>Milestone</u> On-going	On-going. No consultation and agreement yet.
7. The number of KMB/LWB driving instructors should be increased to a total of 110.	An additional 15 DI licenses have been approved by TD. The selection of DI candidates was completed on 19 March 2018. The DI candidates would complete all training and necessary TD's exams before 30 June 2018 to form a cadre of 81 DIs. <u>Milestone</u> With the capacity of 81 DIs, the workload of DIs and the necessity of additional DIs will be reviewed in Q3 2018 and an application of additional 29 DI licenses, to form a cadre of 110, will be submitted.	16 DI candidates have attended and passed TD's written examination and driving test by June 2018 and joined BCTS to form a cadre of 81 DIs. <u>Milestone</u> Same as before.

Topic	Action plan with milestone and date (as of 10 April 2018)	Action plan with milestone and date (as of 1 August 2018)
Performance		
8. Each newly recruited BC should declare his employment, whether on a part time or full time basis; any serious illness that would affect road safety, and criminal records. KMB should conduct a formal assessment on each BC.	The following requirements have been implemented for all newly hired BCs: - declaration of illness; - declaration of criminal record; and - traffic conviction check. Remark: No new hire of part-time BC since 15 February 2018.	Same as before.
9. KMB/LWB should conduct a traffic conviction search for each contract hourly rated BC every 6 months whereas all full time BCs including employed retirees on an annual basis.	New BCs are required to submit their traffic conviction records during recruitment. In-service contract hourly rate BCs (previously known as part-time BCs) have to submit their traffic conviction records every 6 months. Checking the traffic conviction record of in-service full-time BCs will be subject to consultation and subsequent agreement with the trade unions.	For new hire: traffic conviction check has been implemented and has become an on-going measure. For in service contract hourly rated BCs: the first round of traffic conviction check was completed in April 2018. Next round will be done in October 2018. For in service full time BCs: will consult the trade unions and the BCs affected by end of September 2018.

Topic	Action plan with milestone and date (as of 10 April 2018)	Action plan with milestone and date (as of 1 August 2018)
10. KMB should monitor BCs' performance by analyzing his driving record from the black box installed on buses and improve the effectiveness and timeliness of follow up disciplinary actions on BCs' inappropriate driving behavior and attitude.	Operations Sections will continue monitoring bus speed by using the "BOP 207" functions in the black box system. Checking is done on a daily basis. BOP 207 is capable of checking speeding that occurred 10 days before. Any abnormalities will be dealt with and reported promptly to TQD, which will then commence disciplinary procedures. <u>Milestone</u> IT Dept. is in the process of enhancing the presentation of the Bus Performance Reports to facilitate monitoring speeding, harsh braking and abrupt acceleration. After the enhancement of BOM System, Operation Sections will analyze the data of preceding 8 days twice a week to provide driving records of BCs with irregularities. The reports will be passed to TQD twice a week. Immediate actions will be taken to alert respective BCs to deter them from committing the same faults. The whole process will finish in 14 working days. Upon confirmation of the speedometer check is correct, a follow-up action of issuing warning letter or appropriate disciplinary actions will be taken.	Operations Sections will continue monitoring bus speed by using the "BOP 207" functions in the black box system. Checking is done on a daily basis. BOP 207 is capable of checking speeding that occurred 4 days before. Any abnormalities will be dealt with and reported promptly to TQD, which will then commence disciplinary procedures. Raw data of speeding, harsh braking and abrupt acceleration will be generated weekly. For speeding cases, Operation Sections will be informed to remind respective BCs. For harsh braking and abrupt acceleration, plain clothes driving instructors will be deployed to conduct on-board check within one week. TQD will take disciplinary actions against BCs with poor driving performance.

Topic	Action plan with milestone and date (as of 10 April 2018)	Action plan with milestone and date (as of 1 August 2018)
11. The Training and Quality Assurance Department of KMB/LWB should take disciplinary actions against BCs with problems of speeding, abrupt acceleration, harsh braking and other poor performance within 14 working days.	Refer to the answer to item 10 above.	Refer to the answer to item 10 above.

Topic	Action plan with milestone and date (as of 10 April 2018)	Action plan with milestone and date (as of 1 August 2018)
Working conditions		
12. KMB/LWB should implement the revised Guidelines on Bus Captain Working Hours, Rest times and Meal Breaks by the end of 2018 and reduce the maximum working hours for split duties to 13 hours.	The implementation plan of the revised Guidelines will be as follows: - 1. Computer system modifications below will be conducted between April and December 2018: - scheduling system modifications between April and May 2018 - duty rostering system modifications between May and September 2018 - duty dispatching system modifications between July and October 2018 - modifications of reports for guidelines checking for actual duty between November and December 2018 2. Guideline number (2) will be fully complied effective from 1 November 2018 3. Rescheduling bus and crew duties will be implemented by phases starting from October 2018, and to be completed by end of April 2019 4. Guideline number (1)(a), (1)(b), (3) will be fully complied effective from 1 May 2019 Reduction of maximum working hours for split duties to 13 hours will be reviewed upon the full implementation of the revised Guidelines.	Same as before. Everything is on schedule. Scheduling system modification was completed in May 2018.

Topic	Action plan with milestone and date (as of 10 April 2018)	Action plan with milestone and date (as of 1 August 2018)
Psychological support		
13. KMB/LWB should engage a professional consultant to provide a comprehensive review of the current practice and recommendations will be implemented phase by phase to address immediate concerns.	A restricted tender has been sent out to invite professional consultants to provide such service. All the interested consultants will be invited to present their proposal in early May 2018 and the Task Force will appoint the consultant in mid May 2018. The consultancy service should be completed within 6 to 9 months. It is expected the consultant will make recommendations on psychological well being issues including but not limited to recruitment, training, performance management as well as developing tools and training programs that fit our needs.	The consultancy team from the psychology department of a local university was appointed on 31 May 2018. In June 2018, the team has kicked off its review of the current practice in relation to the provision of emotional support through visiting depots, BCTS and Hotline Center, and meetings with Deputy Operations Director, depot staff, zone heads, driving instructors, recruitment team and employee relations team of HR department. In July 2018, the consultancy team has shared their initial observations with the Task Force. Both parties have worked out the general approach in delivering the project and the key activities in the coming months, namely to set up some focus groups to collect views directly from BCs and frontline staff on their needs in terms of psychological support and well being, to plan the training of driving instructors which was scheduled to start in September 2018, to further review the recruitment process so as to maximize its effectiveness, and to develop supporting activities for building a balanced and healthy work life.

Topic	Action plan with milestone and date (as of 10 April 2018)	Action plan with milestone and date (as of 1 August 2018)
Measures to enhance bus safety		
14. Safety belts- KMB/LWB has already requested its suppliers to install safety belts on all seats as a standard feature for new buses ordered after 5 March 2018. As for buses that are currently in service, where certain routes so required, safety belts will be installed on the bus upper decks phase by phase.	<u>Installation of safety belts on new buses ordered after 5 March 2018</u> Safety belts on all seats have been requested on new ordered buses after 5 March 2018. <u>Installation of safety belts on all seats of existing buses</u> Installation of safety belts on lower deck of existing buses is not feasible as this will involve major structural alternation. The feasibility of "installing safety belts on upper deck seats only" will be updated by our suppliers in due course.	<u>Installation of safety belts on new buses ordered after 5 March 2018</u> Completed. <u>Installation of safety belts on all seats of existing buses</u> Volvo and ADL advise that installation of safety belts on upper deck of certain existing buses is feasible. Volvo and ADL will provide technical details. Reduction in carrying capacity and bus down time for retrofit should be considered.
15. Electronic Stability Program – KMB/LWB should test and verify with bus suppliers the installation of ESP in EURO V and EURO VI to reduce the risk of skidding and rolling over.	New ordered Euro VI buses will have ESP installed. Feasibility for retrofitting on existing buses will be updated in due course.	New Euro VI buses to be delivered in 2019 will have ESP installed. Volvo indicated that lead time of 18-24 months will be required for developing a retrofitting solution for the existing Euro V buses. ADL has yet to confirm the retrofitting solution in due course.

Topic	Action plan with milestone and date (as of 10 April 2018)	Action plan with milestone and date (as of 1 August 2018)
16. Geo-fencing—KMB/LWB should set speed limits of buses running through specific geo-fences. Upon satisfactory testing, they should consider using the technology in the fleet in particular routes with steep slopes or sharp bends.	Bus suppliers are studying how to implement this feature. Feasibility study is ongoing.	A test drive was arranged with Volvo on 28 June 2018. The test drive showed that the speed limiter could change its threshold according to the defined 50 km/h and 70 km/h speed limit zones. Another test drive on a specific route will be arranged by August 2018. A test drive was arranged with Openmatics on 31 July 2018. The test drive showed that speed alert could be produced according to the defined 50 km/h and 70 km/h speed limit zones.
17. Tilt alarm – tilt alarm should be installed on the entire fleet to alert BCs when the bus has reached a specific inclination.	Bus suppliers have been urged to study and suggest the inclination threshold. Feasibility will be updated in due course.	All bus manufacturers do not recommend a tilt alarm as the signal may be either too early or too late. Should the threshold be set at a level that a warning is sent to the BC in time for him/her to react, that might cause a number of nuisance activations which may lead to the BC ignoring the warning. Should the threshold be set to a higher level, by the time the BC has the chance to react to the warning, there is a danger that it may be too late. It is also hard to predict what action the BC will have, such as harsh braking or over-steering.
18. Speed alarm—an audible alert and a warning light should be activated to warn BC when the bus speed is beyond 70km/hr.	Completed.	Completed.

Topic	Action plan with milestone and date (as of 10 April 2018)	Action plan with milestone and date (as of 1 August 2018)
19. Speed limitation—speed limitation system which will automatically activate the brakes to slow down the gearbox should be installed on new buses after a period of engineering and testing.	Both ADL and Volvo are studying how this system could be implemented on new bus. Feasibility will be updated in due course.	ADL Euro VI new buses will come with this feature. Volvo will have this feature available in July 2019 and their Euro VI new buses delivered before this time will have the feature retrofitted.
20. Condensation - either hot air demisters or heated windscreens should be adopted for more effective and faster dehumidification.	Either hot air demisters or heated windscreen has been adopted as standard features on new ordered buses after March 2018. Existing buses will be retrofitted with hot air demisters or heated wind screens by phase within the next 12 months.	Completed. On schedule.
21. Drowsiness of bus captain – KMB/LWB should test device to monitor drowsiness of BCs while they are driving and install such system in all buses if the result is satisfactory.	This drowsiness monitoring system will be installed into 4 buses for trial at the end of April 2018.	Initial trial in June 2018 showed that the drowsiness monitoring system could perform its functions. Trial run of the system in 4 buses has started since end of June 2018. The device is positioned to help BCs rather than to take disciplinary action against them. Recording function is not enabled.

8.3.4 To enhance the speeding alert functions of Openmatics black box

Current system

Openmatics is the current supplier of black box on KMB / LWB buses. On speeding alert, the Openmatics black box compares the actual speed from Controller Area Network System onboard with the speed limit threshold, which is currently set at 70 kph.

1. Real-time onboard speed alert at 70 kph.

2. The black box data are being uploaded to the KMB/LWB server from buses for processing and further merging with KMB/LWB systems. The processing time is currently 4 days.

Challenges

Challenges	**Suggested solutions**
Unable to identify the speed limit on actual locations	• Live digital map with accurate speed limits from the Government
Lengthy data processing time for speeding offences	• Live digital map with accurate speed limits from the Government • Improve internal data processing

Works undertaken

A number of initiatives have being carried out to improve the above.

Openmatics has manually defined 50 kph and 70 kph zonings (please refer to Annex). KMB/LWB had started a conceptual trial on 31 July 2018 by comparing the above speed limits with the actual speed. Such trial is to verify whether the real-time onboard speed alert would notify the bus captains upon the actual speed of the trial bus exceeds the speed limit of the road. The result of the initial trial is so far positive. Further testing will be carried out. We are prepared to introduce the Government's digital map into the Openmatics black box, which will take three to four months. However, the Government's digital map does not contain live information, and can only be updated every 6 months.

In order to shorten the backend 4 day processing, KMB/LWB will adopt the blackbox as source to eliminate the duplicated information within KMB/LWB systems.

In parallel, we are also working with bus manufacturers to explore the feasibility of geo-fencing. With the new technology, the black box has potential to assist the control of the buses when certain parameters are met (i.e. speed limiter includes cutting off fuel supply or braking).

Timeline

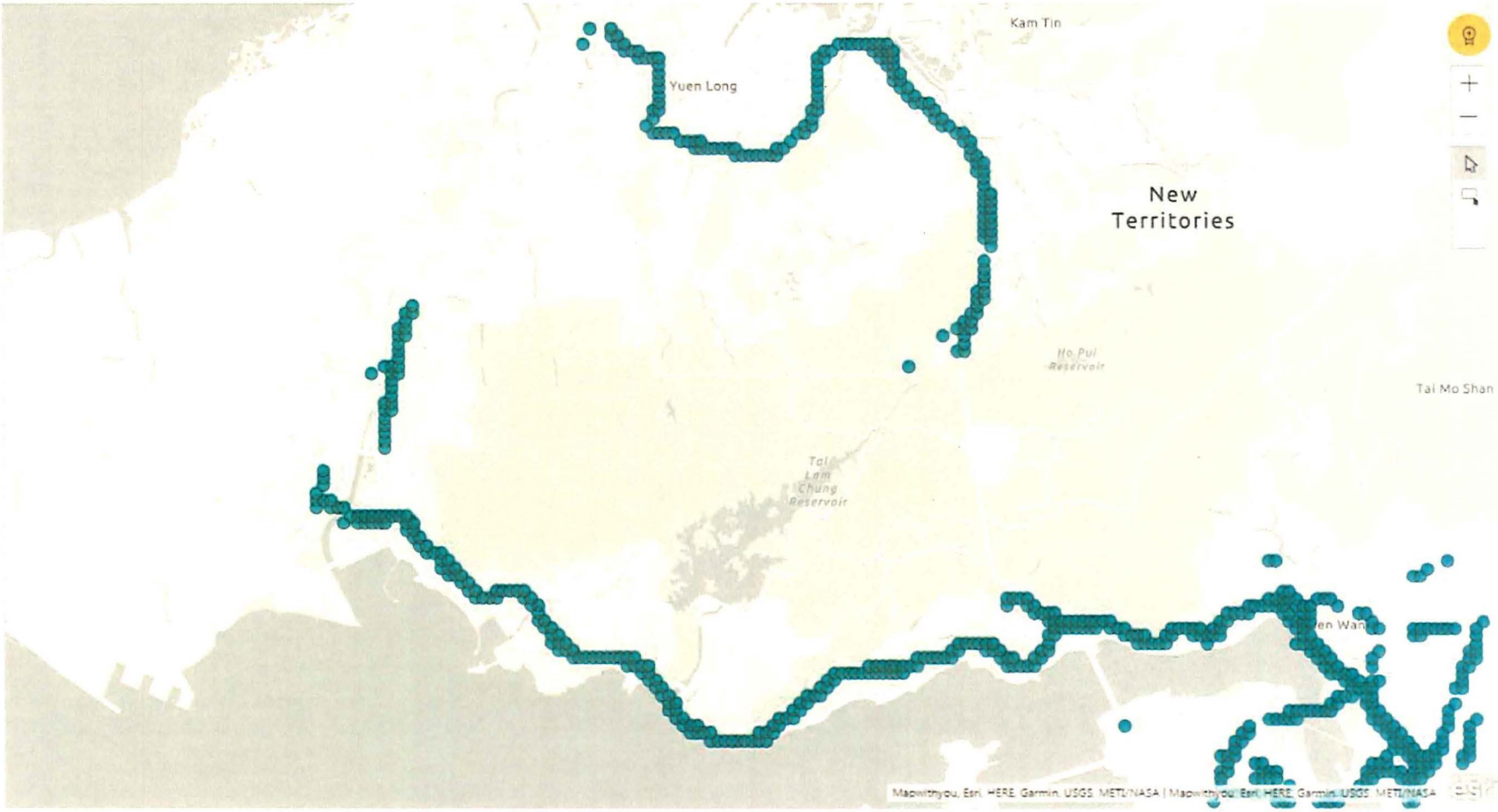
	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19
Real-time alert								
Incorporate speed limit into black box by Openmatics								
Validate the speed limit accuracy								
Carry out internal trial								
Consultation with frontline staff								
Implementation to full fleet								
Data processing								
Integration of internal systems								
Geo-fencing (fuel cutting)								
Discussion with bus manufacturers								
Development by bus manufacturers								
Carry out internal trial								
Consultation with frontline staff								
Implementation to full fleet								

Target

Current	**Future**
Activation of speed alert when the speed exceeds 70 kph	Activation of speed alert when the speed exceeds the actual speed limit
Activation of fuel cutting when the speed exceeds 70 kph	Activation of geo-fencing (including fuel cutting, gear lowering and braking) when the speed exceeds the actual speed limit
Processing time of 4 days in the back-end for speeding offences	Processing time can be shorten further in the back-end for speeding offences

Annex: Speed zones defined for the trial on 31 July 2018

- Green dots: speed limit of 70 kph
- Other areas: speed limit of 50 kph



8.4 Proposed Target Accident Rate

8.4.1. Accident Rate in this context is defined as the average number of bus accidents involving personal injuries or deaths per million vehicle/km operated in the reporting year. This definition used is in line with the previous practice and different franchised bus operators.

8.4.2. Accident Rates of LWB in the past 5 years are as follows.

Year	2013	2014	2015	2016	2017
Accident Rate	1.92	1.33	1.09	0.92	1.21

8.4.3 In setting the target accident rate for the period covered by this Forward Planning Programme, consideration should be given to (i) the historical accident rate of LWB, (ii) the improvement measures formulated and its expected benefits.

8.4.4 Accident rate of a franchised bus operator is highly correlated to the network the operator served. Accident rates of different franchisees vary by the network they served. Both KMB and LWB are managed under the same management system, their accident rate vary due mainly to different networks they served. Likewise, other franchisees A, B and C are managed by the same management, their accident rate vary too.

	Major coverage	Period	Accident Rate
KMB	Kowloon, NT	2017	2.90
LWB	Tung Chung, NT	2017	1.21
Other franchise A	HK Island	2016/2017	6.05*
Other franchise B	HK Island	2016/2017	4.94*
Other franchise C	Tung Chung, HK Island	2016/2017	1.55*
Other franchise D	Lantau Island	2016/2017	1.92

* provisional figure

8.4.5 The bus network served by LWB has changed over time. Every year, there are addition of new routes, adjustment of service frequency of certain roués and cancellation of routes. More reference value will have for the figure in recent years. In the past 3 years (i.e. 2015, 2016 and 2017), the lowest accident rate is 0.92 in 2016. The target accident rate going to set should be lower than this level.

8.4.6 A number of initiatives for improvement of bus safety are taken in 2018/19. Details see section 8.3. It is anticipated that these measures, after implementation, will improve the accident rate over time. LWB set the target rate for the period covered by this Forward Planning Programme as 0.80, representing an improvement from 2017.

8.5 Safety Suggestions to Transport Department

8.5.1. An effective way to reduce accidents is to eliminate hazards at source. Apart from enhancing training and monitoring for bus captains, improving duty rostering and scheduling, promoting safety to passengers and upgrading bus safety features, LWB has provided safety suggestions to the Transport Department with the aim of eliminating or minimising hazards.

8.5.2. LWB has been actively in raising ideas to eliminate or minimise road hazards. The safety suggestions are all-rounded, including provision of proper road markings/signage, re-arrangement of bus stops, strengthening of enforcement of illegal parking and jaywalking, extension of prohibited zones, correction of misleading road markings/signage, provision/removal of guard railings, modification of bus termini, and provision of lighting.

Table 8. 24 Safety Suggestions to Transport Department

	2017	2018 1H
No. of safety suggestion letters first issued (reminders excluded)	29	18

8.5.3. LWB has followed up with the Transport Department on the reply regularly.

8.6 Complementary Policies and Measures

Rest environment

8.6.1. LWB have been upgrading the working environment for their frontline staff, for example, by adding staff rest kiosks with air-conditioners at bus termini, as part of their bid to enhance driving safety. The setting up of rest kiosks cannot be timely done without the support and collaboration of the Government. We are working together with the TD to take the lead in coordinating the authorities involved to speed up the process.

Database for conviction record of bus captains

8.6.2. LWB plans to strengthen the checking of traffic conviction record on existing bus captains. Currently the existing database of TD for checking bus captain's traffic conviction record applies to new recruitments. If the scope can extend to in-service bus captains, it can facilitate the work. LWB views it is better to simplify the procedure by establishing a central database of the conviction records of drivers to facilitate timely safety assessment of drivers. We will discuss this further with TD.

Setting up Bus-only Lanes

8.6.3. Bus safety will be enhanced by an effectively implemented bus priority policy, especially the setting up of bus-only lanes. Unlike other road-based public transport modes, franchised buses operate in a volatile road environment with standees on board, and they are prone to injury even under minimal impact. In view of the vulnerability of passengers on franchised buses, setting up more bus-only lanes would significantly reduce competition for space on the road, which in turn will enhance safety for bus passengers. The setting up of more bus-only lanes is also part of the recommendation stated in the Public Transport Strategy Study (PTSS) published in June 2017.

8.6.4. As some cyclists use the roads along with other vehicles, cyclists may be exposed to danger when motor vehicles overtake them. Since cyclists are permitted to use bus lanes unless there are signs banning them, setting up more bus-only lanes would provide a safer cycling and driving environment.

Illegal parking

8.6.5. Illegal parking at bus stops is a major cause of improper stopping of buses, by which road users' safety will be jeopardised as passengers have to board and alight on the road instead of at the bus stop. Moreover, due to illegal on-street parking, the incidence of forced lane changes increases. Buses and other vehicles overtaking illegally parked vehicles pose a safety concern for boarding and alighting passengers, as well as other road users.

8.6.6. LWB have appealed to the Transport Department and other relevant authorities in respect of this issue. We hope effective measures will be put in place to tackle the passenger safety problem stemming from illegal parking. On the other hand, LWB is working close with the Police to facilitate the enforcement on this matter.

Bus terminus design

8.6.7. The majority of bus termini in Hong Kong adopt the "multiple boarding islands" design, a bus terminus design in use since the 1970s. The design potentially induces crossing conflict, as passengers have to use the same lanes as buses. LWB will also offer the view on the design of new bus termini in future.

Government support for safety technology

8.6.8. Safety technology needs considerable amount of investment. Given that safety is an industry concern, if the Government should consider expanding its sponsorship/subsidy schemes to fund part of research and development costs in respect of various safety-related and traffic management technologies and make them available to all franchised bus operators, it will help accelerate the pace of development

Enforcement of Public Bus Services Regulations (Cap. 230A)

8.6.9. Safe driving is vital to the interests not just of bus passengers, but also of all other road users. Bus captains should be free from disruptions or unnecessary distractions of any kind. In recent years, there have been many cases of LWB bus captains being disturbed or assaulted in the course of conducting their driving duty. However, we note that offenders have been charged only with common assault, while another criminal charge stipulated in "Public Bus Services Regulations (Cap. 230A)" ("the Regulations") is rarely brought.

8.6.10. We continue discussing with relevant Government Departments to consider bringing additional charges as per the Regulations, apart from the common assault charge, to safeguard public safety on buses.

Other road user education

8.6.11. Promoting driving courtesy in respect of public transport vehicles is essential to road safety, as many bus related accidents are caused by improper driving attitude, inter alia, the failure to give way to buses. As stated above, passengers on buses are more vulnerable to traffic accidents, so the Government should proactively educate drivers to give way to buses.

8.6.12. LWB has looked into overseas experiences and will share our findings with TD. The Government of South Australia stipulates that drivers must give way to a bus if the bus is indicating that it intends to move away from the kerb. (The Driver's Handbook: http://mylicence.sa.gov.au/road-rules/the-drivers-handbook/giving-way) The Hong Kong Government may draw on this precedent to amend the Road Users' Code to instruct drivers to give way to buses. In fact, the Transport and Housing Bureau began updating the Road Users' Code in 2018, to include advice for cyclists, the elderly and the disabled on the safe use of roads and related facilities. LWB looks forward to seeing a further enhancement in respect of this suggestion soon.

Enhancement of public education

8.6.13. With regard to the growing number of cases of verbal and physical harassment of frontline staff, as a responsible public bus operator, LWB has put up notices inside bus compartments informing people on board that "It is an offence to talk to the bus captain while the vehicle is in motion" and "Disturbing a bus captain is a criminal offence". Comprehensive training and improvement courses are also regularly provided to LWB bus captains to ensure the continued provision of safe and comfortable bus journeys to the public. The Government may also consider enhancing public education by introducing Announcements in the Public Interest (API) in relation to the etiquette of using bus services.

8.6.14. Transport Department is undergoing a Courtesy Campaign for Public Transport which will be launched in November 2018. The campaign aims at raising public awareness and promotes courteous behavior in public transport. LWB has participated actively in this Campaign

LWB will discuss with Transport Department of the initiatives mentioned in paragraphs 8.6.1 - 8.6.14.

Defensive driving

8.6.15. In view of a large portion of traffic accidents recorded in 2017 is bus captain not blameworthy, the awareness of other road user and driving environment will be important to minimise the chance of traffic accidents. LWB will further emphasis defensive driving in the bus captain training programme.

8.6.16. Details of training provided to new and serving bus captains are given in Annex 8.1.

Annex 8.1

A. Regular Training for New Bus Captains

	Training Type	Nature	Duration	Frequency	No. of route / bus type trained
1.	Basic Training	To teach bus driving technique to prepare for Transport Department class 17 licence tests and to equip trainees with the skills required to carry out the duties of a bus captain. Classroom lectures on company rules, passenger safety, accident blackspot analysis, emergency handling procedure and concept of quality service. On road training on defensive driving technique, bus type familiarisation and route training (night drive included).	18 days full time (68 hours on road driving practice by each trainee and 17 hours classroom training plus 6.5 hours online training of self-study mode)	Before posting to duty	2 routes 3-4 bus types

B. Regular Training for Serving Bus Captains

	Training Type	Nature	Duration	Frequency	No. of route / bus type trained
1.	Refresher Training	This training covers: ✧ strengthen the bus manoeuvring skills and defensive driving technique ✧ bus fire evacuation revision training ✧ customer service improvement training ✧ stress management training ✧ training on bus ramp operating	0.5 day	Once every three years for all Bus captains	N/A
2.	Remedial Training	Aimed at bus captains who are found to be inadequate in certain driving areas or service level. The training will specifically tackle these areas until the bus captain reaches an acceptable level before he/she is released to perform normal duties.	1 full day	For bus captains who are found to have driving irregularities or away from driving duties for a period of time.	N/A The bus type that the in-service BCs usually use
3.	Route Training	Familiarise the route on-the wheel under the supervision of Driving Instructor	1 full day	Before an in-service BCs to be posted to a new route	1 mother route and 1 sub-route (if any)
4.	Bus Type Training	Familiarise a new bus type on-the-wheel under the supervision of Driving Instructor	1full day	Before driving a new bus type	1 bus type 1 bus route

- Training protocols are subject to ongoing review, albeit that the aim will be to continue to do all that is reasonably practicable to ensure the safety and comfort of passengers, staff and other road users at all times

Table showing the number of passengers injured and fatalities in 2018

Accident Nature	2018 Jan-June					
	No. of accident	%	No. of injury	No. of fatal	Total No. of Causalities	%
Non-Collision						
Loss of Balance	349	54%	396	-	396	46%
Other non-collision						
Injury To Alighting/Boarding Passenger	14	2%	15	-	15	2%
Injury To Passenger Inside Bus	17	3%	16	-	16	2%
Others	1	0.2%	1	-	1	0.1%
sub-total	381	59%	428	0	428	50%
Collision						
Collision With Third Party Vehicle (changing lane)	79	12%	89	-	89	10%
Head On/Tail Collision	65	10%	113	1	114	13%
Glancing Collision	46	7%	56	-	56	7%
Injury To Pedestrian	24	4%	23	-	23	3%
Junction Collision	25	4%	36	1	37	4%
Hit Stationary Object/Vehicle/Animal	9	1%	9	-	9	1%
Collision With Other Vehicle (rolling back/ forward/ reversing)	8	1%	14	-	14	2%
Entering Roundabout Collision	3	0.5%	3	-	3	0.3%
Bus Overturn/Topple	1	0.2%	66	19	85	10%
sub-total	260	41%	409	21	430	50%
Total	641	100%	837	21	858	100%

Fatal accidents

Up to 30 June 2018, 3 accidents with fatalities were recorded in 2018, details are set out below:-

1) On 10 February 2018 at Tai Po: 19 fatalities and 66 injured persons.

2) On 18 April 2018 at Shatin: junction collision involving a bicycle and a KMB bus (Route N182), cyclist deceased.

3) On 5 May 2018 at Kam Tin: head on collision involving a truck and a KMB bus (Route 54), truck driver deceased. The driver of the truck died in the accident as a result of his reckless driving. Police informed the bus captain that she was not the investigation target in this accident.

Loss of balance

Out of the 396 injured persons recorded in Loss Of Balance, 395 cases were passengers and one case was a bus captain. There was no fatality.
Further study of the age of passengers was conducted and the distribution is set out below:-

Age of Passenger (years)	No. of injured passengers	%
Below 11	14	4%
12-40	65	16%
41-50	58	15%
51-60	73	18%
61-70	76	19%
Above 70	77	19%
Not provided	32	8%
	395	100%

Among the 395 injured passengers as mentioned above, 226 (57%) of them are above 50 years of age.

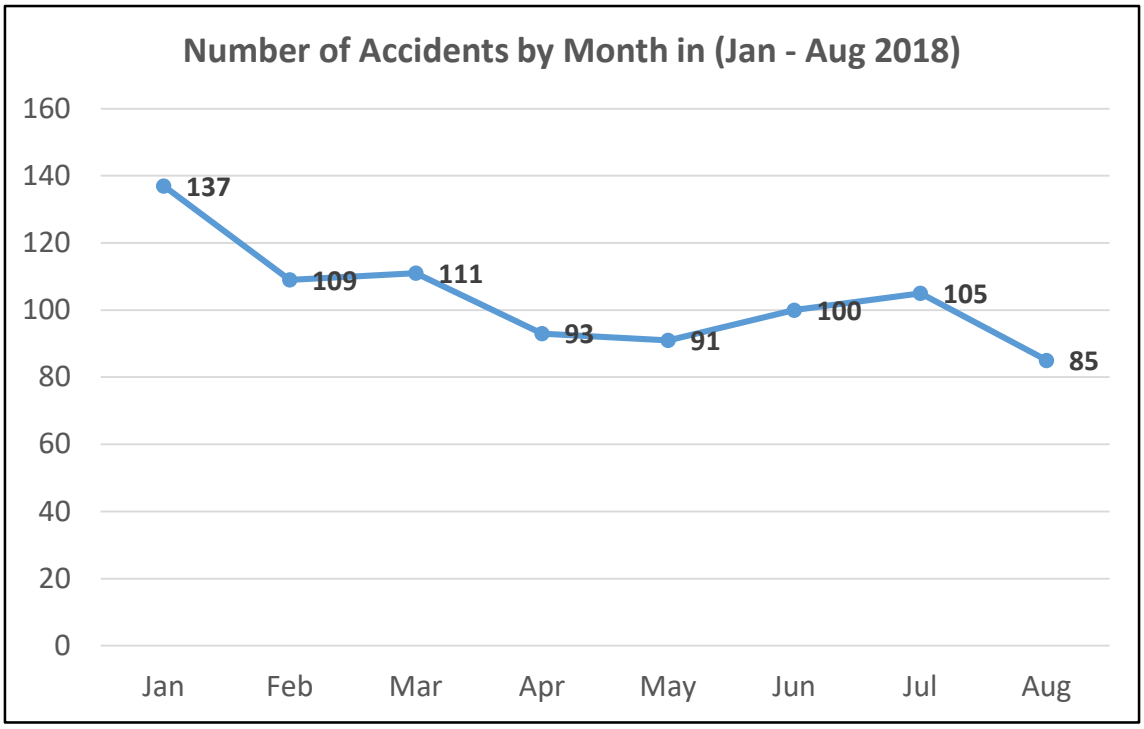
Apart from training and performance monitoring of bus captains, the following passenger engagements are being done at the same time:-

1) To encourage youngsters to give their seats to passengers in need by civil education. KMB holds depot visits for local youth centres, schools and other educational institutes. One of the purposes of the programme is to introduce the caring facilities in bus compartments, including the priority seats;

2) KMB makes use of its bus stop announcement system to broadcast messages encouraging passengers to give seats to those in need; and

3) Stickers are placed on buses to raise awareness of the need to hold the handrail when travelling on buses.

Accidents by month in 2018 (January – August):



Our Safety Section (part of Training and Quality Assurance Department) performs monthly analysis of accident causes.

Based on the analysis of accidents from January to June 2018, it was noted that Loss of Balance ("LOB") contributed to more than half of the total accidents during the period:

Accident Nature	**Jan – June 2018 No. of accidents**	**%**	**Note**
Loss of Balance	349	54%	See (a) below
Other non-collision	32	5%	
Collision	260	41%	
Total	**641**	**100%**	

a. Location for LOB:

Location for LOB	**Jan – June 2018 No. of accidents**	%	**Actions taken**
1. On Stairway	69	20%	Enhancement in bus design
2. Elsewhere other than stairway	280	80%	See (c) below
Total	**349**	**100%**	

b. Accident Investigation result for LOB:

Accident Investigation Result	**Jan – June 2018 No. of accidents**	%
1. Braking in traffic	215	62%
2. Sudden acceleration	73	21%
3. Bus moving in traffic	45	13%
4. Others	16	4%
Total	**349**	**100%**

c. Actions taken

In response to the above analysis, the following actions have been done:

<u>Monitoring Bus Captains' driving behaviour:</u>

- A weekly Bus Performance Report is generated, based on the black box data, to monitor Bus Captains' driving behaviour, and the report includes (1) "Harsh Braking" and (2) "Sudden Acceleration". Our Training and Quality Assurance Department reviews this report on a weekly basis and takes appropriate follow up actions with the concerned Bus Captains (e.g. remedial training, monitoring by plain-cloth driving instructors).

- Continuously reminds Bus Captains on safe and caring driving via different channels, such as messages via Terminus Management System ("TER"), posters, safety forum and face-to-face briefing at bus termini.

Education to passengers:

- Bus stop announcement system and bus stickers to remind passengers to hold the handrail and give seat to passengers who are in need.

- "Hold the Handrail" message on KMB Facebook and KMB/LWB Mobile App.

- Passenger safety video broadcasted via Estimated Time of Arrival ("ETA") panels at bus stops.

- Outdoor staff verbally remind passengers to tightly hold the handrail at busy locations.

[Blank Page]

Information regarding the single "bus overturn/topple" case in 2016

The bus involved was on a non-revenue trip, hence it was not carrying any passengers. The driver was slightly injured.

Date and time:	8 February 2016 at 14:50
Location:	Fuk Hi Street, Yuen Long
Vehicle number:	JV8208
Route serving:	Not applicable, it was a non-revenue and non-passenger carrying trip from Tin Shui Wai Depot to Yuen Long Depot
Number of casualties:	1 injury and no deaths (only the driver was injured, no passengers on board, no other road user was injured)
Accident details:	The bus (JV8208) was driven by a Service Department staff member from Tin Shui Wai Depot to Yuen Long Depot at 14:35 on 8 February 2016. At around 14:50, the bus was driving at the speed of about 20 km/hr when it reached Fuk Hi Street. Suddenly a dog dashed out into the path of the bus from the left side of the road. The driver braked the bus and steered right. He first hit a lamppost and then a road sign. The bus overturned to the left.
Damage to Bus:	Windscreen, front body, left body
Property damage:	Exterior fence of a company's building, a lamppost, and a road sign
Remarks:	The accident was not caused by mechanical breakdown

Information regarding the 27 "hit a street object or a vehicle or an animal" accidents in 2016

Hit a street object or a vehicle or an animal	2016	2017
No. of accidents	27	15
No. of casualties		
• Passengers	36	34
• Pedestrians	4	10
• Bus captains	7	5
• Other vehicle drivers	4	1
	51	50

九龍巴士（一九三三）有限公司
九巴服務 日日進步 THE KOWLOON MOTOR BUS CO. (1933) LTD.

Our Ref: LCKD/OPN/2074/17
Your Ref:

14 December 2017

Senior Superintendent of Police
Traffic Kowloon West
8 Wai Wan Lane
Hung Hom
Kowloon

Attn.: Mr. TSE Pui Wah

**[By *email: ip-sip-tig-2-t-kw@police.gov.hk*
and By post]**

Dear Sir,

Complaint Against Illegal Parking
inside Canton Road KMB Route No. 271 Bus Terminus
Tsim Sha Tsui, Kowloon

It has long been a problem that illegally parked vehicles inside our bus terminus on Canton Road (outside house number 68) for Route No. 271 not only affect our bus operations, trigger very serious traffic congestion along that road, and pose imminent danger to passengers as well as other road users when our buses were intending to drive into or drive out of the terminus.

We have noticed recently that traffic conditions thereat are getting worse and worse and the number of unattended illegally parked vehicles inside the terminus is on a sharp rise. In this regard we have briefed our frontline inspectors to pay frequent visits to the terminus and to report any problems spotted.

At 1822 hours on 2017-12-8 KMB Inspector Mr. Wong Siu Ho has spotted an unattended and illegally parked vehicle inside the terminus causing serious traffic congestion thereat and posing imminent danger to passengers and other road users. Inspector Mr. Wong Siu Ho has then used his recording device/mobile phone to film the traffic violation. Attached please find a brief report furnished by Inspector Mr. Wong Siu Ho and a video clip (DVD) prepared by him/her for your reference.

File: DMS: TRF\Bus Operation\Bus Routes
File: RL

香港九龍荔枝角寶輪街九號 9 Po Lun Street, Lai Chi Kok, Kowloon, Hong Kong
電話 Tel : (852) 2786 8888 傳真 Fax : (852) 2745 0300 網址 Website : www.kmb.hk

九龍巴士（一九三三）有限公司
九巴服務 日日進步 THE KOWLOON MOTOR BUS CO. (1933) LTD.

In order to deter illegal parking problems inside bus terminus we would be extremely grateful if the Police could take follow up enforcement actions and summons the vehicle owner for illegal parking inside bus terminus accordingly. Your collaboration on this will be very much appreciated.

Should you require any further information or if you have any queries please contact me at [redacted] or Operations Officer, Mr Kenneth Kung, at [redacted]

Yours faithfully,
for and on behalf of
THE KOWLOON MOTOR BUS CO. (1933) LTD.

Utan Wong
Assistant Manager, Operations
Lai Chi Kok Depot

Encl: 1 pg & DVD
cc. Police (By email: cip-sup-t-kw@police.gov.hk & ip-sip-sup-t-kw@police.gov.hk)

香港九龍荔枝角寶輪街九號 9 Po Lun Street, Lai Chi Kok, Kowloon, Hong Kong
電話 Tel : (852) 2786 8888 傳真 Fax : (852) 2745 0300 網址 Website : www.kmb.hk

舉報違泊報告書

本人現職於九龍巴士(一九三三)有限公司，職級為一區車務督察，姓名:[redacted]，中文電碼:[redacted]

身份証明文件號碼:[redacted]，出生日期:[redacted]年3月30日，年歲:[redacted]

聯絡電話:[redacted]公司電話:—，地址:香港九龍荔枝角賽輪街九號十五樓。

現擬舉報一宗發生於17年12月8日12:22時的交通違例泊車事件，

當中牽涉一輛私家車，車牌為[redacted]。當日該私家車，車牌[redacted]未經授權違例停泊於

九龍尖沙咀廣東道68號巴士站內，嚴重阻礙巴士正常運作，亦對上落巴士的乘客構成即時危險。本人現正式作出投訴並希望警方能嚴正執法，檢控該違泊車輛以確保所有道路使用者的安全。本人亦願意在有需要時出庭作証，協助警方提出訴訟。

本人亦隨同此份報告，附上一張當日由本人攝錄機拍得的錄影片段(DVD片段)，片段檔案名稱:2017-202-182205.mp4

以供西九龍交通部調查人員參考。本人證實該DVD片段並無任何刪剪，亦為現場所攝錄到的全部。

報告人簽署:[redacted]

日期:8-12-17

跟進事項(由區長或副區長填寫)

違泊報告編號:LCKD-ILP-001-12-17

職員編號:[redacted]

職員姓名:[redacted]

簽署:

日期:10-12-2017

12/12

250-6

Suki

18.1

Report on reporting illegal parking

I am currently work in the Kowloon Motor Bus Co. (1933) Ltd . My post is Inspector of District 1 . Name: *[redacted]* . Chinese Commercial Code: *[redacted]* . ID Card number: *[redacted]* . Date of Birth: *[redacted]* 30th March . Age: *[redacted]* . Contact: *[redacted]* . Contact of the office: / . Address: 15/F, 9 Po Lun Street, Lai Chi Kwok, Kowloon, Hong Kong .

I am intended to report an incident of illegal parking happened at 18:22 on 8th December 2017. It involved a private car, the registration number of which is *[redacted]*. On that day, the private car of registration number *[redacted]*, without authorization, illegally parked inside the bus stop situated in 68 Canton Road, Tsim Sha Tsui, Kowloon. It severely hindered the operation of the bus and put the passengers getting on and off the bus at immediate risk. I hereby formally complain the matter to the police and hope that the police can strictly enforce the law by laying charge against the car for illegal parking to ensure the safety of all road users. I am willing to testify in court to assist the police in the legal proceeding.

I have also enclosed with this report for the investigators of the Traffic Kowloon West's reference a video clip (DVD clip) recorded by my camera. The file name of the clip is 20171208_182255.mp4. I verify that the DVD clip has not been edited and it is entirely what I have recorded on the scene.

Complainant: *[redacted]*
Date: 8-12-17

Follow-up (to be filled in by General Inspector or Deputy General Inspector)

Illegal Parking Report Number: LCKD-iLP.001.12-17
Staff number: *[redacted]*
Name of the staff: *[redacted]*
Signature: *[redacted]*
Date: 10-12-2017

12/12
250-6
Suki

九龍巴士（一九三三）有限公司
九巴服務 日日進步 THE KOWLOON MOTOR BUS CO. (1933) LTD.

Our Ref: LCKD/OPN/2076/17
Your Ref:

14 December 2017

Senior Superintendent of Police
Traffic Kowloon West
8 Wai Wan Lane
Hung Hom
Kowloon

Attn.: Mr. TSE Pui Wah

**[By email: ip-sip-tig-2-t-kw@police.gov.hk
and By post]**

Dear Sir,

**Complaint Against Illegal Parking
inside Canton Road KMB Route No. 271 Bus Terminus
Tsim Sha Tsui, Kowloon**

It has long been a problem that illegally parked vehicles inside our bus terminus on Canton Road (outside house number 68) for Route No. 271 not only affect our bus operations, trigger very serious traffic congestion along that road, and pose imminent danger to passengers as well as other road users when our buses were intending to drive into or drive out of the terminus.

We have noticed recently that traffic conditions thereat are getting worse and worse and the number of unattended illegally parked vehicles inside the terminus is on a sharp rise. In this regard we have briefed our frontline inspectors to pay frequent visits to the terminus and to report any problems spotted.

At 1832 hours on 2017-12-8 KMB Inspector Mr. Wong Siu Ho has spotted an unattended and illegally parked vehicle inside the terminus causing serious traffic congestion thereat and posing imminent danger to passengers and other road users. Inspector Mr. Wong Siu Ho has then used his recording device/mobile phone to film the traffic violation. Attached please find a brief report furnished by Inspector Mr. Wong Siu Ho and a video clip (DVD) prepared by him/her for your reference.

File: DMS: TRF\Bus Operation\Bus Routes
File: Rt.

香港九龍荔枝角寶輪街九號 9 Po Lun Street, Lai Chi Kok, Kowloon, Hong Kong
電話 Tel : (852) 2786 8888 傳真 Fax : (852) 2745 0300 網址 Website : www.kmb.hk

九龍巴士（一九三三）有限公司
THE KOWLOON MOTOR BUS CO. (1933) LTD.

In order to deter illegal parking problems inside bus terminus we would be extremely grateful if the Police could take follow up enforcement actions and summons the vehicle owner for illegal parking inside bus terminus accordingly. Your collaboration on this will be very much appreciated.

Should you require any further information or if you have any queries please contact me at [redacted] or Operations Officer, Mr Kenneth Kung, at [redacted]

Yours faithfully,
for and on behalf of
THE KOWLOON MOTOR BUS CO. (1933) LTD.

Utan Wong
Assistant Manager, Operations
Lai Chi Kok Depot

Encl: 1 pg & DVD
cc. Police (By email : cip-sup-t-kw@police.gov.hk & ip-sip-sup-t-kw@police.gov.hk)

香港九龍荔枝角寶輪街九號 9 Po Lun Street, Lai Chi Kok, Kowloon, Hong Kong
電話 Tel : (852) 2786 8888 傳真 Fax : (852) 2745 0300 網址 Website : www.kmb.hk

舉報違泊報告書

本人現職於九龍巴士(一九三三)有限公司，職級為___區車務督察，姓名:[redacted]，中文電碼:[redacted]

身份証明文件號碼:[redacted]，出生日期:[redacted]年 3月 30日，年歲:[redacted]

聯絡電話:[redacted]/ 公司電話:—，地址:香港九龍荔枝角窩輪街九號十五樓。

現擬舉報一宗發生於 17年 12月 8日 18:32時的交通違例泊車事件，

當中牽涉一輛私家車，車牌為[redacted]。當日該私家車，車牌[redacted]未經授權違例停泊於

九龍尖沙咀廣東道 68 號巴士站內，嚴重阻礙巴士正常運作，亦對上落巴士的乘客構成即時危險。本人現正式作出投訴並希望警方能嚴正執法，檢控該違泊車輛以確保所有道路使用者的安全。本人亦願意在有需要時出庭作証，協助警方提出訴訟。

本人亦隨同此份報告，附上一張當日由本人攝錄機拍得的錄影片段(DVD 片段)，片段檔案名稱:20171208_183257.mp4 以供西九龍交通部調查人員參考。本人證實該 DVD 片段並無任何刪剪，亦為現場所攝錄到的全部。

報告人簽署:[redacted]

日期: 8-12-17

跟進事項(由區長或副區長填寫)

違泊報告編號: LCKD - ILP - 003 - 12 - 17

[redacted]

職員編號:[redacted]

職員姓名:[redacted]

簽署:[redacted]

日期: [illegible]

Z50-6 Suki

18.2

Report on reporting illegal parking

I am currently work in the Kowloon Motor Bus Co. (1933) Ltd . My post is Inspector of District ___ . Name: *[redacted]* . Chinese Commercial Code: *[redacted]* . ID Card number: *[redacted]* . Date of Birth: *[redacted]* 30th March . Age: *[redacted]* . Contact: *[redacted]* . Contact of the office: / . Address: 15/F, 9 Po Lun Street, Lai Chi Kwok, Kowloon, Hong Kong .

I am intended to report an incident of illegal parking happened at 18:32 on 8th December 2017. It involved a private car, the registration number of which is *[redacted]*. On that day, the private car of registration number *[redacted]*, without authorization, illegally parked inside the bus stop situated in 68 Canton Road, Tsim Sha Tsui, Kowloon. It severely hindered the operation of the bus and put the passengers getting on and off the bus at immediate risk. I hereby formally complain the matter to the police and hope that the police can strictly enforce the law by laying charge against the car for illegal parking to ensure the safety of all road users. I am willing to testify in court to assist the police in the legal proceeding.

I have also enclosed with this report for the investigators of the Traffic Kowloon West's reference a video clip (DVD clip) recorded by my camera. The file name of the clip is 20171208_183257.mp4. I verify that the DVD clip has not been edited and it is entirely what I have recorded on the scene.

Complainant: *[redacted]*
Date: 8-12-17

Follow-up (to be filled in by General Inspector or Deputy General Inspector)

Illegal Parking Report Number: LCKD-ILP.003-12.17
Staff number: *[redacted]*
Name of the staff: *[redacted]*
Signature: *[redacted]*
Date: 10-12-2017

18.3

本署檔號 OUR REF : LM (18) in KW YT 234/1/1 Pt.14
來函檔號 YOUR REF : LCKD/OPN/2076/17
電 話 TELEPHONE : 3661 9527
圖文傳真 FAX : 2770 3597

HONG KONG POLICE
Yau Tsim Police District
Yau Ma Tei Police Station
No.3 Yau Cheung Road

10th January 2018

Mr. Utan WONG
Assistant Manager, Operations,
Lai Chi Kok Depot,
The Kowloon Motor Bus CO. (1933) LTD.
No.9 Po Lun Street,
Lai Chi Kok,
Kowloon, Hong Kong

(By Fax 2745 0300)

Dear Mr. WONG,

Re: Complaint Against Illegal Parking inside Canton Road KMB Route, No.271 Bus Terminus, Tsim Sha Tsui, Kowloon

Thank you for your letter dated 14th December 2017. Your complaint have been referred from Traffic Kowloon West to our unit, District Traffic Team of Yau Tsim District, for follow up action.

Upon receipt of your complaint, we have stepped up our traffic enforcement actions at the captioned location. With a view to improving the situation, we will continue to conduct appropriate traffic enforcement action against offending vehicles.

If you have any enquiries, please contact Mr. YIP Chi-sum, Officer-in-charge of the Yau Tsim District Traffic Team at 3661 9525.

Yours sincerely,

(SUN Lun-yum)
for Commissioner of Police

c.c. OC TIG TKW

5127

18.3

本署檔號 OUR REF : LM (18) in KW YT 234/1/1 Pt.14
來函檔號 YOUR REF : LCKD/OPN/2076/17
電 話 TELEPHONE : 3661 9527
圖文傳真 FAX : 2770 3597

HONG KONG POLICE
Yau Tsim Police District
Yau Ma Tei Police Station
No.3 Yau Cheung Road

10th January 2018

Mr. Utan WONG
Assistant Manager, Operations,
Lai Chi Kok Depot,
The Kowloon Motor Bus CO. (1933) LTD.
No.9 Po Lun Street,
Lai Chi Kok,
Kowloon, Hong Kong

(By Fax 2745 0300)

Dear Mr. WONG,

Re: Complaint Against Illegal Parking inside Canton Road KMB Route, No.271 Bus Terminus, Tsim Sha Tsui, Kowloon

Thank you for your letter dated 14th December 2017. Your complaint have been referred from Traffic Kowloon West to our unit, District Traffic Team of Yau Tsim District, for follow up action.

Upon receipt of your complaint, we have stepped up our traffic enforcement actions at the captioned location. With a view to improving the situation, we will continue to conduct appropriate traffic enforcement action against offending vehicles.

If you have any enquiries, please contact Mr. YIP Chi-sum, Officer-in-charge of the Yau Tsim District Traffic Team at 3661 9525.

Yours sincerely,

(SUN Lun-yum)
for Commissioner of Police

c.c. OC TIG TKW

九龍巴士（一九三三）有限公司
THE KOWLOON MOTOR BUS CO. (1933) LTD.

Our Ref. : LCKD/OPN/292/18
Your Ref. :

27 February 2018

Senior Superintendent of Police
Traffic Kowloon West
8 Wai Wan Lane, Hung Hom, Kowloon

Attn.: Mr. TSE Pui Wah

[By email: ip-sip-tig-2-t-kw@police.gov.hk and By post]

Dear Sir,

Complaint Against Illegal Parking
inside Canton Road KMB Route No. 271 Bus Terminus
Tsim Sha Tsui, Kowloon

It has long been a problem that illegally parked vehicles inside our bus terminus on Canton Road (outside house number 68) for Route No. 271 not only affect our bus operations, trigger very serious traffic congestion along that road, and pose imminent danger to passengers as well as other road users when our buses were intending to drive into or drive out of the terminus.

We have noticed recently that traffic conditions thereat are getting worse and worse and the number of unattended illegally parked vehicles inside the terminus is on a sharp rise. In this regard we have briefed our frontline inspectors to pay frequent visits to the terminus and to report any problems spotted.

At 2050 hours on 2018-2-10 KMB Inspector Mr. Ip Chun Wing has spotted an unattended and illegally parked vehicle inside the terminus causing serious traffic congestion thereat and posing imminent danger to passengers and other road users. Inspector Mr. Ip Chun Wing has then used his recording device/mobile phone to film the traffic violation. Attached please find a brief report furnished by Inspector Mr. Ip Chun Wing and a video clip (DVD) prepared by him/her for your reference.

In order to deter illegal parking problems inside bus terminus we would be extremely grateful if the Police could take follow up enforcement actions and summons the vehicle owner for illegal parking inside bus terminus accordingly. Your collaboration on this will be very much appreciated.

香港九龍荔枝角寶輪街九號 9 Po Lun Street, Lai Chi Kok, Kowloon, Hong Kong
電話 Tel : (852) 2786 8888 傳真 Fax : (852) 2745 0300 網址 Website : www.kmb.hk

九龍巴士（一九三三）有限公司
九巴服務 日日進步 THE KOWLOON MOTOR BUS CO. (1933) LTD.

Should you require any further information or if you have any queries please contact me at [redacted] or Operations Officer, Mr Kenneth Kung, at [redacted]

Yours faithfully,
for and on behalf of
THE KOWLOON MOTOR BUS CO. (1933) LTD.

Utan Wong
Assistant Manager, Operations
Lai Chi Kok Depot

Encl.
cc. cip-sup-t-kw@police.gov.hk
cc. ip-sip-sup-t-kw@police.gov.hk
cc.adoo-ytdist@police.gov.hk

舉報違泊報告書

本人現職於九龍巴士(一九三三)有限公司，職級為[redacted]區車務督察，姓名:[redacted]、中文電碼[redacted]

身份証明文件號碼:[redacted]出生日期:[redacted]年11月9日，年歲:[redacted]

聯絡電話:[redacted] / 公司電話[redacted]，地址:香港九龍荔枝角寶輪街九號十五樓。

現擬舉報一宗發生於2018年02月10日20:50時的交通違例泊車事件，

當中牽涉一輛的士車，車牌為[redacted]。當日該的士車，車牌[redacted]未經授權違例停泊於

九龍尖沙咀廣東道 68 號巴士站內，嚴重阻礙巴士正常運作，亦對上落巴士的乘客構成即時危險。本人現正式作出投訴並希望警方能嚴正執法，檢控該違泊車輛以確保所有道路使用者的安全。本人亦願意在有需要時出庭作証，協助警方提出訴訟。

本人亦隨同此份報告，附上一張當日由本人攝錄機拍得的錄影片段(DVD 片段)，片段檔案名稱:VIO-20180210-WA0037

以供西九龍交通部調查人員參考。本人證實該 DVD 片段並無任何刪剪，亦為現場所攝錄到的全部。

報告人簽署:[redacted]

日期:11/02/18

跟進事項(由區長或副區長填寫)

違泊報告編號:KCKD-ILP-004-02-18

職員編號:[redacted]

職員姓名:[redacted]

23158 Brian Yeung 21 FEB 2018

簽署:[redacted]

日期:11-2-2018

18.4

Report on reporting illegal parking

I am currently work in the Kowloon Motor Bus Co. (1933) Ltd . My post is Inspector of District 1 . Name: *[redacted]* . Chinese Commercial Code: *[redacted]* . ID Card number: *[redacted]* . Date of Birth: *[redacted]* 19th December . Age: *[redacted]* . Contact: *[redacted]* . Contact of the office: / . Address: 15/F, 9 Po Lun Street, Lai Chi Kwok, Kowloon, Hong Kong .

I am intended to report an incident of illegal parking happened at 20:50 on 10th February 2018. It involved a taxi, the registration number of which is *[redacted]*. On that day, the taxi of registration number *[redacted]*, without authorization, illegally parked inside the bus stop situated in 68 Canton Road, Tsim Sha Tsui, Kowloon. It severely hindered the operation of the bus and put the passengers getting on and off the bus at immediate risk. I hereby formally complain the matter to the police and hope that the police can strictly enforce the law by laying charge against the car for illegal parking to ensure the safety of all road users. I am willing to testify in court to assist the police in the legal proceeding.

I have also enclosed with this report for the investigators of the Traffic Kowloon West's reference a video clip (DVD clip) recorded by my camera. The file name of the clip is VID-20180210-WA0087. I verify that the DVD clip has not been edited and it is entirely what I have recorded on the scene.

Complainant: *[redacted]*
Date: 11/02/18

Follow-up (to be filled in by General Inspector or Deputy General Inspector)

Illegal Parking Report Number: LCKD-ILP-004-02-18
Staff number: *[redacted]*
Name of the staff: *[redacted]*
Signature: *[redacted]*
Date: 11-2-2018

23158 Brian Yeung 21 FEB 2018

九龍巴士（一九三三）有限公司
九巴服務 日日進步 THE KOWLOON MOTOR BUS CO. (1933) LTD.

Our Ref. : LCKD/OPN/293/18
Your Ref. :

27 February 2018

Senior Superintendent of Police
Traffic Kowloon West
8 Wai Wan Lane, Hung Hom, Kowloon

Attn.: Mr. TSE Pui Wah

[By email: ip-sip-tig-2-t-kw@police.gov.hk and By post]

Dear Sir,

Complaint Against Illegal Parking
inside Canton Road KMB Route No. 271 Bus Terminus
Tsim Sha Tsui, Kowloon

It has long been a problem that illegally parked vehicles inside our bus terminus on Canton Road (outside house number 68) for Route No. 271 not only affect our bus operations, trigger very serious traffic congestion along that road, and pose imminent danger to passengers as well as other road users when our buses were intending to drive into or drive out of the terminus.

We have noticed recently that traffic conditions thereat are getting worse and worse and the number of unattended illegally parked vehicles inside the terminus is on a sharp rise. In this regard we have briefed our frontline inspectors to pay frequent visits to the terminus and to report any problems spotted.

At 2052 hours on 2018-2-10 KMB Inspector Mr. Ip Chun Wing has spotted an unattended and illegally parked vehicle inside the terminus causing serious traffic congestion thereat and posing imminent danger to passengers and other road users. Inspector Mr. Ip Chun Wing has then used his recording device/mobile phone to film the traffic violation. Attached please find a brief report furnished by Inspector Mr. Ip Chun Wing and a video clip (DVD) prepared by him/her for your reference.

In order to deter illegal parking problems inside bus terminus we would be extremely grateful if the Police could take follow up enforcement actions and summons the vehicle owner for illegal parking inside bus terminus accordingly. Your collaboration on this will be very much appreciated.

香港九龍荔枝角寶輪街九號 9 Po Lun Street, Lai Chi Kok, Kowloon, Hong Kong
電話 Tel : (852) 2786 8888 傳真 Fax : (852) 2745 0300 網址 Website : www.kmb.hk

九龍巴士（一九三三）有限公司
九巴服務 日日進步 THE KOWLOON MOTOR BUS CO. (1933) LTD.

Should you require any further information or if you have any queries please contact me at [redacted] or Operations Officer, Mr Kenneth Kung, at [redacted]

Yours faithfully,
for and on behalf of
THE KOWLOON MOTOR BUS CO. (1933) LTD.

Utan Wong
Assistant Manager, Operations
Lai Chi Kok Depot

Encl.
cc. cip-sup-t-kw@police.gov.hk
cc. ip-sip-sup-t-kw@police.gov.hk
cc. adoo-ytdist@police.gov.hk

香港九龍荔枝角寶輪街九號 9 Po Lun Street, Lai Chi Kok, Kowloon, Hong Kong
電話 Tel : (852) 2786 8888 傳真 Fax : (852) 2745 0300 網址 Website : www.kmb.hk

舉報違泊報告書

本人現職於九龍巴士(一九三三)有限公司，職級為車區車務督察，姓名:[redacted]中文電碼:[redacted]

身份証明文件號碼:[redacted]，出生日期:[redacted]年12月19日，年歲:[redacted]

聯絡電話:[redacted] / 公司電話:[redacted]，地址:香港九龍荔枝角窩輪街九號十五樓。

現擬舉報一宗發生於2018年02月10日20:52時的交通違例泊車事件，

當中牽涉一輛的士車，車牌為[redacted]，當日該的士車，車牌[redacted]未經授權違例停泊於

九龍尖沙咀廣東道68號巴士站內，嚴重阻礙巴士正常運作，亦對上落巴士的乘客構成即時危險。本人現正式作出投訴並希望警方能嚴正執法，檢控該違泊車輛以確保所有道路使用者的安全。本人亦願意在有需要時出庭作証，協助警方提出訴訟。

本人亦隨同此份報告，附上一張當日由本人攝錄機拍得的錄影片段(DVD片段)，片段檔案名稱:WD-20180210-WA0012

以供西九龍交通部調查人員參考。本人證實該DVD片段並無任何刪剪，亦為現場所攝錄到的全部。

報告人簽署:[redacted]

日期:11/02/18

跟進事項(由區長或副區長填寫)

違泊報告編號:LCKD-ILP-005-02-18

職員編號:[redacted]

23158 Brian Yeung 21 FEB 2018

職員姓名:[redacted]

簽署:[redacted]

日期:11-2-2018

18.5

Report on reporting illegal parking

I am currently work in the Kowloon Motor Bus Co. (1933) Ltd . My post is Inspector of District 1 . Name: *[redacted]* . Chinese Commercial Code: *[redacted]* . ID Card number: *[redacted]* . Date of Birth: *[redacted]* 19th December . Age: *[redacted]* . Contact: *[redacted]* . Contact of the office: / . Address: 15/F, 9 Po Lun Street, Lai Chi Kwok, Kowloon, Hong Kong .

I am intended to report an incident of illegal parking happened at 20:52 on 10th February 2018. It involved a taxi, the registration number of which is *[redacted]*. On that day, the taxi of registration number *[redacted]*, without authorization, illegally parked inside the bus stop situated in 68 Canton Road, Tsim Sha Tsui, Kowloon. It severely hindered the operation of the bus and put the passengers getting on and off the bus at immediate risk. I hereby formally complain the matter to the police and hope that the police can strictly enforce the law by laying charge against the car for illegal parking to ensure the safety of all road users. I am willing to testify in court to assist the police in the legal proceeding.

I have also enclosed with this report for the investigators of the Traffic Kowloon West's reference a video clip (DVD clip) recorded by my camera. The file name of the clip is VID-20180210-WA0012. I verify that the DVD clip has not been edited and it is entirely what I have recorded on the scene.

Complainant: *[redacted]*
Date: 11/02/18

Follow-up (to be filled in by General Inspector or Deputy General Inspector)

Illegal Parking Report Number: LCKD-ILP-005-02-18
Staff number: *[redacted]*
23158 Brian Yeung 21 FEB 2018
Name of the staff: *[redacted]*
Signature: *[redacted]*
Date: 11-2-2018

九龍巴士（一九三三）有限公司
THE KOWLOON MOTOR BUS CO. (1933) LTD.

Our Ref. : LCKD/OPN/1120/18
Your Ref. :

28 June 2018

Senior Superintendent of Police
Traffic Kowloon West
8 Wai Wan Lane, Hung Hom, Kowloon

Attn.: Mr. TSE Pui Wah

[By email: ip-sip-tig-2-t-kw@police.gov.hk and By post]

Dear Sir,

Complaint against Illegal Parking
outside Jordan Road (Eastbound) House no. 23-29
Jordan, Kowloon

As reflected by our outdoor staff, illegal parking was found outside Jordan Road (Eastbound) House no. 23-29, which is not only affect our bus operations, trigger very serious traffic congestion along that road, and pose imminent danger to passengers as well as other road users when our buses were intending to drive into or drive out of the terminus.

At 2230 hours on 2018-6-6 KMB Inspector Mr. Law Lap Yan has spotted an unattended and illegally parked vehicle at the above located causing serious traffic congestion thereat and posing imminent danger to passengers and other road users. Inspector Mr. Law Lap Yan has then used his recording device/mobile phone to film the traffic violation. Attached please find a brief report furnished by Inspector Mr. Law Lap Yan and a video clip (DVD) prepared by him/her for your reference.

In order to deter illegal parking problems inside bus terminus we would be extremely grateful if the Police could take follow up enforcement actions and summons the vehicle owner for illegal parking accordingly. Your collaboration on this will be very much appreciated.

Should you require any further information or if you have any queries please contact me at [redacted] or Operations Officer, Mr Kenneth Kung, at [redacted]

Yours faithfully,
for and on behalf of
THE KOWLOON MOTOR BUS CO. (1933) LTD.

Utan Wong
Assistant Manager, Operations
Lai Chi Kok Depot

Encl.
cc. cip-sup-t-kw@police.gov.hk & ip-sip-sup-t-kw@police.gov.hk & adoo-ytdist@police.gov.hk

18.6

舉報違泊報告書

本人現職於九龍巴士(一九三三)有限公司，職級為一區車務督察，姓名[redacted]，中文電碼:[redacted]

身份証明文件號碼[redacted] 出生日期[redacted]年1月29日，年歲:[redacted]

聯絡電話[redacted] / 公司電話:[redacted] 地址:香港九龍荔枝角寶輪街九號十五樓。

現擬舉報一宗發生於2018年6月6日22:30時的交通違例泊車事件，

當中牽涉一輛貨車，車牌為[redacted]，當日該貨車，車牌[redacted]未經授權違例停泊於佐敦道東行23-29號對出，嚴重阻礙巴士正常運作，亦對上落巴士的乘客構成即時危險。本人現正式作出投訴並希望警方能嚴正執法，檢控該違泊車輛以確保所有道路使用者的安全。本人亦願意在有需要時出庭作証，協助警方提出訴訟。

本人亦隨同此份報告，附上一張當日由本人攝錄機拍得的錄影片段(DVD 片段)，片段檔案名稱:20180606_222919.mp4

以供西九龍交通部調查人員參考。本人證實該 DVD 片段並無任何刪剪，亦為現場所攝錄到的全部。

報告人簽署:[redacted]

日期:6/6/18

跟進事項(由區長或副區長填寫)

違泊報告編號:KKD-ILP-010-06-18

職員編號:[redacted]

職員姓名:[redacted]

簽署:[redacted]

日期:6.06.18

18.6

Report on reporting illegal parking

I am currently work in the Kowloon Motor Bus Co. (1933) Ltd . My post is Inspector of District 1 . Name: *[redacted]* . Chinese Commercial Code: *[redacted]* . ID Card number: *[redacted]* . Date of Birth: *[redacted]* 29th January . Age: *[redacted]* . Contact: *[redacted]* . Contact of the office: / . Address: 15/F, 9 Po Lun Street, Lai Chi Kwok, Kowloon, Hong Kong .

I am intended to report an incident of illegal parking happened at 22:30 on 6th June 2018. It involved a truck, the registration number of which is *[redacted]*. On that day, the truck of registration number *[redacted]*, without authorization, illegally parked opposite to 23-29 Jordon Road Eastbound. It severely hindered the operation of the bus and put the passengers getting on and off the bus at immediate risk. I hereby formally complain the matter to the police and hope that the police can strictly enforce the law by laying charge against the car for illegal parking to ensure the safety of all road users. I am willing to testify in court to assist the police in the legal proceeding.

I have also enclosed with this report for the investigators of the Traffic Kowloon West's reference a video clip (DVD clip) recorded by my camera. The file name of the clip is 20180606_222959.mp4. I verify that the DVD clip has not been edited and it is entirely what I have recorded on the scene.

Complainant: *[redacted]*
Date: 6/6/18

Follow-up (to be filled in by General Inspector or Deputy General Inspector)

Illegal Parking Report Number: LCKD-ILP-010-06-18
Staff number: *[redacted]*
Name of the staff: *[redacted]*
Signature: *[redacted]*
Date: 06.06.18

18.7

寄件者: courtneychung@police.gov.hk
寄件日期: 2018年8月14日星期二 12:05
收件者: Patrick Pang DOD
主旨: Re: Illegal parking on Canton Road Bus Terminus

Regards

Chung Hung Yip Courtney
Superintendent
Enforcement and Control Division
Kowloon West Region

Tel: [redacted]
Fax: [redacted]

Patrick Pang LCK
<patrick.pang@kmb.hk>
2017-11-15 13:03

To: "sp-e-c-kw@police.gov.hk" <sp-e-c-kw@police.gov.hk>
Cc:
Subject: Illegal parking on Canton Road Bus Terminus

Reference:

Dear Courtney,

Many thanks for the efforts by the Police.

We will arrange to video tape the parking of unauthorized vehicles inside the bus terminus and thereafter send the tape to T KW for processing.

Very much appreciated.

Patrick

寄件者: Wing Chun Kung LCK
寄件日期: 2017年11月14日星期二 12:50
收件者: Patrick Pang LCK
副本: Utan Wong LCK; wingyin.yeung@kmb.hk
主旨: FW: 271 BT pole installation status
附件: 271 BT current status.jpg; 271 BT current status 2.jpg; Suggestion 1.jpg; Suggestion 2.jpg

Dear Pang Sir,

After reviewing current operation situation at Rt. 271 Canton Road Bus terminus that is hindered by illegal parking , possible measures can be taken as in short to long term. Details shown as below:

1. Deploy an extra pole at the end of the BT with signs and notices on the both side; 巴士總站 on one side/嚴禁泊車 on the other.
   That would alert member of public that a BT is situated in the area even when illegal parking vehicles do park and cover up the road markings of bus stop
2. Extend and refurnish existing queuing markings to once again alert M/P where BT is situated.
3. Installation of permanent pole adjacent to boarding point.
   with such arrangement, ad. Box and further notice can be deployed upon the pole.

Please kindly comment and such arrangement can be taken swiftly.
In the meantime, I instructed the inspectorate team to closely monitor the situation.

Best Regards

Kenneth Kung
Operations Officer - Zone 1
Lai Chi Kok Depot, KMB
Email: wingchun.kung@kmb.hk
Tel: [redacted]
Fax:

From: Kam Tong Tang SER
Sent: Tuesday, November 14, 2017 11:34 AM
To: Tak Ching Cheng CFM; Jacky Ng CFM
Cc: Wing Chun Kung LCK; Tin Fong Lau SER; Kwai Wa Lee SER
Subject: FW: 271 BT pole installation status

阿靜；

因應車務要求，請安排儘快安裝種地站柱。謝謝。

From: Wing Chun Kung LCK
Sent: Tuesday, November 14, 2017 11:28 AM
To: Kam Tong Tang SER
Cc: Utan Wong LCK; Wing Yin Yeung LCK; Patrick Pang LCK
Subject: 271 BT pole installation status

Dear Tong,

18.8

As spoken before, JRF of pole installation on the captioned BT has been sent to CFMD. As illegal parking at Canton road hinders bus operation, installation would indeed post a clear message to member of public where BT is. Please kindly update the preparation status and take such action asap.

Please see attached picture for your reference.

Best Regards

Kenneth Kung
Operations Officer - Zone 1
Lai Chi Kok Depot, KMB
Email: wingchun.kung@kmb.hk
Tel:
Fax: [redacted]

5143

18.8

5144

18.8

5145


18.8
巴士總站
嚴禁泊車
1
同一站柱背後
背後貼上
"嚴禁泊車"
2
加長及翻新排隊地線
翻新巴士地"嘩"
5146

18.8

5147

Wing Chun Kung LCK 18.8

From: Wing Chun Kung LCK
Sent: 2017年11月14日Tuesday12:50
To: Patrick Pang LCK
C.c.: Utan Wong LCK; wingyin.yeung@kmb.hk
Subject: FW: 271 BT pole installation status
Attachment: 271 BT current status.jpg; 271 BT current status 2.jpg; Suggestion 1.jpg; Suggestion 2.jpg

Dear Pang Sir,

After reviewing current operation situation at Rt. 271 Canton Road Bus terminus that is hindered by illegal parking , possible measures can be taken as in short to long term. Details shown as below:

1. Deploy an extra pole at the end of the BT with signs and notices on the both side; Bus Terminus on one side/No Parking on the other.
   That would alert member of public that a BT is situated in the area even when illegal parking vehicles do park and cover up the road markings of bus stop
2. Extend and refurnish existing queuing markings to once again alert M/P where BT is situated.
3. Installation of permanent pole adjacent to boarding point.
   with such arrangement, ad. Box and further notice can be deployed upon the pole.

Please kindly comment and such arrangement can be taken swiftly.
In the meantime, I instructed the inspectorate team to closely monitor the situation.

Best Regards

Kenneth Kung
Operations Officer - Zone 1
Lai Chi Kok Depot, KMB
Email: wingchun.kung@kmb.hk
Tel: [redacted]
Fax:

From: Kam Tong Tang SER
Sent: Tuesday, November 14, 2017 11:34 AM
To: Tak Ching Cheng CFM; Jacky Ng CFM
Cc: Wing Chun Kung LCK; Tin Fong Lau SER; Kwai Wa Lee SER
Subject: FW: 271 BT pole installation status

Ar Ching:

According to the request from the Operations Unit, please arrange immediately the installation of stands affixed onto the ground. Thank you.

From: Wing Chun Kung LCK
Sent: Tuesday, November 14, 2017 11:28 AM
To: Kam Tong Tang SER
Cc: Utan Wong LCK; Wing Yin Yeung LCK; Patrick Pang LCK
Subject: 271 BT pole installation status

Dear Tong,

18.8

As spoken before, JRF of pole installation on the captioned BT has been sent to CFMD. As illegal parking at Canton road hinders bus operation, installation would indeed post a clear message to member of public where BT is. Please kindly update the preparation status and take such action asap.

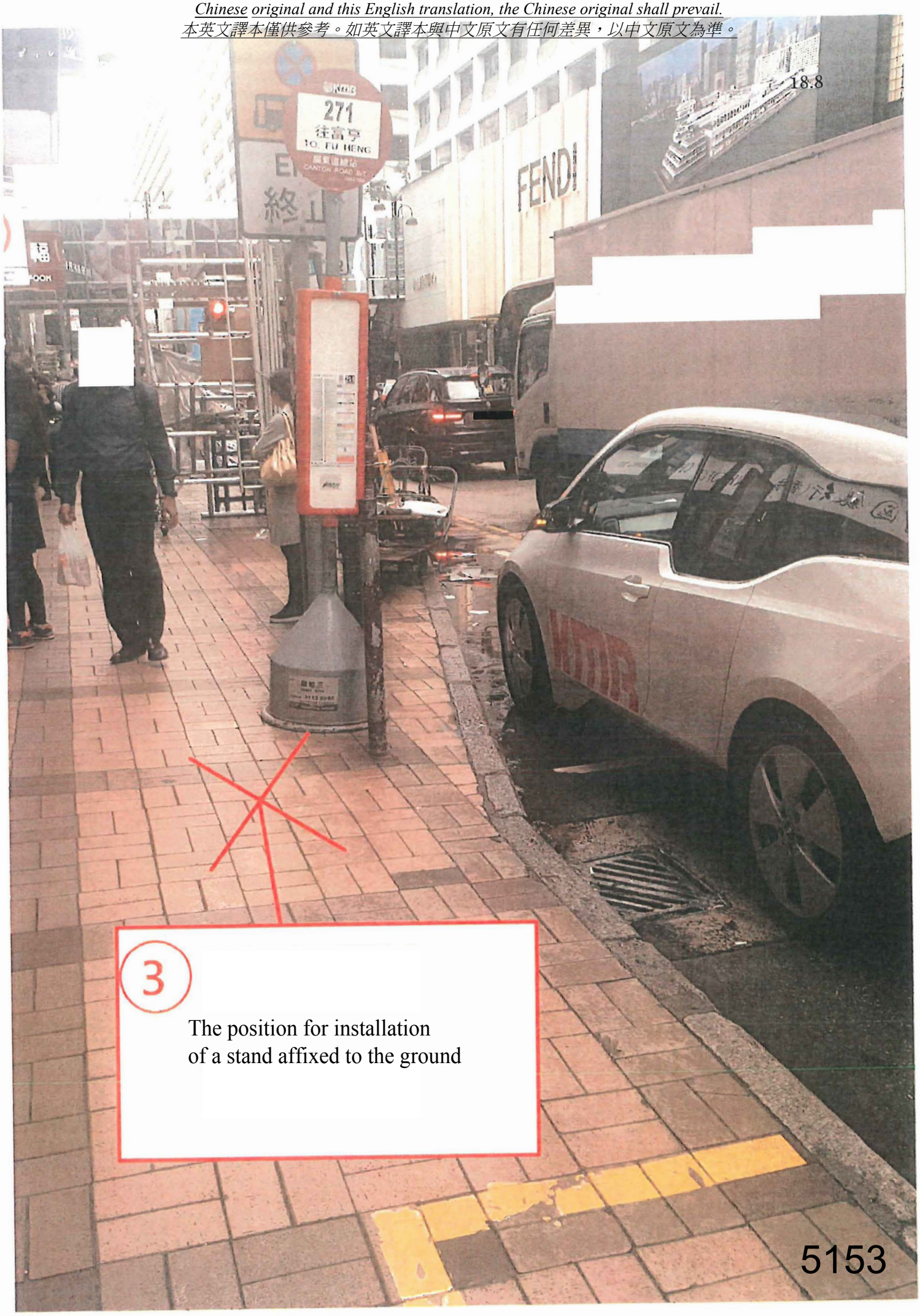
Please see attached picture for your reference.

Best Regards

Kenneth Kung
Operations Officer - Zone 1
Lai Chi Kok Depot, KMB
Email: wingchun.kung@kmb.hk
Tel:
Fax:

18.8

5151



3

The position for installation of a stand affixed to the ground

5153

Wing Chun Kung LCK 18.9

寄件者:	Wing Chun Kung LCK
寄件日期:	2017年11月15日星期三 8:34
收件者:	Patrick Pang LCK
副本:	Utan Wong LCK; wingyin.yeung@kmb.hk
主旨:	Illegal parking at Canton Road
附件:	Illegal Parking located at Canton Road.docx; IMG-20171115-WA0001.jpg; IMG-20171115-WA0002.jpg; IMG-20171115-WA0003.jpg; IMG-20171115-WA0004.jpg; IMG-20171115-WA0005.jpg

Dear Pang Sir,

Please see attached files upon your request.

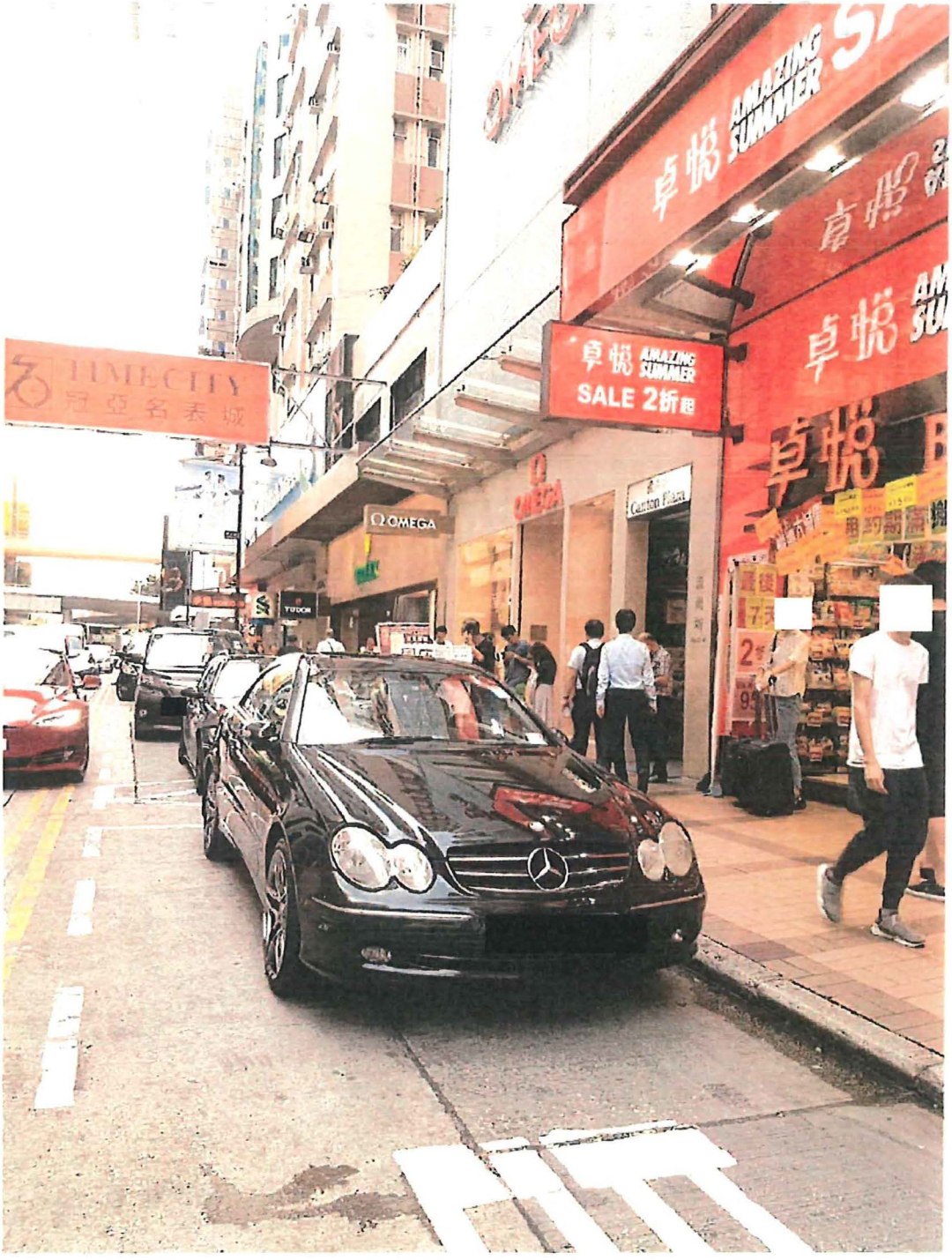
Best Regards

Kenneth Kung
Operations Officer - Zone 1
Lai Chi Kok Depot, KMB
Email: wingchun.kung@kmb.hk
Tel:
Fax: [redacted]

Illegal Parking located at Rt.271 Canton Road Bus terminus

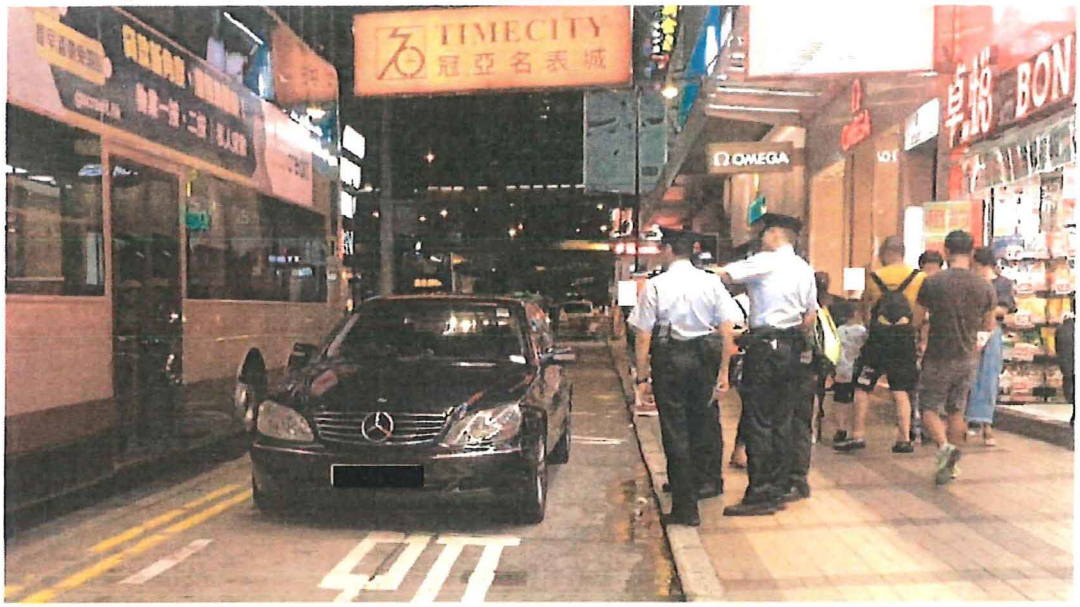
S.9

1. Vehicle parked inside designated bus bay



2. Vehicles parked inside designated bus bay which buses had to cut into its own parking slot dangerously. (with law enforcement)

18.9



3. Illegal parking (with law enforcement.)

18.9

4. Illegal parking trucks that even escalated the danger whilst buses cut into their own parking slot.

18.9

Wing Chun Kung LCK 18.10

寄件者:	Patrick Pang LCK
寄件日期:	2017年11月15日星期三 13:19
收件者:	Kin Wang Leung OD
副本:	Godwin So CPD; Gary Leung CFM; Utan Wong LCK; Wang Cheong Leung LCK; Debby Wong LCK; Wing Chun Kung LCK; Wing Yin Yeung LCK; Henry Leung LGD; Jason Lau LGD
主旨:	Stepping Up of Police Enforcement Action - BT on Canton Road, TST
附件:	Illegal Parking located at Canton Road.docx; IMG-20171115-WA0001.jpg; IMG-20171115-WA0002.jpg; IMG-20171115-WA0003.jpg; IMG-20171115-WA0004.jpg; IMG-20171115-WA0005.jpg

Good Afternoon Wang Gor,

We spoke.

In addition to the enforcement actions currently taken by the Police I have again touched base with Traffic Kowloon West and we both conceded that the illegally parked vehicles inside our BT on Canton Road for Route 271 not only affect our bus operations but trigger serious traffic congestion along that road.

It has been agreed to take Canton Road BT as a trial in that we will arrange our frontline duties to video tape those illegally parked vehicles inside our BT and thereafter send the tape to the Police with specified date/time and the name of the staff who shoots the video clip. As there is a likelihood for our staff to furnish a statement at a later stage we will prepare a standardized template for our staff to follow.

Upon the successful prosecutions of the drivers involved we will then arrange some sort of 'unofficial publicity' by our means to widely spread the message with a view to deter those habitual offenders, not only on Canton Road BT but on other BT.

If this turns out to be successful we could then take unauthorized vehicles using the bus lane as a second trial.

I will keep you abreast of the progress.

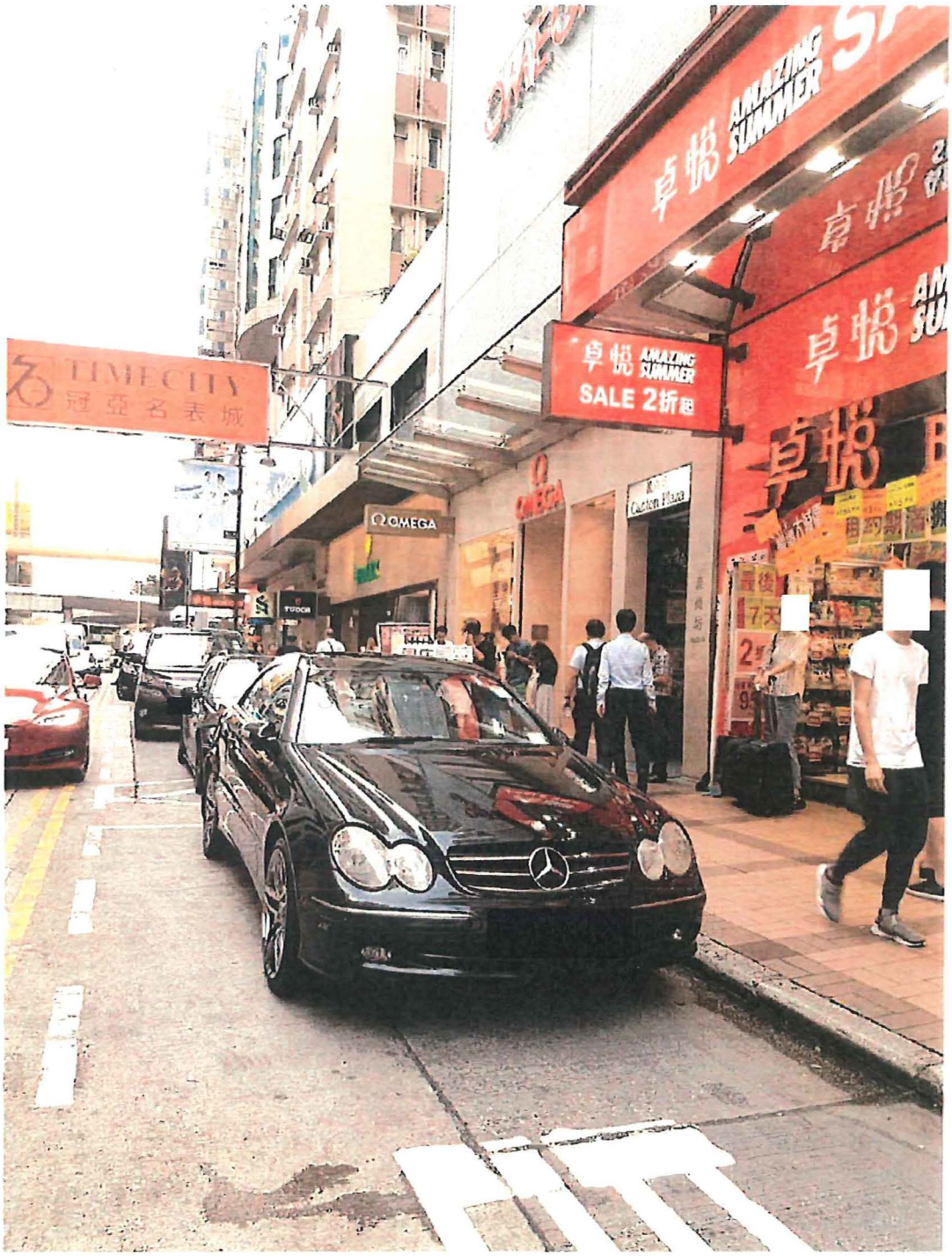
Thank you.

Patrick

Illegal Parking located at Rt.271 Canton Road Bus terminus

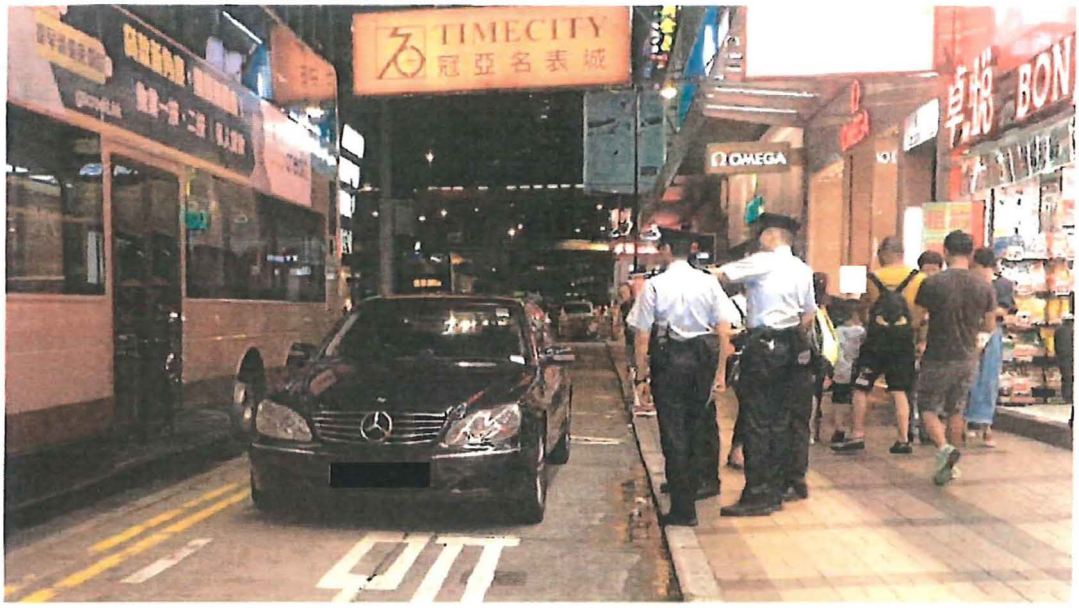
Item 3.10

1. Vehicle parked inside designated bus bay



2. Vehicles parked inside designated bus bay which buses had to cut into its own parking slot dangerously. (with law enforcement)

18.10



3. Illegal parking (with law enforcement.)

18.10

4. Illegal parking trucks that even escalated the danger whilst buses cut into their own parking slot. 18.10

寄件者: Wing Chun Kung LCK
寄件日期: 2017年11月20日星期一 20:16
收件者: Patrick Pang LCK
副本: Utan Wong LCK; wingyin.yeung@kmb.hk
主旨: FW: Illegal parking at Canton Road
附件: 擬訂車務督察以錄影片段舉報違泊報告書工作程序.pptx; 車務督察以錄影片段舉報違泊報告書.docx; 車務督察以錄影片段舉報違泊報告紀錄.xlsx

Dear Sir,

Sorry for mistaken. Attachments are as attached correctly.

Best Regards

Kenneth Kung
Operations Officer - Zone 1
Lai Chi Kok Depot, KMB
Email: wingchun.kung@kmb.hk
Tel: [redacted]
Fax:

From: Wing Chun Kung LCK
Sent: Monday, November 20, 2017 7:17 PM
To: Patrick Pang LCK
Cc: Utan Wong LCK; wingyin.yeung@kmb.hk
Subject: RE: Illegal parking at Canton Road

Dear Pang Sir,

I have instructed the inspectorate team to carry out inspection on illegal parking and videotaped last week accordingly.
I also drafted a report regarding on the matter and took reference with the template given from your previous mail.
I now attach the following files for your endorsement

1. 擬訂車務督察以錄影片段舉報違泊報告書工作程序
2. 舉報違泊報告書
3. 車務督察以錄影片段舉報違泊報告紀錄

Once the above protocol is confirmed, initiate case can be drafted and refer to Police Force in no time.
Your precious comment would be very much appreciated.

Best Regards

Kenneth Kung
Operations Officer - Zone 1

Lai Chi Kok Depot, KMB
Email: wingchun.kung@kmb.hk
Tel:
Fax: [redacted]

18.11

From: Patrick Pang LCK
Sent: Monday, November 20, 2017 2:57 PM
To: Wing Chun Kung LCK
Subject: RE: Illegal parking at Canton Road

Dear Chun,

Attached is the statement sample. Just follow more or less is OK.

Patrick

From: Wing Chun Kung LCK
Sent: Wednesday, November 15, 2017 8:34 AM
To: Patrick Pang LCK
Cc: Utan Wong LCK; Wing Yin Yeung LCK
Subject: Illegal parking at Canton Road

Dear Pang Sir,

Please see attached files upon your request.

Best Regards

Kenneth Kung
Operations Officer - Zone 1
Lai Chi Kok Depot, KMB
Email: wingchun.kung@kmb.hk
Tel:
Fax: [redacted]

Wing Chun Kung LCK 18.11

From:	Wing Chun Kung LCK
Sent:	2017年11月20日 Monday 20:16
To:	Patrick Pang LCK
C.c.:	Utan Wong LCK; wingyin.yeung@kmb.hk
Subject:	FW: Illegal parking at Canton Road
Attachment:	Draft Work Procedure for reporting illegal parking by inspectors using video clips.pptx; Report on reporting illegal parking.docx; Record of inspectors reporting illegal parking using video clips.xlsx

Dear Sir,

Sorry for mistaken. Attachments are as attached correctly.

Best Regards

Kenneth Kung
Operations Officer - Zone 1
Lai Chi Kok Depot, KMB
Email: wingchun.kung@kmb.hk
Tel: [redacted]
Fax:

From: Wing Chun Kung LCK
Sent: Monday, November 20, 2017 7:17 PM
To: Patrick Pang LCK
Cc: Utan Wong LCK; wingyin.yeung@kmb.hk
Subject: RE: Illegal parking at Canton Road

Dear Pang Sir,

I have instructed the inspectorate team to carry out inspection on illegal parking and videotaped last week accordingly.
I also drafted a report regarding on the matter and took reference with the template given from your previous mail.
I now attach the following files for your endorsement

1. Draft Work Procedure for reporting illegal parking by inspectors using video clips
2. Report on reporting illegal parking
3. Record of inspectors reporting illegal parking using video clips

Once the above protocol is confirmed, initiate case can be drafted and refer to Police Force in no time.
Your precious comment would be very much appreciated.

Best Regards

Kenneth Kung
Operations Officer - Zone 1

Lai Chi Kok Depot, KMB
Email: wingchun.kung@kmb.hk
Tel:
Fax:

18.11

From: Patrick Pang LCK
Sent: Monday, November 20, 2017 2:57 PM
To: Wing Chun Kung LCK
Subject: RE: Illegal parking at Canton Road

Dear Chun,

Attached is the statement sample. Just follow more or less is OK.

Patrick

From: Wing Chun Kung LCK
Sent: Wednesday, November 15, 2017 8:34 AM
To: Patrick Pang LCK
Cc: Utan Wong LCK; Wing Yin Yeung LCK
Subject: Illegal parking at Canton Road

Dear Pang Sir,

Please see attached files upon your request.

Best Regards

Kenneth Kung
Operations Officer - Zone 1
Lai Chi Kok Depot, KMB
Email: wingchun.kung@kmb.hk
Tel:
Fax:

Wing Chun Kung LCK 18.12

寄件者: Wing Chun Kung LCK
寄件日期: 2017年11月23日星期四 10:58
收件者: Patrick Pang LCK
副本: Utan Wong LCK; wingyin.yeung@kmb.hk
主旨: RE: 271 BT pole installation status
附件: IMG-20171121-WA0009.jpg; IMG-20171120-WA0006.jpg; IMG-20171120-WA0003.jpg; IMG-20171120-WA0002.jpg

Dear Pang Sir,

For your updated information, permanent bus stop pole JRF has been sent and still pending for CFMD action.
Still, other discussed measures were taken as to alert member of public that a BT is situated in the area.

1. Deploy an extra pole at the end of the BT with signs and notices- Completed
2. Extend and refurbish existing queuing markings – Completed
3. Installation of permanent pole- Pending for CFMD action

Also, reported by inspectors and frontline staff, illegal parking inside the bus bay reduced significantly after such arrangement.
The traffic situation would still be closely monitored. Please see attached photos for your reference.

p.s. refurbishment of bus stop road markings has been referred to related GOV party

Best Regards

Kenneth Kung
Operations Officer - Zone 1
Lai Chi Kok Depot, KMB
Email: wingchun.kung@kmb.hk
Tel: [redacted]
Fax:

From: Wing Chun Kung LCK
Sent: Wednesday, November 15, 2017 8:36 AM
To: Patrick Pang LCK
Cc: Utan Wong LCK; wingyin.yeung@kmb.hk
Subject: RE: 271 BT pole installation status

Dear Pang sir,

Well received . Please also see another email for such illegal parking reference.

Best Regards

Kenneth Kung
Operations Officer - Zone 1
Lai Chi Kok Depot, KMB

Email: wingchun.kung@kmb.hk
Tel: [redacted]
Fax:

18.12

From: Patrick Pang LCK
Sent: Tuesday, November 14, 2017 4:03 PM
To: Wing Chun Kung LCK
Cc: Utan Wong LCK; Wing Yin Yeung LCK
Subject: Re: 271 BT pole installation status

Chun,

Many thanks for your suggestions. Please proceed.

Please also send me more photos via a separate email showing the seriousness of the illegal parking thereat. I want to send the photos to the Police for their reference.

Patrick

On 14 Nov 2017, at 12:50, Wing Chun Kung LCK <wingchun.kung@kmb.hk> wrote:

> Dear Pang Sir,
>
> After reviewing current operation situation at Rt. 271 Canton Road Bus terminus that is hindered by illegal parking , possible measures can be taken as in short to long term. Details shown as below:
>
> 1. Deploy an extra pole at the end of the BT with signs and notices on the both side; 巴士總站 on one side/嚴禁泊車 on the other.
>   That would alert member of public that a BT is situated in the area even when illegal parking vehicles do park and cover up the road markings of bus stop
> 2. Extend and refurnish existing queuing markings to once again alert M/P where BT is situated.
> 3. Installation of permanent pole adjacent to boarding point.
>   with such arrangement, ad. Box and further notice can be deployed upon the pole.
>
> Please kindly comment and such arrangement can be taken swiftly.
> In the meantime, I instructed the inspectorate team to closely monitor the situation.
>
> Best Regards
>
> Kenneth Kung
> Operations Officer - Zone 1
> Lai Chi Kok Depot, KMB
> Email: wingchun.kung@kmb.hk
> Tel: [redacted]
> Fax:

From: Kam Tong Tang SER
Sent: Tuesday, November 14, 2017 11:34 AM
To: Tak Ching Cheng CFM; Jacky Ng CFM
Cc: Wing Chun Kung LCK; Tin Fong Lau SER; Kwai Wa Lee SER
Subject: FW: 271 BT pole installation status

18.12

阿靜：

因應事務要求，請安排儘快安裝陳地站柱，謝謝。

From: Wing Chun Kung LCK
Sent: Tuesday, November 14, 2017 11:28 AM
To: Kam Tong Tang SER
Cc: Utan Wong LCK; Wing Yin Yeung LCK; Patrick Pang LCK
Subject: 271 BT pole installation status

Dear Tong,

As spoken before, JRF of pole installation on the captioned BT has been sent to CFMD. As illegal parking at Canton road hinders bus operation, installation would indeed post a clear message to member of public where BT is. Please kindly update the preparation status and take such action asap.

Please see attached picture for your reference.

Best Regards

Kenneth Kung
Operations Officer - Zone 1
Lai Chi Kok Depot, KMB
Email: wingchun.kung@kmb.hk
Tel:
Fax: [redacted]

<271 BT current status.jpg>

<271 BT current status 2.jpg>

<Suggestion 1.jpg>

<Suggestion 2.jpg>

5170


271
往富亨
TO: FU HENG
廣東道總站
CANTON ROAD B/T
KMB
巴士總站
請勿泊車
DBS
glasstique

18.12

5172


車長請慢駛
留意過路
行人安全
巴士仔提提您
Warm Reminder
巴士總站
請勿泊車
嚴禁泊車
sasa
THE BODY SHOP
DARE TO
MASK
sasa
莎莎
am 上午 8-10
pm 下午 5-8
Except General Holidays


車長請慢駛
留意過路
行人安全
Warm Reminder
巴士總站
請勿泊車
巴士
總站
TUDOR

Wing Chun Kung LCK 18.12

From:	Wing Chun Kung LCK
Sent:	2017年11月23日Thursday10:58
To:	Patrick Pang LCK
C.c.:	Utan Wong LCK; wingyin.yeung@kmb.hk
Subject:	RE: 271 BT pole installation status
Attachment:	IMG-20171121-WA0009.jpg; IMG-20171120-WA0006.jpg; IMG-20171120-WA0003.jpg; IMG-20171120-WA0002.jpg

Dear Pang Sir,

For your updated information, permanent bus stop pole JRF has been sent and still pending for CFMD action.
Still, other discussed measures were taken as to alert member of public that a BT is situated in the area.

1. Deploy an extra pole at the end of the BT with signs and notices- Completed
2. Extend and refurbish existing queuing markings – Completed
3. Installation of permanent pole- Pending for CFMD action

Also, reported by inspectors and frontline staff, illegal parking inside the bus bay reduced significantly after such arrangement.
The traffic situation would still be closely monitored. Please see attached photos for your reference.

p.s. refurbishment of bus stop road markings has been referred to related GOV party

Best Regards

Kenneth Kung
Operations Officer - Zone 1
Lai Chi Kok Depot, KMB
Email: wingchun.kung@kmb.hk
Tel: 3[redacted]
Fax: [redacted]

From: Wing Chun Kung LCK
Sent: Wednesday, November 15, 2017 8:36 AM
To: Patrick Pang LCK
Cc: Utan Wong LCK; wingyin.yeung@kmb.hk
Subject: RE: 271 BT pole installation status

Dear Pang sir,

Well received . Please also see another email for such illegal parking reference.

Best Regards

Kenneth Kung
Operations Officer - Zone 1
Lai Chi Kok Depot, KMB

Email: wingchun.kung@kmb.hk
Tel: [redacted]
Fax:

18.12

From: Patrick Pang LCK
Sent: Tuesday, November 14, 2017 4:03 PM
To: Wing Chun Kung LCK
Cc: Utan Wong LCK; Wing Yin Yeung LCK
Subject: Re: 271 BT pole installation status

Chun,

Many thanks for your suggestions. Please proceed.

Please also send me more photos via a separate email showing the seriousness of the illegal parking thereat. I want to send the photos to the Police for their reference.

Patrick

On 14 Nov 2017, at 12:50, Wing Chun Kung LCK <wingchun.kung@kmb.hk> wrote:

> Dear Pang Sir,
>
> After reviewing current operation situation at Rt. 271 Canton Road Bus terminus that is hindered by illegal parking , possible measures can be taken as in short to long term. Details shown as below:
>
> 1. Deploy an extra pole at the end of the BT with signs and notices on the both side;
> "Bus Terminus"on one side/"No Parking" on the other.
> That would alert member of public that a BT is situated in the area even when illegal parking vehicles do park and cover up the road markings of bus stop
> 2. Extend and refurnish existing queuing markings to once again alert M/P where BT is situated.
> 3. Installation of permanent pole adjacent to boarding point.
> with such arrangement, ad. Box and further notice can be deployed upon the pole.
>
> Please kindly comment and such arrangement can be taken swiftly.
> In the meantime, I instructed the inspectorate team to closely monitor the situation.
>
> Best Regards
>
> Kenneth Kung
> Operations Officer - Zone 1
> Lai Chi Kok Depot, KMB
> Email: wingchun.kung@kmb.hk
> Tel: [redacted]
> Fax:

From: Kam Tong Tang SER
Sent: Tuesday, November 14, 2017 11:34 AM
To: Tak Ching Cheng CFM; Jacky Ng CFM
Cc: Wing Chun Kung LCK; Tin Fong Lau SER; Kwai Wa Lee SER
Subject: FW: 271 BT pole installation status

18.12

Ar Ching:

According to the request from the Operations Unit, please arrange immediately the installation of stands affixed onto the ground. Thank you.

From: Wing Chun Kung LCK
Sent: Tuesday, November 14, 2017 11:28 AM
To: Kam Tong Tang SER
Cc: Utan Wong LCK; Wing Yin Yeung LCK; Patrick Pang LCK
Subject: 271 BT pole installation status

Dear Tong,

As spoken before, JRF of pole installation on the captioned BT has been sent to CFMD. As illegal parking at Canton road hinders bus operation, installation would indeed post a clear message to member of public where BT is. Please kindly update the preparation status and take such action asap.

Please see attached picture for your reference.

Best Regards

Kenneth Kung
Operations Officer - Zone 1
Lai Chi Kok Depot, KMB
Email: wingchun.kung@kmb.hk
Tel:
Fax: [redacted]

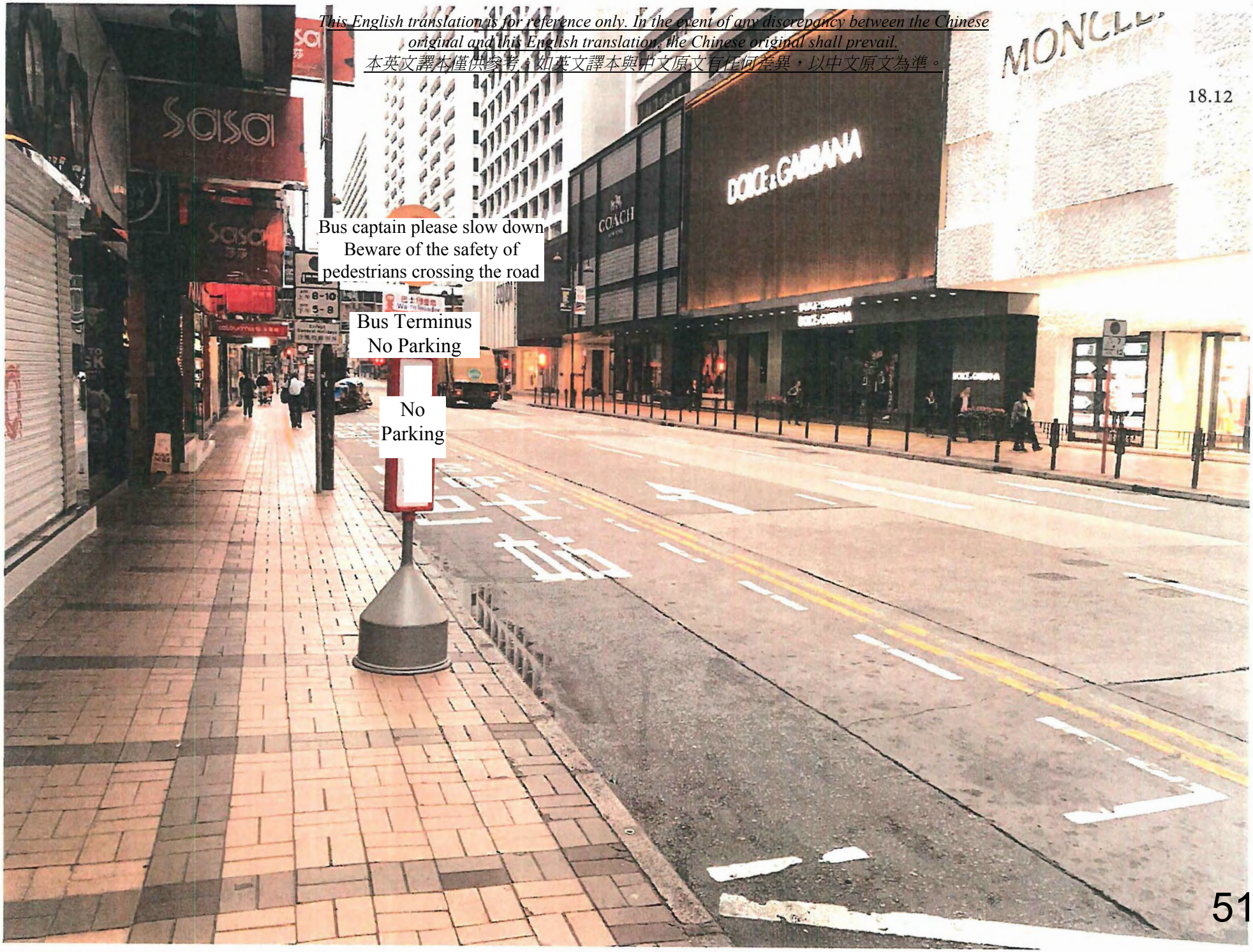
<271 BT current status.jpg>

<271 BT current status 2.jpg>

<Suggestion 1.jpg>

<Suggestion 2.jpg>

5178



5181

Wing Chun Kung LCK 18.13

寄件者: Wing Chun Kung LCK
寄件日期: 2018年2月9日星期五 11:41
收件者: Patrick Pang LCK
副本: Utan Wong LCK
主旨: RE: FW: Complaint Against Illegal Parking inside Canton Road KMB Route No. 271 Bus Terminus Tsim Sha Tsui, Kowloon

Dear Pang Sir,

Well noted. Thanks.

Best Regards

Kenneth Kung
Operations Officer - Zone 1
Lai Chi Kok Depot, KMB
Email: wingchun.kung@kmb.hk
Tel: [redacted]
Fax: [redacted]

From: Patrick Pang LCK
Sent: Thursday, February 8, 2018 6:47 PM
To: Wing Chun Kung LCK
Cc: Utan Wong LCK
Subject: FW: FW: Complaint Against Illegal Parking inside Canton Road KMB Route No. 271 Bus Terminus Tsim Sha Tsui, Kowloon

Dear Chun,

Please note our contact point with Traffic Kowloon West is Senior Inspector, Traffic Investigation Group, Mr Tse Pui Wah, Philip.

Thank you.

Patrick

From: courtneychung@police.gov.hk [mailto:courtneychung@police.gov.hk]
Sent: Thursday, February 8, 2018 3:16 PM
To: Patrick Pang LCK
Subject: Re: FW: Complaint Against Illegal Parking inside Canton Road KMB Route No. 271 Bus Terminus Tsim Sha Tsui, Kowloon

Hi Patrick Sir - as confirmed by CIP SUP T KW Don MAK, SIP TIG T KW TSE Pui-wah, Philip, (Tel. 36619105) is the designated contact point with KMB (Operations), please feel free to contact SIP TSE direct 18.13

Regards

Chung Hung Yip Courtney
Superintendent
Enforcement and Control Division
Kowloon West Region

Tel: [redacted]
Fax: [redacted]

Patrick Pang LCK
<patrick.pang@kmb.hk>
2018-02-02 13:46

To: "courtneychung@police.gov.hk" <courtneychung@police.gov.hk>
Cc:
Subject: FW: Complaint Against Illegal Parking inside Canton Road KMB Route No. 271 Bus Terminus Tsim Sha
Reference:

Dear Courtney,

Received this email from Stephen Hon saying that we should approach TSE Pui-wah, OC TIG I&S KW, in future.

Just to confirm TSE Pui-wah is the contact person in future?

Please advise.

Thank you.

Patrick

-----Original from message-----
From: stephenhon@police.gov.hk [mailto:stephenhon@police.gov.hk]
Sent: Tuesday, January 02, 2018 5:17 PM
To: Kathy Tsang LCK
Cc: stanleylaw@police.gov.hk; pwtse@police.gov.hk
Subject: Re: Complaint Against Illegal Parking inside Canton Road KMB Route No. 271 Bus Terminus Tsim

Sha Tsui, Kowloon

18.13

Dear Ms. TSANG,

As my colleague, Mr. TSE Pui-wah, OC TIG I&S KW is responsible for the subject investigation, I shall forward your email to him for further action. Please direct further correspondence to him in future.

Dear Philip,

The subject matter is under the purview of Traffic Investigation Group; hence, please find the email below for your further action.

Best Regards,

(HON Ka-leung, Stephen)

Senior Inspector of Police,
Investigation and Support
Regional Traffic Headquarters, Kowloon West
Tel: [redacted]
Fax:

心正意誠 - I'M 誠信道路先鋒

"To make the most out of the present for a better and happier tomorrow, for we can't change what's just past and don't know what's gonna happen in the future!"
"做好這一刻去迎接更美愉的明天,因為我們沒法改變過去也沒法預知未來!"

To Promote Excellence in Traffic Policing
交通警政 精益求精

Kathy Tsang LCK <kathytsang@kmb.hk>

To:
"cip-sup-t-kw@police.gov.hk"
<cip-sup-t-kw@police.gov.hk>

2018-01-02 12:27

Cc:
"cip-sup-t-kw@police.gov.hk"
<cip-sup-t-kw@police.gov.hk>,
"ip-sip-sup-t-kw@police.gov.hk"

<ip-sip-sup-t-kw@police.gov.hk>

18.13

( ) w/ CONFIDENTIAL Attachment
( ) RESTRICTED
(*) Unclassified

Subject:

Reference:

Complaint Against Illegal Parking inside
Canton Road KMB Route No. 271 Bus
Terminus Tsim Sha Tsui, Kowloon

[ ] GR to file

Transport International Holdings Limited E-mail Disclaimer

This e-mail may contain confidential, proprietary or legally privileged information and is intended for the attention and use of the addressee(s) only. If you are not the intended recipient of this message, you must not copy, use or disclose any part of its contents. Please notify the sender immediately and

delete this message from your system.

18.13

[attachment "LCKD.OPN.3.18.pdf" deleted by sp-e-c-kw/T-KW/STATION/POLICE/HKSARG]

Wing Chun Kung LCK 18.13

寄件者: Wing Chun Kung LCK
寄件日期: 2018年2月9日星期五 11:41
收件者: Patrick Pang LCK
副本: Utan Wong LCK
主旨: RE: FW: Complaint Against Illegal Parking inside Canton Road KMB Route No. 271 Bus Terminus Tsim Sha Tsui, Kowloon

Dear Pang Sir,

Well noted. Thanks.

Best Regards

Kenneth Kung
Operations Officer - Zone 1
Lai Chi Kok Depot, KMB
Email: wingchun.kung@kmb.hk
Tel: [redacted]
Fax: [redacted]

From: Patrick Pang LCK
Sent: Thursday, February 8, 2018 6:47 PM
To: Wing Chun Kung LCK
Cc: Utan Wong LCK
Subject: FW: FW: Complaint Against Illegal Parking inside Canton Road KMB Route No. 271 Bus Terminus Tsim Sha Tsui, Kowloon

Dear Chun,

Please note our contact point with Traffic Kowloon West is Senior Inspector, Traffic Investigation Group, Mr Tse Pui Wah, Philip.

Thank you.

Patrick

From: courtneychung@police.gov.hk [mailto:courtneychung@police.gov.hk]
Sent: Thursday, February 8, 2018 3:16 PM
To: Patrick Pang LCK
Subject: Re: FW: Complaint Against Illegal Parking inside Canton Road KMB Route No. 271 Bus Terminus Tsim Sha Tsui, Kowloon

Hi Patrick Sir - as confirmed by CIP SUP T KW Don MAK, SIP TIG T KW TSE Pui-wah, Philip, (Tel. 36619105) is the designated contact point with KMB (Operations), please feel free to contact SIP TSE direct 18.13

Regards

Chung Hung Yip Courtney
Superintendent
Enforcement and Control Division
Kowloon West Region

Tel: [redacted]
Fax: [redacted]

Patrick Pang LCK
<patrick.pang@kmb.hk>
2018-02-02 13:46

To: "courtneychung@police.gov.hk" <courtneychung@police.gov.hk>
Cc:
Subject: FW: Complaint Against Illegal Parking inside Canton Road KMB Route No. 271 Bus Terminus Tsim Sha
Reference:

Dear Courtney,

Received this email from Stephen Hon saying that we should approach TSE Pui-wah, OC TIG I&S KW, in future.

Just to confirm TSE Pui-wah is the contact person in future?

Please advise.

Thank you.

Patrick

-----Original from message-----
From: stephenhon@police.gov.hk [mailto:stephenhon@police.gov.hk]
Sent: Tuesday, January 02, 2018 5:17 PM
To: Kathy Tsang LCK
Cc: stanleylaw@police.gov.hk; pwtse@police.gov.hk
Subject: Re: Complaint Against Illegal Parking inside Canton Road KMB Route No. 271 Bus Terminus Tsim

Sha Tsui, Kowloon

18.13

Dear Ms. TSANG,

As my colleague, Mr. TSE Pui-wah, OC TIG I&S KW is responsible for the subject investigation, I shall forward your email to him for further action. Please direct further correspondence to him in future.

Dear Philip,

The subject matter is under the purview of Traffic Investigation Group; hence, please find the email below for your further action.

Best Regards,

(HON Ka-leung, Stephen)

Senior Inspector of Police,
Investigation and Support
Regional Traffic Headquarters, Kowloon West
Tel: [redacted]
Fax:

Righteous and Honest - I'm a road pioneer with integrity

"To make the most out of the present for a better and happier tomorrow, for we can't change what's just past and don't know what's gonna happen in the future!"
"做好這一刻去迎接更美愉的明天,因為我們沒法改變過去也沒法預知未來!"

To Promote Excellence in Traffic Policing
交通警政　精益求精

Kathy Tsang LCK <kathytsang@kmb.hk>
To: "cip-sup-t-kw@police.gov.hk" <cip-sup-t-kw@police.gov.hk>
2018-01-02 12:27
Cc: "cip-sup-t-kw@police.gov.hk" <cip-sup-t-kw@police.gov.hk>, "ip-sip-sup-t-kw@police.gov.hk"

<ip-sip-sup-t-kw@police.gov.hk>

18.13

( ) w/ CONFIDENTIAL Attachment
( ) RESTRICTED
(*) Unclassified

Subject:

Reference:
Complaint Against Illegal Parking inside
Canton Road KMB Route No. 271 Bus
Terminus Tsim Sha Tsui, Kowloon

[ ] GR to file

Transport International Holdings Limited E-mail Disclaimer

This e-mail may contain confidential, proprietary or legally privileged information and is intended for the attention and use of the addressee(s) only. If you are not the intended recipient of this message, you must not copy, use or disclose any part of its contents. Please notify the sender immediately and

delete this message from your system.

18.13

The Transport International Holdings Limited and each of its affiliates and the sender of this message shall not be responsible or liable for any errors or omissions in the contents of this message as secure or error free e-mail transmission cannot be guaranteed. Information sent via e-mail could arrive late or contain viruses or be intercepted, corrupted, lost, destroyed, or incomplete. Unless otherwise stated, any information given in this message is indicative only and is subject to our formal written confirmation.
[attachment "LCKD.OPN.3.18.pdf" deleted by sp-e-c-kw/T-KW/STATION/POLICE/HKSARG]

舉報違泊報告書

18.14

本人現職於九龍巴士(一九三三)有限公司，職級為___區車務督察，姓名:_____，中文電碼:_____，

身份証明文件號碼:_____，出生日期:_____年_____月_____日，年歲:_____

聯絡電話:_____ / 公司電話:_____，地址:___香港九龍荔枝角寶輪街九號十五樓_____。

現擬舉報一宗發生於_____年_____月_____日___:___時的交通違例泊車事件，

當中牽涉一輛_____車，車牌為_____。當日該_____車，車牌_____未經授權違例停泊於

九龍尖沙咀廣東道 68 號巴士站內，嚴重阻礙巴士正常運作，亦對上落巴士的乘客構成即時危險。本人現正式作出投訴並希望警方能嚴正執法，檢控該違泊車輛以確保所有道路使用者的安全。本人亦願意在有需要時出庭作証，協助警方提出訴訟。

本人亦隨同此份報告，附上一張當日由本人攝錄機拍得的錄影片段(DVD 片段)，

以供西九龍交通部調查人員參考。本人證實該 DVD 片段並無任何刪剪，亦為現場所攝錄到的全部。

報告人簽署:_____

日期:_____

跟進事項(由區長或副區長填寫)

違泊報告編號:_____

職員編號:_____

職員姓名:_____

簽署:_____

日期:_____

18.14

Report on reporting illegal parking

I am currently work in the Kowloon Motor Bus Co. (1933) Ltd . My post is Inspector of District _____ . Name: _____ . Chinese Commercial Code: _____. ID Card number: _____ . Date of Birth: _____Year _____Month _____Day . Age: _____. Contact: _____ / Contact of the office: _____ . Address: 15/F, 9 Po Lun Street, Lai Chi Kwok, Kowloon, Hong Kong .

I am intended to report an incident of illegal parking happened at _____Year _____Month _____Day. It involved a _____, the registration number of which is _____. On that day, the _____ of registration number _____, without authorization, illegally parked inside the bus stop situated in 68 Canton Road, Tsim Sha Tsui, Kowloon. It severely hindered the operation of the bus and put the passengers getting on and off the bus at immediate risk. I hereby formally complain the matter to the police and hope that the police can strictly enforce the law by laying charge against the car for illegal parking to ensure the safety of all road users. I am willing to testify in court to assist the police in the legal proceeding.

I have also enclosed with this report for the investigators of the Traffic Kowloon West's reference a video clip (DVD clip) recorded by my camera _____. I verify that the DVD clip has not been edited and it is entirely what I have recorded on the scene.

Complainant: _____
Date: _____

Follow-up (to be filled in by General Inspector or Deputy General Inspector)

Illegal Parking Report Number: _____
Staff number: _____
Name of the staff: _____
Signature: _____
Date: _____

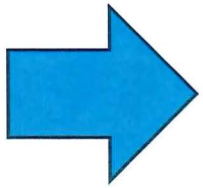
以錄影片段舉報違泊程序

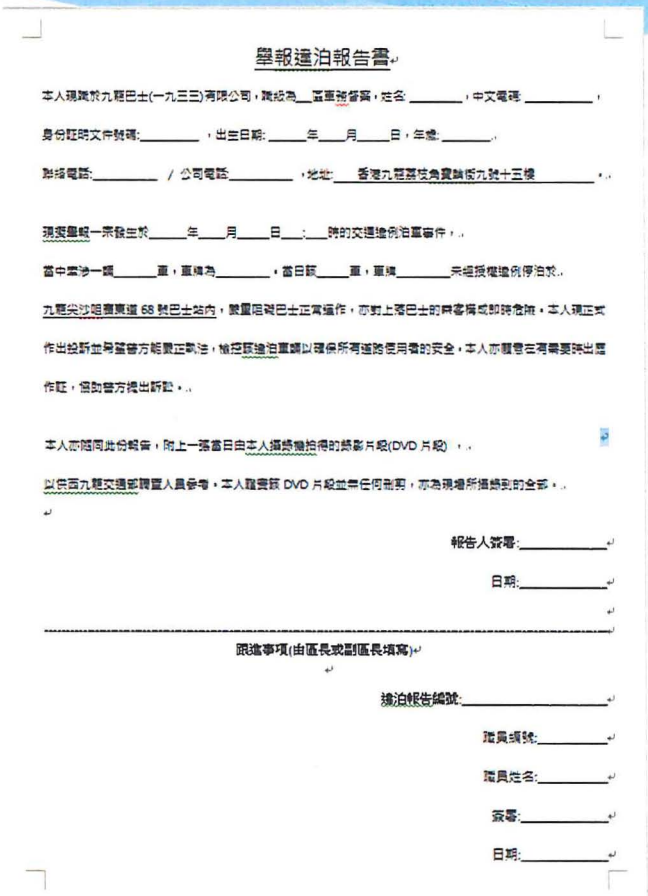
對象:

- 各級車務督察
- 有關車務組文員

以錄影片段舉報違泊程序

由車務督察到有關地點進行
記錄及填寫有關
" 車務督察舉報違泊報告書"





舉報違泊報告書

本人現就於九龍巴士(一九三三)有限公司，職級為__監車務督察，姓名 _____，中文電碼 _____，

身份証明文件號碼:_____，出生日期:_____年____月____日，年齡:_____。

聯絡電話:_____ / 公司電話_____，地址:__香港九龍荔枝角實業街九號十五樓_____。

現發舉報一宗發生於_____年____月____日__:__時的交通違例泊車事件。

當中涉一輛_____車，車牌為_____，當日該____車，車牌_____未經授權違例停泊於

九龍尖沙咀廣東道 68 號巴士站內，嚴重阻礙巴士正常操作，亦對上落巴士的乘客構成即時危險，本人現正式作出投訴並希望當方能跟正執法，檢控該違泊車輛以確保所有道路使用者的安全，本人亦願意在有需要時出庭作証，協助當方提出訴訟。

本人亦隨同此份報告，附上一張當日由本人攝錄拍得的錄影片段(DVD 片段) 。

以供西九龍交通部調查人員參考，本人理當該 DVD 片段並非任何剪輯，亦為現場所攝錄到的全部。

報告人簽署:_____

日期:_____

跟進事項(由區長或副區長填寫)

違泊報告編號:_____

職員編號:_____

職員姓名:_____

簽署:_____

日期:_____

以錄影片段舉報違泊程序

舉報違泊報告書

本人現聘於九龍巴士(一九三三)有限公司，職級為__區車務督導，姓名:_____，中文電碼:_____，

身份証明文件號碼:_____，出生日期:_____年____月____日，年齡:_____，

聯絡電話:_____ / 公司電話:_____，地址:__香港九龍基枝角資關街九號十五樓_____。

現要舉報一宗發生於_____年____月____日___:___時的交通違例泊車事件，

當中牽涉一輛_____車，車牌為_____，當日該____車，車牌_____未經授權違例停泊於

九龍尖沙咀麼東道 68 號巴士站內，嚴重阻礙巴士正常運作，亦對上落巴士的乘客構成即時危險，本人現正式作出投訴並希望貴方能嚴正執法，檢控該違泊車輛以確保所有道路使用者的安全，本人亦願意在有需要時出庭作証，協助貴方提出訴訟。

本人亦隨同此份報告，附上一張當日由本人攝錄機拍得的錄影片段(DVD 片段)，

以供西九龍交通部調查人員參考，本人確實該 DVD 片段並未作任何刪剪，亦為現場所攝錄到的全部。

報告人簽署:_____

日期:_____

跟進事項(由區長或副區長填寫)

違泊報告編號:_____

職員編號:_____

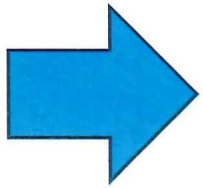
職員姓名:_____

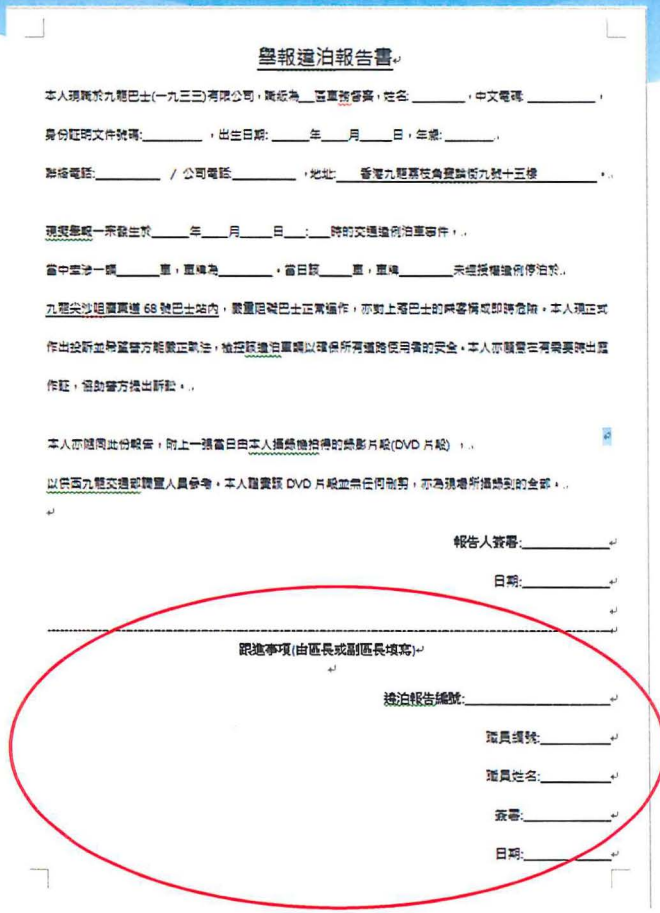
簽署:_____

日期:_____

以錄影片段舉報違泊程序

區長或副區長負責填寫當中跟進事項一欄





舉報違泊報告書

本人現職於九龍巴士(一九三三)有限公司，職級為＿＿＿＿，姓名:＿＿＿＿，中文電碼:＿＿＿＿，

身份証明文件號碼:＿＿＿＿，出生日期:＿＿年＿＿月＿＿日，年齡:＿＿＿＿，

聯絡電話:＿＿＿＿ / 公司電話:＿＿＿＿，地址:＿＿香港九龍慕枝角登豐街九號十三樓＿＿＿＿。

現就＿＿一宗發生於＿＿年＿＿月＿＿日＿＿:＿＿時的交通違例泊車事件，

當中牽涉一輛＿＿＿＿車，車牌為＿＿＿＿，當日該＿＿＿＿車，車牌＿＿＿＿未經授權違例停泊於，

九龍尖沙咀廣東道 68 號巴士站內，嚴重阻礙巴士正常運作，亦對上落巴士的乘客構成即時危險。本人現正式作出投訴並希望警方能嚴正執法，檢控該違泊車輛以確保所有道路使用者的安全。本人亦願意在有需要時出庭作証，協助警方提出訴訟。

本人亦隨同此份報告，附上一張當日由本人攝錄拍得的錄影片段(DVD 片段)。

以供西九龍交通部調查人員參考。本人確實該 DVD 片段並未作任何剪割，亦為現場所攝錄到的全部。

報告人簽署:＿＿＿＿

日期:＿＿＿＿

跟進事項(由區長或副區長填寫)

違泊報告編號:＿＿＿＿

職員編號:＿＿＿＿

職員姓名:＿＿＿＿

簽署:＿＿＿＿

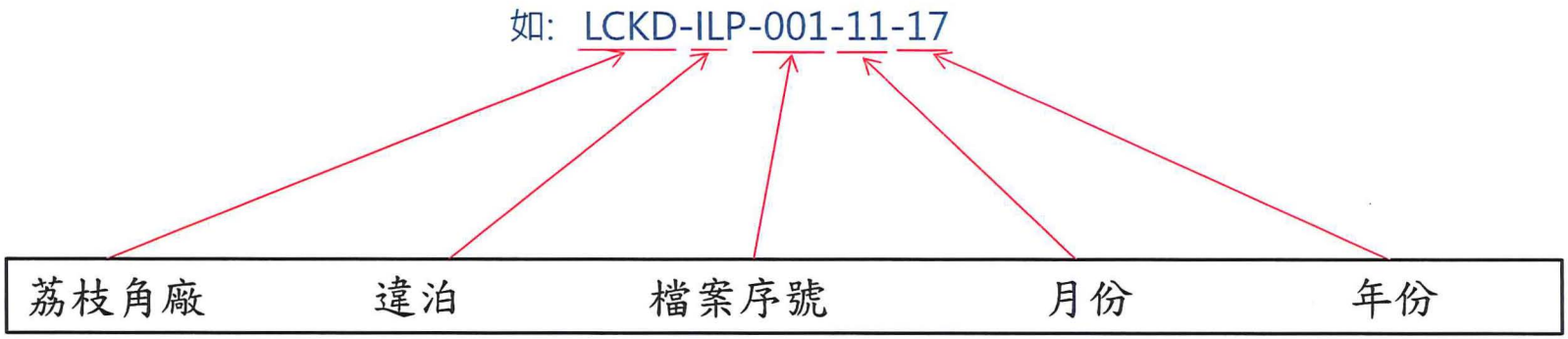
日期:＿＿＿＿

以錄影片段舉報違泊程序

* 區長及副區長須於有關共用資料夾自行建立

1. 有關檔案編號
2. 有關檔案編號資料夾
3. 上傳有關影片到資料夾
4. 並於”車務督察以錄影片段舉報違泊報告紀錄”作出登記

檔案編號組成格式如下:



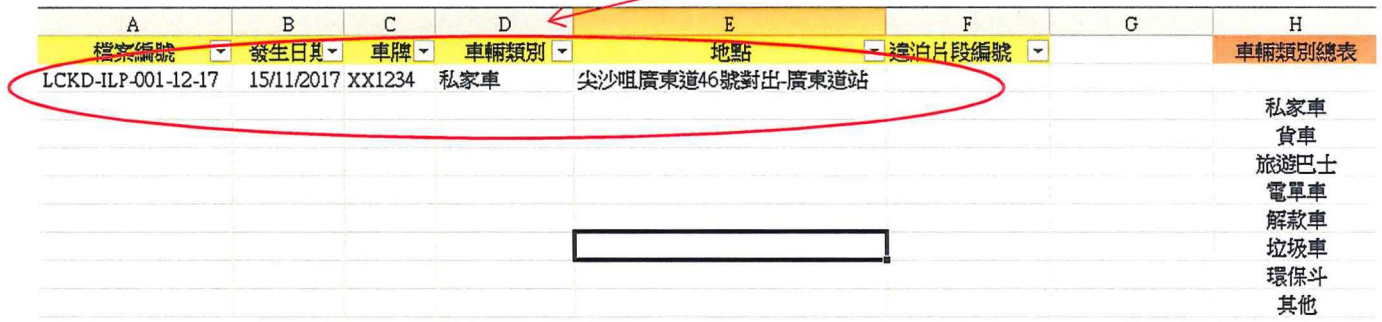
以錄影片段舉報違泊程序

1. 於有關共用資料夾自行建立有關檔案編號

名稱	修改日期	類型	大小
Dump	30/11/2017 18:46	檔案資料夾	
LCKD-ILP-001-12-17	30/11/2017 19:04	檔案資料夾	
LCKD-ILP-002-12-17	30/11/2017 19:04	檔案資料夾	
LCKD-ILP-003-12-17	30/11/2017 19:04	檔案資料夾	
Illegal Parking located at Canton Road...	20/11/2017 19:05	Microsoft Word ...	20 KB
車務督察以錄影片段舉報違泊報告書	22/11/2017 9:01	Microsoft Word ...	19 KB
Complaint letter against illegal parking	22/11/2017 11:44	Microsoft Word ...	33 KB
擬訂車務督察以錄影片段舉報違泊報告書...	30/11/2017 19:04	Microsoft Power...	410 KB
車務督察以錄影片段舉報違泊報告紀錄	30/11/2017 19:05	Microsoft Excel ...	11 KB

以錄影片段舉報違泊程序

根據檔案編號組成格式及有關不同資料
於<車務督察以錄影片段舉報違泊報告紀錄>進行登記



A	B	C	D	E	F	G	H
檔案編號	發生日期	車牌	車輛類別	地點	違泊片段編號		車輛類別總表
LCKD-ILP-001-12-17	15/11/2017	XX1234	私家車	尖沙咀廣東道46號對出-廣東道站			
							私家車
							貨車
							旅遊巴士
							電單車
							解款車
							垃圾車
							環保斗
							其他

以錄影片段舉報違泊程序

* 於有關共用資料夾自行建立有關檔案編號資料夾

名稱	修改日期	類型	大小
Dump	30/11/2017 18:46	檔案資料夾	
LCKD-ILP-001-12-17	30/11/2017 19:04	檔案資料夾	
LCKD-ILP-002-12-17	30/11/2017 19:04	檔案資料夾	
LCKD-ILP-003-12-17	30/11/2017 19:04	檔案資料夾	
Illegal Parking located at Canton Road...	20/11/2017 19:05	Microsoft Word ...	20 KB
車務督察以錄影片段舉報違泊報告書	22/11/2017 9:01	Microsoft Word ...	19 KB
Complaint letter against illegal parking	22/11/2017 11:44	Microsoft Word ...	33 KB
擬訂車務督察以錄影片段舉報違泊報告書...	30/11/2017 19:04	Microsoft Power...	410 KB
車務督察以錄影片段舉報違泊報告紀錄	30/11/2017 19:05	Microsoft Excel ...	11 KB

以錄影片段舉報違泊程序

* 上傳有關影片到資料夾

以錄影片段舉報違泊程序

* 各車務督察完成有關程序後將有關
"車務督察以錄影片段舉報違泊報告書"交回車務組

* 有關文員將上述有關文件同時
1. 掃瞄及上傳報告書至有關檔案編號共用資料夾內
2. 存放於車務組"以錄影片段舉報違泊報告書"資料夾內

以錄影片段舉報違泊程序

* 各車務主任核實各文件及有關資料後轉交警方跟進

Procedures of reporting illegal parking using video recording

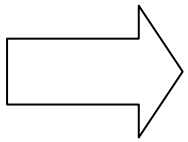
Targets:

Inspectors at all levels

Relevant operations clerks

Procedures of reporting illegal parking using video recording

Inspectors should visit the relevant location for documenting and completing the relevant "illegal parking report by inspectors"



Illegal Parking Report

I am currently working in The Kowloon Motor Bus Co. (1933) Ltd. as an inspector in _____ district with the following particulars: Name: _____ , Chinese Commercial Code: _____, ID no.: _____, Date of Birth: _____(DD/MM/YY), Age: _____, Contact Phone No.: _____ / Company Phone No.: _____, Address: 13/F, 9 Po Lun Street, Lai Chi Kok, Kowloon, Hong Kong.

I am herby reporting an illegal parking incident occurred at ____:_____ on _____(DD/MM/YY), involving a _____ vehicle with a license plate no. _____. At that time, the _____ vehicle with the license plate no. _____ parked at the bus stop in 68 Canton Road, Tsim Sha Tsui, Kowloon illegally without any authorization, seriously impeding the normal operation of the bus, and posing immediate danger to passengers getting on and off the bus. I hereby officially lodge a complaint and hope that the police can strictly enforce the law and prosecute the vehicle that is illegally parked so as to ensure the safety of all road users. I am also willing to testify in court when necessary to assist the police in filing a lawsuit.

I am also enclosing a video clip (DVD video clip) taken by my camcorder on that day together with this report for reference by the investigators of Traffic Kowloon East. I confirm that the DVD video clip has not been deleted and was recorded on the spot.

Signature of reporter: _____

Date: _____

Follow-up matters (to be completed by the district head or deputy district head)

Illegal parking report number:_____
Staff No.: _____
Name of Staff: _____
Signature: _____
Date: _____

Procedures of reporting illegal parking using video recording

Illegal Parking Report

I am currently working in The Kowloon Motor Bus Co. (1933) Ltd. as an inspector in _____ district with the following particulars: Name: _____ , Chinese Commercial Code: _____, ID no.: _____, Date of Birth: _____(DD/MM/YY), Age: _____, Contact Phone No.: _____ / Company Phone No.: _____, Address: 13/F, 9 Po Lun Street, Lai Chi Kok, Kowloon, Hong Kong.

I am herby reporting an illegal parking incident occurred at ____:_____ on _____(DD/MM/YY), involving a _____ vehicle with a license plate no. _____. At that time, the _____ vehicle with the license plate no. _____ parked at the bus stop in 68 Canton Road, Tsim Sha Tsui, Kowloon illegally without any authorization, seriously impeding the normal operation of the bus, and posing immediate danger to passengers getting on and off the bus. I hereby officially lodge a complaint and hope that the police can strictly enforce the law and prosecute the vehicle that is illegally parked so as to ensure the safety of all road users. I am also willing to testify in court when necessary to assist the police in filing a lawsuit.

I am also enclosing a video clip (DVD video clip) taken by my camcorder on that day together with this report for reference by the investigators of Traffic Kowloon East. I confirm that the DVD video clip has not been deleted and was recorded on the spot.

Signature of reporter: _____

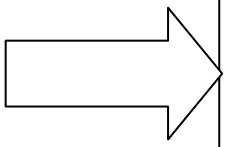
Date: _____

Follow-up matters (to be completed by the district head or deputy district head)

Illegal parking report number:_____
Staff No.: _____
Name of Staff: _____
Signature: _____
Date: _____

Procedures of reporting illegal parking using video recording

The district head or deputy district head is responsible for completing the column regarding "follow-up matters"



Illegal Parking Report

I am currently working in The Kowloon Motor Bus Co. (1933) Ltd. as an inspector in _____ district with the following particulars: Name: _____ , Chinese Commercial Code: _____, ID no.: _____, Date of Birth: _____(DD/MM/YY), Age: _____, Contact Phone No.: _____ / Company Phone No.: _____, Address: 13/F, 9 Po Lun Street, Lai Chi Kok, Kowloon, Hong Kong.

I am herby reporting an illegal parking incident occurred at ____:_____ on _____(DD/MM/YY), involving a _____ vehicle with a license plate no. _____. At that time, the _____ vehicle with the license plate no. _____ parked at the bus stop in 68 Canton Road, Tsim Sha Tsui, Kowloon illegally without any authorization, seriously impeding the normal operation of the bus, and posing immediate danger to passengers getting on and off the bus. I hereby officially lodge a complaint and hope that the police can strictly enforce the law and prosecute the vehicle that is illegally parked so as to ensure the safety of all road users. I am also willing to testify in court when necessary to assist the police in filing a lawsuit.

I am also enclosing a video clip (DVD video clip) taken by my camcorder on that day together with this report for reference by the investigators of Traffic Kowloon East. I confirm that the DVD video clip has not been deleted and was recorded on the spot.

Signature of reporter: _____

Date: _____

Follow-up matters (to be completed by the district head or deputy district head)

Illegal parking report number:_____
Staff No.: _____
Name of Staff: _____
Signature: _____
Date: _____

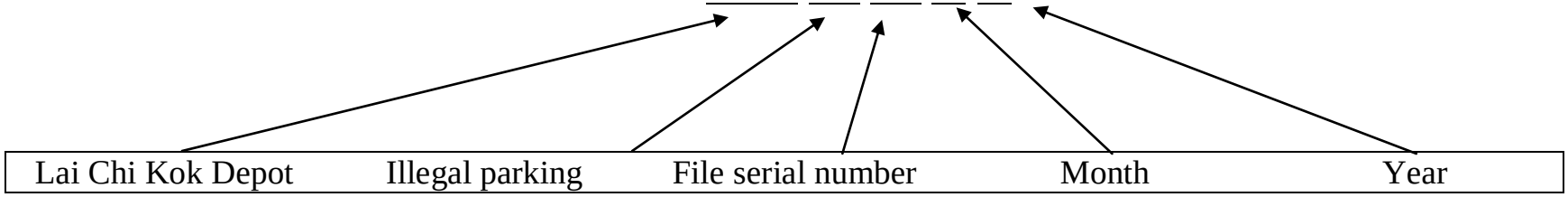
Procedures of reporting illegal parking using video recording

* The district head and the deputy district head must make the move to set up the following information in the relevant sharing folder.

1. Relevant file number
2. Folder pertaining to relevant file number
3. Upload the related videos to the folder
4. Create entry in the "record of illegal parking report using video recording by inspectors"

The format of the file number is as follows:

Such as: LCKD-ILP-001-11-17



Procedures of reporting illegal parking using video recording

1. Make the move to set up the relevant file number in the relevant sharing folder

Procedures of reporting illegal parking using video recording

Create entry in the "record of illegal parking report using video recording by inspectors" according to the format of the file number and various relevant information

A	B	C	D	E	F	G	H
Illegal parking report number	Date of occurrence	License plate number	Category of vehicles	Location	No. of illegal parking video		List of category of vehicles
LCKD-IL?-001-12-17	15/11/2017	XX1234	Private car	Canton Road Station, off 68 Canton Road, Tsim Sha Tsui			
							Private car
							Truck
							Tour bus
							Motorcycle
							Cash escort vehicle
							Refuse collection vehicle
							Skips
							Others

Procedures of reporting illegal parking using video recording

*Set up the relevant file number folder in the relevant sharing folder

Procedures of reporting illegal parking using video recording

*Upload the related videos to the folder

Procedures of reporting illegal parking using video recording

*After the completion of the relevant procedures, the inspectors will return the "illegal parking report using video recording by inspectors" to the operations team

*The relevant clerk will handle the above relevant documents as follows:

1. Scan and upload the report to the relevant file number sharing folder
2. File in the "illegal parking report using video recording" folder of the operations team

Procedures of reporting illegal parking using video recording

*The operations officers will verify the documents and relevant information before forwarding them to the police for follow-up actions

車務督察以錄影片段舉報違泊報告紀錄 - 2017

18.16

違泊報告編號	發生日期	車牌	車輛類別	地點	違泊片段名稱
LCKD-ILP-001-12-17	2017/12/08	[redacted]	私家車	尖沙咀廣東道68號對出-廣東道站	20171208_182255.mp4
LCKD-ILP-002-12-17	2017/12/08		私家車	尖沙咀廣東道68號對出-廣東道站	20171208_183209.mp4
LCKD-ILP-003-12-17	2017/12/08		私家車	尖沙咀廣東道68號對出-廣東道站	20171208_183257.mp4
LCKD-ILP-004-12-17	2017/12/13		私家車	尖沙咀廣東道68號對出-廣東道站	20171213_154321.mp4

車務督察以錄影片段舉報違泊報告紀錄 - 2018

檔案編號	發生日期	車牌	車輛類別	地點	違泊片段編號
LCKD-ILP-001-01-18	2018/01/16	[redacted]	其他	尖沙咀廣東道68號對出-廣東道站	20180116_.mp4
LCKD-ILP-002-01-18	2018/01/28		旅遊巴士	尖沙咀廣東道68號對出-廣東道站	20180128_134935.mp4
LCKD-ILP-003-01-18	2018/01/30		私家車	尖沙咀廣東道68號對出-廣東道站	20180130_162714.mp4
LCKD-ILP-004-02-18	2018/02/10		的士	尖沙咀廣東道68號對出-廣東道站	VID-20180210-WA0087
LCKD-ILP-005-02-18	2018/02/10		的士	尖沙咀廣東道68號對出-廣東道站	VID-20180210-WA0012
LCKD-ILP-006-03-18	2018/02/25		的士	尖沙咀廣東道68號對出-廣東道站	IMG_3394.MOV
~~LCKD-ILP-007-04-18~~				~~尖沙咀廣東道68號對出-廣東道站~~	
~~LCKD-ILP-008-05-18~~	~~2018/05/22~~			~~尖沙咀廣東道68號對出-廣東道站~~	-
~~LCKD-ILP-009-05-18~~				~~尖沙咀廣東道68號對出-廣東道站~~	
LCKD-ILP-010-06-18	2018/06/06	[redacted]	貨車	佐敦道東行23-29號對出	20180606_222959.mp4
~~LCKD-ILP-011-06-18~~				~~尖沙咀廣東道68號對出-廣東道站~~	
~~LCKD-ILP-012-06-18~~				~~佐敦道東行23-29號對出~~	
LCKD-ILP-013-06-18	2018/06/01		旅遊巴士	漆咸道南麼地道總站出口	20180601_163114.mp4
LCKD-ILP-014-06-18	2018/06/02		的士	佐敦道東行23-29號對出	IMG_8512.MOV
LCKD-ILP-015-06-18	2018/06/13		私家車	甘泉街巴士總站	20180613_151037.mp4
LCKD-ILP-001-08-18	2018/08/06		貨車	渡船街2B號對出近文英樓	VID-20180806-WA0001.mp4

Record of illegal parking report using video recording by inspectors – 2017

Illegal parking report number	Date of occurrence	License plate number	Category of vehicles	Location	File name of the illegal parking video
LCKD-ILP-001-12-17	2017/12/08		Private car	Canton Road Station, off 68 Canton Road, Tsim Sha Tsui	20171208_1822S5.mp4
LCKD-ILP-002-12-17	2017/12/08		Private car	Canton Road Station, off 68 Canton Road, Tsim Sha Tsui	20171208_183209.mp4
LCKD-ILP-003-12-17	2017/12/08		Private car	Canton Road Station, off 68 Canton Road, Tsim Sha Tsui	20171208_183257.mp4
LCKD-ILP-004-12-17	2017/12/13		Private car	Canton Road Station, off 68 Canton Road, Tsim Sha Tsui	20171213_154321.mp4

Illegal parking report using video recording by inspectors – 2018

File number	Date of occurrence	License plate number	Category of vehicles	Location	File name of the illegal parking video
LCKD-ILP-001-01-18	2018/01/16		Others	Canton Road Station, off 68 Canton Road, Tsim Sha Tsui	20180116_.mp4
LCKD-ILP-002-01-18	2018/01/28		Tour bus	Canton Road Station, off 68 Canton Road, Tsim Sha Tsui	20180128_134935.mp4
LCKD-ILP-003-01-18	2018/01/30		Private car	Canton Road Station, off 68 Canton Road, Tsim Sha Tsui	20180130_162714.mp4
LCKD-ILP-004-02-18	2018/02/10		Taxi	Canton Road Station, off 68 Canton Road, Tsim Sha Tsui	VID-20180210-WA0087
LCKD-ILP-005-02-18	2018/02/10		Taxi	Canton Road Station, off 68 Canton Road, Tsim Sha Tsui	VID-20180210-WA0012
LCKD-ILP-006-03-18	2018/02/25		Taxi	Canton Road Station, off 68 Canton Road, Tsim Sha Tsui	IMG 3394.MOV
~~LCKD-ILP-007-04-18~~				~~Canton Road Station, off 68 Canton Road, Tsim Sha Tsui~~	
~~LCKD-ILP-008-05-18~~	~~2018/05/22~~			~~Canton Road Station, off 68 Canton Road, Tsim Sha Tsui~~	-

~~LCKD-ILP-009-05-18~~			~~Canton Road Station, off 68 Canton Road, Tsim Sha Tsui~~	
LCKD-ILP-010-06-18	2018/06/06	Truck	Off 23-29 Jordan Road Eastbound	20180606_222959.mp4
~~LCKD-ILP-011-06-18~~			~~Canton Road Station, off 68 Canton Road, Tsim Sha Tsui~~	
~~LCKD-ILP-012-06-18~~			~~Off 23-29 Jordan Road Eastbound~~	
LCKD-ILP-013-06-18	2018/06/01	Tour bus	Mody Road Terminal Exit, Chatham Road South	20180601_163114.mp4
LCKD-ILP-014-06-18	2018/06/02	Taxi	Off 23-29 Jordan Road Eastbound	IMG_8512.MOV
LCKD-ILP-015-06-18	2018/06/13	Private car	Kom Tsun Street Bus Terminal	20180613_151037.mp4
LCKD-ILP-001-08-18	2018/08/06	Truck	Near Man Ying Building, off No. 2B, Ferry Street	VID-20180806-WA0001.mp4

19.1 Table identifying relevant parties in email correspondences

Name	Position at material time
Chun Kin Chan SER ("CKC")	Senior Engineer, Service Department, KMB
Sai Lok Ho SER ("SLH")	Senior Engineer, Service Department, KMB
Jan Kulis ("JK")	System Engineering Teamleader, Openmatics, a subsidiary of ZF Friedrichshafen AG
Andrew Boulton ("AB")	Customer Development & Technical Director, Alexander Dennis (Asia Pacific) Limited
Julia Lu ("JL")	Key Account manager, Volvo Bus Hong Kong Limited
Scott Harvey ("SH")	Manager, Sales and Sales Engineering, Volvo Bus Hong Kong Limited

19.2 Chronology and summary of emails between KMB and Openmatics

Date	Sender	Recipient	Summary	Reference
2 August 2018	JK	CKC	Table showing threshold value of KMB and three other European bus operators	Document no. 19.5
3 August 2018	CKC	JK	Enquire criteria used by double decker bus operators	Document no. 19.6
4 August 2018	CKC	JK	Enquire standards of sudden acceleration, harsh braking and tilt angle	Document no. 19.7
6 August 2018	JK	CKC	Confirm standards are not normalised in western countries	Document no. 19.8
6 August 2018	CKC	JK	Enquire whether any agreed standards in western countries	Document no. 19.9
17 August 2018	CKC	JK	Enquire whether Openmatics has recommendations on standards and whether there are threshold values from other double decker bus operators	Document no. 19.10
17 August 2018	CKC	JK	Seeking confirmation that criteria of European bus operators are running single decker buses only	Document no. 19.11
17 August 2018	JK	CKC	Confirmed no recommendation for double decker buses. Not aware of any double decker bus operators using such thresholds	Document no. 19.12
17 August 2018	JK	CKC	Confirmed that the European bus operators run single decker buses	Document no. 19.13

JK: Jan Kulis

CKC: Chun Kin Chan

19.3 Chronology and summary of emails between KMB and Alexander Dennis (Asia Pacific) Limited

Date	Sender	Recipient	Summary	Reference
29 March 2018	SLH	AB	Enquire tilt angle threshold value for single and double decker buses	Document no. 19.14
28 May 2018	SLH	AB	Request for suggestion on the setting of tilt angle value	Document no. 19.15
6 July 2018	AB	SLH	Reply regarding setting threshold value	Document no. 19.16
2 August 2018	SLH	AB	Enquire whether any advice was given to other bus operators regarding tilt alarm angle	Document no. 19.17
2 August 2018	AB	SLH	Confirm no advice given to other bus operators	Document no. 19.18
3 August 2018	SLH	AB	Enquire whether other double deck bus operators in other countries have adopted the tilt angle alarm	Document no. 19.19
3 August 2018	AB	SLH	Confirm not aware of any other double decker bus operators who have adopted the tilt angle alarm	Document no. 19.20

SLH: Sai Lok Ho

AB: Andrew Boulton

19.4 Chronology and summary of emails between KMB and Volvo Bus Hong Kong Limited

Date	Sender	Recipient	Summary	Reference
29 March 2018	SLH	SH	Enquire tilt angle threshold value for single and double decker buses	Document no. 19.21
28 May 2018	SLH	JL	Enquire advice on tilt angle threshold value	Document no. 19.22
29 May 2018	JL	SLH	Comments regarding tilt angle, passive roll stability control etc.	Document no. 19.23
2 August 2018	SLH	JL	Enquire whether any advice was given to other bus operators regarding tilt alarm angle	Document no. 19.24
2 August 2018	JL	SLH	Confirm comments and recommendations in email 29 May 2018 are official comments to Transport Department and bus operators	Document no. 19.25
3 August 2018	SLH	JL	Enquire whether other double deck bus operators in other countries have adopted the tilt angle alarm	Document no. 19.26
6 August 2018	JL	SLH	Confirm not aware of any other double decker bus operators who have adopted the tilt angle alarm	Document no. 19.27

SLH: Sai Lok Ho

JL: Julia Lo

From: Jan.Kulis@zf.com [mailto:Jan.Kulis@zf.com]
Sent: Thursday, August 02, 2018 9:44 PM
To: Chun Kin Chan SER
Cc: ales.hejl@zf.com; thomas.roesch@zf.com
Subject: RE: Criteria for triggering the alarms of Driver Feedback Device

Hello Mr. Chan,
So the threshold values for Driver Feedback app from europian operators are bellow:

Alarm	Criteria for triggering the alarm (KMB)	Criteria that are used by bus operator 1	Criteria that are used by bus operator 2	Criteria that are used by bus operator 3
Engine Over Revving	Engine rpm > 3000 and no braking signal	Engine RPM > 1800	Engine RPM > 2000	Engine RPM > 1800
Speeding	Vehicle speed > 70 km/h	Speed > 80 km/h	Speed > 102 km/h	Speed > 90 km/h
Excessive Idling	Vehicle speed < 1 km/h & Engine rpm > 500 & Duration > 15 minutes	Duration > 2 mins	Duration > 10 mins	Duration > 15 mins
Harsh Acceleration	Acceleration > 4 km/h/s (speed difference between 2 consecutive seconds)	5 km/h	7,2 km/h	8 km/h
Harsh Braking	Deceleration > 7 km/h/s (speed difference between 2 consecutive seconds)	3.6 km/h	8 km/h	8 km/h
Tilting	Tilt Angle > 44º	Tilt Angle > 10º	Tilt Angle > 15º	Tilt Angle > 15º

The RPM needs to be always considered with gearbox (automatic vs manual) and vehicle / engine type in general.

Best regards, Jan K.
Jan Kuliš
System Engineering Teamleader
Openmatics s.r.o.
Poděbradova 2842/1
301 00 Plzeň, Česká republika/Czech Republic
Mobile: +420 602 271 575, Telefon/Phone +420 371 150-404, Telefax/Fax: +420 371 151-001
jan.kulis@zf.com

From: Chun Kin Chan SER
Sent: Friday, August 03, 2018 8:36 AM
To: 'Jan.Kulis@zf.com'
Cc: Kin Wang Leung OD; ales.hejl@zf.com; thomas.roesch@zf.com
Subject: RE: Criteria for triggering the alarms of Driver Feedback Device

Dear Mr. Jan Kulis,

Thank you very much for your help! I will pass this information to our management for further discussion.

Moreover, I think European bus operators only have single decker buses. Is it possible to also quote the criteria used by the bus operators with double decker buses, e.g. bus operators of the UK or Singapore?

Many thanks for your help again!
Chan Chun Kin (KMB)
3-Aug-2018

From: Chun Kin Chan SER [mailto:chanchunkin@kmb.hk]
Sent: 4. srpna 2018 13:28
To: Kulis Jan PLN OM-SLS
Cc: Kin Wang Leung OD; Hejl Ales PLN OM-SLS; Roesch Thomas PLN OM-ADM
Subject: Criteria for triggering the alarms of Driver Feedback Device

Dear Mr. Jan Kulis,

Would you please advise whether any standards on "sudden acceleration", "harsh braking" and "tilt angle" have been set by countries or professional bodies?

Please reply my email by tomorrow (5-Aug-2018). I am sorry for the rush.

Many thanks for your help!
Chan Chun Kin (KMB)
4-Aug-2018

From: Jan.Kulis@zf.com [mailto:Jan.Kulis@zf.com]
Sent: Monday, August 06, 2018 2:30 PM
To: Chun Kin Chan SER
Cc: Kin Wang Leung OD; ales.hejl@zf.com; thomas.roesch@zf.com
Subject: RE: Criteria for triggering the alarms of Driver Feedback Device

Dear Mr. Chan,
As mentioned over WA, these criterias are not normalized, up to our knowledge , in west countries.

Best regards, Jan K.

From: Chun Kin Chan SER
Sent: Monday, August 06, 2018 2:42 PM
To: 'Jan.Kulis@zf.com'
Cc: Kin Wang Leung OD; ales.hejl@zf.com; thomas.roesch@zf.com
Subject: RE: Criteria for triggering the alarms of Driver Feedback Device

Dear Mr. Jan Kulis,

Can I interpret that there is no agreed standard in "sudden acceleration", "harsh braking" and "tilt angle" in western countries (Europe and North America)?

Best regards,
Chan Chun Kin (KMB)
6-Aug-2018

From: Chun Kin Chan SER [mailto:chanchunkin@kmb.hk]
Sent: 17. srpna 2018 10:33
To: Kulis Jan PLN OM-SLS
Cc: Kin Wang Leung OD; Hejl Ales PLN OM-SLS; Roesch Thomas PLN OM-ADM
Subject: RE: Criteria for triggering the alarms of Driver Feedback Device

Dear Mr. Jan Kulis,

Please also clarify whether Openmatics has any recommendation on the thresholds of "sudden acceleration", "harsh braking" and "tilt angle" for double decker buses.
Please also clarify whether any thresholds from other bus operators with double deckers can be referred.

Look forward to your reply.

Best regards,
Chan Chun Kin (KMB)
16-Aug-2018

From: Chun Kin Chan SER [mailto:chanchunkin@kmb.hk]
Sent: 17. srpna 2018 13:02
To: Kulis Jan PLN OM-SLS
Cc: Kin Wang Leung OD; Hejl Ales PLN OM-SLS; Roesch Thomas PLN OM-ADM
Subject: RE: Criteria for triggering the alarms of Driver Feedback Device

Dear Mr. Jan Kulis,

Would you please confirm the following three European operators (that you quoted for our reference) are running single decker buses only (i.e. they do not have any double decker buses)?

Many thanks for your help!
Chan Chun Kin (KMB)
17-Aug-2018

From: Jan.Kulis@zf.com [mailto:Jan.Kulis@zf.com]
Sent: Friday, August 17, 2018 5:51 PM
To: Chun Kin Chan SER <chanchunkin@kmb.hk>
Cc: Kin Wang Leung OD <k.w.leung@kmb.hk>; ales.hejl@zf.com; thomas.roesch@zf.com
Subject: RE: Criteria for triggering the alarms of Driver Feedback Device

Dear Mr. Chan,
Openmatics do not have any recommendation for double deckers threshold values for Driver Feedback app, as this is usualy city-specific and bus-type specific issue.

I am not aware of any double decker bus operator usign such thresholds.

Best regards, Jan

From: Jan.Kulis@zf.com [mailto:Jan.Kulis@zf.com]
Sent: Friday, August 17, 2018 7:35 PM
To: Chun Kin Chan SER <chanchunkin@kmb.hk>
Cc: Kin Wang Leung OD <k.w.leung@kmb.hk>; ales.hejl@zf.com; thomas.roesch@zf.com
Subject: RE: Criteria for triggering the alarms of Driver Feedback Device

Dear Mr. Chan,
Yes, these are signle deckers.

Best regards, Jan K.

From: Sai Lok Ho SER
Sent: Thursday, March 29, 2018 7:03 PM
To: andrew.boulton@alexander-dennis.com
Cc: Kin Wang Leung OD; Chun Kin Chan SER
Subject: Tilt angle warning thresold value

Dear Andy,

Referring to the items "No. 2 passive roll stability control (audio/visual warning only)"in last working group meeting, could ADL please advise under normal bus operation, what tilt angle value should not exceed for both double deck & single deck bus types, so that we can set a threshold value for such a tilt angle warning device ?

Your prompt reply is appreciated.

Thanks and regards,

Ivan

From: Sai Lok Ho SER [mailto:ivanho@kmb.hk]
Sent: 28 May 2018 18:30
To: Andrew Boulton (Asia Pacific)
Cc: Kin Wang Leung OD; Chun Kin Chan SER
Subject: RE: Tilt angle warning thresold value

Dear Andy,

Could you please provide ADL's suggestion on the setting of such as tilt angle value ?

Thanks and regards,

Ivan

From: andrew.boulton@alexander-dennis.com [mailto:andrew.boulton@alexander-dennis.com]
Sent: Friday, July 6, 2018 6:46 PM
To: Sai Lok Ho SER
Cc: Kin Wang Leung OD; Chun Kin Chan SER
Subject: RE: Tilt angle warning thresold value

Dear Ivan

Thank you for your enquiry with respect to this matter.

Unfortunately, I am not able to recommend an angle that the bus could tilt to before a warning would be given to the driver. It is not possible to be able to evaluate this as the boundary conditions for stability will vary with the prevailing conditions. For example, a bus would behave very differently in the wet or dry conditions.

I also believe that the system would be fundamentally unable to deliver a suitable warning to the driver that would allow him to react in time to a dangerous situation.

Should the parameter be set too low then there would be a number of nuisance activations and the system would be habitually ignored. Should a warning be delivered at a significant angle of tilt, then it is likely that the driver would not have time to react or would be distracted by the warning at a time when he should be concentrating on rectifying the situation he finds himself in.

I'm sorry that I can not be of more help in this matter. Should you have any questions, please do not hesitate to ask.

Best regards

Andy

From: Sai Lok Ho SER [mailto:ivanho@kmb.hk]
Sent: 02 August 2018 14:40
To: Andrew Boulton (Asia Pacific)
Cc: Kin Wang Leung OD; Chun Kin Chan SER
Subject: RE: Tilt angle warning thresold value

Dear Andy,

Please confirm whether ADL recently has advised some other bus operators regarding to the value of this tilt alarm angle, and is differ from previous recommendation to us as in below email.

Thanks,

Ivan

"ADL to advise other bus operators adopting this tilt alarm. At what angle."

From: andrew.boulton@alexander-dennis.com [mailto:andrew.boulton@alexander-dennis.com]
Sent: Thursday, August 2, 2018 2:44 PM
To: Sai Lok Ho SER
Cc: Kin Wang Leung OD; Chun Kin Chan SER
Subject: RE: Tilt angle warning thresold value

Good Afternoon Ivan

I am not aware of us advising any operator of this tilt angle and my previous comments below still stand.

Best Regards

Andy

From: Sai Lok Ho SER [mailto:ivanho@kmb.hk]
Sent: 03 August 2018 09:42
To: Andrew Boulton (Asia Pacific)
Cc: Kin Wang Leung OD; Chun Kin Chan SER
Subject: RE: Tilt angle warning thresold value

Dear Andy,

Do you aware any other double-deck bus operators, in any other countries, have dopted tilt angle alarm ?

Thanks and regards,

Ivan

From: andrew.boulton@alexander-dennis.com [mailto:andrew.boulton@alexander-dennis.com]
Sent: Friday, August 3, 2018 1:03 PM
To: Sai Lok Ho SER <ivanho@kmb.hk>
Cc: Kin Wang Leung OD <k.w.leung@kmb.hk>; Chun Kin Chan SER <chanchunkin@kmb.hk>
Subject: RE: Tilt angle warning thresold value

Good Afternoon Ivan

I am unaware of anyone adopting such a device.

Best Regards

Andy

From: Sai Lok Ho SER
Sent: Thursday, March 29, 2018 7:05 PM
To: scott.harvey@volvo.com
Cc: Kin Wang Leung OD; Chun Kin Chan SER
Subject: Tilt angle warning thresold value

Dear Scott,

Referring to the items "No. 2 passive roll stability control (audio/visual warning only)"in last working group meeting, could Volvo please advise under normal bus operation, what tilt angle value should not exceed for both double deck & single deck bus types, so that we can set a threshold value for such a tilt angle warning device ?

Your prompt reply is appreciated.

Thanks and regards,

Ivan

From: Sai Lok Ho SER [mailto:ivanho@kmb.hk]
Sent: 2018年5月28日 6:28 下午
To: Lu Julia
Cc: Knight Jeremy; Harvey Scott; Kin Wang Leung OD; Chun Kin Chan SER
Subject: Tilt angle warning thresold value

Dear Julia,

Could you please provide Volvo's advice on the tilt angle threshold value as mentioned in items "No. 2 passive roll stability control (audio/visual warning only)" ?

Thanks and regards,

Ivan

From: Lu Julia [mailto:julia.lu@volvo.com]
Sent: Tuesday, May 29, 2018 8:58 AM
To: Sai Lok Ho SER
Cc: Knight Jeremy; Harvey Scott; Kin Wang Leung OD; Chun Kin Chan SER
Subject: RE: Tilt angle warning thresold value

Dear Ivan,

As advised in the response to the working group, we understand that TD's interpretation of the passive roll stability control (audio/visual warning) means the lateral acceleration sensing shall be with alarm activated.

Our comments is there will be only Cons as it will be very dangerous to have lateral acceleration sensing with alarm activated, we don't know what actions driver shall have, harsh braking or over steering, etc. We recommended there is I-coaching with Volvo telematics available to register driver's behavior as beneficial of fleet management system if customer request.

Tilt angle for DD is always meeting the regulation requirements as 28 degree.

If you refer to ESP, just want to clarify that ESP only operates on yaw rotation around the Y-axle. Which means that if a wheel will start to skid or loose grip, the brakes will be applied. There is no tilt angle connection to ESP.

Thanks, Julia

在 2018 年 8 月 2 日，14:32，Sai Lok Ho SER <ivanho@kmb.hk> 写道：

Dear Julia,

Please confirm whether Volvo recently has advised some other bus operators regarding to the value of this tilt alarm angle, and is differ from previous recommendation to us as in below email.

Thanks,

Ivan

"Volvo to advise other bus operators adopting this tilt alarm. At what angle."

From: Lu Julia [mailto:julia.lu@volvo.com]
Sent: Thursday, August 2, 2018 3:01 PM
To: Sai Lok Ho SER
Cc: Kin Wang Leung OD; Chun Kin Chan SER
Subject: Re: Tilt angle warning thresold value

Dear Ivan，

The comments you have below is our official comments to TD and to operators.

Thanks, Julia

发自我的 iPhone

From: Sai Lok Ho SER <ivanho@kmb.hk>
Sent: Friday, 3 August 2018 9:44 AM
To: Lu Julia <julia.lu@volvo.com>
Cc: Kin Wang Leung OD <k.w.leung@kmb.hk>; Chun Kin Chan SER <chanchunkin@kmb.hk>
Subject: RE: Tilt angle warning thresold value

Dear Julia,

Do you aware any other double-deck bus operators, in any other countries, have adopted tilt angle alarm ?

Thanks and regards,

Ivan

From: Lu Julia [mailto:julia.lu@volvo.com]
Sent: Monday, August 6, 2018 9:21 AM
To: Sai Lok Ho SER <ivanho@kmb.hk>
Cc: Kin Wang Leung OD <k.w.leung@kmb.hk>; Chun Kin Chan SER <chanchunkin@kmb.hk>
Subject: RE: Tilt angle warning thresold value

Dear Ivan,

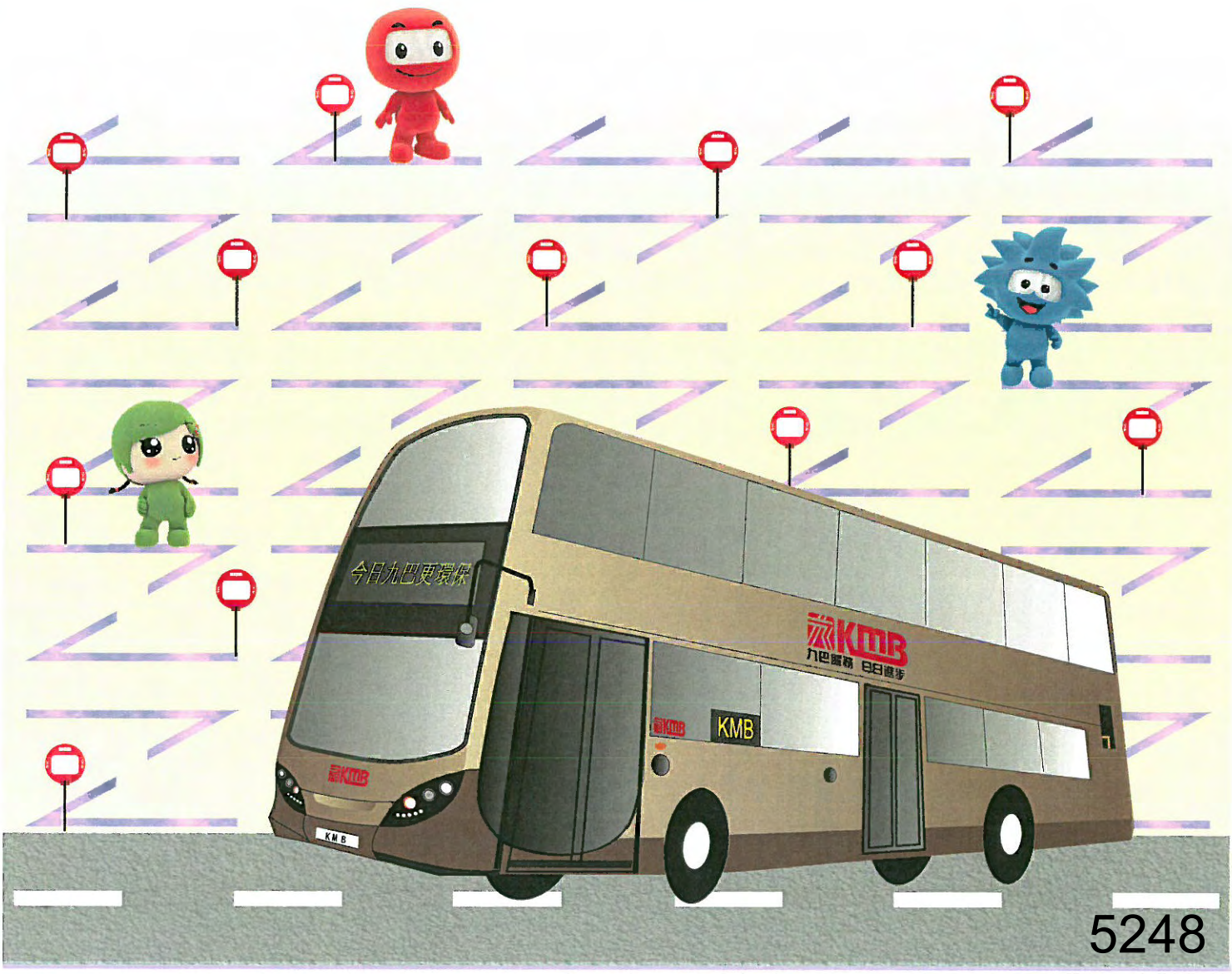
We are not aware any other double-deck bus operators have adopted tilt angle alarm so far.

Thanks and regards, Julia

九巴服務 日日進步

PRIVATE & CONFIDENTIAL

5 YEAR PLAN 2013 – 2017



5248

8. BUS SAFETY

8.1 Introduction

8.1.1 Safety is the top priority in KMB's operations. Safety is enhanced through the strengthening of communication, documentation, training, deployment and performance monitoring as well as improvements in bus maintenance and design. Considerable efforts have also been made to promote traffic safety by passenger education and publicity.

8.1.2 This chapter includes an analysis of the types/causes of accidents for the past two calendar years (2010 and 2011) and the relationship of accident rates with respect to different factors, including bus captain age, length of service, and length of driving hours before the accident, bus types, etc.

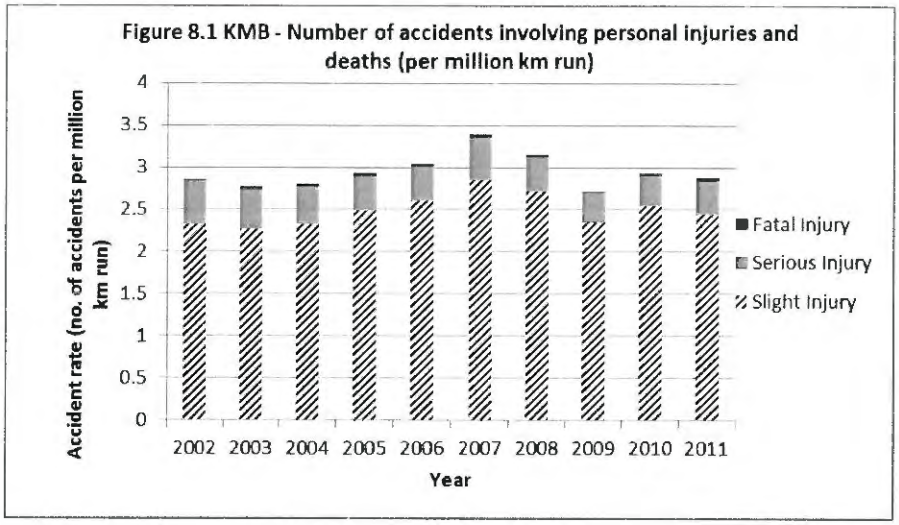
8.1.3 The chapter further discusses the various measures that have been or are being undertaken to promote safety.

8.2 Analysis of Bus Accidents in the Past Two Calendar Years

8.2.1 A comprehensive analysis of accident which occurred from November 2002 to October 2003 was presented in the report "Review on Safety Arrangements to Enhance Road and Passenger Safety" submitted to the Transport Department in February 2004. The analyses are repeated for the two-year period 2010 to 2011. The results are presented below.

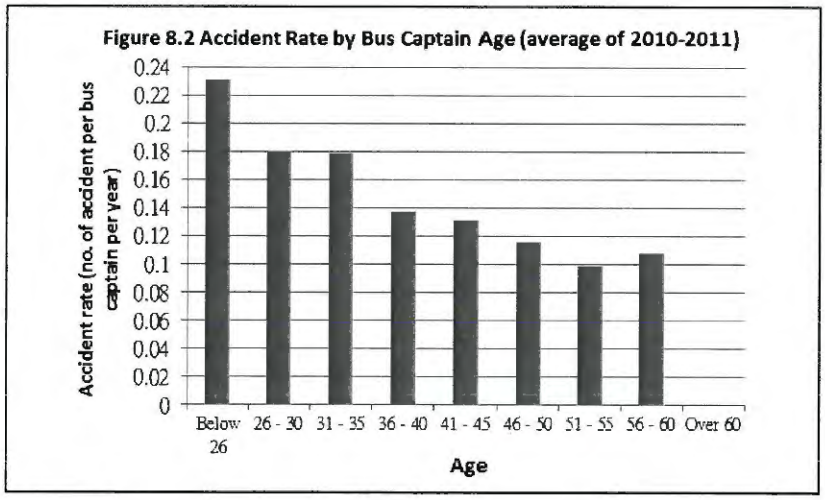
Trend of Accident Rates

8.2.2 Accident rates from 2002 to 2011 are shown in Figure 8.1. Following the increase in accident rate from 2004 to 2007, notable reductions were achieved in 2008 and 2009 as a result of concerted efforts to reduce accidents. In 2010, there was a slight increase of the figure. However, it dropped from 2.92 in 2010 to 2.87 in 2011 (as reported in Assessment for KMB Performance for 2011).



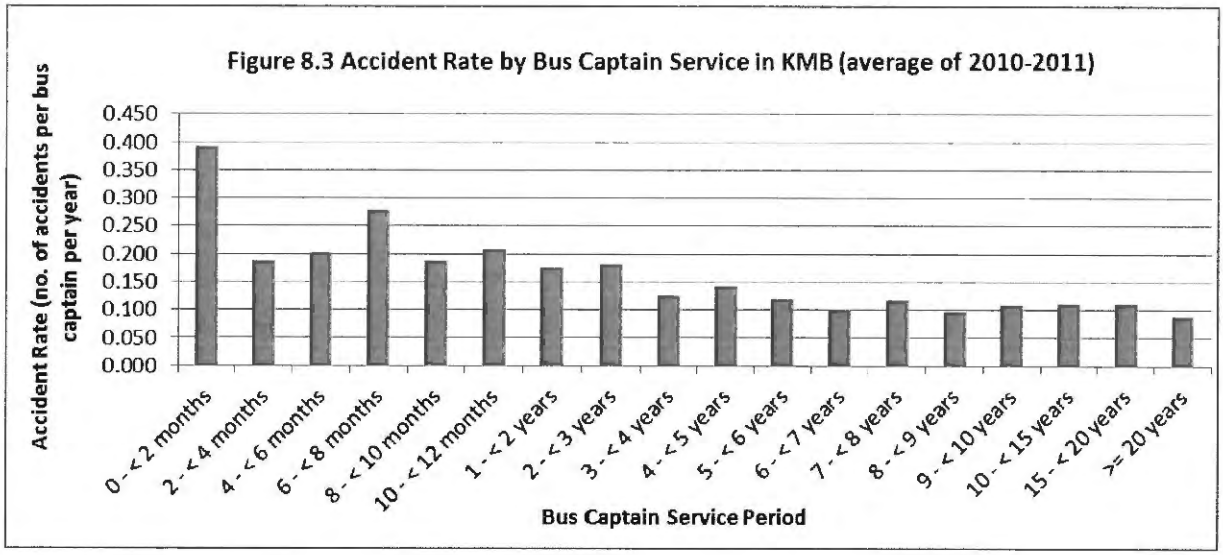
Accident Rate by Bus Captain Age

8.2.3 Results of the analysis of accident rate by bus captain age are shown in Figure 8.2. The results show that younger bus captains are more prone to higher accident rates, but this is mainly due to the fact that these bus captains have relatively less bus driving experience and they are more prone to accidents in their first few months of service. This is also shown in the relationship between accident rates and years of service.



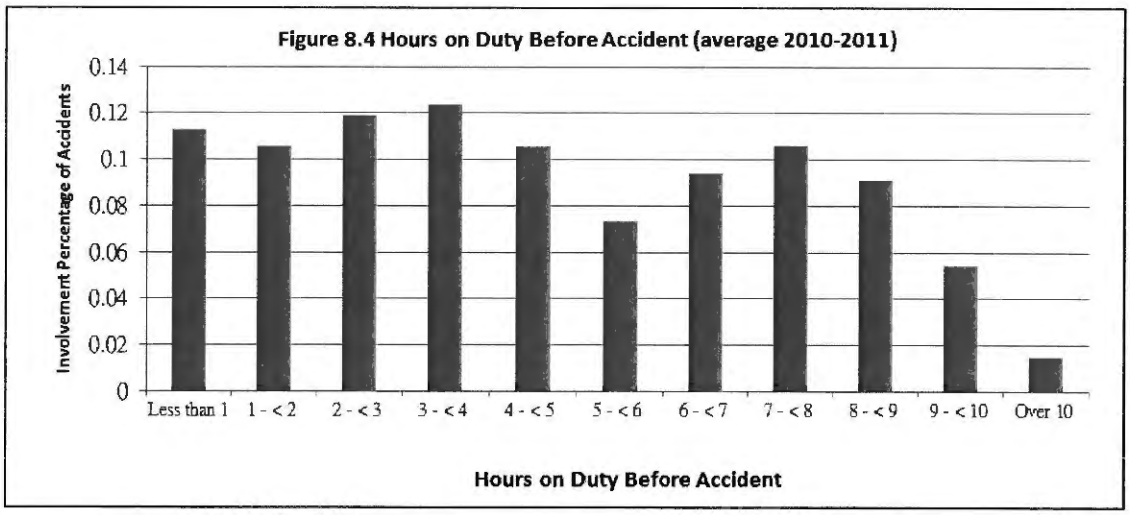
Accident Rate by Years of Service

8.2.4 The results of the analysis on accident rate by experience in terms of years of service in the Company are shown in Figure 8.3. As mentioned above, the likelihood of an accident occurring in the first few months after the newly recruitment is relatively higher. The accident rate then falls as experience is accumulated.



Accident Rate by Hours on Duty Before Accident

8.2.5 The analysis results in Figure 8.4 (below) show that there is no correlation between the occurrence of accident and the number of hours on duty before the accident.



Accidents by Nature

8.2.6 The results of the analysis of accident natures are shown in Table 8.1 below.

Table 8.1 Accidents by nature in percentage

Accident nature	Percentage (%)
Head On/Tail Collision	11.9%
Glancing Collision	3.7%
Collision W/TP Veh (changing lane)	11.0%
Collision With Other Veh (rolling back/forward/reversing)	0.4%
J/O Collision	4.9%
Entering R/A Collision	0.2%
Hit St. Obj/Veh/Animal	2.0%
Bus Overturn/Topple	0.0%
Injury To Pedestrian	7.3%
Injury To Alighting/Boarding Passenger	2.7%
Passenger Loss Of Balance	52.9%
Injury To Passenger Inside Bus	1.7%
Others	1.0%
Total:	**100%**

8.2.7 The results are expressed in terms of percentage of accidents during the two years 2010-2011. The majority of the accidents (52.9%) were due to passengers losing balance while on the bus. More than half of these cases were caused by the bus braking in traffic. Accidents with injuries sustained as a result of different kinds of collisions account for 32.3% while accidents with injury to pedestrians account for about 7.3% of all the accidents.

8.2.8 KMB however does not have the contributory factors of traffic accidents categorized as stated in Annex E (II) in the letter from the Transport Department Ref. BD 76/50 dated 31 May 2012. The breakdown by our classification of accident natures from 2009 to 2011 is as follows:

Table 8.2 Accident by nature

Accident Nature	No. of Accidents		
	2009	2010	2011
Head On / Head Tail Collision	125	119	115
Glancing Collision	32	30	43
Collision with Vehicle Changing Lane	89	101	115
Collision at Junction	61	44	53
Collision at Roundabout	3	0	4
Collision while Bus / Other Vehicle Reversing	2	4	4
Hitting Stationary Object	13	23	17
Overturn/Topple	1	0	0
Injury to Pedestrian	60	73	69
Injury to Boarding/Alighting Passenger	24	22	32
Passenger Loss of Balance	529	545	492
Injury to Passenger Inside Bus - Other Natures	12	21	13
Others	7	12	8
Total:	**958**	**994**	**965**

Accidents by Liability

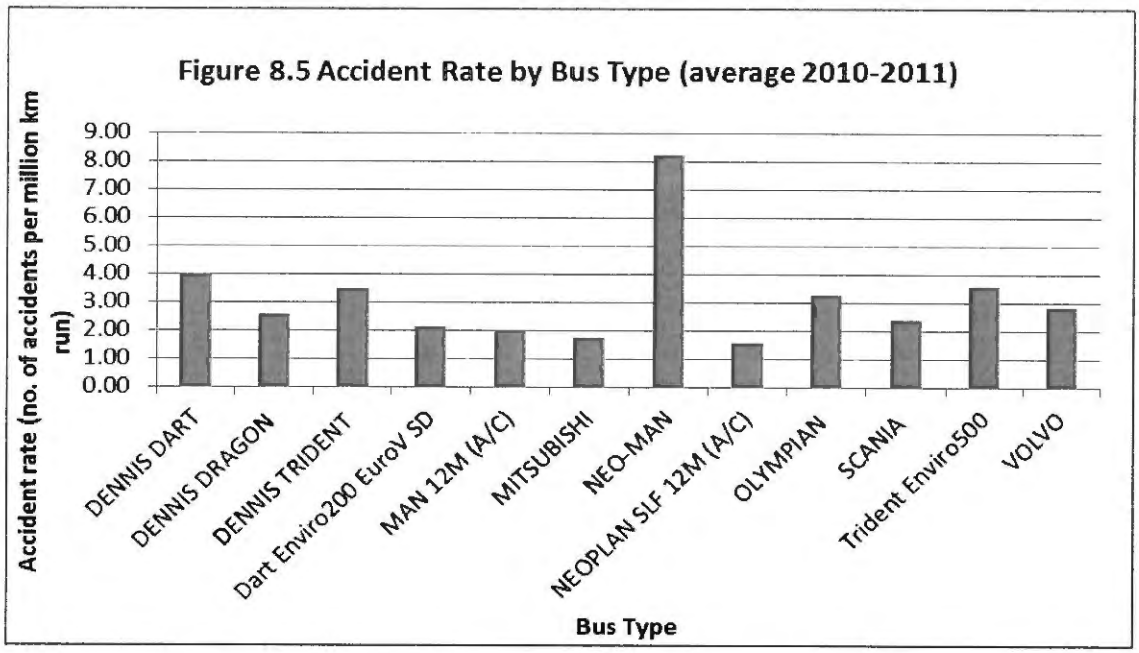
8.2.9 The breakdown of liability in the two-year period is shown in Table 8.3 below. For 81.7% of the cases, the bus captains were not blameworthy. The pending cases (about 0.5%) are those pending Police action and/or court ruling.

Table 8.3 Accident by Liability of Bus Captain

Liability of KMB Bus Captain	Percentage (%)
Negligent	17.8
Innocent	81.7
Pending	0.5
Total:	100

Accidents by Bus Type

8.2.10 Accidents by bus type were also analysed and the results are shown in Figure 8.5. It is noted that the accident rate for bus type (NEO-MAN) was the highest. However, this bus type was not commonly used in KMB and the total kilometres operated were extremely low. In fact, the general results are not significant to show any direct relationships between accident rate and bus type, and the differences among bus types can be attributable to operating environment (e.g. route) and other factors.



8.2.11 The percentage of duties in KMB that involve bus or route hopping is very small (8.4% and 18.1% respectively) as at the end of April 2012. Bus captains are deployed to these duties only if they have received the relevant bus type and route training.

Number of Non-collision Franchised Bus Accidents involving passenger casualty

8.2.12 As requested by the Transport Department as per Annex E (I) in letter Ref. BD 76/50 dated 31 May 2012, the breakdown of the number of non-collision accident involving passenger casualty is provided as follows :

	Number of Non-collision Franchised Bus Accidents involving passenger casualty	Percentage over all accidents involving franchised buses	No. of accidents involving passenger losing balance on stairway (No. of casualty) (i)	No. of accidents involving passenger injured by door (No. of casualty) (ii)	No. of accidents involving passenger losing balance elsewhere except (i) & (ii) (No. of casualty) (iii)
2011	537	55.6%	122	23	392

8.3 Bus Captain Training and Monitoring

8.3.1 As part of KMB's dedication to provide safe, reliable and comfortable services for our passengers, comprehensive systems of bus captain training and monitoring have been set up in KMB. Elements of defensive driving, good driving attitude and emergency handling are incorporated in the various training courses. Driving performance monitoring is carried out with systematic checking by performance assessors, driving instructors and mystery passengers, and followed up with disciplinary actions if required.

8.3.2 KMB buses have various safety related features to enhance road and passenger safety. Speed monitoring and limiting devices are already installed or are being installed on buses.

- Since November 2009, laser gun checks have been strengthened in various areas. The pass rate of laser gun checks shows an upward trend, going up from 97.95% in December 2010 to 98.91% in April 2012. In view of the effectiveness of this arrangement, KMB has strengthened the laser gun checks by increasing the checks to twelve days per month (including both day and night).

- The electronic tachographs have been used to monitor bus captain performance, especially with regard to speeding (see paragraph 8.8.9 for details).

8.3.3 In order to enhance bus captains' ability to deal with emergency incidents such as "dashing out" of pedestrians onto the carriageway, and to improve bus ride comfort, a state-of-the-art driving simulator studio was launched in the KMB Bus Captain Training School at the end of 2007.

8.3.4 To enhance the recruitment of suitable new bus captains, apart from driving record checks, a personality test for bus captain applicants has been introduced since the second half of 2007.

8.3.5 Details of training provided to new and serving bus captains are given in Annex 8.1.

8.3.6 Bus captains who are involved in serious traffic accidents will be suspended from driving duty and referred to receive professional counselling service. Remedial driving training will also be arranged for them.

8.3.7 To prevent similar traffic accidents from recurring, bus captains who are involved in liable traffic accidents resulting in injury are referred to our Bus Captain Training School to attend Safety Enhancement Training. The training course includes defensive driving concept, simulator training, case study, experience sharing and assessment.

8.3.8 Communication channels with staff and labour unions are well established and these channels facilitate exchange of views on issues including safety.

8.3.9 As a safety enhancement measures, the Company has appointed a professional counselling service provider to operate a 24-hour Hotline（傾心線）for our staff and their immediate family members, including spouse and children, to raise and discuss any problems or difficulties they may encounter in their daily lives. The purpose is to provide a channel for staff members to relieve pressure and seek help from independent professional counsellors. The discussions are strictly confidential and contents will not be revealed to the Company. The Company also organises a series of seminars on health and disease prevention for its staff members with the aim of raising their awareness of the importance of healthy living.

8.4 Rostering, Scheduling and Duty Dispatch

8.4.1 KMB follows rostering, scheduling and duty dispatch systems which fully comply with the Transport Department Guidelines on Driver Working Hours. The systems also ensure that only bus captains who satisfy training requirements are assigned to duties.

8.4.2 Arrangements are made to assign new bus captains to easy routes in the first few months of appointment to allow a period of familiarisation and settling in.

8.4.3 In order to help new bus captains adapt to the new working environment, a "New Bus Captain Assistance Group" was established in June 2009. During the introductory session provided to new bus captains, enquiry hotlines regarding bus operational and mechanical aspects are provided to new bus captains. They are also introduced with experienced staff as their mentors in their first three months of appointment. In addition, regular sharing meetings are organised for new bus captains with the presence of management staff. The objective is to give supports to new bus captains such that they can get familiar with daily operation. A hotline is available at the Bus Captain Training School for new bus captains to obtain driving skills consultation from driving instructors.

8.4.4 Ongoing adjustment in journey time, layover time and meal break is made with the solicited input from frontline staff.

8.4.5 The "Guidelines on Bus Captain Working Hours, Rest Time and Meal Breaks" has been revised and implemented in October 2010. While KMB will do the best to meet Transport Department's implementation timeline on the new meal break and working time arrangements, KMB reiterates that safety should be the pre-requisite and there should be no compromise on bus captain hiring and training quality because of the accelerated timeline, including, but not limited to, the number of training days, new bus captain intake quality, readiness and quality of new instructors, resources dedicated to ongoing safety improvement initiatives.

8.5 Bus Maintenance and Safety Features

8.5.1 All KMB buses are subject to a maintenance and quality assurance system which aims to keep the buses in top conditions.

8.5.2 The buses have various safety related features to enhance road and passenger safety. Speed monitoring and limiting devices are already installed or are being installed on KMB buses.

8.5.3 At the request of Transport Department, seat belts have been retrofitted at the four seats on the first row on the upper deck of post-1997 design buses. Furthermore, guard rails have been installed across the upper deck windscreen of the pre-1997 design buses. The improvement works were completed in December 2007 and April 2008 respectively.

8.5.4 Regarding the further request from the Transport Department of retrofitting of double hand rails on double deck buses with straight staircases (part D(g) as per letter ref. ( ) in BDC 76/50 dated 12 June 2009), 2 buses with straight staircases fitted with double hand rail have been put into service while all new buses with straight staircase will have the double hand rails fitted. The retrofit of double handrails for 555 SLF buses with straight staircases has been completed by end of 2011. As at 30 April 2012, there are 847 SLF buses with straight staircase and all are fitted with double handrails.

8.5.5 234 buses have been installed with interlock as a trial scheme in 2011. The interlock function prohibits the buses from moving unless the front doors are fully closed. The aim of this trial is to explore the opportunity for reduction of traffic accidents due to passenger loss of balance.

8.5.6 To help reducing accident of elderly passengers due to losing balance on board, the new bus specifications have included continuous railing, extending from the entrance to as far as possible, as a basic feature. This new design allows passengers to hold on to a handrail as they move towards the priority seats or inner part of the bus.

8.6 Promotion of Passenger Safety

8.6.1 Safety awareness among bus captains is promoted by means of in-house videos, safety messages on waybills, internal magazine (i.e. KMB Today), safety tips broadcast on monitors in depots and staff website, as well as the annual *KMB Bus Captain of the Year Competition*. Game booths with tongue twister "Safety-first in KMB" and "Care for the Elderly" puzzles have been conducted in 2011.

8.6.2 Various projects to educate the public and passengers on the safe use of bus services have been undertaken. These include Announcements of Public Interest, education video and TV commercials. In addition, on-board stickers and messages remind passengers of safety precautions.

8.6.3 Continuous monitoring of accident data and review of procedures and systems to enhance safety are being undertaken with internal cross-departmental meetings and participation in the Road Safety Forum for Franchised Buses organised by Transport Department.

8.6.4 Education of passengers on the importance of road safety and safety on buses will continue in the form of posters and reminders on buses, and using the Bus Stop Announcement System. This will be supplemented by education videos and TV commereial campaigns from time to time. By mid-March 2009, safety messages of "Please hold the handrail" and "Please take care of children and elderly" have been inserted into the Bus Stop Announcement System on all KMB buses for automatic announcement at specific bus stops to remind passengers.

8.6.5 KMB produced its first "Bus Captain Safe Driving Handbook" and distributed to all bus captains in October 2009. To strive for continual improvement, the second edition has been published in June 2011 to supersede the obsolete one subsequent to the regular review. The new handbook includes driving regulations and points to note about safe driving, covering every aspect of bus captains' daily work. It is aimed at assisting bus captains in establishing a proper safe driving attitude, and taking every practical step that can achieve safe driving, to ensure the safety of passengers and other road users.

8.6.6 "Care for the Elderly Poster Design Competition" was launched by KMB in September 2010 to enhance public awareness of caring for the elderly. Open to all primary school students, the competition received a positive response from primary schools with more than 2,000 entries. The prize presentation ceremony was held in December 2010. The posters designed by the champion, first runner-up and second runner-up in each section, were displayed on a bus body banner on three buses from December 2010 to April 2011.

8.6.7 Providing passengers, especially the elderly, with safe bus journeys has always been KMB's first priority. To promote the message of care for the elderly, promotional leaflets are distributed at over 150 bus termini, homes for elderly, shopping centres and KMB Customer Service Centres to enhance public awareness of safety for elderly passengers. The leaflet carries images of some of the winning posters in the "Care for the Elderly – Poster Design Competition", which was open to all primary school students. Using different drawings and slogans, passengers were reminded to take care of the elderly when travelling on buses by offering their seats and holding the handrails, as well as by a general show of care and concern, thus helping to contribute to safe and comfortable bus journeys.

8.6.8 To demonstrate commitment on safety, a new Safety Policy was established and approved in January 2011. Briefings to all relevant staff on new Safety Policy were completed in February 2011.

8.6.9 In line with its tradition of providing safe and reliable bus services, especially for those with special needs, such as the elderly, the disabled, pregnant women and infants, KMB launched a "priority seats" trial scheme in May 2011. 8 bus routes are selected and the priority seats are equipped with a newly-designed headrest for easy recognition. Publicity in the form of posters on buses and messages on RoadShow's Multi-media On-board service will help raise public awareness and encourage more passengers to give their seats to people in need. A new poster entitled "Care for the Elderly" is also displayed in the bus compartment, in the hope of encouraging passengers to express their concern for passengers in need by offering their seats. Through the provision of priority seats, passengers in needs can enjoy a safer and more pleasant bus journey. KMB aims to complete fleet-wide adoption of this scheme by the end of 2012.

8.6.10 KMB will launch a series of publicity programmes on bus safety by means of district events, press events and advertising campaigns. These programmes include sponsoring district-based safety campaigns, press sessions and press releases, advertising through channels such as bus body advertisements, bus shelter posters and TV commercials, as well as publicity in the KMB website and the corporate magazine "KMB Today". In 2011, frontline staff, in collaboration with police representatives, have distributed safety leaflets and environmental friendly bags bearing the "Hold the Handrail – Safety First" message to elderly passengers at some bus stops.

8.6.11 A "Safety Ambassador" campaign has been newly launched in 2011. This campaign cascades down safety messages to the frontline staff in bus termini. As a result, 20 bus termini have been visited with the theme "Safety-first in KMB" in 2011.

8.7 Programmes for elderly and persons with disabilities

8.7.1 To further promote a caring culture, KMB launched a "priority seats" trial scheme in May 2011 involving 87 buses operating on eight routes to encourage passengers to offer their seats to people in need. The programme has been so well received that KMB has decided to launch the scheme fleet wide on some 3,800 buses. To tie in with the colour of the bus seats, the headrest will be deep purple in colour, featuring the images of the elderly, pregnant women, babies and people with disabilities. A "seat-offering" hand sign is also incorporated with the words "Thought of Giving Your Seat?" to remind passengers of their civic duty. The installation programme is expected to be completed in 2012. KMB will also produce a new video clip to raise the safety awareness of its bus captains internally, with the aim of continually improving on its passenger safety.

8.7.2 To promote operational safety and share the experience of safe driving, representatives of the Police will be invited to conduct a series of tailor-made Road Safety workshops.

8.7.3 To further enhance safety awareness among elderly passengers, KMB will launch a series of promotional activities in conjunction with Police. These include visit bus stops frequently used by elderly to remind them to hold handrail whilst riding on buses.

8.8 Measures to be taken

8.8.1 KMB proposes to use the 3-year average of 2009 to 2011 actual accident involvement rate of 2.83 (defined as the number of buses involved in accidents per million km operated) as a target for the purpose of this Five- Year Plan period. According to the figures in 2010 and 2011, 81.7% of the cases revealed that our bus captains were not blameworthy (see paragraph 8.2.7 for detail).

8.8.2 The current system of bus captain training will continue with regular review of the training course objectives and contents.

8.8.3 The performance monitoring system will continue to uphold driving and safety standards.

8.8.4 The existing rostering, scheduling and duty dispatch systems are working well and fully comply with Transport Department's guidelines for driver working and driving hours. These current systems and practices will be maintained, with ongoing fine tuning in response to staff feedback and enhancement using available technology.

8.8.5 All KMB buses are subject to a stringent maintenance and quality assurance system which keeps the buses in good roadworthy conditions. The existing maintenance and quality assurance system will be continued.

8.8.6 Speed limiting devices have been a standard feature of all KMB buses.

8.8.7 The electronic tachographs satisfy the Transport Department's requirements for electronic data recording device issued by VSSD dated 17th October 2003. They are now being used to monitor bus captain performance, especially with regard to speeding.

8.8.8 The electronic tachograph is standard equipment on new buses. At the end of April 2012, a total of 3,878 KMB buses (99.3% of fleet) were installed with electronic tachographs. The remaining 29 buses were old buses which were scheduled for scrapping in 2012. These buses mostly operate in the urban areas.

8.8.9 KMB has created a database of "Driving Tips in Special Attention Areas". The database provides structured instructions and tips on best driving practices for all bus captains driving on particular routes, so that expertise and knowledge of the most experienced bus captains can be effectively transferred to all others. To promote bus captains' awareness of safe driving, all relevant bus routes are listed in the database, supplemented by photos and layout drawings for easy reference.

8.8.10 The existing systems of Safety Bonus and Safety Awards will continue to positively promote safety awareness among bus captains. Safety awareness is to be emphasised in communications in in-house videos and staff website, safety messages on waybills, the *KMB Bus Captain of the Year Competition,* safety tips broadcast in depots, visual presentations of wreckages of past accidents and posting of accident numbers and accident rates at duty dispatch offices.

In addition to the existing individual safe driving award, route-based awards on bus safety are newly introduced in 2010 to encourage frontline staff to strive for continual improvement in bus safety performance.

8.8.11 In 2010, KMB's commitment to enhance safety and service quality was demonstrated by the establishment of Safety and Service Quality Department. The Department was established in September 2010 to specifically focus on driving KMB towards internationally recognised safety standard.

8.8.12 Alcoholic Breathing Test has been introduced randomly to Bus Captains since October 2010 in order to enhance the message of "If you drink, don't drive". This practice will continue to enhance bus captains' safety awareness.

8.8.13 To promote bus operation safety and share the driving safety message, representatives of the Police are regularly invited to conduct a series of Road Safety workshops. Consequently, six workshops have been organized with over 130 participants joined the workshops in 2011.

8.8.14 For the purpose of reducing accident rate arising from loss of balance, frontline staff will take appropriate actions to proactively regulate the behaviour of passengers in need. The intervention program was developed in August 2010 and extended to all bus routes in May 2011.

8.8.15 To provide a good foundation for a safety culture, a strategic plan is in place for developing, implementing and reviewing a safety management system that goes beyond legal and statutory requirements. Fit-for-purpose safety management system will be established based on Occupational Health and Safety Assessment Series ("OHSAS") 18001 Safety Management System. Awareness training for OHSAS 18001 was provided between April and May 2011 in order to enhance the basic safety knowledge of staff. OHSAS 18001 internal audit training was also provided in November 2011 to train up some maintenance and operations staff such that they are competent to carry out internal safety audit.

8.8.16 KMB will continue to review and consider the retrofit of safety features as necessary to the vehicles to enhance road and passenger safety.

8.8.17 Internal meetings will continue to be held regularly to monitor accident statistics and propose methods of accident reduction.

8.8.18 KMB will continue to participate in the Road Safety Forum for Franchised Buses organised by Transport Department, and will continue to communicate with Transport Department on road safety issues.

8.8.19 Fostering safety culture is a key to get the commitment from staff at all levels. To enhance communication between bus captains and the management, Frontline Operations Supporting Team (FOST) has been newly established. The team encourages two-way communication on various topics, i.e. safety messages, case sharing, feedback/idea collection, etc.

8.8.20 A fit-for-purpose safety management system has been established in December 2011 based on Occupational Health and Safety Assessment Series ("OHSAS") 18001 requirements. KMB also adopted a "Plan-Do-Check-Act"(PDCA) approach, which aims at continual improvement in the safety performance of all aspects of business and sustained operational excellence.

Annex 8.1

A. Regular Training for New Bus Captains

	Training Type	Nature	Duration	Frequency	No. of route / bus type trained
1.	Basic Training	To teach bus driving technique to prepare for the Transport Department class 17 licence test and to equip trainees with the skills required to carry out the duties of a bus captain. Classroom lectures on company rules, passenger safety, accident black spot analysis, emergency handling procedure and concept of quality service. On road training on defensive driving technique, bus type familiarisation and route training (night drive included).	18 days full time	Before posting to duty	3 routes 3-4 bus types
2.	Special Facilities Training	With the assistance of a simulated bus model, bus captains are trained on the operation of Octopus System, Bus Stop Announcement System, Destination Signboard and Fare Display.	Included in Basic Training	Before posting to duty	Not applicable
3.	Simulation training	Bus Simulator training to provide scenario on potential on-road threats for trainees to rehearse relevant response action.	Included in Basic Training	Before posting to duty	Not applicable

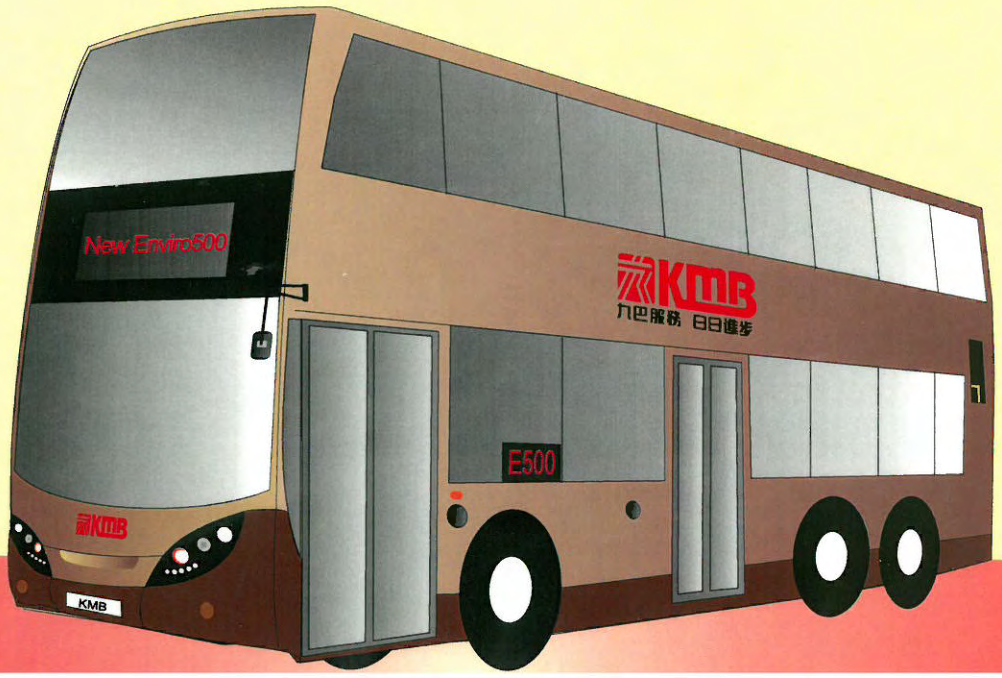
B. Regular Training for Serving Bus Captains

	Training Type	Nature	Duration	Frequency	No. of route / bus type trained
1.	Driving Enhancement Training	Experienced bus captains are trained on areas of defensive driving techniques to avoid traffic accident as well as advanced skills in bus manoeuvres. Service enhancement training is also included.	1 day full time	For experienced bus captains.	1 route & highway training 1 bus type
2.	Remedial Training	Aimed at bus captains who are found to be inadequate in certain driving areas or service level. The training will specifically tackle these areas until the bus captain reaches an acceptable level before he/she is released to perform normal duties.	1 to 6 days full time	For bus captains who are found to have driving irregularities or away from driving duties for a period of time.	1 route 1 bus type
3.	Route Training	All bus captains will be trained before being posted to a specific route	1 day full time	As needed	1 route 1 bus type
4.	Bus Type Training	All bus captains will be trained before being posted to drive a specific bus type	1 day full time	As needed	1 route 1 bus type
5.	Safety Enhancement Training	As a corrective measure to prevent similar traffic accident from recurring, it is anticipated that the driving skill and driving attitude of bus captains concerned can be enhanced after receiving the training	1.5 hours	For bus captains involved in liable traffic accident resulting in injury	Not applicable
6.	Simulator Training	Bus Simulator training to provide scenario on potential on-road threats for trainees to rehearse relevant response actions.	Included in Driving Enhancement Training, Remedial Training and Safety Enhancement Training	Included in Driving Enhancement Training, Remedial Training and Safety Enhancement Training	Not applicable

九巴服務 日日進步

PRIVATE & CONFIDENTIAL

5 YEAR PLAN 2014 - 2018



5267

8. BUS SAFETY

8.1 Introduction

8.1.1 Safety is the top priority in the operation of the KMB. Safety is enhanced through the strengthening of communication, documentation, training, deployment and performance monitoring as well as improvements in bus maintenance and design. Considerable efforts have also been made to promote traffic safety by passenger education and publicity.

8.1.2 This chapter includes an analysis of the types/causes of accidents for the past two calendar years (2011 and 2012) and the relationship of accident rates with respect to different factors, including bus captain age, length of service, and length of driving hours before the accident, bus types, etc.

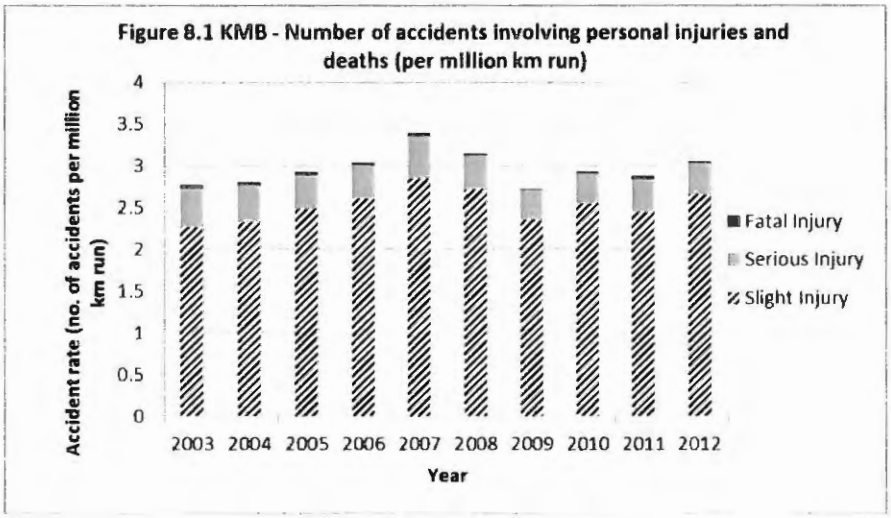
8.1.3 The chapter further discusses the various measures that have been or are being undertaken to promote safety.

8.2 Analysis of Bus Accidents in the Past Two Calendar Years

8.2.1 The analyses for the two-year period 2011 to 2012. The results are presented below.

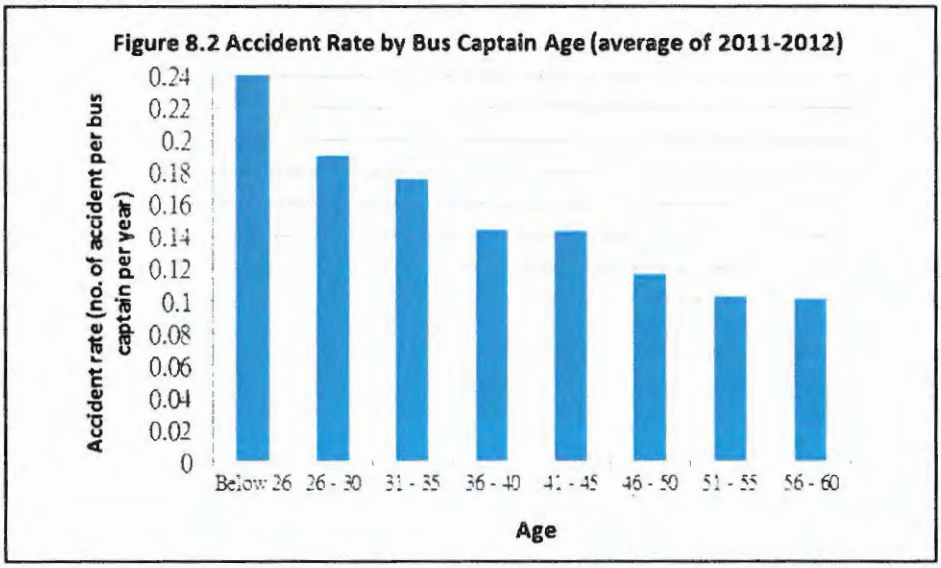
Trend of Accident Rates

8.2.2 Accident rates from 2003 to 2012 are shown in Figure 8.1. Following the increase in accident rate from 2004 to 2007, notable reductions were achieved in 2008 and 2009 as a result of concerted efforts to reduce accidents. The figures from 2009 to 2012 were kept at a better performance than 2008.



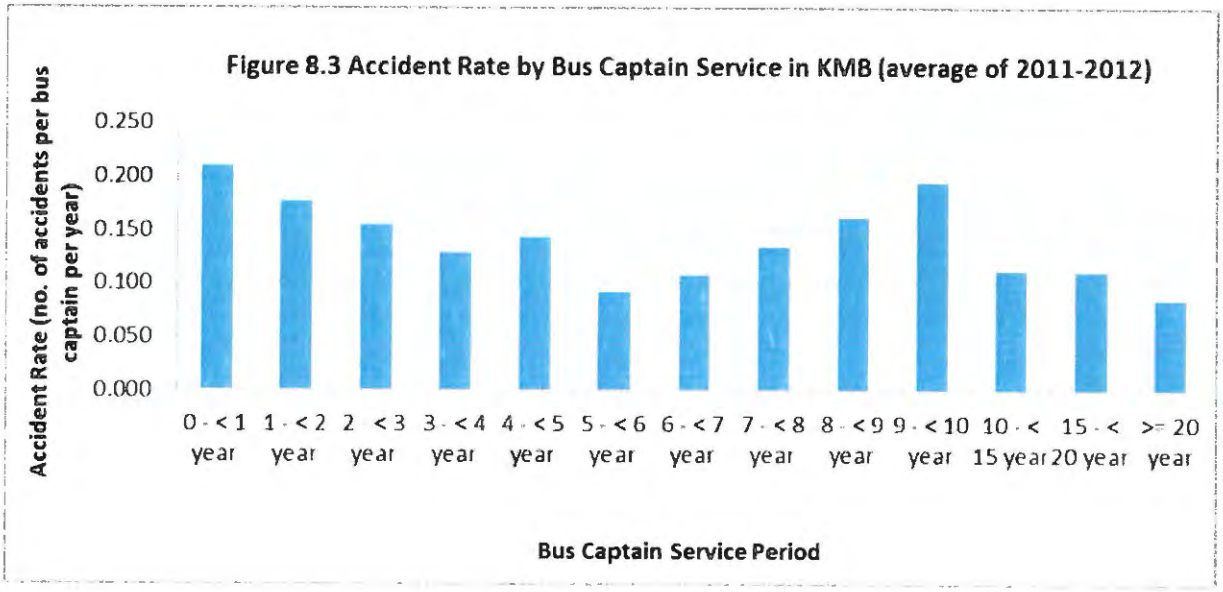
Accident Rate by Bus Captain Age

8.2.3 Results of the analysis of accident rate by bus captain age are shown in Figure 8.2. The results show that younger bus captains are more prone to higher accident rates, but this is mainly due to the fact that these bus captains have relatively less bus driving experience and they are more prone to accidents in their first few months of service. This is also shown in the relationship between accident rates and years of service.



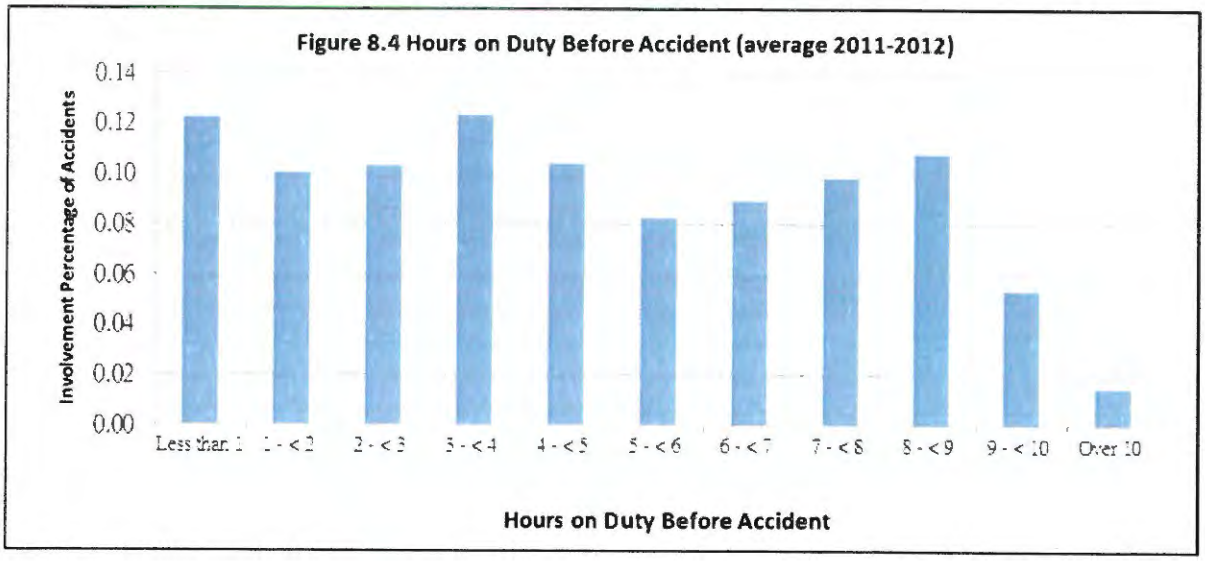
Accident Rate by Years of Service

8.2.4 The results of the analysis on accident rate by experience in terms of years of service in the Company are shown in Figure 8.3. As mentioned above, the likelihood of an accident occurring in the first year immediately following recruitment is relatively higher. The accident rate then falls as experience increases. However, there is an upward trend for bus captains with driving experience from 5-10 years. A group of bus captains recruited in 2002-2003 had poor driving performance compared with others. Close monitoring and training would be provided to those bus captains.



Accident Rate by Hours on Duty Before Accident

8.2.5 The analysis results in Figure 8.4 (below) show that there is no correlation between the occurrence of accident and the number of hours on duty before the accident.



Accidents by Nature

8.2.6 The results of an analysis of accident nature are shown in Table 8.1 below. The results are expressed in terms of percentage of accidents during the two years 2011-2012.

Table 8.1 Accidents by nature in percentage

Accident nature	Percentage (%)
Head On/Tail Collision	13.1%
Glancing Collision	4.2%
Collision with Third Party Vehicle (changing lane)	11.6%
Collision With Other Vehicle (rolling back/forward/reversing)	0.5%
Junction Collision	5.6%
Entering Roundabout Collision	0.3%
Hit Stationary Object/Vehicle/Animal	1.7%
Bus Overturn/Topple	0.0%
Injury To Pedestrian	6.3%
Injury To Alighting/Boarding Passenger	3.2%
Passenger Loss Of Balance	51.5%
Injury To Passenger Inside Bus	1.3%
Others	0.8%
Total:	**100%**

8.2.7 The majority of the accidents (51.5%) were due to passengers losing balance while on the bus. More than half of these cases were caused by the bus braking in traffic. Accidents with injuries sustained as a result of different kinds of collisions accounted for 35.3% while accidents with injury to pedestrians accounting for 6.3% of all the accidents.

8.2.8 The breakdown by our classification of accident nature from 2011 to 2012 is as follows:

Table 8.2 Accidents by nature

Accident Nature	No. of Accidents	
	2011	2012
Head On / Head Tail Collision	115	148
Glancing Collision	43	42
Collision with Vehicle Changing Lane	115	119
Collision With Other Vehicle (rolling back/forward/reversing)	4	7
Collision at junction	53	59
Entering roundabout Collision	4	2
Hitting Stationary Object	17	17
Overturn/Topple	0	0
Injury to Pedestrian	69	57
Injury to Boarding/Alighting Passenger	32	32
Passenger Loss of Balance	492	545
Injury to Passenger Inside Bus - Other Natures	13	13
Others	8	8
Total:	**965**	**1049**

Accidents by Liability

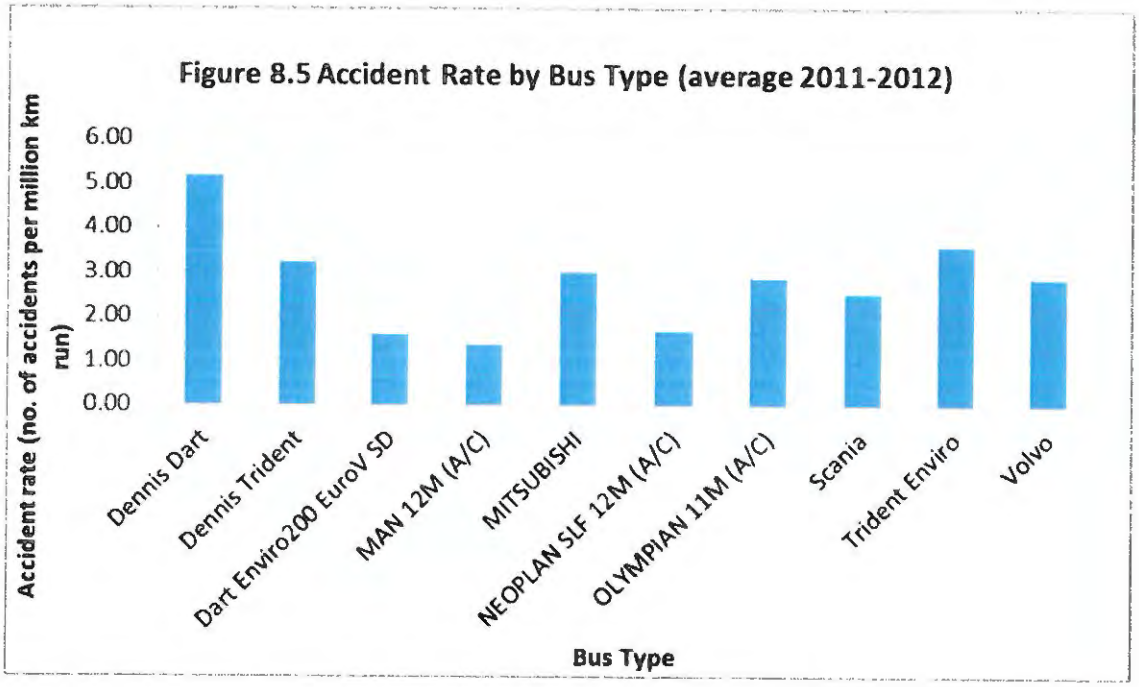
8.2.9 The breakdown of liability in the two-year period is shown in Table 8.3 below. For 80% of the cases, the bus captains were not blameworthy. The pending cases (about 0.6%) are those pending Police action and/or court ruling.

Table 8.3 Accidents by Liability of Bus Captain

Liability of KMB Bus Captain	Percentage (%)
Negligent	19.4
Innocent	80.0
Pending	0.6
Total:	100

Accidents by Bus Type

8.2.10 Accidents by bus type were also analysed and the results are shown in Figure 8.5. It is noted that the accident rate for bus type (Dennis Dart) was the highest. However, the general results are not significant enough to show any direct relationships between accident rate and bus type, and the differences among bus types can be attributable to operating environment (e.g. route), roads, bus captains and other factors.



8.2.11 The percentage of duties in KMB that involve bus or route hopping was (15.9% and 20.1% respectively) as at the end of April 2013.

8.2.12 The breakdown of the number of non-collision accident involving passenger casualty is provided as follows:

Table 8.4 Number of Non-collision Franchised Bus Accidents Involving Passenger Casualty

	Number of Non-collision Franchised Bus Accidents involving passenger casualty	Percentage over all accidents involving franchised buses	No. of accidents involving passenger losing balance on stairway (No. of casualty) (i)	No. of accidents involving passenger injured by door (No. of casualty) (ii)	No. of accidents involving passenger losing balance elsewhere except (i) & (ii) (No. of casualty) (iii)
2012	590	56.2%	138	30	422

Accidents by experience of the bus captains on the route

Table 8.5 Accidents by Experience of the Bus Captains on the Route

Experience of the bus captains on the route (Year)	Distribution of accidents from 2011-2012 (%)
0-<1	31.1%
1-<2	10.9%
2-<3	7.1%
3-<4	6.4%
4-<5	6.6%
5-<6	7.4%
6-<7	7.4%
7-<8	7.6%
8-<9	7.1%
9-<10	3.3%
10-<11	1.6%
11-<12	1.7%
12-<13	0.9%
13-<14	0.8%
14-<15	0.3%

8.2.13 As mentioned above, the percentage of traffic accidents for bus captains with less than 1 year route driving experience is the highest as compared to those bus captains with years of route driving experience. The figures indicate that less experienced bus captains (<1 year driving experience on the routes) were more likely to be involved in traffic accidents. They need time to get familiar with the characteristics of the routes and the road environment.

Accidents by experience of the bus captains on the bus model operated

Table 8.6 Accidents by Experience of the Bus Captains on the Bus Model Operated

Experience of the bus captains on the bus model operated (Year)	Distribution of accidents from 2011-2012 (%)
0-<1	22.4%
1-<2	13.2%
2-<3	7.2%
3-<4	4.9%
4-<5	5.8%
5-<6	3.6%
6-<7	4.2%
7-<8	7.6%
8-<9	11.0%
9-<10	12.6%
10-<11	6.0%
11-<12	1.2%
12-<13	0.4%
13-<14	0.1%
14-<15	0.0%
15-<16	0.1%

8.2.14 The figures indicate that less experienced bus captains (<1 year driving experience on the bus model operated) had the highest traffic accident involvement rate.

Accidents by the number of routes which a bus captain operated in one shift

Table 8.7 Accidents by the Number of Routes which a Bus Captain Operated in One Shift in 2012

Number of routes which a bus captain operated in one shift	Distribution of accidents in 2012 (%)
1	89%
2	8%
3	3%

Accidents by the number of buses which a bus captain operated in one shift

Table 8.8 Accidents by the Number of Buses a Bus Captain Operated in One Shift in 2012

Number of buses a bus captain operated in one shift	Distribution of accidents in 2012 (%)
1	80%
2	18%
3	2%

8.3 Bus Captain Training and Monitoring

8.3.1 As part of KMB's dedication to provide safe, reliable and comfortable services for our passengers, comprehensive systems of bus captain training and monitoring have been set up in KMB. Elements of defensive driving, good driving attitude and emergency handling are incorporated in the various training courses. Driving performance monitoring is carried out with systematic checking by performance assessors, driving instructors and mystery passengers, and followed up with disciplinary actions if required. Moreover, the new 'Drive Green' hardware and software as referenced in a previous Chapter will also help to identify those bus captains who have a higher incidence of 'harsh braking' on a given route than is normal. This information can be used as to ensure that appropriate proactive feedback is given to a bus captain with aim of promoting improved driving behaviour that will in turn serve to prevent/reduce 'loss of balance' cases (as well as accidents in general).

8.3.2 KMB buses have various safety related features to enhance road and passenger safety. Speed monitoring and limiting devices are already installed or are being installed on buses.

- Since November 2009, laser gun checks have been strengthened in various areas. The pass rate of laser gun checks remains as high as 99% for the period May 2012 to April 2013. In view of the effectiveness of this arrangement, KMB has strengthened the laser gun checks by increasing the checks to twelve days per month (including both day and night);

- The electronic tachographs have been used to monitor bus captain performance, especially with regard to speeding (see paragraph 8.8.8 for details); and,

- Real-time Driving Indicators 駕駛提示器 (see above reference to the Drive Green initiative) are planned to be installed in buses from mid 2013 which can help bus captains to utilize the driving skills learnt in the Eco-safe Driving Training Course. As denoted above, the benefits of such Eco-safe driving to the bus captains are:

    1. Reduced the risk of accidents while driving;
    2. Reduced stress levels and enhanced satisfaction of driving; and,
    3. Increased confidence in vehicle control and driving technique.

8.3.3 In order to enhance bus captains' ability to deal with emergency incidents such as "dashing out" of pedestrians onto the carriageway, and to improve bus ride comfort, a state-of-the-art driving simulator studio was launched in the KMB Bus Captain Training School at the end of 2007.

8.3.4 To enhance the recruitment of suitable new bus captains, apart from driving record checks, a personality test for bus captain applicants has been introduced since the second half of 2007.

8.3.5 Details of training provided to new and serving bus captains are given in Annex 8.1.

8.3.6 Bus captains who are involved in serious traffic accidents will be suspended from driving duty and referred to receive professional counselling service. Remedial driving training will also be arranged for them.

8.3.7 To prevent similar traffic accidents from recurring, bus captains who are involved in blameworthy traffic accidents resulting in injury are referred to our Bus Captain Training School to attend Safety Enhancement Training. The training course includes defensive driving concepts, simulator training, case studies, experience sharing and assessment.

8.3.8 Communication channels with staff and labour unions are well established and these channels facilitate the exchange of views on issues including safety.

8.3.9 As a safety enhancement measures, the Company has appointed a professional counselling service provider to operate a 24-hour Hotline（傾心線）for our staff and their immediate family members, including spouse and children, to raise and discuss any problems or difficulties they may encounter in their daily lives. The purpose is to provide a channel for staff members to relieve their pressure and seek help from independent professional counsellors as they may see fit. The discussions are strictly confidential and contents will not be revealed to the Company. The Company also organises a series of seminars on health and disease prevention for its staff members with the aim of raising their awareness of the importance of healthy living.

8.4 Rostering, Scheduling and Duty Dispatch

8.4.1 KMB follows rostering, scheduling and duty dispatch systems having due regard to the Transport Department Guidelines on Driver Working Hours. The systems also ensure that only bus captains who satisfy training requirements are assigned to duties.

8.4.2 Arrangements are made to assign new bus captains to easy routes in the first few months of appointment to allow for a period of familiarisation and settling in.

8.4.3 In order to help new bus captains adapt to the new working environment, a "New Bus Captain Assistance Group" was established in June 2009. During the introductory session provided to new bus captains, enquiry hotlines regarding bus operational and mechanical aspects are provided to new bus captains. They are also introduced to experienced staff members who act as their mentors for a new recruit's first three months on the job. . In addition, regular 'sharing meetings' are organised for new bus captains in the presence of management staff. The objective is to give support to new bus captains such that they can become appropriately familiar with daily operations. A hotline is available at the Bus Captain Training School for new bus captains to obtain driving skills consultation from driving instructors.

8.4.4 Ongoing adjustment in journey time, layover time and meal break is made with the solicited input from frontline staff and efforts in this regard have been accelerated of late.

8.4.5 The "Guidelines on Bus Captain Working Hours, Rest Time and Meal Breaks" has been revised and implemented in October 2010. KMB has completed the review on the duty schedules in the 3rd quarter of 2012.

8.5 Bus Maintenance and Safety Features

8.5.1 All KMB buses are subject to a maintenance and quality assurance system which aims to keep the buses in top conditions.

8.5.2 The buses have various safety related features to enhance road and passenger safety. Speed monitoring and limiting devices are already installed or are being installed on KMB buses.

8.5.3 At the request of Transport Department, seat belts have been retrofitted at the four seats on the first row on the upper deck of post-1997 design buses. Furthermore, guard rails have been installed across the upper deck windscreen

of the pre-1997 design buses. The improvement works were completed in December 2007 and April 2008 respectively.

8.5.4 Regarding the further request from Transport Department that KMB retrofits double hand rails to all double deck buses with straight staircases (part D(g) as per letter ref. ( ) in BDC 76/50 dated 12 June 2009), some 921 buses with straight staircases have been so fitted (100% of relevant fleet) whilst all new buses with straight staircases will have the double hand rails fitted. The retrofit of double handrails for 555 SLF buses with straight staircases has been completed by end of 2011. As at 30 April 2013, there are 921 SLF buses with straight staircase and all are fitted with double handrails

8.5.5 To help reduce accidents involving elderly passengers due to 'losing balance on board', the new bus specifications have included continuous railing, extending from the entrance into the saloon (as far as is practicable). This new design allows passengers to hold on to a handrail as they move towards the priority seats or the inner part of the bus.

8.5.6 In 2007, as requested by the Legco Panel on Transport Meeting on 26 March 2007 regarding retrofitting of seat belts, KMB/CTB/NWFB had jointly appointed ADL to conduct a feasibility study to examine the possibility of installation/retrofitting of seat belts at the exposed seats on upper deck, all seats on upper deck and exposed seats on lower deck. It was both technically and operationally not feasible to do so in both new and existing buses.

8.6 Promotion of Passenger Safety

8.6.1 Safety awareness among bus captains is promoted by means of in-house videos, safety messages on waybills, internal magazine (i.e. KMB Today), safety tips broadcast on monitors in depots and staff website, as well as the annual *KMB Bus Captain of the Year Competition*. Game booths with tongue twister "Safety-first in KMB" and "Care for the Elderly" puzzles have been promoted in 2011.

8.6.2 Various projects to educate the public and passengers on the safe use of bus services have been undertaken. These include Announcements of Public Interest, education video and TV commercials. In addition, on-board stickers and messages remind passengers of the benefit of taking safety precautions.

8.6.3 Continuous monitoring of accident data and review of procedures and systems to enhance safety are being undertaken with internal cross-departmental meetings and participation in the Road Safety Forum for Franchised Buses organised by Transport Department.

8.6.4 Education of passengers on the importance of road safety and safety on buses will continue in the form of posters and reminders on buses, and using the Bus Stop Announcement System. This will be supplemented by education videos and TV commercial campaigns from time to time. By mid-March 2009, safety messages of "Please hold the handrail" and "Please take care of children and elderly" have been inserted into the Bus Stop Announcement System on all KMB buses for automatic announcement at specific bus stops to remind passengers. A new series of safety messages are being planned to be launched via Bus Stop Announcement System in 2013 to remind passengers to hold the handrails.

8.6.5 KMB produced its first "Bus Captain Safe Driving Handbook" and this was distributed to all bus captains in October 2009. To strive for continuous improvement, the second edition was published in June 2011. The new handbook includes driving regulations and points to note about safe driving, covering every aspect of a bus captains' daily work. It is aimed at assisting bus captains in establishing a proper safe driving attitude and encouraging them to take all practical steps aimed at achieving safe driving,.

8.6.6 New "Hold the Handrail" safety stickers have been posted to replace the old one in 2012. New higher visibility 'Priority Seat' markings have also been rolled out to very good effect.

8.7 Programmes for elderly and persons with disabilities

8.7.1 To further promote a caring culture and prevent accidents, KMB launched a "priority seats" trial scheme in May 2011 involving 87 buses operating on eight routes to encourage passengers to offer their seats to people in need. The programme was so well received that KMB decided to launch the scheme fleet wide on some 3,500 buses. To tie in with the colour of the bus seats, the headrest will be deep purple in colour, featuring the images of the elderly, pregnant women, babies and people with disabilities. A "seat-offering" hand sign is also incorporated with the words "Thought of Giving Your Seat?" to remind passengers of their civic duty. The installation programme was completed by the end of 2012. KMB also produced a new training video to raise the safety awareness of its bus captains internally, with the aim of continually improving on its passenger safety. The message "Thought of giving your seat?" has been inserted into the Bus Stop Announcement System on all KMB buses for automatic announcement at specific bus stops (as a reminder to passengers).

8.7.2 To promote operational safety and share the experience of safe driving, representatives of the Police will be invited to conduct a series of tailor-made Road Safety Lectures.

8.7.3 To further enhance safety awareness among elderly passengers, KMB will launch a series of promotional activities in conjunction with Police. These include visiting bus stops frequently used by elderly to remind them to hold handrail whilst riding on buses.

8.8 Measures to be taken

8.8.1 KMB proposes to use the 3-year average of 2010 to 2012 actual accident involvement rate of 2.95 (defined as the number of buses involved in accidents per million km operated) as a target for the purpose of this Five-Year Plan period. According to the figures in 2011 and 2012, 80% of the cases revealed that our bus captains were not blameworthy (see paragraph 8.2.9 for detail).

8.8.2 The current system of bus captain training will continue to be regularly reviewed.

8.8.3 The performance monitoring system will continue to uphold driving and safety standards.

8.8.4 New Scheduling Software has been sourced from Canada that should facilitate the efforts of the Company in ensuring/ monitoring full compliance with Driver Working Guidelines going forward.

8.8.5 All KMB buses are subject to a stringent maintenance and quality assurance system which keeps the buses in good roadworthy conditions. The existing maintenance and quality assurance system will be continued.

8.8.6 Speed limiting devices have been a standard feature of all KMB buses.

8.8.7 The electronic tachographs satisfy Transport Department's requirements for electronic data recording device issued by VSSD dated 17th October 2003. They are now being used to monitor bus captain performance, especially with regard to speeding. The new 'Drive Green' Initiative will now take this performance monitoring to new levels

8.8.8 The electronic tachograph is standard equipment on new buses. At the end of April 2013, a total of 3,775 KMB buses (99.95% of fleet) were installed with electronic tachographs. One of the remaining 2 buses was an old bus which is scheduled for scrapping in 2013. The other bus is the battery-electric single-deck bus currently under trial.

8.8.9 KMB has created a database of "Driving Tips in Special Attention Areas". The database provides structured instructions and tips on best driving practices for all bus captains driving on particular routes, so that expertise and knowledge of the most experienced bus captains can be effectively transferred to all others. To promote bus captains' awareness of safe driving, all relevant bus routes are listed in the database, supplemented by photos and layout drawings of 'blackspots etc' for easy reference.

8.8.10 The existing systems of Safety Bonus and Safety Awards will continue to positively promote safety awareness among bus captains. Safety awareness will continue to be emphasised in communications as stated above. In addition to the existing individual safe driving award, route-based awards on bus safety were introduced in 2010 to encourage frontline staff to strive for continual improvement in bus safety performance.

8.8.11 Alcoholic Breathing Test had been introduced randomly to Bus Captains since October 2010 in order to enhance the message of "If you drink, don't drive". This practice will continue to enhance bus captains' safety awareness.

8.8.12 To promote bus operation safety and share the driving safety message, representatives of the Police will continue to be invited to conduct Road Safety workshops. 8 workshops have been organised to date with over 209 participants joining the workshops in 2012.

8.8.13 To enhance the safety awareness and driving skill for new bus captains, the Police in Kowloon East, Kowloon West, NT South and NT North will continue to conduct Road Safety Lectures for new bus captains on a monthly basis

8.8.14 KMB will continue to review and consider the retrofit of safety features as necessary to the vehicles to enhance road and passenger safety.

8.8.15 Internal meetings will continue to be held regularly to monitor accident statistics and propose methods of accident reduction. The importance of systematic 'feedback loops' in safety management will be emphasised to ensure that lessons are learned from any incidents that do occur.

8.8.16 KMB will continue to participate in the Road Safety Forum for Franchised Buses organised by Transport Department, and will continue to communicate with Transport Department on road safety issues.

8.8.17 Fostering a safety culture amongst staff members as a whole is key. To enhance communication between bus captains and the management, a Frontline Operations Supporting Team (FOST) has been established. The team encourages two-way communication on various topics, i.e. safety messages, case sharing, feedback/idea collection, etc.

8.8.18 A fit-for-purpose safety management system has been established in December 2011 based on Occupational Health and Safety Assessment Series ("OHSAS") 18001 requirements. KMB also adopted a "Plan-Do-Check-Act" (PDCA) approach, which aims at achieving continuous improvement in the safety performance of all aspects of the business and sustained operational excellence. Operations Division attained the OHSAS 18001 Certificate in August 2012.

8.8.19 Safety Driving Tips Album will be developed to extract key driving tips for all routes. Appropriate reference albums will be maintained at relevant termini

8.8.20 To enhance interaction between inspectors, terminal supervisors and bus captains and to arouse safety awareness amongst bus captains, "Safe Driving" Cards will be published in pocket size and issued to all bus captains.

8.8.21 160 buses were installed with CCTV in the first quarter of 2013. The footage from these CCTV cameras will provide objective evidence for accident investigation and may encourage positive behavioural change amongst bus captains

8.8.22 On-street monitoring and promotion by inspectors will be conducted in strategic locations on a weekly basis to promote safety messages to passengers.

8.8.23 Safety videos will be broadcast on RoadShow to promote safety messages to passengers.

8.8.24 A "Buddy Driver Programme" was launched in October 2012. Experienced bus captains accompany new bus captains with the aim of providing the new captains with enhanced 'on the job' support in their early days with the Company.

Annex 8.1

A. Regular Training for New Bus Captains

	Training Type	Nature	Duration	Frequency	No. of route / bus type trained
1.	Basic Training	To teach bus driving technique to prepare for Transport Department class 17 licence tests and to equip trainees with the skills required to carry out the duties of a bus captain. Classroom lectures on company rules, passenger safety, accident black spot analysis, emergency handling procedure and concept of quality service. On road training on defensive driving technique, bus type familiarisation and route training (night drive included).	18 days full time	Before posting to duty	3 routes 3-4 bus types
2.	Special Facilities Training	With the assistance of a simulated bus model, bus captains are trained on the operation of Octopus System, Bus Stop Announcement System, Destination Signboard and Fare Display.	Included in Basic Training	Before posting to duty	Not applicable
3.	Simulation training	Bus Simulator training to provide scenario on potential on-road threats for trainees to rehearse relevant response action.	Included in Basic Training	Before posting to duty	Not applicable

B. Regular Training for Serving Bus Captains

	Training Type	Nature	Duration	Frequency	No. of route / bus type trained
1.	Driving Enhancement Training	Experienced bus captains are trained on areas of defensive driving techniques to avoid traffic accident as well as advanced skills in bus manoeuvres. Service enhancement training is also included.	1 day full time	For experienced bus captains.	1 route & highway training 1 bus type
2.	Remedial Training	Aimed at bus captains who are found to be inadequate in certain driving areas or service level. The training will specifically tackle these areas until the bus captain reaches an acceptable level before he/she is released to perform normal duties.	1 to 6 days full time	For bus captains who are found to have driving irregularities or away from driving duties for a period of time.	1 route 1 bus type
3.	Route Training	All bus captains will be trained before being posted to a specific route	1 day full time	As needed	1 route 1 bus type
4.	Bus Type Training	All bus captains will be trained before being posted to drive a specific bus type	1 day full time	As needed	1 route 1 bus type
5.	Safety Enhancement Training	As a corrective measure to prevent similar traffic accident from recurring, it is anticipated that the driving skill and driving attitude of bus captains concerned can be enhanced after receiving the training	1.5 hours	For bus captains involved in liable traffic accident resulting in injury	Not applicable
6.	Simulator Training	Bus Simulator training to provide scenario on potential on-road threats for trainees to rehearse relevant response actions.	Included in Driving Enhancement Training, Remedial Training and Safety Enhancement Training	Included in Driving Enhancement Training, Remedial Training and Safety Enhancement Training	Not applicable

- Training protocols are subject to ongoing review, albeit that the aim will be to continue to do all that is reasonably practicable to ensure the safety and comfort of passengers, staff and other road users at all times

九巴服務 日日進步

PRIVATE & CONFIDENTIAL

5-YEAR PLAN 2015 - 2019

June 2014

5286

8. BUS SAFETY

8.1 Introduction

8.1.1 Safety is the top priority in the operation of the KMB. Safety is enhanced through the strengthening of communication, documentation, training, deployment and performance monitoring as well as improvements in bus maintenance and design. Considerable efforts have also been made to promote traffic safety by passenger education and publicity.

8.1.2 This chapter includes an analysis of the types/causes of accidents for the past two calendar years (2012 and 2013) and the relationship of accident rates with respect to different factors, including bus captain age, length of service, and length of driving hours before the accident, bus types, etc.

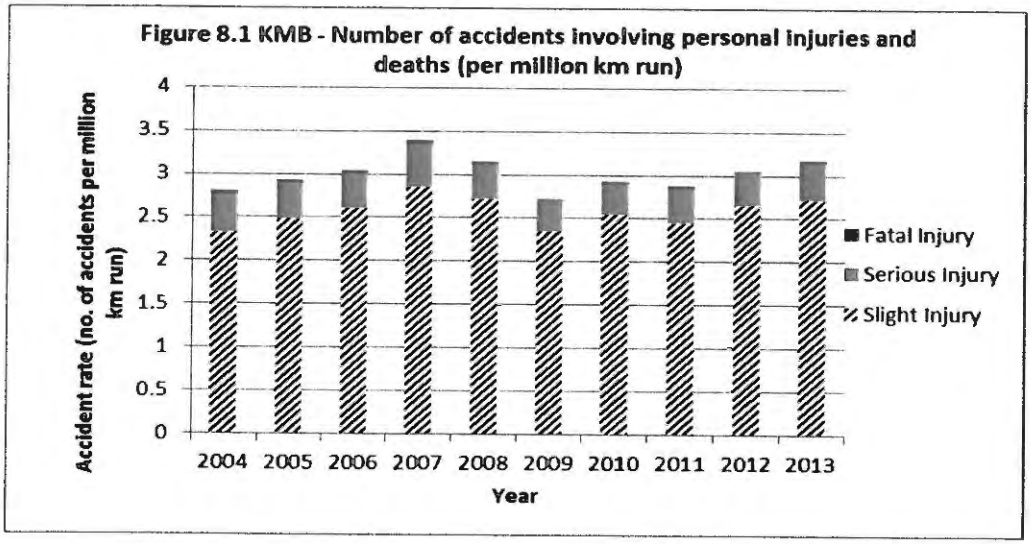
8.1.3 The chapter further discusses the various measures that have been or are being undertaken to promote safety.

8.2 Analyses of Bus Accidents in the Past Two Calendar Years

8.2.1 The analyses for the two-year period 2012 to 2013 are presented below.

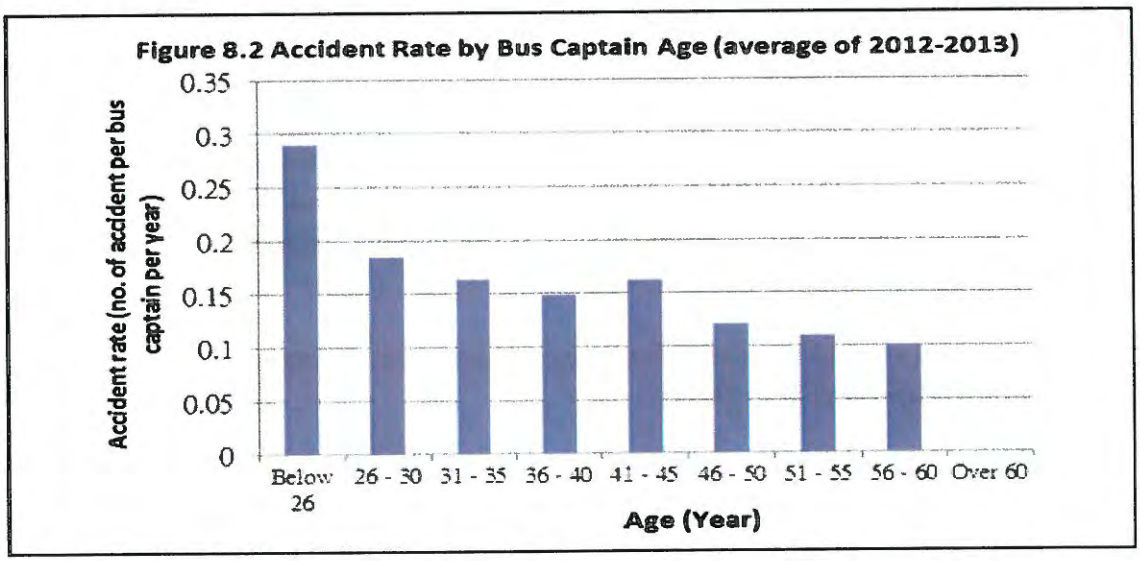
Trend of Accident Rates

8.2.2 Accident rates from 2004 to 2013 are shown in Figure 8.1. Following the increase in accident rate from 2004 to 2007, notable reductions were achieved in 2008 and 2009. The figures from 2008 to 2013 were kept at a better performance than 2007.



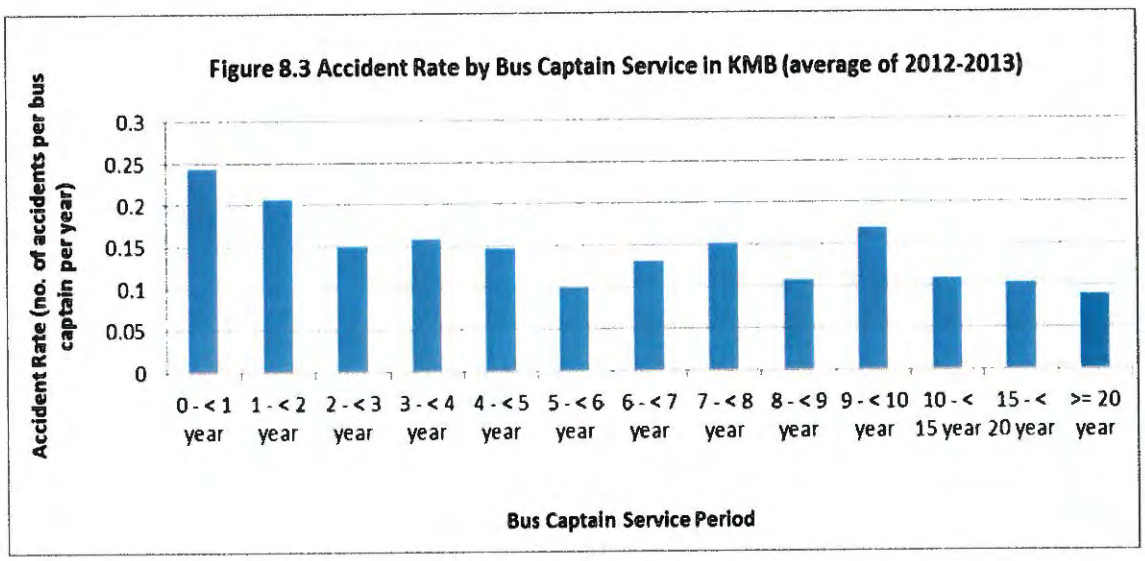
Accident Rate by Bus Captain Age

8.2.3 Results of the analysis of accident rate by bus captain age are shown in Figure 8.2. The results show that younger bus captains are more prone to higher accident rates, but this is mainly due to the fact that these bus captains have relatively less bus driving experience and they are more prone to accidents in their first few months of service. This is also shown in the relationship between accident rates and years of service.



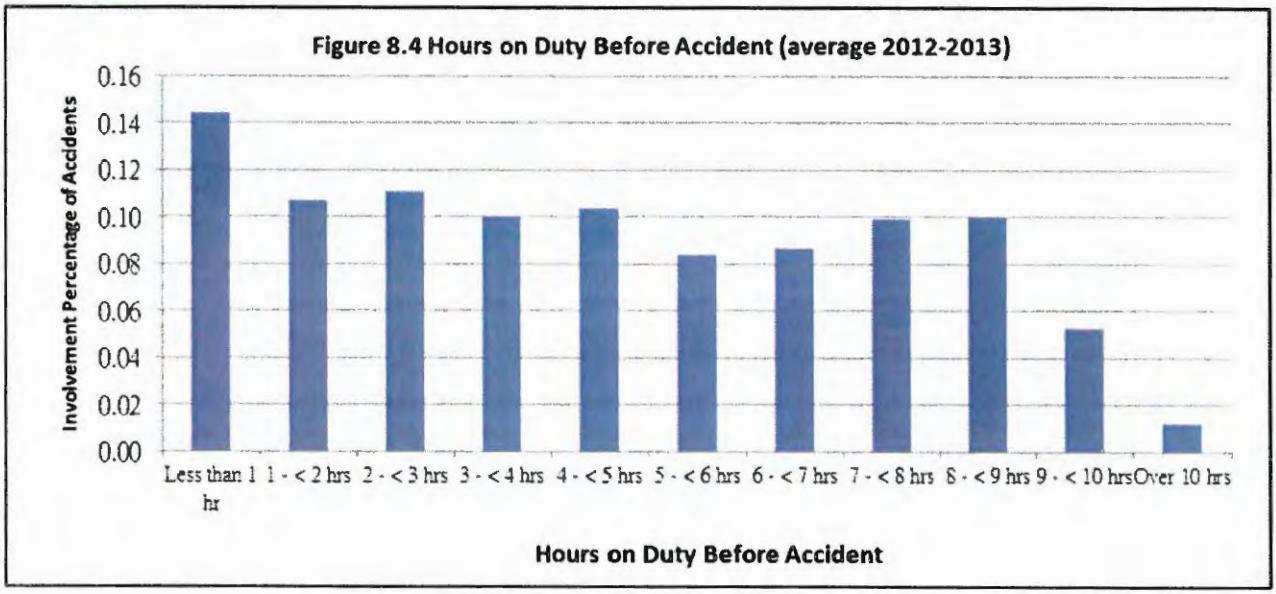
Accident Rate by Years of Service

8.2.4 The results of the analysis on accident rate by experience in terms of years of service in the Company are shown in Figure 8.3. As mentioned above, the likelihood of an accident occurring in the first year immediately following recruitment is relatively higher. The accident rate then falls as experience increases.



Accident Rate by Hours on Duty Before Accident

8.2.5 The analysis results in Figure 8.4 (below) show that there is no correlation between the occurrence of accident and the number of hours on duty before the accident.



Accidents by Nature

8.2.6 The results of an analysis of accident nature are shown in Table 8.1 below. The results are expressed in terms of percentage of accidents during the two years 2012-2013.

Table 8.1 Accidents by nature in percentage

Accident nature	Percentage (%)
Head On/Tail Collision	13.4%
Glancing Collision	4.0%
Collision with Third Party Vehicle (changing lane)	10.6%
Collision With Other Vehicle (rolling back/forward/reversing)	0.5%
Junction Collision	5.1%
Entering Roundabout Collision	0.2%
Hit Stationary Object/Vehicle/Animal	1.8%
Bus Overturn/Topple	0.0%
Injury To Pedestrian	5.9%
Injury To Alighting/Boarding Passenger	3.0%
Passenger Loss Of Balance	53.1%
Injury To Passenger Inside Bus	1.7%
Others	0.7%
Total:	100%

8.2.7 The majority of the accidents (53.1%) were due to passengers losing balance while on the bus. More than half of these cases were caused by the bus braking in traffic. Accidents with injuries sustained as a result of different kinds of collisions accounted for 34%, while accidents with injury to pedestrians accounting for 5.9% of all the accidents.

8.2.8 The breakdown by our classification of accident nature from 2012 to 2013 is as follows:

Table 8.2 Accidents by nature

Accident Nature	No. of Accidents	
	2012	2013
Head On / Head Tail Collision	149	137
Glancing Collision	42	44
Collision with Vehicle Changing Lane	119	107
Collision With Other Vehicle (rolling back/forward/reversing)	7	3
Collision at junction	59	49
Entering roundabout Collision	2	2
Hitting Stationary Object	17	22
Overturn/Topple	0	0
Injury to Pedestrian	57	69
Injury to Boarding/Alighting Passenger	32	31
Passenger Loss of Balance	544	587
Injury to Passenger Inside Bus - Other Natures	13	22
Others	8	6
Total:	1049	1080

8.2.9 Number of accidents by nature has increased in "Injury to Pedestrian" and "Passenger Loss of Balance" categories in 2013. However, the blameworthy percentage under category "Injury to Pedestrian" dropped from 33% in 2013 to 29% in 2013. The blameworthy percentage under category "Passenger Loss of Balance" also dropped from 3% in 2012 to 2% in 2013.

Accidents by Liability

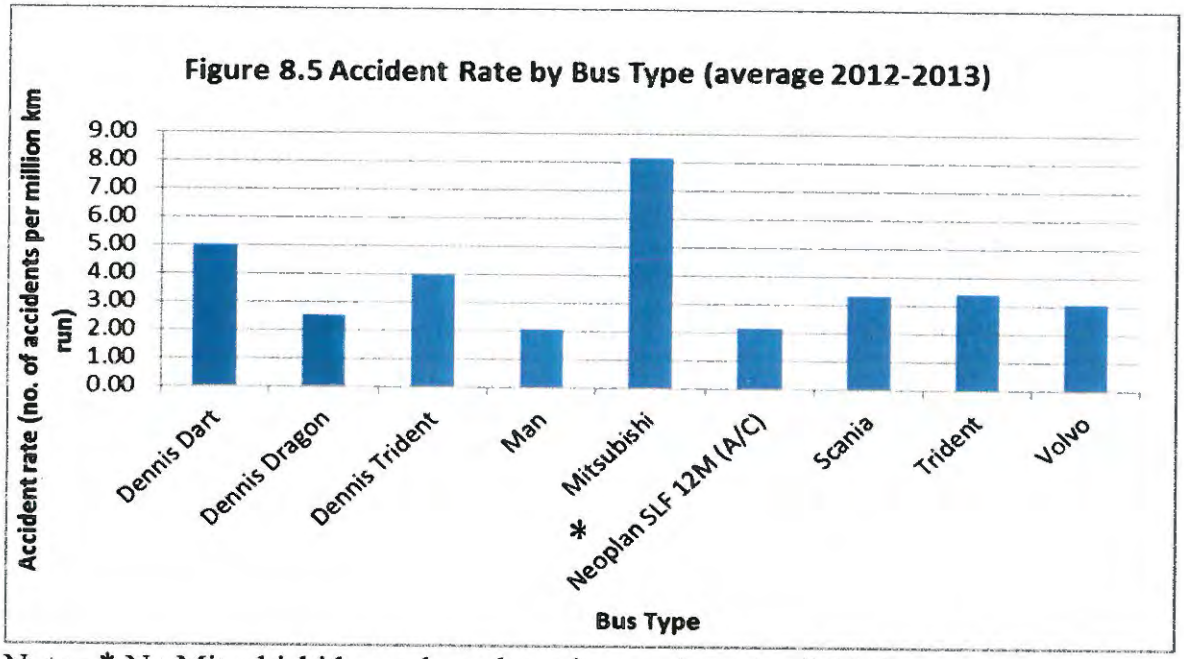
8.2.10 The breakdown of liability in the two-year period is shown in Table 8.3 below. For 80% of the cases, the bus captains were considered innocent. About 1% of the cases are pending for Police action and/or court ruling.

Table 8.3 Accidents by Liability of Bus Captain

Liability of KMB Bus Captain	Percentage (%)
Negligent	19
Innocent	80
Pending	1
Total:	100

Accidents by Bus Type (Current Types Only)

8.2.11 Accidents by bus type were also analysed and the results are shown in Figure 8.5. The general results are not significant enough to show any direct relationships between accident rate and bus type, and the differences among bus types can be attributable to operating environment (e.g. route), roads, bus captains and other factors.



Note : * No Mitsubishi buses have been in use since April 2012

8.2.12 The percentage of duties in KMB that involve bus or route hopping was (33.0% and 20.1% respectively) as at the end of April 2014.

8.2.13 The breakdown of the number of non-collision accident involving passenger casualty is provided as follows:

Table 8.4 Number of Non-collision Franchised Bus Accidents Involving Passenger Casualty

	Number of Non-collision Franchised Bus Accidents involving passenger casualty	Percentage over all accidents involving franchised buses	No. of accidents involving passenger losing balance on stairway (No. of casualty) (i)	No. of accidents involving passenger injured by door (No. of casualty) (ii)	No. of accidents involving passenger losing balance elsewhere except (i) & (ii) (No. of casualty) (iii)
2013	640	59.3%	153	24	463

Accidents by experience of the bus captains on the route

Table 8.5 Accidents by Experience of the Bus Captains on the Route

Experience of the bus captains on the route (Year)	Distribution of accidents from 2012-2013 (%)
0-<1	34.6%
1-<2	11.6%
2-<3	7.5%
3-<4	6.4%
4-<5	4.9%
5-<6	4.3%
6-<7	4.7%
7-<8	6.4%
8-<9	6.5%
9-<10	4.8%
10-<11	2.8%
11-<12	1.8%
12-<13	0.5%
13-<14	1.3%
14-<15	0.9%
15-<16	0.4%
24-<25	0.7%

8.2.14 As mentioned above, the percentage of traffic accidents for bus captains with less than 1 year route driving experience is the highest as compared to those bus captains with years of route driving experience. The figures indicate that less experienced bus captains (<1 year driving experience on the routes) were more likely to be involved in traffic accidents. They need time to get familiar with the characteristics of the routes and the road environment.

Accidents by experience of the bus captains on the bus model operated

Table 8.6 Accidents by Experience of the Bus Captains on the Bus Model Operated

Experience of the bus captains on the bus model operated (Year)	Distribution of accidents from 2012-2013 (%)
0-<1	24.5%
1-<2	15.9%
2-<3	12.4%
3-<4	6.5%
4-<5	3.4%
5-<6	3.3%
6-<7	2.4%
7-<8	3.6%
8-<9	5.5%
9-<10	9.1%
10-<11	7.6%
11-<12	4.1%
12-<13	0.9%
13-<14	0.2%
14-<15	0.0%
24-<25	0.5%

8.2.15 The figures indicate that less experienced bus captains (<1 year driving experience on the bus model operated) had the highest traffic accident involvement rate.

Accidents by the number of routes which a bus captain operated in one shift

Table 8.7 Accidents by the Number of Routes which a Bus Captain Operated in One Shift in 2012-2013

Number of routes which a bus captain operated in one shift	Distribution of accidents in 2012-2013 (%)
1	87%
2	10%
3	2%

Accidents by the number of buses which a bus captain operated in one shift

Table 8.8 Accidents by the Number of Buses a Bus Captain Operated in One Shift in 2012-2013

Number of buses a bus captain operated in one shift	Distribution of accidents in 2012-2013 (%)
1	77%
2	21%
3	2%

8.3 Bus Captain Training and Monitoring

8.3.1 As part of KMB's dedication to provide safe, reliable and comfortable services for our passengers, comprehensive systems of bus captain training and monitoring have been set up in KMB. Elements of defensive driving, good driving attitude and emergency handling are incorporated in the various training courses. Driving performance monitoring is carried out with systematic checking by driving instructors and followed up with disciplinary actions if required. Moreover, the new 'Drive Green' hardware and software as referenced in a previous Chapter will also help to identify those bus captains who have a higher incidence of 'harsh braking' on a given route than is normal. This information can be used as to ensure that appropriate proactive feedback is given to a bus captain with aim of promoting improved driving behaviour that will in turn serve to prevent/reduce 'loss of balance' cases (as well as accidents in general).

8.3.2 KMB buses have various safety related features to enhance road and passenger safety. Speed monitoring and limiting devices are already installed or are being installed on buses.

- Since November 2009, laser gun checks have been strengthened in various areas. The pass rate of laser gun checks remains as high as 99.5% for the period May 2013 to April 2014. In view of the effectiveness of this

arrangement, KMB has strengthened the laser gun checks by increasing the checks to twelve days per month (including both day and night);

- The electronic tachographs have been used to monitor bus captain performance, especially with regard to speeding (see paragraph 8.8.8 for details); and

- Real-time Driving Indicators 駕駛提示器 (see above reference to the Drive Green initiative in 7.5.8 of Chapter 7) are planned to be installed in buses from mid 2013 which can help bus captains to utilize the driving skills learnt in the Eco-safe Driving Training Course. As denoted above, the benefits of such Eco-safe driving to the bus captains are:

  1. Reduced risk of accidents while driving;
  2. Reduced stress levels and enhanced satisfaction of driving; and
  3. Increased confidence in vehicle control and driving technique.

8.3.3 In order to enhance bus captains' ability to deal with emergency incidents such as "dashing out" of pedestrians onto the carriageway, and to improve bus ride comfort, a state-of-the-art driving simulator studio was launched in the KMB Bus Captain Training School at the end of 2007.

8.3.4 To enhance the recruitment of suitable new bus captains, apart from driving record checks, a personality test for bus captain applicants has been introduced since the second half of 2007.

8.3.5 Details of training provided to new and serving bus captains are given in Annex 8.1.

8.3.6 Bus captains who are involved in serious traffic accidents will be suspended from driving duty and referred to receive professional counselling service. Remedial driving training will also be arranged for them.

8.3.7 To prevent similar traffic accidents from recurring, bus captains who are involved in blameworthy traffic accidents resulting in injury are referred to our Bus Captain Training School to attend Safety Enhancement Training. The training course includes defensive driving concepts, simulator training, case studies, experience sharing and assessment.

8.3.8 Communication channels with staff and labour unions are well established and these channels facilitate the exchange of views on issues including safety.

8.3.9 As a safety enhancement measures, the Company has appointed a professional counselling service provider to operate a 24-hour Hotline（傾心線）for our staff and their immediate family members, including spouse and children, to raise

and discuss any problems or difficulties they may encounter in their daily lives. The purpose is to provide a channel for staff members to relieve their pressure and seek help from independent professional counsellors as they may see fit. The discussions are strictly confidential and contents will not be revealed to the Company. The Company also organises a series of seminars on health and disease prevention for its staff members with the aim of raising their awareness of the importance of healthy living.

8.4 Rostering, Scheduling and Duty Dispatch

8.4.1 KMB follows rostering, scheduling and duty dispatch systems having due regard to the Transport Department Guidelines on Driver Working Hours. The systems also ensure that only bus captains who satisfy training requirements are assigned to duties.

8.4.2 Arrangements are made to assign new bus captains to easy routes in the first few months of appointment to allow for a period of familiarisation and settling in.

8.4.3 In order to help new bus captains adapt to the new working environment, a "New Bus Captain Assistance Group" was established in June 2009. During the introductory session provided to new bus captains, enquiry hotlines regarding bus operational and mechanical aspects are provided to new bus captains. They are also introduced to experienced staff members who act as their mentors for a new recruit's first three months on the job. In addition, regular 'sharing meetings' are organised for new bus captains in the presence of management staff. The objective is to give support to new bus captains such that they can become appropriately familiar with daily operations. A hotline is available at the Bus Captain Training School for new bus captains to obtain driving skills consultation from driving instructors.

8.4.4 Ongoing adjustment in journey time, layover time and meal break is made with the solicited input from frontline staff and efforts in this regard have been accelerated of late.

8.5 Bus Maintenance and Safety Features

8.5.1 All KMB buses are subject to a maintenance and quality assurance system which aims to keep the buses in top conditions.

8.5.2 The buses have various safety related features to enhance road and passenger safety. Speed monitoring and limiting devices are already installed on KMB buses.

8.5.3 At the request of Transport Department, seat belts have been retrofitted at the four seats on the first row on the upper deck of post-1997 design buses. Furthermore, guard rails have been installed across the upper deck windscreen of the pre-1997 design buses. The improvement works were completed in December 2007 and April 2008 respectively.

8.5.4 Regarding the further request from Transport Department that KMB retrofits double hand rails to all double deck buses with straight staircases (part D(g) as per letter ref. ( ) in BDC 76/50 dated 12 June 2009), some 1,122 buses with straight staircases have been so fitted (100% of relevant fleet) whilst all new buses with straight staircases will have the double hand rails fitted. The retrofit of double handrails for 555 SLF buses with straight staircases was completed at the end of 2011. As at 30 April 2014, there were 1,122 SLF buses with straight staircase and all fitted with double handrails.

8.5.5 To help reduce accidents involving elderly passengers due to 'losing balance on board', the new bus specifications have included continuous railing, extending from the entrance into the saloon (as far as is practicable). This new design allows passengers to hold on to a handrail as they move towards the priority seats or the inner part of the bus.

8.5.6 In 2007, as requested by the Legco Panel on Transport Meeting on 26 March 2007 regarding retrofitting of seat belts, KMB/CTB/NWFB had jointly appointed ADL to conduct a feasibility study to examine the possibility of installation/retrofitting of seat belts at the exposed seats on upper deck, all seats on upper deck and exposed seats on lower deck. It was both technically and operationally not feasible to do so in both new and existing buses.

8.6 Promotion of Passenger Safety

8.6.1 Safety awareness among bus captains is promoted by means of in-house videos, safety messages on waybills, internal magazine (i.e. KMB Today), tool-box talk, safety tips broadcast on monitors in depots and staff website, as well as the annual *KMB Bus Captain of the Year Competition*. Game booths with passengers' Dos and Don'ts inside bus compartment have been promoted in 2013.

8.6.2 Various projects to educate the public and passengers on the safe use of bus services have been undertaken. These include Announcements of Public Interest, education video and TV commercials. In addition, on-board stickers and messages remind passengers of the benefit of taking safety precautions.

8.6.3 Continuous monitoring of accident data and review of procedures and systems to enhance safety are being undertaken with internal cross-departmental

meetings and participation in the Road Safety Forum for Franchised Buses organised by Transport Department.

8.6.4 Education of passengers on the importance of road safety and safety on buses will continue in the form of posters and reminders on buses, and using the Bus Stop Announcement System. This will be supplemented by education videos and TV commercial campaigns from time to time. By July 2013, a new series of safety messages was broadcast on the Bus Stop Announcement System ("BSAS") of buses. A total of 60 designated routes were selected and these safety messages served as friendly reminders to hold the handrails during bus journey. In order to give these friendly reminders greater impact, KMB invited Mr. Bowie Wu Fung, a renowned local actor whose voice is familiar to Hong Kong people, to provide the voice for the messages in Cantonese. The safety messages were also broadcast in English and Putonghua.

8.6.5 KMB produced its first "Bus Captain Safe Driving Handbook" and this was distributed to all bus captains in October 2009. To strive for continuous improvement, the second edition was published in June 2011. The third edition will be published in the 4th quarter of 2014. The new handbook includes driving regulations and points to note about safe driving, covering every aspect of a bus captains' daily work. It is aimed at assisting bus captains in establishing a proper safe driving attitude and encouraging them to take all practical steps aimed at achieving safe driving,.

8.6.6 New "Hold the Handrail" safety stickers have been posted to replace the old one in 2012. New higher visibility 'Priority Seat' markings have also been rolled out to very good effect.

8.6.7 To further enhance passengers' safety awareness when they ride on the buses, a new video called "Hold the Handrails – Safety First" has been launched since September 2013. It was broadcast in Cantonese on the Multi-media On-board (MMOB) system in KMB buses. The video showed how unforeseen situations could occur on the roads from time to time and passengers were encouraged to hold the handrails at all times to prevent loss of balance in the event of unexpected traffic incidents.

8.7 Programmes for elderly and persons with disabilities

8.7.1 To further promote a caring culture and prevent accidents, KMB fully launched a "priority seats" scheme by the end of 2012. A "seat-offering" hand sign is also incorporated with the words "Thought of Giving Your Seat?" to remind passengers of their civic duty. The aims of the "priority seats" scheme were to promote a culture of caring for passengers and to encourage passengers to express their concerns for the passengers in need by offering their seats to the elderly, disabled,

pregnant women and passengers with infants, even though such initiatives are not statutory requirements. We have also reminded all of our bus captains to proactively offer assistance to the passengers whenever necessary.

8.7.2 KMB also produced a new training video to raise the safety awareness of its bus captains internally, with the aim of continually improving on its passenger safety. The message "Thought of giving your seat?" has been inserted into the Bus Stop Announcement System on all KMB buses for automatic announcement at specific bus stops (as a reminder to passengers).

8.7.3 To promote operational safety and share the experience of safe driving, representatives of the Police are invited to conduct a series of tailor-made Road Safety Lectures.

8.7.4 To further enhance safety awareness among elderly passengers, KMB will launch a series of promotional activities in conjunction with Police. These include visiting bus stops frequently used by elderly to remind them to hold handrail whilst riding on buses.

8.8 Measures to be taken

8.8.1 KMB proposes to use the 3-year average of 2011 to 2013 actual accident involvement rate of 3.03 (defined as the number of buses involved in accidents per million km operated) as a target for the purpose of this Five-Year Plan period. According to the figures in 2012 and 2013, in 79.2% of the cases our bus captains were not blameworthy (see paragraph 8.2.9 for detail).

8.8.2 The current system of bus captain training will continue to be regularly reviewed.

8.8.3 The performance monitoring system will continue to uphold driving and safety standards.

8.8.4 Scheduling System has been implemented since 2013. It enhances the Company's ability in ensuring/monitoring compliance with Driver Working Guidelines.

8.8.5 All KMB buses are subject to a stringent maintenance and quality assurance system which keeps the buses in good roadworthy conditions. The existing maintenance and quality assurance system will be continued.

8.8.6 Speed limiting devices have been a standard feature of all KMB buses.

8.8.7 The electronic tachographs meet Transport Department's requirements for electronic data recording device issued by VSSD dated 17th October 2003. They are now being used to monitor bus captain performance, especially with regard to speeding. The new 'Drive Green' Initiative has not only enhanced environmental management but also bus safety and ride comfort.

8.8.8 The electronic tachograph is standard equipment on new buses. At the end of April 2014, a total of 3,842 KMB buses (i.e. 100% of fleet) were installed with electronic tachographs.

8.8.9 KMB has created a database of "Driving Tips in Special Attention Areas". The database provides structured instructions and tips on best driving practices for all bus captains driving on particular routes, so that expertise and knowledge of the most experienced bus captains can be effectively transferred to all others. To promote bus captains' awareness of safe driving, all relevant bus routes are listed in the database, supplemented by photos and layout drawings of 'blackspots etc' for easy reference.

8.8.10 The existing systems of Safety Bonus and Safety Awards will continue to positively promote safety awareness among bus captains. Safety awareness will continue to be emphasised in communications as stated above. In addition to the existing individual safe driving award, route-based awards on bus safety were introduced in 2010 to encourage frontline staff to strive for continual improvement in bus safety performance.

8.8.11 Alcoholic Breathing Test had been introduced randomly to Bus Captains since October 2010 in order to enhance the message of "If you drink, don't drive". This practice will continue to enhance bus captains' safety awareness.

8.8.12 To promote bus operation safety and share the driving safety message, representatives of the Police will continue to be invited to conduct Road Safety workshops. Twelve workshops have been organised to date with over 451 participants joining the workshops in 2013.

8.8.13 To enhance the safety awareness and driving skill for new bus captains, the Police in Kowloon East, Kowloon West, NT South and NT North will continue to conduct Road Safety Lectures for new bus captains on a monthly basis

8.8.14 KMB will continue to review and consider the retrofit of safety features as necessary to the vehicles to enhance road and passenger safety.

8.8.15 Internal meetings will continue to be held regularly to monitor accident statistics and propose methods of accident reduction. The importance of

systematic 'feedback loops' in safety management will be emphasised to ensure that lessons are learned from any incidents that do occur.

8.8.16 KMB will continue to participate in the Road Safety Forum for Franchised Buses organised by Transport Department, and will continue to communicate with Transport Department on road safety issues.

8.8.17 A fit-for-purpose safety management system has been established in December 2011 based on Occupational Health and Safety Assessment Series ("OHSAS") 18001 requirements. KMB also adopted a "Plan-Do-Check-Act" (PDCA) approach, which aims at achieving continuous improvement in the safety performance of all aspects of the business and sustained operational excellence. Operations Division attained the OHSAS 18001 Certificate in August 2012.

8.8.18 Safety Driving Tips Album will be reviewed and refreshed on an on-going basis. Appropriate reference albums will be maintained at relevant termini.

8.8.19 On-street monitoring and promotion by inspectors will be conducted in strategic locations on a weekly basis to promote safety messages to passengers.

8.8.20 Safety videos will be broadcast on RoadShow in the 4th quarter of 2014 to enhance passengers' safety awareness when they ride on the buses.

8.8.21 A "Buddy Driver Programme" was launched in October 2012. Experienced bus captains accompany new bus captains with the aim of providing the new captains with enhanced 'on the job' support in their early days with the Company.

8.8.22 Driving instructors of Bus Captain Training School (BCTS) have conducted briefings to bus captains on monthly safety themes at bus termini since January 2014. In line with the specific safety themes, safety posters have been designed and displayed at all strategic locations to promote safety awareness.

8.8.23 Safety promotion boards to appraise bus captains with outstanding safety performance, i.e. "Zero accidents in 20 years", "Zero accidents in 15 years", "internal commendations" and "Customer commendations", were launched in the 2nd quarter of 2014.

Annex 8.1

A. Regular Training for New Bus Captains

	Training Type	Nature	Duration	Frequency	No. of route / bus type trained
1.	Basic Training	To teach bus driving technique to prepare for Transport Department class 17 licence tests and to equip trainees with the skills required to carry out the duties of a bus captain. Classroom lectures on company rules, passenger safety, accident black spot analysis, emergency handling procedure and concept of quality service. On road training on defensive driving technique, bus type familiarisation and route training (night drive included).	18 days full time	Before posting to duty	2 routes 3-4 bus types
2.	Special Facilities Training	With the assistance of a simulated bus model, bus captains are trained on the operation of Octopus System, Bus Stop Announcement System, Destination Signboard and Fare Display.	Included in Basic Training	Before posting to duty	Not applicable
3.	Simulation training	Bus Simulator training to provide scenario on potential on-road threats for trainees to rehearse relevant response action.	Included in Basic Training	Before posting to duty	Not applicable

B. Regular Training for Serving Bus Captains

	Training Type	Nature	Duration	Frequency	No. of route / bus type trained
1.	Driving Enhancement Training	Experienced bus captains are trained on areas of defensive driving techniques to avoid traffic accident as well as advanced skills in bus manoeuvres. Service enhancement training is also included.	1 day full time	For experienced bus captains.	1 route & highway training 1 bus type
2.	Remedial Training	Aimed at bus captains who are found to be inadequate in certain driving areas or service level. The training will specifically tackle these areas until the bus captain reaches an acceptable level before he/she is released to perform normal duties.	1 to 6 days full time	For bus captains who are found to have driving irregularities or away from driving duties for a period of time.	1 route 1 bus type
3.	Route Training	All bus captains will be trained before being posted to a specific route	1 day full time	As needed	1 route 1 bus type
4.	Bus Type Training	All bus captains will be trained before being posted to drive a specific bus type	1 day full time	As needed	1 route 1 bus type
5.	Safety Enhancement Training	As a corrective measure to prevent similar traffic accident from recurring, it is anticipated that the driving skill and driving attitude of bus captains concerned can be enhanced after receiving the training	1.5 hours	For bus captains involved in liable traffic accident resulting in injury	Not applicable
6.	Simulator Training	Bus Simulator training to provide scenario on potential on-road threats for trainees to rehearse relevant response actions.	Included in Driving Enhancement Training, Remedial Training and Safety Enhancement Training	Included in Driving Enhancement Training, Remedial Training and Safety Enhancement Training	Not applicable

- Training protocols are subject to ongoing review, albeit that the aim will be to continue to do all that is reasonably practicable to ensure the safety and comfort of passengers, staff and other road users at all times

Confidential

KMB

5 YEAR PLAN 2016-2020

5303

8. BUS SAFETY

8.1 Introduction

8.1.1 Safety is the top priority in the operation of KMB. Safety is enhanced through the strengthening of communication, documentation, training, deployment and performance monitoring as well as improvements in bus maintenance and design. Considerable efforts have also been made to promote traffic safety by passenger education and publicity.

8.1.2 This chapter includes an analysis of the types/causes of accidents for the past two calendar years (2013 and 2014) and the relationship of accident rates with respect to different factors, including bus captain age, length of service, and length of driving hours before the accident, bus types, etc.

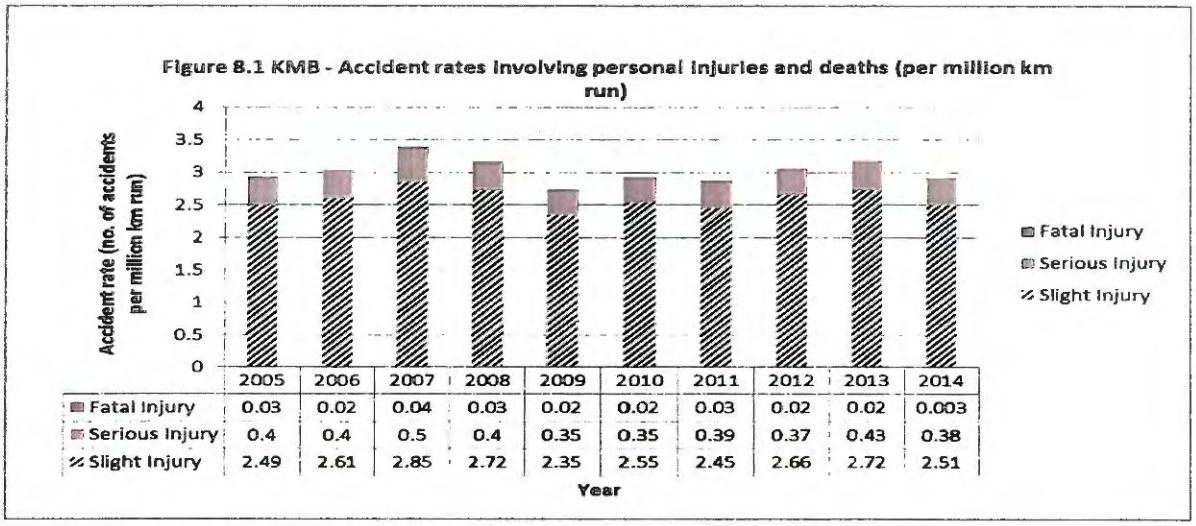
8.1.3 The chapter further discusses the various measures that have been or are being undertaken to promote safety.

8.2 Analysis of Bus Accidents in the Past Two Calendar Years

8.2.1 The analyses for the two-year period 2013 to 2014. The results are presented below.

Trend of Accident Rates

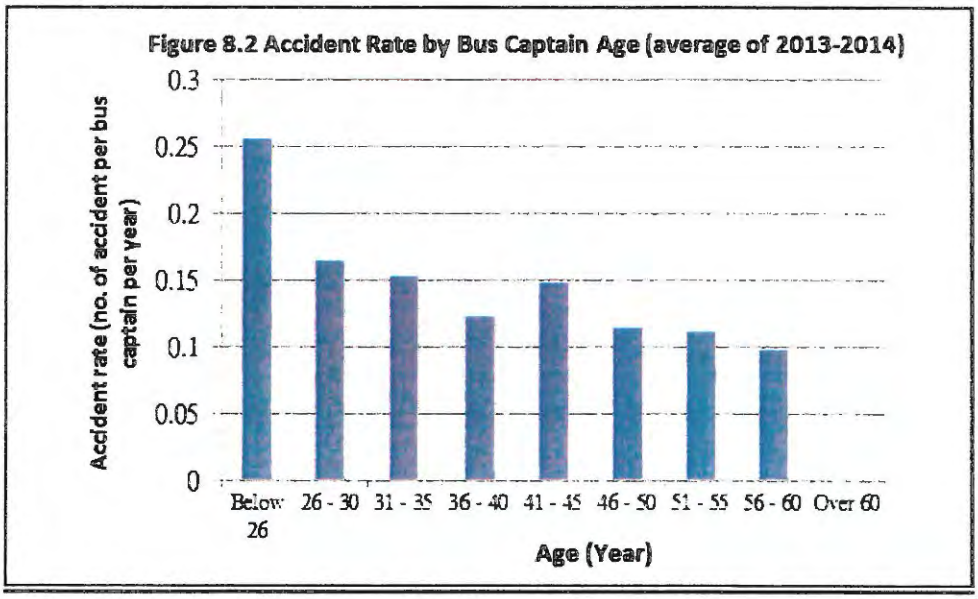
8.2.2 Accident rates from 2005 to 2014 are shown in Figure 8.1. Following the increase in accident rate from 2011 to 2013, notable reduction was achieved in 2014.



	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Fatal Injury	0.03	0.02	0.04	0.03	0.02	0.02	0.03	0.02	0.02	0.003
Serious Injury	0.4	0.4	0.5	0.4	0.35	0.35	0.39	0.37	0.43	0.38
Slight Injury	2.49	2.61	2.85	2.72	2.35	2.55	2.45	2.66	2.72	2.51

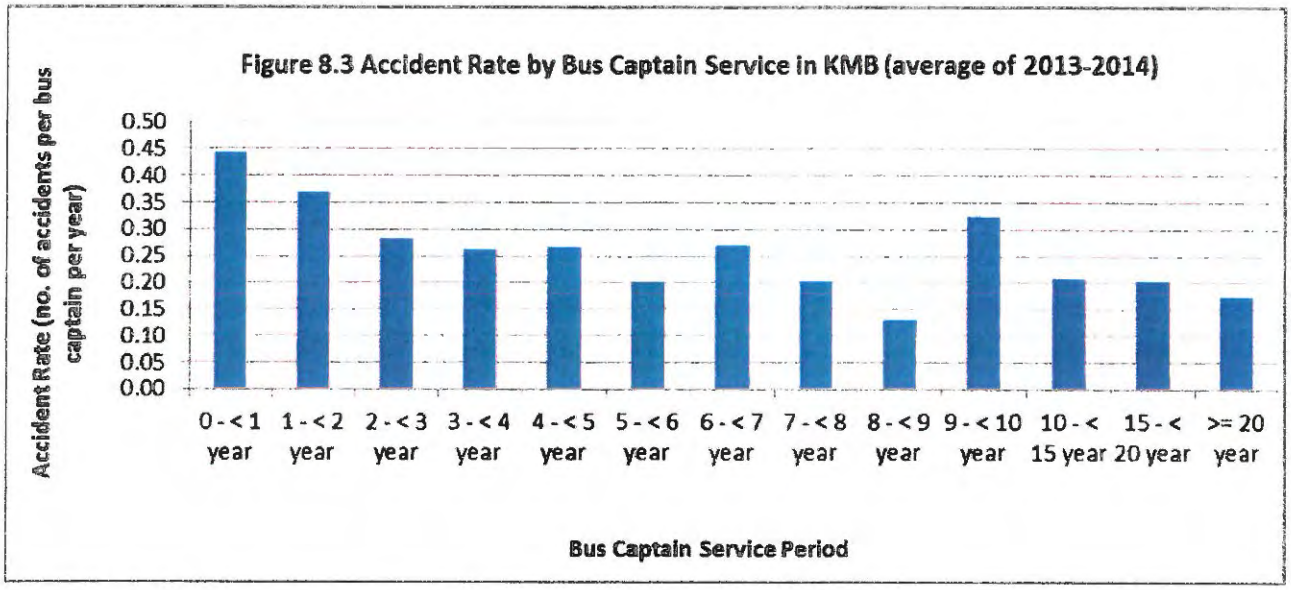
Accident Rate by Bus Captain Age

8.2.3 Results of an analysis of accident rate by bus captain age are shown in Figure 8.2. The results show that younger bus captains are more prone to higher accident rates, but this is mainly due to the fact that these bus captains have relatively less bus driving experience and they are more prone to accidents in their first few months of service. This is also shown in the relationship between accident rates and years of service.



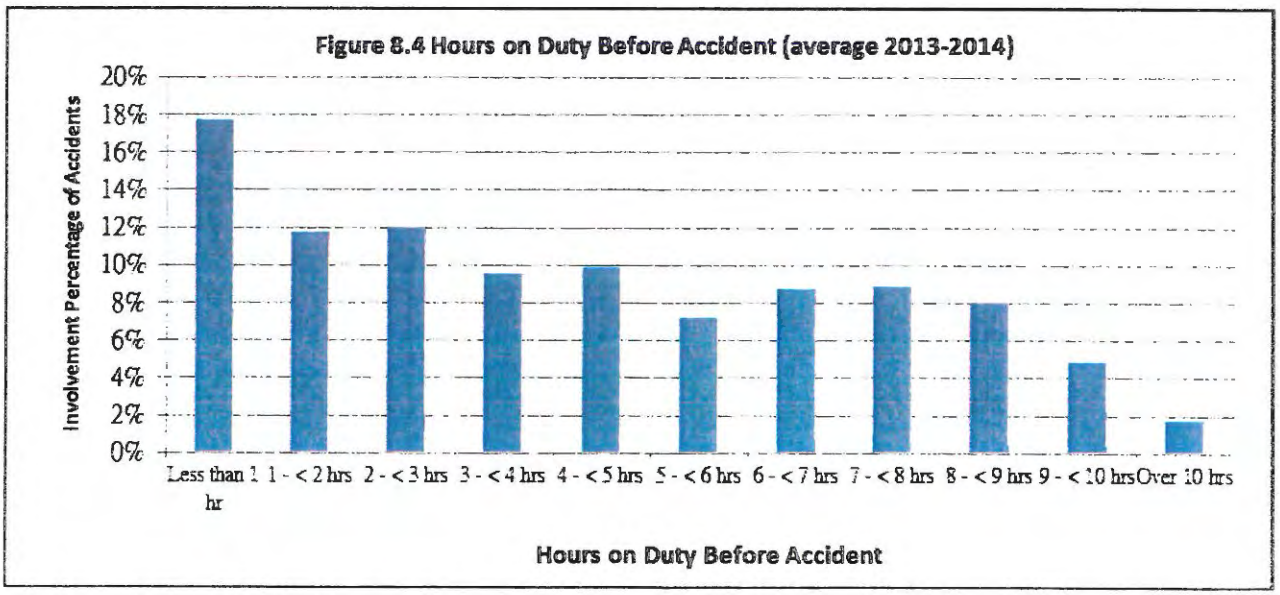
Accident Rate by Years of Service

8.2.4 The results of an analysis on accident rate by experience in terms of years of service in the Company are shown in Figure 8.3. As mentioned above, the likelihood of an accident occurring in the first year immediately following recruitment is relatively higher. The accident rate then falls as experience increases.



Accident Rate by Hours on Duty Before Accident

8.2.5 The analysis results in Figure 8.4 (below) show that there is no correlation between the occurrence of accident and the number of hours on duty before the accident.



Accidents by Nature

8.2.6 The results of an analysis of accident nature are shown in Table 8.1 below. The results are expressed in terms of percentage of accidents during the two years 2013-2014.

Table 8.1 Accidents by nature in percentage

Accident nature	Percentage (%)
Head On/Tail Collision	13.0%
Glancing Collision	4.2%
Collision with Third Party Vehicle (changing lane)	11.1%
Collision With Other Vehicle (rolling back/forward/reversing)	0.4%
Junction Collision	5.2%
Entering Roundabout Collision	0.1%
Hit Stationary Object/Vehicle/Animal	2.1%
Bus Overturn/Topple	0.0%
Injury To Pedestrian	5.1%
Injury To Alighting/Boarding Passenger	2.7%
Passenger Loss Of Balance	53.5%
Injury To Passenger Inside Bus	2.0%
Others	0.4%
Total:	100%

8.2.7 The majority of the accidents (53.5%) were due to passengers losing balance while on the bus. More than half of these cases were caused by the bus braking in traffic. Accidents with injuries sustained as a result of different kinds of collisions accounted for 34% while accidents with injury to pedestrians accounting for 5.9% of all the accidents.

8.2.8 The breakdown by our classification of accident nature from 2013 to 2014 is as follows:

Table 8.2 Accidents by nature

Accident Nature	No. of Accidents	
	2013	2014
Head On / Head Tail Collision	136	127
Glancing Collision	44	42
Collision with Vehicle Changing Lane	108	116
Collision With Other Vehicle (rolling back/forward/reversing)	3	5
Collision at junction	49	56
Entering roundabout Collision	2	1
Hitting Stationary Object	22	21
Overturn/Topple	0	0
Injury to Pedestrian	69	35
Injury to Boarding/Alighting Passenger	31	24
Passenger Loss of Balance	587	497
Injury to Passenger Inside Bus - Other Natures	22	19
Others	6	3
Total:	1079	946

8.2.9 Accidents related to "Injury to Pedestrian" and "Passenger Loss of Balance" dropped significantly in 2014.

Accidents by Liability

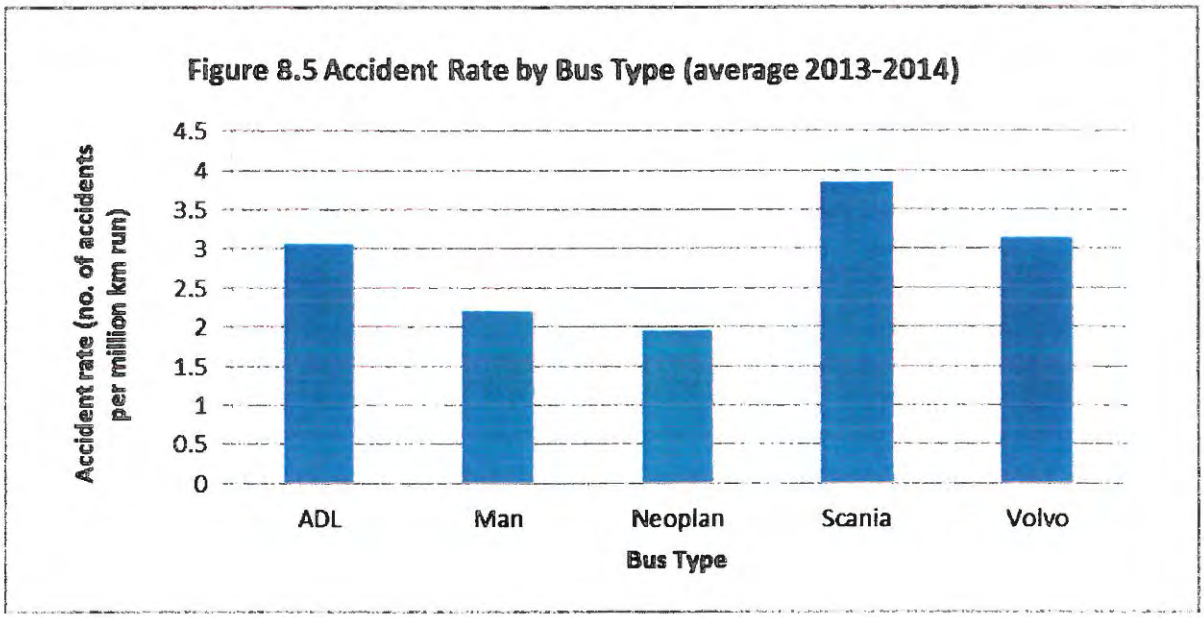
8.2.10 The breakdown of liability in the two-year period is shown in Table 8.3 below. For 80% of the cases, the bus captains were not blameworthy. The pending cases (about 1%) are those pending for Police action and/or court ruling.

Table 8.3 Accidents by Liability of Bus Captain

Liability of KMB Bus Captain	Percentage (%)
Negligent	19
Innocent	80
Pending	1
Total:	100

Accidents by Bus Type

8.2.11 Accidents by bus type were also analysed and the results are shown in Figure 8.5. The general results are not significant enough to show any direct relationships between accident rate and bus type, and the differences among bus types can be attributable to operating environment (e.g. route), roads, bus captains and other factors.



8.2.12 The percentage of duties in KMB that involve bus or route hopping was (51.8% and 23.0% respectively) as at the end of April 2015.

8.2.13 A breakdown of the number of non-collision accident involving passenger casualty is provided as follows:

Table 8.4 Number of Non-collision Franchised Bus Accidents Involving Passenger Casualty

	Number of Non-collision Franchised Bus Accidents involving passenger casualty	Percentage over all accidents involving franchised buses	No. of accidents involving passenger losing balance on stairway (No. of casualty) (i)	No. of accidents involving passenger injured by door (No. of casualty) (ii)	No. of accidents involving passenger losing balance elsewhere except (i) & (ii) (No. of casualty) (iii)
2014	540	57%	115	21	404

Accidents by experience of the bus captains on the route

Table 8.5 Accidents by Experience of the Bus Captains on the Route

Experience of the bus captains on the route (Year)	Distribution of accidents from 2013-2014 (%)
0-<1	33.68%
1-<2	12.67%
2-<3	9.04%
3-<4	5.56%
4-<5	4.82%
5-<6	3.83%
6-<7	3.58%
7-<8	5.07%
8-<9	5.27%
9-<10	4.42%
10-<11	4.62%
11-<12	3.43%
12-<13	0.89%
13-<14	1.24%
14-<15	0.99%
15-<16	0.70%
16-<17	0.10%
17-<18	0.05%
18-<19	0.05%
Over 19	0.00%

8.2.14 As mentioned above, the percentage of traffic accidents for bus captains with less than 1 year route driving experience is the highest as compared to those bus captains with years of route driving experience. The figures indicate that less experienced bus captains (<1 year driving experience on the routes) were more likely to be involved in traffic accidents. They need time to get familiar with the characteristics of the routes and the road environment.

Accidents by experience of the bus captains on the bus model operated

Table 8.6 Accidents by Experience of the Bus Captains on the Bus Model Operated

Experience of the bus captains on the bus model operated (Year)	Distribution of accidents from 2013-2014 (%)
0-<1	25.16%
1-<2	16.69%
2-<3	16.59%
3-<4	9.76%
4-<5	4.56%
5-<6	2.82%
6-<7	2.13%
7-<8	1.83%
8-<9	2.67%
9-<10	3.37%
10-<11	5.10%
11-<12	6.14%
12-<13	2.33%
13-<14	0.64%
14-<15	0.20%
Over 15	0.00%

8.2.15 The figures indicate that less experienced bus captains (<1 year driving experience on the bus model operated) had the highest traffic accident involvement rate.

Accidents by the number of routes which a bus captain operated in one shift

Table 8.7 Accidents by the Number of Routes which a Bus Captain Operated in One Shift in 2013-2014

Number of routes which a bus captain operated in one shift	Distribution of accidents in 2013-2014 (%)
1	85.38%
2	12.15%
3	2.47%

Accidents by the number of buses which a bus captain operated in one shift

Table 8.8 Accidents by the Number of Buses a Bus Captain Operated in One Shift in 2013-2014

Number of buses a bus captain operated in one shift	Distribution of accidents in 2013-2014 (%)
1	63.60%
2	29.98%
3	6.37%
4	0.05%

8.3 Bus Captain Training and Monitoring

8.3.1 As part of KMB's dedication to provide safe, reliable and comfortable services for our passengers, comprehensive systems of bus captain training and monitoring have been set up in KMB. Elements of defensive driving, good driving attitude and emergency handling are incorporated in various training courses. Driving performance monitoring is carried out with systematic checking by driving instructors and followed up with disciplinary actions if required. Moreover, the new 'Drive Green' hardware and software as referenced in a previous Chapter will also help to identify those bus captains who have a higher incidence of 'harsh braking' on a given route than is normal. This information can be used as to ensure that appropriate proactive feedback is given to a bus captain with aim of promoting improved driving behaviour that will in turn serve to prevent/reduce 'loss of balance' cases (as well as accidents in general).

8.3.2 KMB buses have various safety related features to enhance road and passenger safety. Speed monitoring and limiting devices are already installed or are being installed on buses.

- Since November 2009, laser gun checks have been strengthened in various areas. The pass rate of laser gun checks from May 2014 to Apr 2015 is 99.44%, the frequency of check remains at 12 times per month (including day and night).

- The electronic tachographs have been used to monitor bus captain performance, especially with regard to speeding (see paragraph 8.8.8 for details); and,

- Real-time Driving Indicators 駕駛提示器 (see above reference to the Drive Green initiative) are being installed in buses from mid 2013 which can help bus captains to utilize the driving skills learnt in the Eco-safe Driving Training Course. As denoted above, the benefits of such Eco-safe driving to the bus captains are:

1. Reduced the risk of accidents while driving;
2. Reduced stress levels and enhanced satisfaction of driving; and,
3. Increased confidence in vehicle control and driving technique.

8.3.3 To enhance the recruitment of suitable new bus captains, apart from driving record checks, a personality test for bus captain applicants has been introduced since the second half of 2007.

8.3.4 Details of training provided to new and serving bus captains are given in Annex 8.1.

8.3.5 Bus captains who are involved in serious traffic accidents will be suspended from driving duty and referred to receive professional counselling service. Remedial driving training will also be arranged for them.

8.3.6 To prevent similar traffic accidents from recurring, bus captains who are involved in blameworthy traffic accidents resulting in injury are referred to the Bus Captain Training School to attend Safety Enhancement Training. The training course includes defensive driving concepts, case studies, experience sharing and assessment.

8.3.7 Communication channels with staff and labour unions are well established and these channels facilitate the exchange of views on issues including safety.

8.3.8 As a safety enhancement measures, the Company has appointed a professional counselling service provider to operate a 24-hour Hotline（傾心線）for our staff and their immediate family members, including spouse and children, to raise and discuss any problems or difficulties they may encounter in their daily lives. The purpose is to provide a channel for staff members to relieve their pressure and seek help from independent professional counsellors as they may see fit. The discussions are strictly confidential and contents will not be revealed to the Company. The Company also organises a series of seminars on health and disease prevention for its staff members with the aim of raising their awareness of the importance of healthy living.

8.4 Rostering, Scheduling and Duty Dispatch

8.4.1 KMB follows rostering, scheduling and duty dispatch systems having due regard to the Transport Department Guidelines on Driver Working Hours. The systems also ensure that only bus captains who satisfy training requirements are assigned to duties.

8.4.2 Arrangements are made to assign new bus captains to easy routes in the first few months of appointment to allow for a period of familiarisation and settling in.

8.4.3 In order to help new bus captains adapt to the new working environment, KMB has enhanced and introduced an all-rounded "Buddy Scheme for New Bus Captain" in May 2015. In this enhanced scheme, new bus captains are provided with New Bus Captain Orientation Handbook regarding bus operational and mechanical aspects during the introductory session. Experienced bus captains (named "Buddy Bus Captains") accompany new bus captains with the aim of providing the new bus captains with enhanced 'on the job' support in their early days with the Company. They are also introduced to experienced staff members who act as their mentors for a new recruit's first year on the job. Hotline at the Bus Captain Training School and additional hotline of mentors are both available for new bus captains to obtain consultation from driving instructors and mentors respectively.

8.4.4 Ongoing adjustment in journey time, layover time and meal break is made with the solicited input from frontline staff and efforts in this regard have been accelerated in recent years.

8.5 Bus Maintenance and Safety Features

8.5.1 All KMB buses are subject to a maintenance and quality assurance system which aims to keep the buses in top conditions. Speed monitoring and limiting devices are already installed on KMB buses.

8.5.2 The buses have many safety related features to enhance road and passenger safety, such as,

- seat belts have been retrofitted at the four seats on the first row on the upper deck ,
- double hand rails have been retrofitted to all double deck buses with straight staircases (as at 30 April 2015, there are 1543 SLF buses with straight staircase and all are fitted with double handrails); and
- To help reduce accidents involving elderly passengers due to 'losing balance on board', the new bus specifications have included continuous railing, extending from the entrance into the saloon (as far as is practicable).

8.6 Promotion of Passenger Safety

8.6.1 Safety awareness among bus captains is promoted by means of in-house videos, safety messages on waybills, internal posters, tool-box talk, and safety tips provided at staff website, as well as through events such as KMB Bus Captain of the Year Competition.

8.6.2 Various projects to educate the public and passengers on the safe use of bus services have been undertaken. These include an education video. In addition, on-board stickers and messages remind passengers to take safety precautions.

8.6.3 Continuous monitoring of accident data and review of procedures and systems to enhance safety are being undertaken with internal cross-departmental meetings.

8.6.4 Education of passengers on the importance of road safety and safety on buses will continue in the form of posters and reminders on buses, and using the Bus Stop Announcement System ("BSAS"). This will be supplemented by education videos from time to time. By July 2013, a new series of safety messages was broadcast on the BSAS of buses. A total of 60 designated routes were selected and these safety messages served as friendly reminders to hold the handrails during bus journey. In order to give these friendly reminders greater impact, KMB invited Mr. Bowie Wu Fung, a renowned local actor whose voice is familiar to Hong Kong people, to provide the voice for the messages in Cantonese. The safety messages were also broadcast in English and Putonghua.

8.6.5 KMB produces its "Bus Captain Safe Driving Handbook" which is distributed to all bus captains Currently in its third edition, the handbook includes driving regulations and points to note about safe driving, covering every aspect of a bus captain's daily work. It is aimed at assisting bus captains in establishing a proper safe driving attitude and encouraging them to take all practical steps aimed at achieving safe driving.

8.6.6 To further enhance passengers' safety awareness when they ride on the buses, a new video called "Hold the Handrails – Safety First" was launched in September 2013. It was broadcast in Cantonese on the Multi-media On-board (MMOB) system in KMB buses. The video showed how unforeseen situations could occur on the roads from time to time and passengers were encouraged to hold the handrails at all times to prevent loss of balance in the event of unexpected traffic incidents. In addition, a new and updated musical safety video called "Hold the Handrails – Safety First" was launched in November 2014.

8.7 Programmes for Elderly and Persons with Disabilities

8.7.1 To encourage young people to give their seat to passengers in need, KMB's depots regularly receive visits from local youth centres, primary and secondary schools and other educational institutes. In addition to being introduced to the depots' operations, the visitors are informed of the caring facilities in bus compartments, including the priority seats.

8.7.2 Also, KMB's volunteer club, FRIENDS OF KMB, is committed to promoting the message of "Good Passenger - Good Citizen". FRIENDS OF KMB provides voluntary assistance at carnivals organized by District Councils, NGOs and Road Safety Council to enhance public awareness of road safety, offer seats to people in need and to promote safe travel tips for the elderly.

8.7.3 KMB makes use of its bus stop announcement system to broadcast relevant messages in Cantonese, English and Putonghua encouraging passengers to give their seats to those in need.

8.7.4 As part of its efforts to promote a caring culture, KMB launched a new music video in November 2014 for broadcast on all KMB buses fitted with MMOB, once again, which encourages passengers to give their seat to those in need. The video was launched at Tsim Sha Tsui Pier on the occasion of celebrity Louis Yuen staging a street drama with KMB's mascot.

8.7.5 KMB makes use of different ways of promoting its priority seats, including press sessions, press releases and social media to raise awareness about the need to care for the elderly.

8.7.6 To promote operational safety and share the experience of safe driving, representatives of the Police are invited to conduct a series of tailor-made Road Safety Lectures.

8.7.7 To further enhance safety awareness among elderly passengers, KMB have launched a series of promotional activities in conjunction with Police and local district members. These include visiting bus stops frequently used by the elderly to remind them to hold handrail whilst riding on buses.

8.8 Measures to be Taken

8.8.1 KMB proposes to use the 3-year average of 2012 to 2014 actual accident involvement rate of 3.04 (defined as the number of buses involved in accidents per million km operated) as a target for the purpose of this Five-Year Plan period. It represents a 4% reduction from the accident rate in 2013, the highest record among 2012-2014.

8.8.2 The current system of bus captain training will continue to be reviewed regularly.

8.8.3 The performance monitoring system will continue to uphold driving and safety standards.

8.8.4 New Scheduling software was implemented in Year 2013. It enhances the Company's ability in ensuring/ monitoring compliance with Driver Working Guidelines.

8.8.5 All KMB buses are subject to a stringent maintenance and quality assurance system which keeps the buses in good roadworthy conditions. The existing maintenance and quality assurance system will be continued.

8.8.6 Speed limiting devices have been a standard feature of all KMB buses.

8.8.7 The electronic tachographs are being used to monitor bus captain performance, especially with regard to speeding. The new 'Drive Green' Initiative has not only enhanced environmental management but also bus safety and ride comfort. An electronic tachograph is standard equipment on new buses. At the end of April 2015, a total of 3,820 KMB buses (i.e. 100% of fleet) were installed with electronic tachographs.

8.8.8 KMB has created a database of "Driving Tips in Special Attention Areas". The database provides structured instructions and tips on best driving practices for all bus captains driving on particular routes, so that expertise and knowledge of the most experienced bus captains can be effectively transferred to all others. To promote bus captains' awareness of safe driving, all relevant bus routes are listed in the database, supplemented by photos and layout drawings for easy reference.

8.8.9 The existing systems of Safety Bonus and Safety Awards will continue to promote safety awareness among bus captains. Safety awareness will continue to be emphasised in communications as stated above. In addition to the existing individual safe driving award, route-based awards on bus safety will be continued to encourage frontline staff to strive for continual improvement in bus safety performance.

8.8.10 Alcoholic Breathing Test of Bus Captains is randomly conducted to control the incidence of driving under influence.

8.8.11 To promote bus operation safety and share the driving safety message, representatives of the Police will continue to be invited to conduct Road Safety Lectures. 12 workshops have been organised to date with 467 participants joining the workshops in 2014.

8.8.12 KMB will continue to review and consider the retrofit of safety features as necessary to the vehicles to enhance road and passenger safety.

8.8.13 Internal meetings will continue to be held regularly to monitor accident statistics and propose methods of accident reduction. The importance of systematic 'feedback loops' in safety management will be emphasised to ensure that lessons are learned from any incidents that do occur.

8.8.14 KMB will continue to communicate with Transport Department on road safety issues.

8.8.15 On-street monitoring and promotion by inspectors will be conducted in strategic locations on a regular basis to promote safety messages to passengers.

8.8.16 Driving instructors of Bus Captain Training School have conducted briefings to bus captains on monthly safety themes at bus termini since January 2014. In line with the specific safety themes, safety posters have been designed and displayed at all strategic locations to promote safety awareness.

Annex 8.1

A. Regular Training for New Bus Captains

	Training Type	Nature	Duration	Frequency	No. of route / bus type trained
1.	Basic Training	To teach bus driving technique to prepare for Transport Department class 17 licence tests and to equip trainees with the skills required to carry out the duties of a bus captain. Classroom lectures on company rules, passenger safety, accident black spot analysis, emergency handling procedure and concept of quality service. On road training on defensive driving technique, bus type familiarisation and route training (night drive included).	18 days full time	Before posting to duty	2 routes 3-4 bus types
2.	Special Facilities Training	With the assistance of a simulated bus model, bus captains are trained on the operation of Octopus System, Bus Stop Announcement System, Destination Signboard and Fare Display.	Included in Basic Training	Before posting to duty	Not applicable

B. Regular Training for Serving Bus Captains

	Training Type	Nature	Duration	Frequency	No. of route / bus type trained
1.	Driving Enhancement Training	Experienced bus captains are trained on areas of defensive driving techniques to avoid traffic accident as well as advanced skills in bus manoeuvres. Service enhancement training is also included.	1 day full time	For experienced bus captains.	1 route & highway training 1 bus type
2.	Remedial Training	Aimed at bus captains who are found to be inadequate in certain driving areas or service level. The training will specifically tackle these areas until the bus captain reaches an acceptable level before he/she is released to perform normal duties.	1 to 6 days full time	For bus captains who are found to have driving irregularities or away from driving duties for a period of time.	1 route 1 bus type
3.	Route Training	All bus captains will be trained before being posted to a specific route	1 day full time	As needed	1 route 1 bus type
4.	Bus Type Training	All bus captains will be trained before being posted to drive a specific bus type	1 day full time	As needed	1 route 1 bus type
5.	Safety Enhancement Training	As a corrective measure to prevent similar traffic accident from recurring, it is anticipated that the driving skill and driving attitude of bus captains concerned can be enhanced after receiving the training	1.5 hours	For bus captains involved in liable traffic accident resulting in injury	Not applicable

- Training protocols are subject to ongoing review, albeit that the aim will be to continue to do all that is reasonably practicable to ensure the safety and comfort of passengers, staff and other road users at all times

Confidential

KMB

5 YEAR PLAN 2017-2021

5320

8. BUS SAFETY

8.1 Introduction

8.1.1 Safety is the top priority in the operation of KMB. Safety is enhanced through the strengthening of communication, documentation, training, deployment and performance monitoring as well as improvements in bus maintenance and design. Considerable efforts have also been made to promote traffic safety by passenger education and publicity.

8.1.2 This chapter includes an analysis of the types/causes of accidents for the past two calendar years (2014 and 2015) and the relationship of accident rates with respect to different factors, including bus captain age, length of service, and length of driving hours before the accident, bus types, etc.

8.1.3 The chapter further discusses the various measures that have been or are being undertaken to promote safety.

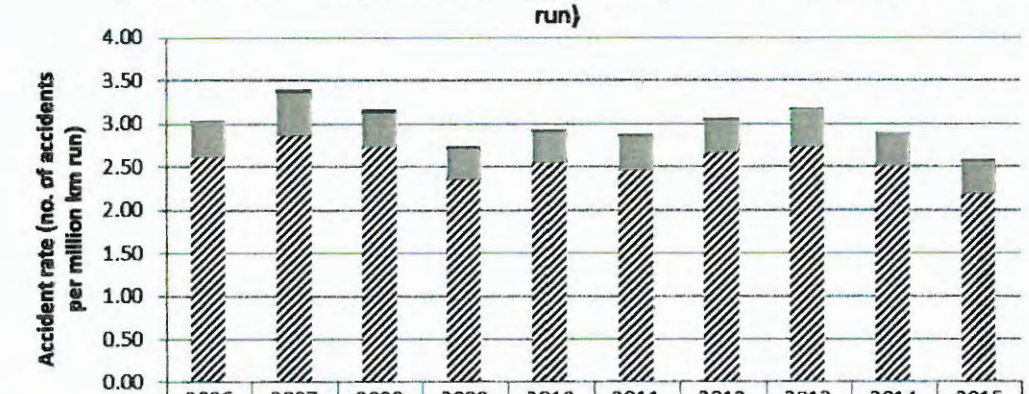
8.2 Analysis of Bus Accidents in the Past Two Calendar Years

8.2.1 The analyses for the two-year period 2014 to 2015. The results are presented below.

Trend of Accident Rates

8.2.2 Accident rates from 2006 to 2015 are shown in Figure 8.1. Following the increase in accident rate from 2011 to 2013, notable reduction was achieved in 2014 and 2015.

Figure 8.1 KMB - Accident rates involving personal injuries and deaths (per million km run)



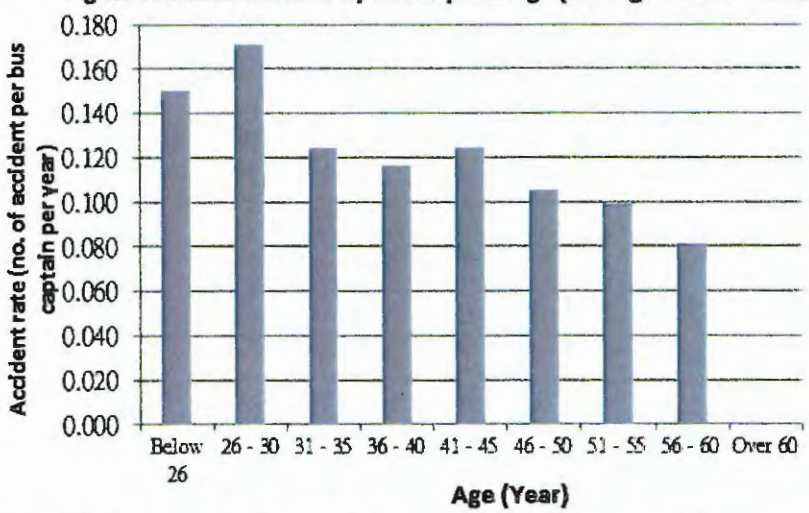
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Fatal Injury	0.02	0.04	0.03	0.02	0.02	0.03	0.02	0.02	0.00	0.03
Serious Injury	0.40	0.50	0.40	0.35	0.35	0.39	0.37	0.43	0.38	0.36
Slight Injury	2.61	2.85	2.72	2.35	2.55	2.45	2.66	2.72	2.51	2.18

Year

Accident Rate by Bus Captain Age

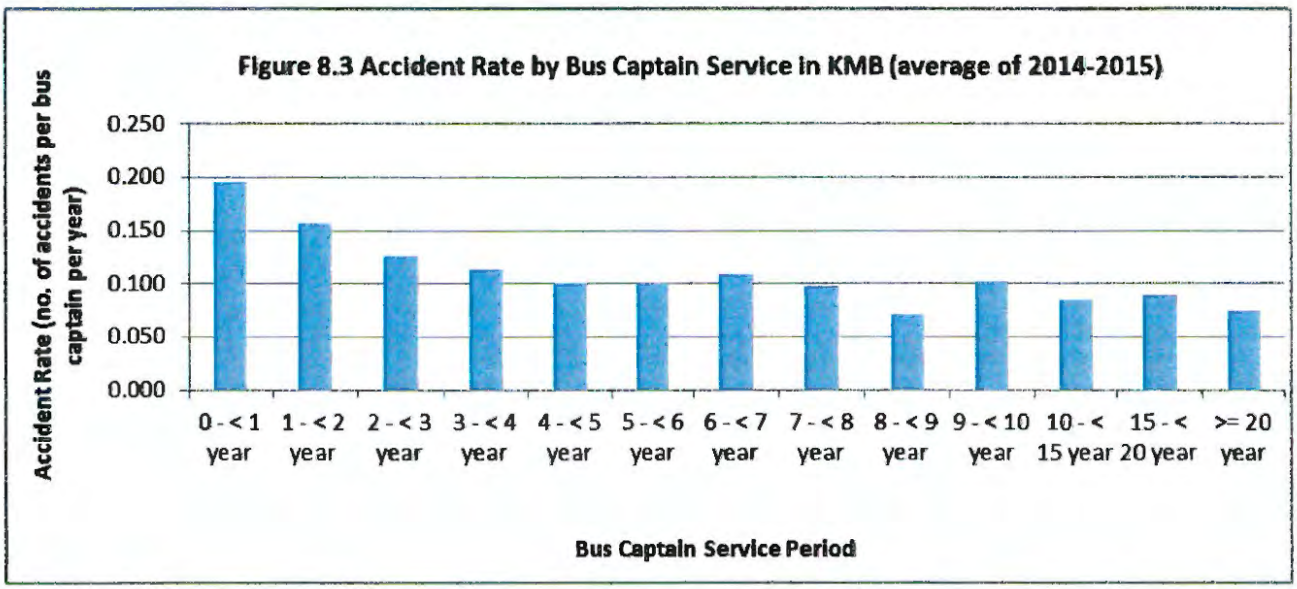
8.2.3 Results of an analysis of accident rate by bus captain age are shown in Figure 8.2. The results show that younger bus captains are more prone to higher accident rates, but this is mainly due to the fact that these bus captains have relatively less bus driving experience and they are more prone to accidents in their first few months of service. This is also shown in the relationship between accident rates and years of service.

Figure 8.2 Accident Rate by Bus Captain Age (average of 2014-2015)



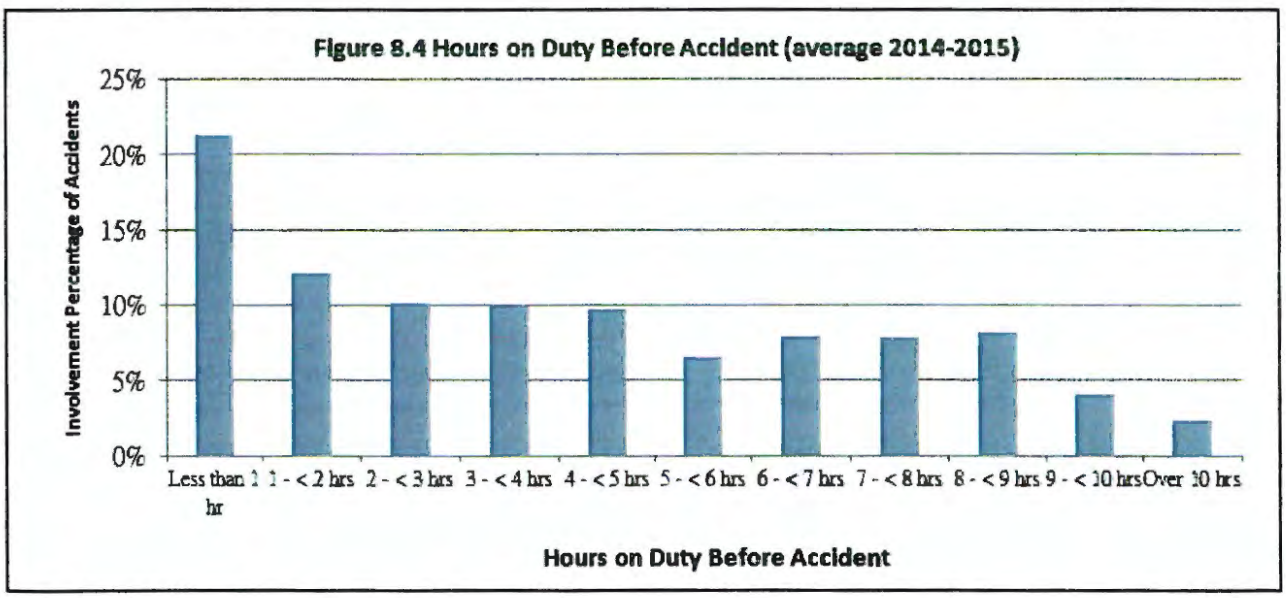
Accident Rate by Years of Service

8.2.4 The results of an analysis on accident rate by experience in terms of years of service in the Company are shown in Figure 8.3. As mentioned above, the likelihood of an accident occurring in the first year immediately following recruitment is relatively higher. The accident rate then falls as experience increases.



Accident Rate by Hours on Duty Before Accident

8.2.5 The analysis results in Figure 8.4 show that there is no correlation between the occurrence of accident and the number of hours on duty before the accident.



Accidents by Nature

8.2.6 The results of an analysis of accident nature are shown in Table 8.1 below. The results are expressed in terms of percentage of accidents during the two years 2014-2015.

Table 8.1 Accidents by nature in percentage

Accident nature	Percentage (%)
Head On/Tail Collision	14.1%
Glancing Collision	4.0%
Collision with Third Party Vehicle (changing lane)	11.3%
Collision With Other Vehicle (rolling back/forward/reversing)	0.6%
Junction Collision	6.2%
Entering Roundabout Collision	0.2%
Hit Stationary Object/Vehicle/Animal	1.8%
Bus Overturn/Topple	0.0%
Injury To Pedestrian	4.3%
Injury To Alighting/Boarding Passenger	2.6%
Passenger Loss Of Balance	52.4%
Injury To Passenger Inside Bus	2.0%
Others	0.4%
Total:	**100%**

8.2.7 The majority of the accidents (52.4%) were due to passengers losing balance while on the bus. More than half of these cases were caused by the bus braking in traffic. Accidents with injuries sustained as a result of different kinds of collisions accounted for 36.5% while accidents with injury to pedestrians accounting for 4.3% of all the accidents.

8.2.8 The breakdown by our classification of accident nature is as follows:

Table 8.2 Accidents by nature

Accident Nature	No. of Accidents	
	2014	2015
Head On / Head Tail Collision	126	128
Glancing Collision	42	30
Collision with Vehicle Changing Lane	117	87
Collision With Other Vehicle (rolling back/forward/reversing)	5	6
Collision at junction	56	56
Entering roundabout Collision	1	3
Hitting Stationary Object	21	12
Overturn/Topple	0	0
Injury to Pedestrian	35	43
Injury to Boarding/Alighting Passenger	24	22
Passenger Loss of Balance	497	445
Injury to Passenger Inside Bus - Other Natures	19	17
Others	3	4
Total:	**946**	**853**

8.2.9 Accidents related to "Collision with Vehicle Changing Lane" and "Passenger Loss of Balance" dropped significantly in 2015.

Accidents by Liability

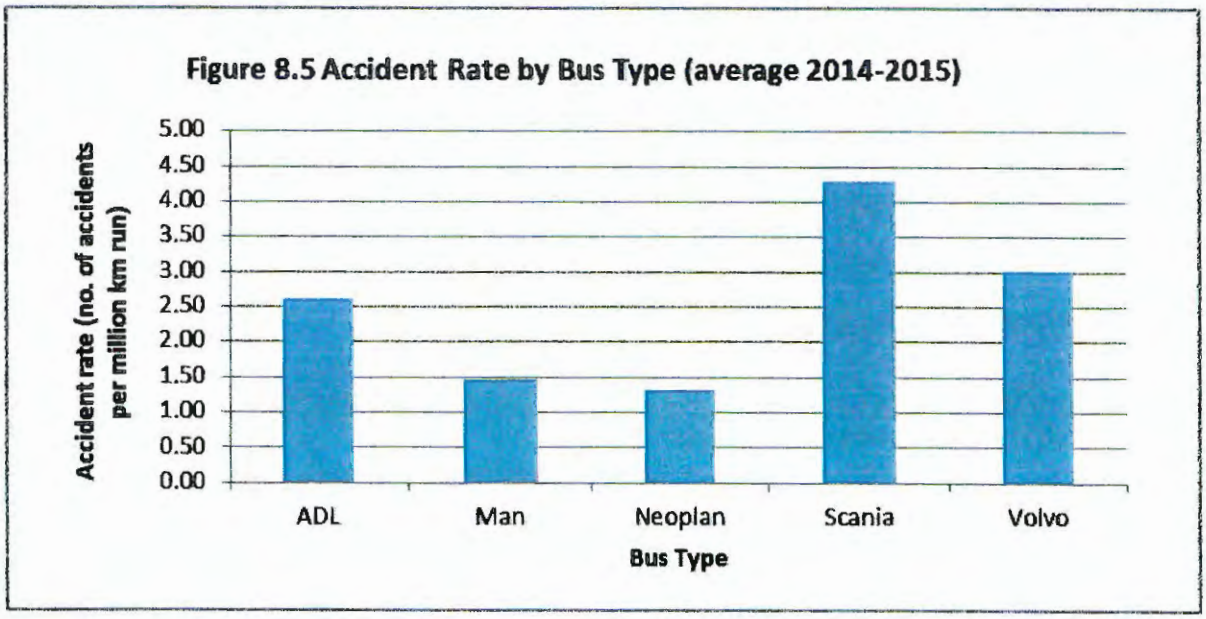
8.2.10 The breakdown of liability in the two-year period is shown in Table 8.3 below. For 79% of the cases, the bus captains were not blameworthy. The pending cases (about 1%) are those pending for Police action and/or court ruling.

Table 8.3 Accidents by Liability of Bus Captain

Liability of KMB Bus Captain	Percentage (%)
Negligent	20
Innocent	79
Pending	1
Total:	100

Accidents by Bus Type

8.2.11 Accidents by bus type were also analysed and the results are shown in Figure 8.5. The general results are not significant enough to show any direct relationships between accident rate and bus type, and the differences among bus types can be attributable to operating environment (e.g. route), roads, bus captains and other factors.



Number of Non-collision Franchised Bus Accidents Involving Passenger Casualty

Table 8.4 Number of Non-collision Franchised Bus Accidents Involving Passenger Casualty

	Number of Non-collision Franchised Bus Accidents involving passenger casualty	Percentage over all accidents involving franchised buses	No. of accidents involving passenger losing balance on stairway (No. of casualty) (i)	No. of accidents involving passenger injured by door (No. of casualty) (ii)	No. of accidents involving passenger losing balance elsewhere except (i) & (ii) (No. of casualty) (iii)
2015	484	57%	106	18	360

Contributory Factors of Traffic Accidents

8.2.12 To prevent similar traffic accidents from recurring, bus captains who are involved in repeated blameworthy traffic accidents are referred to the Bus Captain Training School to attend training. The training course includes defensive driving concepts, case studies, experience sharing and assessment.

8.2.13 KMB produces its "Bus Captain Safe Driving Handbook" which is posted at staff website for all bus captains currently in its fifth edition (1 March 2016), the handbook includes driving regulations and points to note about safe driving, covering every aspect of a bus captain's daily work. It is aimed at assisting bus captains in establishing a proper safe driving attitude and encouraging them to take all practical steps aimed at achieving safe driving.

Accidents by experience of the bus captains on the route

Table 8.5 Accidents by Experience of the Bus Captains on the Route

Experience of the bus captains on the route (Year)	Distribution of accidents from 2014-2015 (%)
0-<1	33.7%
1-<2	12.8%
2-<3	10.1%
3-<4	5.9%
4-<5	5.2%
5-<6	3.8%
6-<7	3.1%
7-<8	3.1%
8-<9	4.2%

Experience of the bus captains on the route (Year)	Distribution of accidents from 2014-2015 (%)
9-<10	3.4%
10-<11	4.4%
11-<12	4.8%
12-<13	2.1%
13-<14	1.2%
14-<15	0.7%
15-<16	0.5%
16-<17	0.5%
17-<18	0.3%
18-<19	0.2%

8.2.14 As mentioned above, the percentage of traffic accidents for bus captains with less than 1 year route driving experience is the highest as compared to those bus captains with years of route driving experience. The figures indicate that less experienced bus captains (<1 year driving experience on the routes) were more likely to be involved in traffic accidents. They need time to get familiar with the characteristics of the routes and the road environment.

Accidents by experience of the bus captains on the bus model operated

Table 8.6 Accidents by Experience of the Bus Captains on the Bus Model Operated

Experience of the bus captains on the bus model operated (Year)	Distribution of accidents from 2014-2015 (%)
0-<1	26.9%
1-<2	14.6%
2-<3	13.0%
3-<4	11.5%
4-<5	8.7%
5-<6	3.9%
6-<7	2.3%
7-<8	2.1%
8-<9	1.6%
9-<10	1.4%
10-<11	3.1%
11-<12	5.4%
12-<13	3.3%
13-<14	1.6%
14-<15	0.4%
15-<16	0.1%

8.2.15 The figures indicate that less experienced bus captains (<1 year driving experience on the bus model operated) had the highest traffic accident involvement rate.

Accidents by the number of routes which a bus captain operated in one shift

Table 8.7 Accidents by the Number of Routes which a Bus Captain Operated in One Shift

Number of routes which a bus captain operated in one shift	Distribution of accidents in 2014-2015 (%)
1	84%
2	13%
3	3%

Accidents by the number of buses which a bus captain operated in one shift

Table 8.8 Accidents by the Number of Buses a Bus Captain Operated in One Shift

Number of buses a bus captain operated in one shift	Distribution of accidents in 2014-2015 (%)
1	47.8%
2	40.4%
3	11.6%
4	0.2%
5	0.1%

8.3 Bus Captain Training and Monitoring

8.3.1 As part of KMB's dedication to provide safe, reliable and comfortable services for our passengers, comprehensive systems of bus captain training and monitoring have been set up in KMB. Elements of defensive driving, good driving attitude and emergency handling are incorporated in various training courses. Driving performance monitoring is carried out with systematic checking by driving instructors and followed up with disciplinary actions if required. Moreover, the new 'Drive Green' hardware and software as referenced in a previous Chapter will also help to identify those bus captains who have a higher incidence of 'harsh braking' on a given route than is normal. This information can be used as to ensure that appropriate proactive feedback is given to a bus captain with aim of promoting improved driving behaviour that will in turn serve to prevent/reduce 'loss of balance' cases (as well as accidents in general).

8.3.2 KMB buses have various safety related features to enhance road and passenger safety. Speed monitoring and limiting devices are already installed or are being installed on buses.

- Since November 2009, laser gun checks have been strengthened in various areas. The pass rate of laser gun checks from May 2014 to Apr 2015 is 99.44%, the frequency of check remains at 12 times per month (including day and night).

- The electronic tachographs are being used to monitor bus captain performance, especially with regard to speeding. The new 'Drive Green' Initiative has not only enhanced environmental management but also bus safety and ride comfort. An electronic tachograph is standard equipment on new buses. At the end of April 2016, a total of 3,845 KMB buses (i.e. 100% of registered fleet) were installed with electronic tachographs; and,

- Real-time Driving Indicators 駕駛提示器 (see above reference to the Drive Green initiative) are being installed in buses from mid 2013 which can help bus captains to utilize the driving skills learnt in the Eco-safe Driving Training Course. As denoted above, the benefits of such Eco-safe driving to the bus captains are:

    1. Reduce the risk of accidents while driving;
    2. Reduce stress levels and enhanced satisfaction of driving; and,
    3. Increase confidence in vehicle control and driving technique.

8.3.3 Details of training provided to new and serving bus captains are given in Annex 8.1.

8.3.4 Bus captains who are involved in serious traffic accidents will be suspended from driving duty and referred to receive professional counselling service. Remedial driving training will also be arranged for them.

8.3.5 To prevent similar traffic accidents from recurring, bus captains who are involved in repeated blameworthy traffic accidents are referred to the Bus Captain Training School to attend training. The training course includes defensive driving concepts, case studies, experience sharing and assessment.

8.3.6 Communication channels with staff and labour unions are well established and these channels facilitate the exchange of views on issues including safety.

8.3.7 As a safety enhancement measures, the Company has appointed a professional counselling service provider to operate a 24-hour Hotline（傾心線）for our staff and their immediate family members, including spouse and children, to raise and discuss any problems or difficulties they may encounter in their daily lives. The purpose is to provide a channel for staff members to relieve their pressure and seek help from independent professional counsellors as they may see fit. The discussions are strictly confidential and contents will not be revealed to the Company. The Company also organises a series of seminars on health and disease prevention for its staff members with the aim of raising their awareness of the importance of healthy living.

8.3.8 Alcoholic Breathing Test of Bus Captains is randomly conducted to control the incidence of driving under influence.

8.3.9 The current system of bus captain training will continue to be reviewed regularly.

8.3.10 The performance monitoring system will continue to uphold driving and safety standards.

8.3.11 A new training module, in the form of classroom discussion led by Driving Instructors of KMB's Bus Captain Training School, has been added to the bus captain training programmes from March 2016. Besides the new bus captains, other in-service bus captains have participated in this "Care for Passenger" classroom discussion when they attend refresher training. To make sure that the "Care for Passenger" message can reach existing bus captains in a timely manner, highlights of this training module has been available on the staff web from April 2016 and bus captains are required to log-on the staff web to go through the content.

8.4 Rostering, Scheduling and Duty Dispatch

8.4.1 KMB follows rostering, scheduling and duty dispatch systems having due regard to the Transport Department Guidelines on Driver Working Hours. The systems also ensure that only bus captains who satisfy training requirements are assigned to duties.

8.4.2 Arrangements are made to assign new bus captains to easy routes in the first few months of appointment to allow for a period of familiarisation and settling in.

8.4.3 In order to help new bus captains adapt to the new working environment, KMB has enhanced and introduced an all-rounded "Buddy Scheme for New Bus Captain" in May 2015. In this enhanced scheme, new bus captains are provided with New Bus Captain Orientation regarding bus operational and mechanical aspects. Experienced bus captains accompany new bus captains with the aim of providing the new bus captains with enhanced 'on the job' support in their early days with the Company. Hotline at the Bus Captain Training School is available for new bus captains to obtain consultation from driving instructors and mentors respectively.

8.4.4 Ongoing adjustment in journey time, layover time and meal break is made with the solicited input from frontline staff and efforts in this regard have been accelerated in recent years.

8.4.5 New scheduling software was implemented in Year 2013. It enhances the Company's ability in ensuring/ monitoring compliance with Driver Working Guidelines.

8.4.6 The percentage of duties in KMB that involve bus or route hopping was (59.1% and 27.0% respectively) as at the end of April 2016.

8.5 Bus Maintenance and Safety Features

8.5.1 All KMB buses are subject to a maintenance and quality assurance system which aims to keep the buses in top conditions. Speed monitoring and limiting devices are already installed on KMB buses.

8.5.2 The buses have many safety related features to enhance road and passenger safety, such as,

- seat belts have been retrofitted at the four seats on the first row on the upper deck ,
- double hand rails have been retrofitted to all double deck buses with straight staircases; and
- to help reduce accidents involving elderly passengers due to 'losing balance on board', the new bus specifications have included continuous railing, extending from the entrance into the saloon (as far as is practicable).

8.5.3 All KMB buses are subject to a stringent maintenance and quality assurance system which keeps the buses in good roadworthy conditions. The existing maintenance and quality assurance system will be continued.

8.5.4 Speed limiting devices have been a standard feature of all KMB buses.

8.5.5 KMB will continue to review and consider the retrofit of safety features as necessary to the vehicles to enhance road and passenger safety.

8.5.6 According to the bus manufacturers, the current bus models available do not have the required structural integrity to have all seats or seats in upper deck seatbelt-enabled. Currently, all SLF buses in KMB already have seatbelts fitted at the "vulnerable" positions, i.e. the exposed seats. It would be a complete bus body structural re-design of the vehicle to have all seats with seatbelts that are currently non-existent in the market. Not only do the standard seats need to be changed to ones with stronger anchorage points and wider pedestal legs, but the overall bus construction would need extensive localized reinforcement along the floor / inter-floor

structure that inevitably render the vehicle unnecessarily heavy, reduced passenger carrying capacity and less fuel efficient for public bus application.

8.6 Promotion of Passenger Safety

8.6.1 Safety awareness among bus captains is promoted by means of in-house videos, safety messages on waybills, internal posters, tool-box talk, and safety tips provided at staff website.

8.6.2 KMB produces its "Bus Captain Safe Driving Handbook" which is posted at staff website for all bus captains currently in its fifth edition (1 March 2016), the handbook includes driving regulations and points to note about safe driving, covering every aspect of a bus captain's daily work. It is aimed at assisting bus captains in establishing a proper safe driving attitude and encouraging them to take all practical steps aimed at achieving safe driving.

8.6.3 Various projects to educate the public and passengers on the safe use of bus services have been undertaken. These include education video, on-board stickers, KMB Facebook and KMB Apps to remind passengers from taking safety precautions.

8.6.4 Education of passengers on the importance of road safety and safety on buses by using the Bus Stop Announcement System ("BSAS") will continue. The safety messages were broadcast in Cantonese, English and Putonghua.

8.6.5 To further enhance passengers' safety awareness when they ride on the buses, a new musical safety video called "Hold the Handrails – Safety First" was launched in November 2014. It was broadcast in Cantonese on the Multi-media On-board (MMOB) system in KMB buses. Passengers were encouraged to hold the handrails to prevent loss of balance.

8.6.6 KMB Facebook and KMB Apps have been used to increase passenger awareness to 'Hold the Handrail'; to be available from March 2016.

8.6.7 Before Boarding: Existing efforts continue to remind passengers to hold the handrails by KMB Inspectors and Bus Stop Assistants at busy locations. Publicity ribbons promoting the message "車廂內緊握扶手" have been worn by KMB staff from March 2016 to catch the eye-balls of the waiting passengers.

8.6.8 While Boarding: A sticker "請緊握扶手" has been posted at a prominent place near the Octopus machine from March 2016 to catch the attention of boarding passengers.

8.6.9 During the Journey: The "請緊握扶手" message has been broadcast via the Bus Stop Announcement System before approaching each and every bus stop on all KMB routes. Re-arrangement of the sound track has started in March 2016.

8.6.10 Preparing to Alight: A sticker "請緊握扶手" has been posted at the exit door frame from March 2016.

8.7 Programmes for Elderly and Persons with Disabilities

8.7.1 To encourage young people to give their seat to passengers in need, KMB's depots regularly receive visits from local youth centres, primary and secondary schools and other educational institutes. In addition to being introduced to the depots' operations, the visitors are informed of the caring facilities in bus compartments, including the priority seats.

8.7.2 Also, KMB's volunteer club, FRIENDS OF KMB, is committed to promoting the message of "Good Passenger - Good Citizen". FRIENDS OF KMB provides voluntary assistance at carnivals organized by District Councils, NGOs and Road Safety Council to enhance public awareness of road safety, offer seats to people in need and to promote safe travel tips for the elderly.

8.7.3 KMB makes use of its bus stop announcement system to broadcast relevant messages in Cantonese, English and Putonghua encouraging passengers to give their seats to those in need.

8.7.4 As part of its efforts to promote a caring culture, KMB broadcasts on all KMB buses fitted with MMOB an educational video, which encourages passengers to hold the handrail and to give their seat to those in need.

8.7.5 Stickers are placed on buses to raise awareness about the need to hold the handrail when travelling on buses.

8.7.6 To promote operational safety and share the experience of safe driving, representatives of the Police were invited to conduct a series of tailor-made Road Safety Lectures.

8.7.7 To further enhance safety awareness among elderly passengers, KMB have launched a series of promotional activities. These include visiting bus stops frequently used by the elderly to remind them to hold handrail whilst riding on buses.

8.7.8 Bus Stop Assistants have been assisting persons in need to find a seat and helping wheelchair users while boarding/alighting starting from May 2016.

8.8 Proposed Target and Other Measures

8.8.1 KMB proposes to use the 3-year average of 2013 to 2015 actual accident involvement rate of 2.88 (defined as the number of buses involved in accidents per million km operated) as a target for the purpose of this Five-Year Plan period. It represents a 9% reduction from the accident rate in 2013, the highest record among 2013-2015.

8.8.2 KMB has created a database of "Driving Tips in Special Attention Areas". The database provides structured instructions and tips on best driving practices for all bus captains driving on particular routes, so that expertise and knowledge of the most experienced bus captains can be effectively transferred to all others. To promote bus captains' awareness of safe driving, all relevant bus routes are listed in the database, supplemented by photos and layout drawings for easy reference.

8.8.3 The existing systems of Safety Bonus and Safety Awards will continue to promote safety awareness among bus captains. Safety awareness will continue to be emphasised in communications as stated above. In addition to the existing individual safe driving award, route-based awards on bus safety will be continued to encourage frontline staff to strive for continual improvement in bus safety performance.

8.8.4 Internal meetings will continue to be held regularly to monitor accident statistics and propose methods of accident reduction. The importance of systematic 'feedback loops' in safety management will be emphasised to ensure that lessons are learned from any incidents that do occur.

8.8.5 KMB will continue to communicate with Transport Department on road safety issues.

8.8.6 On-street monitoring and promotion by inspectors will be conducted in strategic locations on a regular basis to promote safety messages to passengers.

Annex 8.1

A. Regular Training for New Bus Captains

	Training Type	Nature	Duration	Frequency	No. of route / bus type trained
1.	Basic Training	To teach bus driving technique to prepare for Transport Department class 17 licence tests and to equip trainees with the skills required to carry out the duties of a bus captain. Classroom lectures on company rules, passenger safety, accident black spot analysis, emergency handling procedure and concept of quality service. On road training on defensive driving technique, bus type familiarisation and route training (night drive included).	18 days full time (68 hours on road driving practice by each trainee and 18 hours classroom training)	Before posting to duty	2 routes 3-4 bus types
2.	Special Facilities Training	With the assistance of a simulated bus model, bus captains are trained on the operation of Octopus System, Bus Stop Announcement System, Destination Signboard and Fare Display.	Included in Basic Training	Before posting to duty	Not applicable

B. Regular Training for Serving Bus Captains

	Training Type	Nature	Duration	Frequency	No. of route / bus type trained
1.	Driving Enhancement Training	Experienced bus captains are trained on areas of defensive driving techniques to avoid traffic accident as well as advanced skills in bus manoeuvres. Service enhancement training is also included.	1 day full time	For experienced bus captains.	1 route & highway training 1 bus type
2.	Remedial Training	Aimed at bus captains who are found to be inadequate in certain driving areas or service level. The training will specifically tackle these areas until the bus captain reaches an acceptable level before he/she is released to perform normal duties.	1 to 6 days full time	For bus captains who are found to have driving irregularities or away from driving duties for a period of time.	1 route 1 bus type
3.	Route Training	All bus captains will be trained before being posted to a specific route	1 day full time	As needed	1 route 1 bus type
4.	Bus Type Training	All bus captains will be trained before being posted to drive a specific bus type	1 day full time	As needed	1 route 1 bus type

- Training protocols are subject to ongoing review, albeit that the aim will be to continue to do all that is reasonably practicable to ensure the safety and comfort of passengers, staff and other road users at all times

LONG WIN BUS 5-YEAR PLAN

2013-2017

服務為先，顧客為本

For the Service, For the Customer

龍運巴士有限公司
Long Win Bus Company Limited

5337

PRIVATE & CONFIDENTIAL

8. SAFETY REVIEW AND IMPROVEMENT MEASURES IN BUS OPERATION

8.1 Introduction

8.1.1 Safety has always been the number one priority in LWB's operation. Safety is enhanced through the strengthening of training, deployment and performance monitoring as well as improvements in maintenance and bus design. Considerable efforts have also been spent in promotion of safety by passenger education and publicity.

8.1.2 This chapter includes an analysis of the types / causes of accidents for the past two calendar years (2010 and 2011) and the relationship of accident rates with respect to different factors including bus captain age, length of service, length of driving hours before the accident, bus type and etc.

8.1.3 This chapter further discusses the various measures being undertaken to promote safety.

8.2 Analysis of Bus Accidents in the Past Two Calendar Years

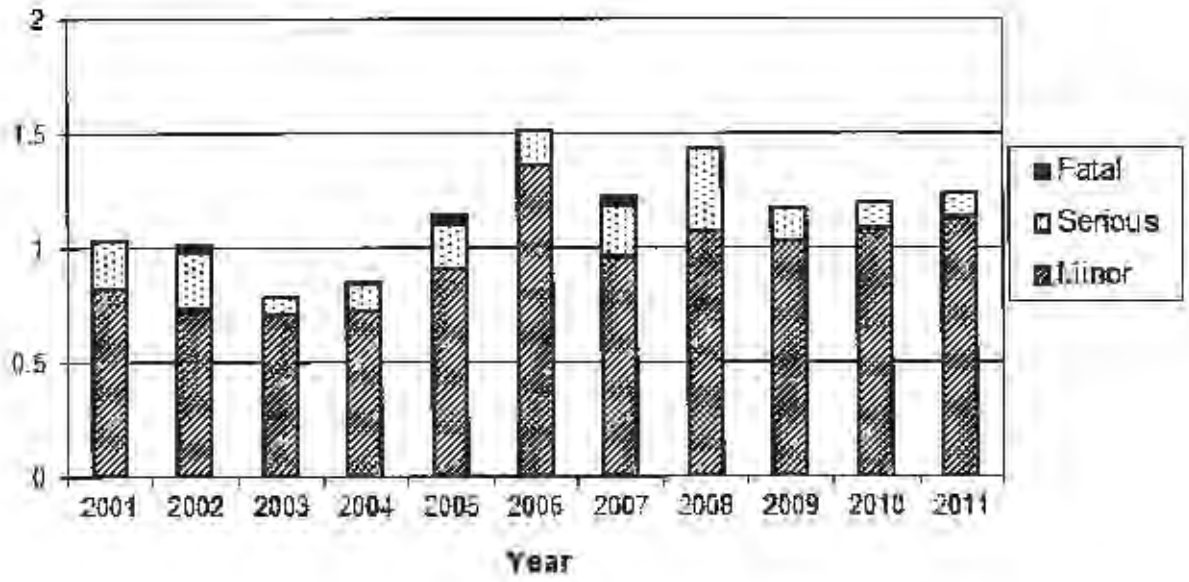
8.2.1 A comprehensive analysis of accidents which occurred from November 2002 to October 2003 was conducted with the findings presented in the report "Review on Safety Arrangements to Enhance Road and Passenger Safety" submitted to Transport Department in February 2004. The analyses are repeated for the two-year period 2010 to 2011. The results are presented below.

5338

Trend of Accident Rates

8.2.2 Accidents rates from 2001 to 2011 are shown in Figure 8.1. There was a mild increase in accident rate in 2011 compared to 2010. For the first 4 months of 2012, LWB's accident rate was 1.19 per million vehicle-km.

Figure 8.1 Number of accidents involving personal injuries and deaths (per million vehicle-km)

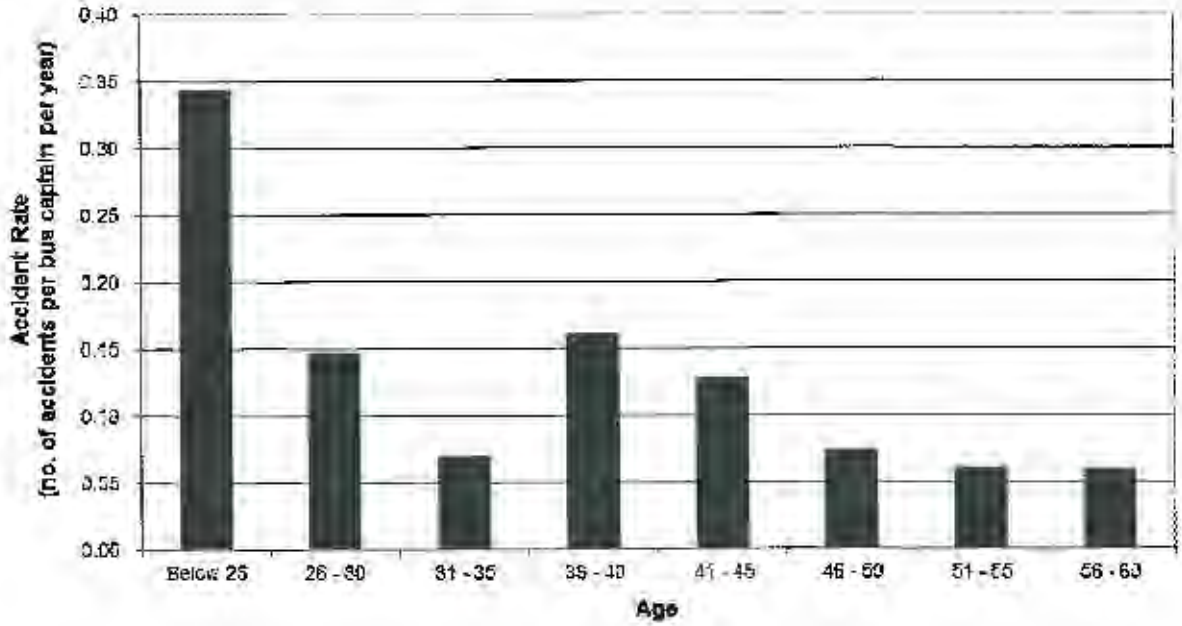


5339

Accident Rate by Bus Captain Age

8.2.3 Results of the analysis of accident rate by bus captain age are shown in Figure 8.2. It is noted that the accident rate for bus captains aged below 26 was relatively higher, due mainly to the small number of bus captains in that particular age group. Otherwise, there is no conclusive evidence to indicate any systematic relationship between accident propensity and bus captain age.

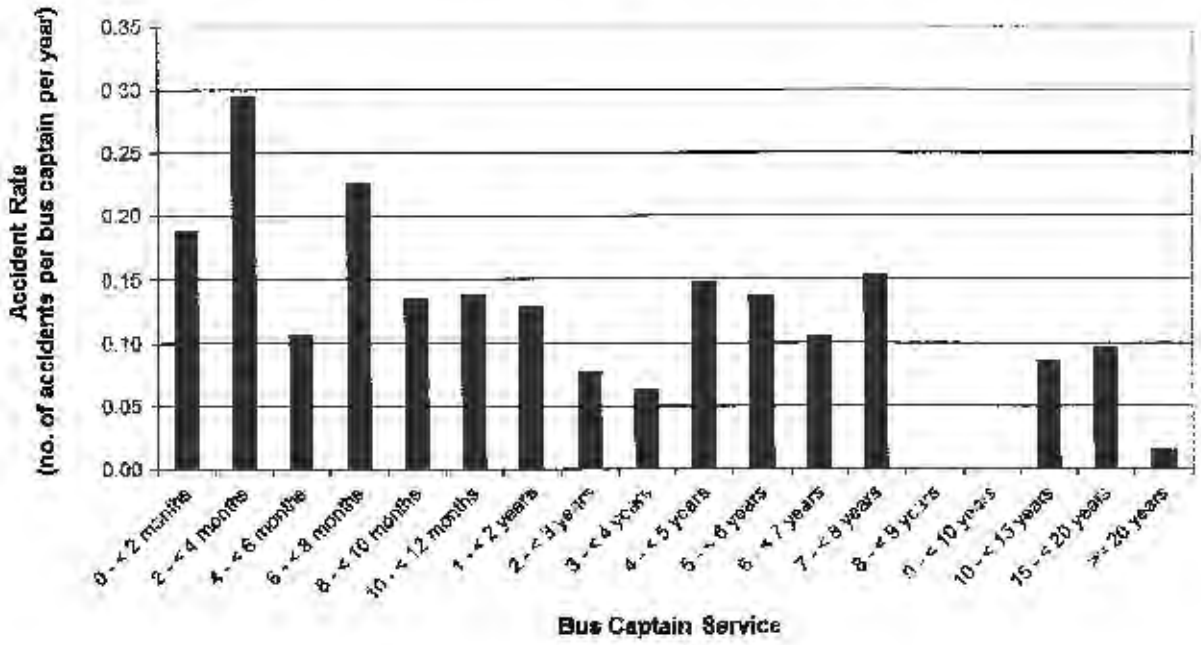
Figure 8.2 Accident Rate by Bus Captain Age



Accident Rate by Year of Service

8.2.4 The results of the analysis on accident rate by experience in terms of service in the Company are shown in Figure 8.3. It is noted that bus captains with service time less than four months had a comparatively higher accident rate than other groups. The main reason for this situation is mainly due to the fact that these bus captains were mostly new recruits who are more prone to accidents in their first few months of service. The accident rate then falls as experience is accumulated.

Figure 8.3 Accident Rate by Bus Captain Service in Company



5341

Accident Rate by Hours on Duty Before Accident

8.2.5 The analysis results shown below in Figure 8.4 indicate that the occurrence of accident had no systematic relationship to the number of hours on duty before the accident.

Figure 8.4 Hours on Duty Before Accident

Accidents by Nature

8.2.6 The results of the analysis of accident nature are shown in Table 8.1 below.

Table 8.1 LWB Accidents by Nature of Accident

Nature of Accident	
Head On/Head Tail Collision	23.9%
Glancing Collision	4.5%
Collision with Vehicle Changing Lane	9.0%
Collision at Junction	1.5%
Collision at Roundabout	3.0%
Collision while Bus/Other Vehicle Reversing	1.5%
Hitting Stationary Object	1.5%
Overturn/Topple	1.5%
Injury to Pedestrian	6.0%
Injury to Boarding/Alighting Passenger	0.0%
Passenger Loss of Balance	41.8%
Injury to Passenger Inside Bus - Other Natures	1.5%
Others	4.5%
Total:	100.0%

8.2.7 The results are expressed in terms of percentage of all accidents during the two years 2010 – 2011. A significant portion of accidents (42%) were due to passenger losing balance. More than half of these cases were caused by the bus braking in traffic. Accidents with injuries sustained as a result of collisions accounted for about 43% of all the accidents.

5342

Accidents by Liability

8.2.8 The breakdown of liability in the two-year period is shown in Table 8.2 below. For 73% of the cases, the bus captain was not blameworthy.

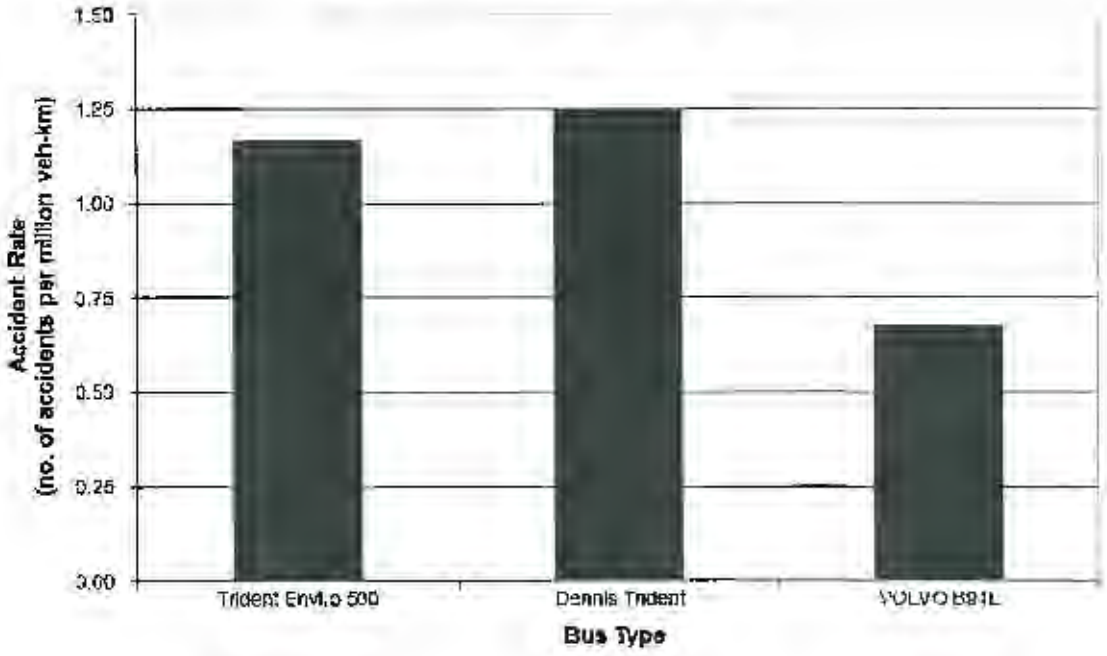
Table 8.2 Accident by Liability of Bus Captain

Liability of Bus Captain	
Negligent	23.9%
Innocent	73.1%
Suspended	3.0%
Total:	100.0%

Accident by Bus Type

8.2.9 The results of the analysis on accidents by bus type are shown in Figure 8.5. As a result of the predominant numbers of Dennis Trident (60.4% as at end 2011) in the fleet of LWB, the findings do not provide conclusive evidence on the relationship between accident potential and bus type.

Figure 8.5 Accident Rate by Bus Type



5343

Duty Deployment with regard to Number of Routes / Buses Operated

8.2.10 The percentage of duties in LWB that involve route or bus hopping is relatively small (13.0% and 36.8% respectively) as at the end of May 2012. Bus captains are deployed to these duties only if they have received the relevant bus route or type training. Our current accident database does not have the information regarding whether the accident occurred during a trip involving route or bus hopping.

Conclusion

8.2.11 The results of the analyses show no systematic relationship between accidents and bus captain age, driving experience in terms of years of service (apart from higher accident potential in the first 4 months of service) and hours on duty before accident. In about 73% of all the accident cases, our bus captains were not blameworthy for the accidents. Loss of balance of passengers on board the buses and passenger injuries sustained as a result of collisions accounted for a significant portion of the accidents.

8.3 Bus Captain Training and Monitoring

8.3.1 Comprehensive systems of bus captain training and monitoring have been adopted in LWB. Elements of defensive driving, good driving attitude and emergency handling are incorporated in the various training courses. Driving performance monitoring is carried out with systematic checking by monitors, driving instructors and mystery passengers, and followed up with disciplinary actions if required.

8.3.2 In order to enhance bus captains' ability to deal with emergency incidents such as "dashing out" of pedestrians onto the carriageway, and to improve bus ride comfort, bus captains of LWB attending Driving Enhancement Training and Remedial Training courses at KMB's Bus Captain Training School from March 2008 onwards will receive driving simulator training during the course.

8.3.3 To enhance the recruitment of suitable new bus captains, apart from driving record checks, a personality test for bus captain applicants has been introduced since the second half of 2007.

8.3.4 Details of training provided to new and serving bus captains are given in Annex 8.1

8.3.5 Communication channels with staff and unions are well established and these channels facilitate exchange of views on issues including safety.

8.3.6 As a safety enhancement measure, KMB has appointed a professional counselling service provider to operate a 24-hour Hotline （傾心線） for its staff and their immediate family members, including spouse and children, to raise and discuss any problems or difficulties they may encounter in their daily lives. The purpose is to provide a channel for staff members to relieve pressure and seek help from independent professional counsellors. This service is applicable to bus captains of LWB. The discussions are strictly confidential and contents will not be revealed to the Company. Staff of LWB can also attend a series of seminars on health and disease prevention organized by KMB for its staff members with the aim of raising their awareness of the importance of healthy living.

8.3.7 Bus drivers who are involved in serious traffic accidents will be suspended from driving duty and referred to receive professional counselling service. Remedial driving training will also be arranged for them.

8.4 Rostering, Scheduling and Duty Dispatch

8.4.1 LWB follows rostering, scheduling and duty dispatch systems which fully comply with the Transport Department Guidelines on Driver Working Hours. The systems also ensure that only bus captains who satisfy training requirements are assigned to duties.

8.4.2 Arrangements are made to assign new bus captains to a fixed route in the first few months of appointment to allow a period of familiarization and settling in.

8.4.3 In order to help new bus captains adapt to the new working environment, an orientation session is organized for new bus captains prior to the first duty reporting day while another service skills refreshing course will be conducted in a month later. On top of this, a "Caring Team" which comprises of some experienced outdoor staff has been set up in early 2011. New bus captains will be introduced with the members

of this team as their mentors for the following months when they report duty on the first working day. The objective of the above measures is to enhance the supports provided to new bus captains, in particular in the early stage of their employment with the company. A hotline set up by the Bus Captain Training School is also available for new bus captains for general enquiry and consultation of driving skills

8.4.4 Ongoing adjustment in journey time, layover, and meal break is made with the solicited input from frontline staff

8.5 Bus Maintenance and Safety Features

8.5.1 All LWB buses are subject to a maintenance and quality assurance system which aims to keep the buses in top conditions.

8.5.2 The buses have various safety-related features to enhance road and passenger safety. Speed monitoring and limiting devices are already installed on all LWB buses.

8.5.3 Seat belts are installed on all seats on double-deck buses licensed before 2005 and on exposed seats on double-deck buses licensed from 2005 onwards.

8.5.4 Interlock system is deployed to ensure exit door is closed before vehicle can move, or no door can be opened when vehicle is in motion.

8.6 Promotion of Passenger Safety

8.6.1 Safety Bonus, Safe Driving Annual Bonus and Safe Driving Award Schemes are adopted in LWB to positively promote safe driving.

8.6.2 Various projects to educate the public and passengers on the safe use of bus services have been undertaken. These include Announcement of Public Interest and education video. In addition, on-board stickers and messages remind passengers of safety precautions.

8.6.3 With effect from mid-March 2009, safety messages on "Please hold the handrail" and "Take care of children / elderly" have been added at appropriate en-route stops (subject to journey distance between stops) to be broadcasted / displayed by the Bus Stop Announcement System to remind passengers taking care of themselves while onboard the bus.

8.6.4 Safety awareness among bus captains is promoted by means of in-house videos, safety messages on waybills, safety reminder booklets, safety tips broadcasts on monitors in duty dispatch offices and the "Bus Captain of the Year Competition" which was organised by KMB.

8.6.5 Continuous monitoring of accident data and review of procedures and systems to enhance safety are being undertaken with internal cross-company meetings with KMB and participation in the Road Safety Forum for Franchised Buses organised by Transport Department.

8.6.6 To demonstrate commitment on safety, a new Safety Policy was established and approved in January 2011. Briefings to all relevant staff on new Safety Policy were completed in February 2011. Frontline management staff will continue to conduct briefings on safety and share the causes of accidents and driving tips to accident blackspots to bus captains periodically. To increase bus captains' awareness on the briefings, Long Win operation management staff will join the safety briefings periodically and collect opinions/ feedbacks from bus captains related to safety and accident prevention. A second edition of "Bus Captain Safe Driving Handbook" was distributed to all bus captains from June 2011. The Handbook aims to remind bus captains to maintain a proper and safe driving attitude, so as to ensure the safety of passengers and other road users.

8.6.7 In line with its tradition of providing safe and reliable bus services, especially for those with special needs, such as the elderly, the disabled, pregnant women and infants, a "priority seats" trial scheme was launched in May 2011. Route E34 had been selected for the trial and the priority seats were equipped with a newly-designed headrest for easy recognition. Through the provision of priority seats, passengers in needs can enjoy a safer and more pleasant bus journey. In view of the positive feedback from the public, Long Win aims to complete fleet-wide adoption of this scheme by the end of 2012.

8.7 Measures to be Taken

8.7.1 The current system of bus captain training will continue with regular review of the training course objectives and contents.

8.7.2 2-days Driving Enhancement Training and Route Training are well in place.

8.7.3 The performance monitoring system will continue to uphold driving and safety standards.

8.7.4 The existing rostering, scheduling and duty dispatch systems are working well and fully comply with Transport Department's requirements. These current systems and practices will be maintained, with ongoing fine-tuning in response to staff feedback and enhancement using available technology.

8.7.5 All LWB buses are subject to a stringent maintenance and quality assurance system which keeps the buses in good roadworthy conditions. The existing maintenance and quality assurance system will be continued.

8.7.6 The electronic tachograph is now standard equipment on new buses. At the end of June 2011, all LWB buses are installed with electronic tachographs, which are used to monitor bus captain performance, especially with regard to speeding.

8.7.7 All LWB buses are equipped with speed limiting devices which limit the speed on level ground to 70 km/hour.

8.7.8 LWB will continue to review and consider the retrofit of safety features as necessary to the vehicles to enhance road and passenger safety.

8.7.9 Alcoholic breathing test had been introduced randomly to bus captains since October 2010 in order to enhance the message of "If you drink, don't drive". This practice will continue to enhance bus captains' safety awareness.

8.7.10 The existing systems of Safety Bonus and Safety Awards will be continued to positively promote safety awareness among bus captains. Safety awareness is emphasized in in-house VCDs, safety messages on waybills, the "Bus Captain of the Year Competition" (organised by KMB), safety bulletins showing accident numbers and accident rates, safety reminder booklet and visual presentations of wreckages of past accidents displayed at Duty Dispatch Offices.

8.7.11 Education of passengers on the importance of road safety and safety on buses will continue in the form of posters and reminders on buses, and using the Bus Stop Announcement System. This will be supplemented by education videos from time to time.

8.7.12 Cross-company meetings with KMB will be held regularly to monitor accident statistics and propose methods of accident reduction.

8.7.13 LWB will continue to participate in the Road Safety Forum for Franchised Buses organised by Transport Department, and will continue to communicate with Transport Department on road safety issues.

8.8 Target Accident Rate

8.8.1 Transport Department requested the Company to provide a target accident involvement rate in terms of number per million vehicle-km operated as a measure to stimulate continuous improvement to the safety of LWB's bus operations via its letter ref. ( ) in BD 79/63-1 dated 24 April 2012.

8.8.2 Having reviewed the average accident involvement rates of the past years, we continue to adopt the rate of 1.43 per million vehicle-km operated as target for this FPP. As mentioned in paragraph 8.2.8 above, 73% of our bus captains were not blameworthy for the accident cases that occurred in 2010 and 2011.

Annex 8.1

A. Regular Training for New Bus Captains*

	Training Type	Nature	Duration	Frequency	No. of route / bus type trained
1.	Basic Training	To teach bus driving technique to prepare for Transport Department Class 17 license test and to equip trainees with the skills required to carry out the duties of a bus captain. Classroom lectures on company rules, passenger safety, accident black spot analysis, emergency handling procedure and concept of quality service. On road training on defensive driving technique, bus familiarization and route training (night drive included).	18 days full time	Before posting to duty	3 routes 3-4 bus types
2.	Special Facilities Training	With the assistance of a simulated bus model, bus captains are trained on the operation of Octopus System, Bus Stop Announcement System, Destination Signboard and Fare Display.	Included in Basic Training	Before posting to duty	Not applicable
3.	Simulation training	Bus Simulator training to provide scenario on potential on-road threats for trainees to rehearse relevant response action.	Included in Basic Training	Before posting to duty	Not applicable

* Training courses are conducted by Bus Captain Training School of KMB.

5350

B. Regular Training for Serving Bus Captains*

	Training Type	Nature	Duration	Frequency	No. of route / bus type trained
1.	Driving Enhancement Training	Experienced bus captains are trained on areas of defensive driving techniques to avoid traffic accident as well as advanced skills in bus maneuvers. Service enhancement training is also included.	1 day full time	For experienced bus captains.	1 route & highway training 1 bus type
2.	Remedial Training	Aimed at bus captains who are found to be inadequate in certain driving areas or service level. The training will specifically tackle these areas until the bus captain reaches an acceptable level before he/she is released to perform normal duties.	1 to 6 days full time	For bus captains who are found to have driving irregularities or away from driving duties for a period of time.	3 routes 1 bus type
3.	Route Training	All bus captains will be trained before being posted to a specific route	1 day full time	As needed	1 route 1 bus type
4.	Bus Type Training	All bus captains will be trained before being posted to drive a specific bus type	1 day full time	As needed	1 route 1 bus type
5.	Safety Enhancement Training	As a corrective measure to prevent similar traffic accident from occurring. It is anticipated that the driving skill and driving attitude of bus captains concerned can be enhanced after receiving the training	1.5 hours	For bus captains involved in traffic accident resulting in serious injury/fatal, or liable traffic accident resulting in slight injury	Not applicable
6.	Simulator training	Bus Simulator training to provide scenario on potential on-road threats for trainees to rehearse relevant response actions.	Included in Driving Enhancement Training and Remedial Training	Included in Driving Enhancement Training and Remedial Training	Not applicable

* Training courses are conducted by Bus Captain Training School of KMB.

5351

LONG WIN BUS 5-YEAR PLAN

2014 - 2018

服務為先，顧客為本

For the Service, For the Customer

5352

龍運巴士有限公司

Long Win Bus Company Limited

PRIVATE & CONFIDENTIAL

8. SAFETY REVIEW AND IMPROVEMENT MEASURES IN BUS OPERATION

8.1 Introduction

8.1.1 Safety has always been the number one priority in LWB's operation. Safety is enhanced through the strengthening of training, deployment and performance monitoring as well as improvements in maintenance and bus design. Considerable efforts have also been spent in promotion of safety by passenger education and publicity.

8.1.2 This chapter includes an analysis of the types / causes of accidents for the past two calendar years (2011 and 2012) and the relationship of accident rates with respect to different factors including bus captain age, length of service, length of driving hours before the accident, bus type and etc.

8.1.3 This chapter further discusses the various measures being undertaken to promote safety.

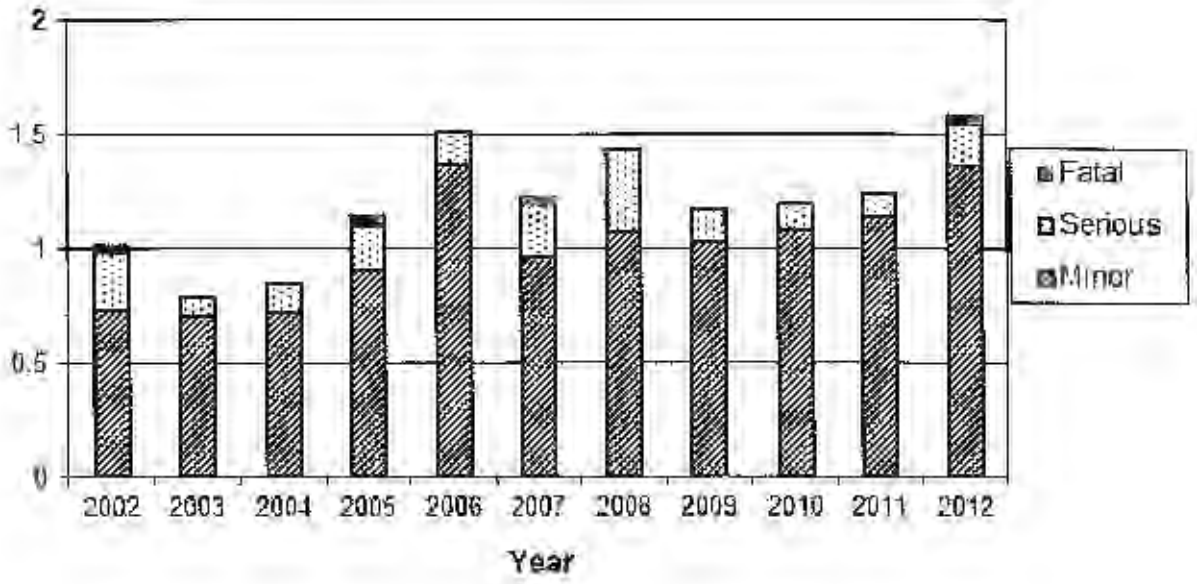
8.2 Analysis of Bus Accidents in the Past Two Calendar Years

8.2.1 A comprehensive analysis of accidents which occurred from November 2002 to October 2003 was conducted with the findings presented in the report "Review on Safety Arrangements to Enhance Road and Passenger Safety" submitted to Transport Department in February 2004. The analyses are repeated for the two-year period 2011 to 2012. The results are presented below.

Trend of Accident Rates

8.2.2 Accidents rates from 2002 to 2012 are shown in Figure 8.1. There was a increase in accident rate in 2012 compared to 2011. The increase of the figure in 2012 is mainly caused by two types of accident nature, which are head on / head tail collision, and collision with vehicle changing lane. Further explanation can be found in Section 8.2.7 and 8.2.8.

Figure 8.1 Number of accidents involving personal injuries and deaths (per million vehicle-km)

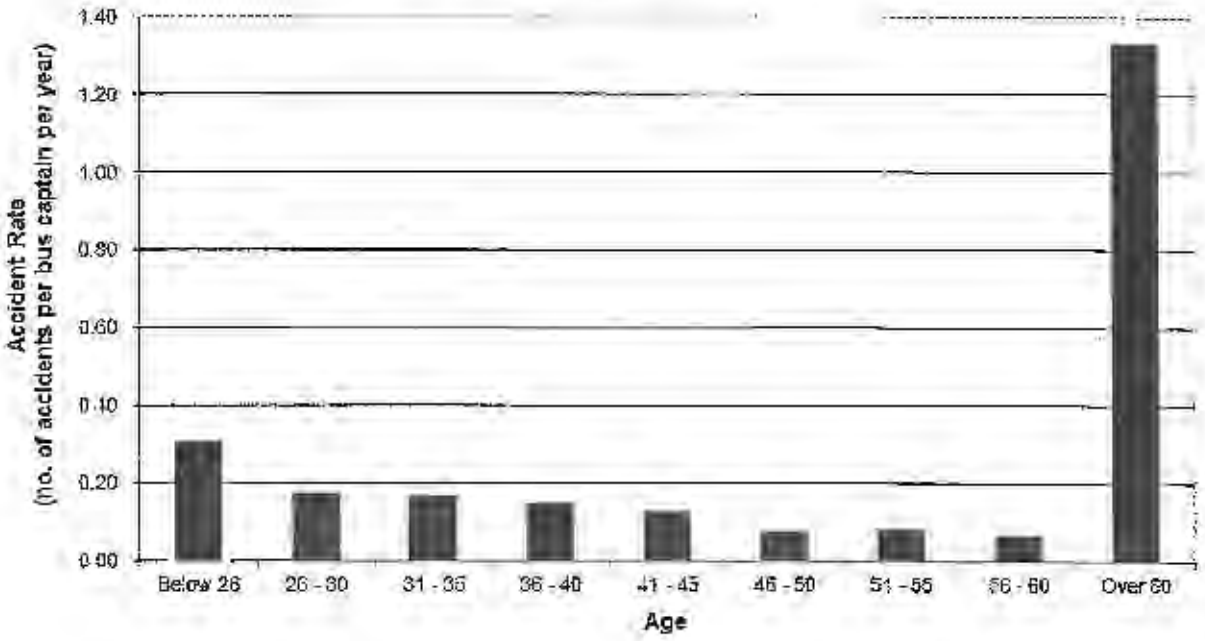


5354

Accident Rate by Bus Captain Age

8.2.3 Results of the analysis of accident rate by bus captain age are shown in Figure 8.2. It is noted that the accident rate for bus captains aged over 60 was relatively higher, due mainly to the small number of bus captains in that particular age group. Otherwise, there is no conclusive evidence to indicate any systematic relationship between accident propensity and bus captain age.

Figure 8.2 Accident Rate by Bus Captain Age

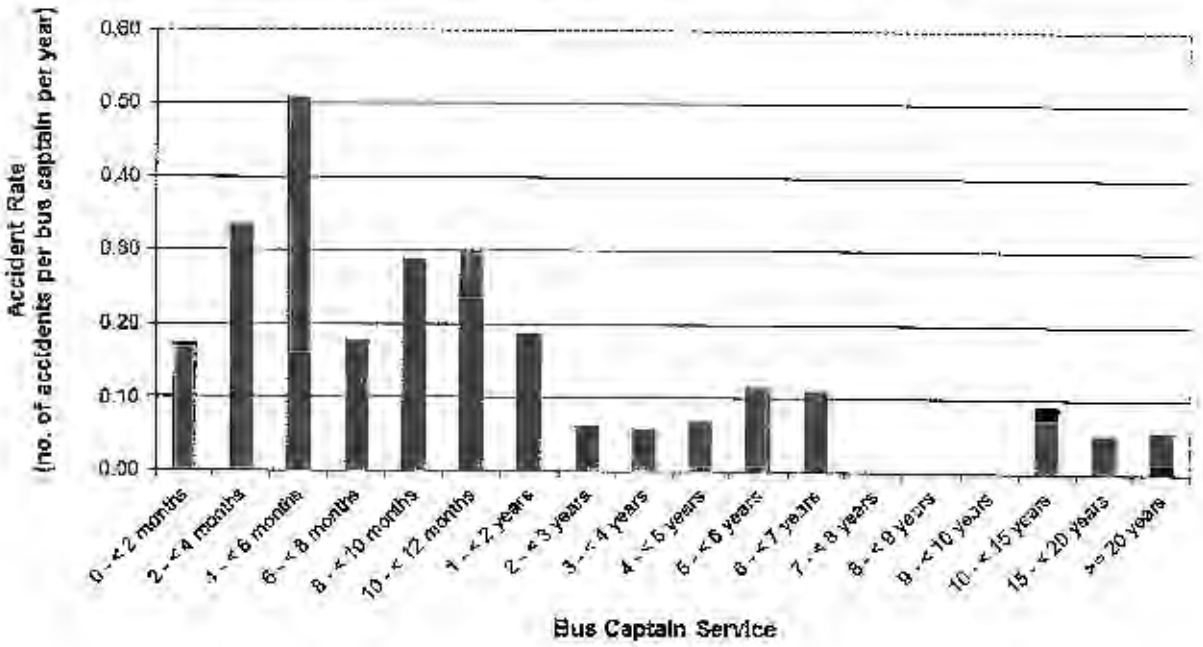


5355

Accident Rate by Year of Service

8.2.4 The results of the analysis on accident rate by experience in terms of service in the Company are shown in Figure 8.3. It is noted that bus captains with service time less than six months had a comparatively higher accident rate than other groups. The main reason for this situation is mainly due to the fact that these bus captains were mostly new recruits who are more prone to accidents in their first few months of service. The accident rate then falls as experience is accumulated.

Figure 8.3 Accident Rate by Bus Captain Service in Company

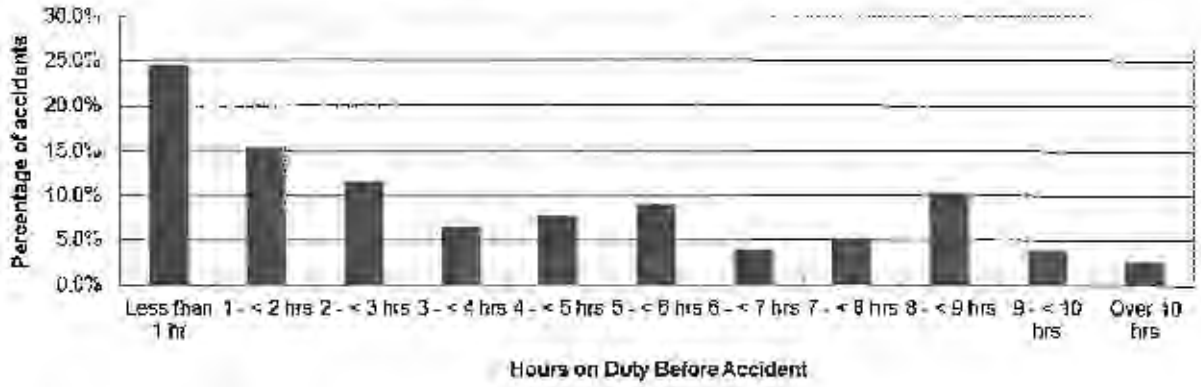


5356

Accident Rate by Hours on Duty Before Accident

8.2.5 The analysis results shown below in Figure 8.4 indicate that the occurrence of accident had no systematic relationship to the number of hours on duty before the accident.

Figure 8.4 Hours on Duty Before Accident



Accidents by Nature

8.2.6 The results of the analysis of accident nature are shown in Table 8.1 below.

Table 8.1 LWB Accidents by Nature of Accident

Nature of Accident	
Head On/Head Tail Collision	20.5%
Glancing Collision	6.4%
Collision with Vehicle Changing Lane	15.4%
Collision at Junction	1.3%
Collision at Roundabout	2.6%
Collision while Bus/Other Vehicle Reversing	1.3%
Hitting Stationary Object	2.6%
Overturn/Topple	1.3%
Injury to Pedestrian	7.7%
Injury to Boarding/Alighting Passenger	0.0%
Passenger Loss of Balance	39.8%
Injury to Passenger Inside Bus - Other Natures	1.3%
Others	0.0%
Total:	100.0%

8.2.7 The results are expressed in terms of percentage of all accidents during the two years 2011 – 2012. A significant portion of accidents (40%) were due to passenger losing balance. More than half of these cases were caused by the bus braking in traffic. A percentage of 38.6% of the accidents in 2012 are related to passenger loss of balance, and the ratio of accidents involving passenger losing balance on stairway and elsewhere except on stairway is 1:2.4.

8.2.8 Accidents with injuries sustained as a result of collisions accounted for about 48% of all the accidents. The head tail collision accidents with bus hit by other vehicle from rear increase from 5.9% in 2011 to 11.4% in 2012, and the collision accidents with changing lane vehicle increase from 8.8% in 2011 to 18.2% in 2012.

Accidents by Liability

8.2.9 The breakdown of liability in the two-year period is shown in Table 8.2 below. For 73% of the cases, the bus captain was not blameworthy.

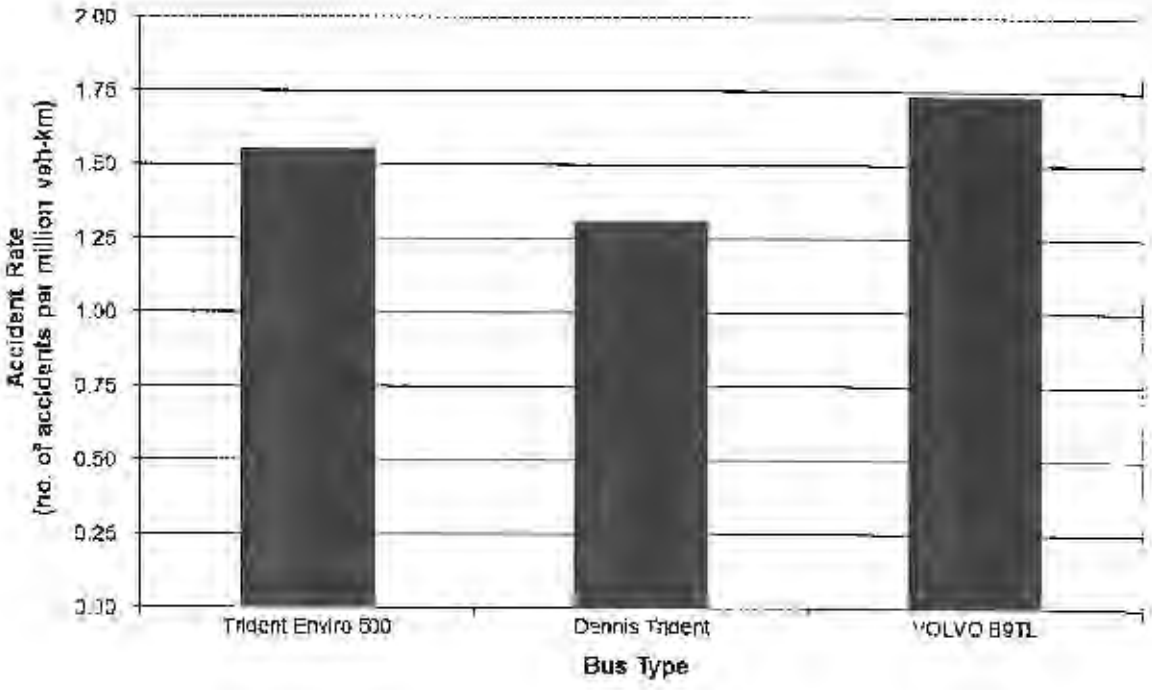
Table 8.2 Accident by Liability of Bus Captain

Liability of Bus Captain	
Negligent	20.5%
Innocent	73.1%
Suspended	6.4%
Total:	100.0%

Accident by Bus Type

8.2.10 The results of the analysis on accidents by bus type are shown in Figure 8.5. As a result of the predominant numbers of Dennis Trident (50.2% as at end 2012) in the fleet of LWB, the findings do not provide conclusive evidence on the relationship between accident potential and bus type.

Figure 8.5 Accident Rate by Bus Type



5358

Duty Deployment with regard to Number of Routes / Buses Operated

8.2.11 The percentage of duties in LWB that involve route or bus hopping is relatively small (14.4% and 35.6% respectively) as at the end of May 2013. Bus captains are deployed to these duties only if they have received the relevant bus route or type training. Our current accident database does not have the information regarding whether the accident occurred during a trip involving route or bus hopping.

Conclusion

8.2.12 The results of the analyses show no systematic relationship between accidents and bus captain age, driving experience in terms of years of service (apart from higher accident potential in the first 6 months of service) and hours on duty before accident. In about 73% of all the accident cases, our bus captains were not blameworthy for the accidents. Loss of balance of passengers on board the buses and passenger injuries sustained as a result of collisions accounted for a significant portion of the accidents.

8.3 Bus Captain Training and Monitoring

8.3.1 Comprehensive systems of bus captain training and monitoring have been adopted in LWB. Elements of defensive driving, good driving attitude and emergency handling are incorporated in the various training courses. Driving performance monitoring is carried out with systematic checking by monitors, driving instructors and mystery passengers, and followed up with disciplinary actions if required.

8.3.2 In order to enhance bus captains' ability to deal with emergency incidents such as "dashing out" of pedestrians onto the carriageway, and to improve bus ride comfort, bus captains of LWB attending Driving Enhancement Training and Remedial Training courses at KMB's Bus Captain Training School from March 2008 onwards will receive driving simulator training during the course.

8.3.3 To enhance the recruitment of suitable new bus captains, apart from driving record checks, a personality test for bus captain applicants has been introduced since the second half of 2007.

8.3.4 Details of training provided to new and serving bus captains are given in Annex 8.1.

8.3.5 Communication channels with staff and unions are well established and these channels facilitate exchange of views on issues including safety.

8.3.6 As a safety enhancement measure, KMB has appointed a professional counselling service provider to operate a 24-hour Hotline （傾心線） for its staff and their immediate family members, including spouse and children, to raise and discuss any problems or difficulties they may encounter in their daily lives. The purpose is to provide a channel for staff members to relieve pressure and seek help from independent professional counsellors. This service is applicable to bus captains of LWB. The discussions are strictly confidential and contents will not be revealed to the Company. Staff of LWB can also attend a series of seminars on health and disease prevention organized by KMB for its staff members with the aim of raising their awareness of the importance of healthy living.

8.3.7 Bus drivers who are involved in serious traffic accidents will be suspended from driving duty and referred to receive professional counselling service. Remedial driving training will also be arranged for them.

8.4 Rostering, Scheduling and Duty Dispatch

8.4.1 LWB follows rostering, scheduling and duty dispatch systems which fully comply with the Transport Department Guidelines on Driver Working Hours. The systems also ensure that only bus captains who satisfy training requirements are assigned to duties.

8.4.2 Arrangements are made to assign new bus captains to a fixed route in the first few months of appointment to allow a period of familiarization and settling in.

8.4.3 In order to help new bus captains adapt to the new working environment, an orientation session is organized for new bus captains prior to the first duty reporting day while another service skills refreshing course will be conducted in a month later. On top of this, a "Caring Team" which comprises of some experienced outdoor staff has been set up in early 2011. New bus captains will be introduced with the members

of this team as their mentors for the following months when they report duty on the first working day. The objective of the above measures is to enhance the supports provided to new bus captains, in particular in the early stage of their employment with the company. A hotline set up by the Bus Captain Training School is also available for new bus captains for general enquiry and consultation of driving skills.

8.4.4 Ongoing adjustment in journey time, layover, and meal break is made with the solicited input from frontline staff.

8.5 Bus Maintenance and Safety Features

8.5.1 All LWB buses are subject to a maintenance and quality assurance system which aims to keep the buses in top conditions.

8.5.2 The buses have various safety-related features to enhance road and passenger safety. Speed monitoring and limiting devices are already installed on all LWB buses.

8.5.3 Seat belts are installed on all seats on double-deck buses licensed before 2005 and on exposed seats on double-deck buses licensed from 2005 onwards.

8.5.4 Interlock system is deployed to ensure exit door is closed before vehicle can move, or no door can be opened when vehicle is in motion.

8.6 Promotion of Passenger Safety

8.6.1 Safety Bonus, Safe Driving Annual Bonus and Safe Driving Award Schemes are adopted in LWB to positively promote safe driving.

8.6.2 Various projects to educate the public and passengers on the safe use of bus services have been undertaken. These include Announcement of Public Interest and education video. In addition, on-board stickers and messages remind passengers of safety precautions.

8.6.3 With effect from mid-March 2009, safety messages on "Please hold the handrail" and "Take care of children / elderly" have been added at appropriate en-route stops (subject to journey distance between stops) to be broadcasted / displayed by the Bus Stop Announcement System to remind passengers taking care of themselves while onboard the bus.

8.6.4 Safety awareness among bus captains is promoted by means of in-house videos, safety messages on waybills, safety reminder booklets, safety tips broadcasts on monitors in duty dispatch offices and the "Bus Captain of the Year Competition" which was organised by KMB.

8.6.5 Continuous monitoring of accident data and review of procedures and systems to enhance safety are being undertaken with internal cross-company meetings with KMB and participation in the Road Safety Forum for Franchised Buses organised by Transport Department.

8.6.6 To demonstrate commitment on safety, a new Safety Policy was established and approved in January 2011. Briefings to all relevant staff on new Safety Policy were completed in February 2011. Frontline management staff will continue to conduct briefings on safety and share the causes of accidents and driving tips to accident blackspots to bus captains periodically. To increase bus captains' awareness on the briefings, Long Win operation management staff will join the safety briefings periodically and collect opinions/ feedbacks from bus captains related to safety and accident prevention. A second edition of "Bus Captain Safe Driving Handbook" was distributed to all bus captains from June 2011. The Handbook aims to remind bus captains to maintain a proper and safe driving attitude, so as to ensure the safety of passengers and other road users.

8.6.7 In line with its tradition of providing safe and reliable bus services, especially for those with special needs, such as the elderly, the disabled, pregnant women and infants, a "priority seats" trial scheme was launched in May 2011. Route E34 had been selected for the trial and the priority seats were equipped with a newly-designed headrest for easy recognition. Through the provision of priority seats, passengers in needs can enjoy a safer and more pleasant bus journey. In view of the positive feedback from the public, LWB have completed fleet-wide adoption of this scheme by the end of 2012.

8.7 Measures to be Taken

8.7.1 The current system of bus captain training will continue with regular review of the training course objectives and contents.

8.7.2 2-days Driving Enhancement Training and Route Training are well in place.

8.7.3 The performance monitoring system will continue to uphold driving and safety standards.

8.7.4 The existing rostering, scheduling and duty dispatch systems are working well and fully comply with Transport Department's requirements. These current systems and practices will be maintained, with ongoing fine-tuning in response to staff feedback and enhancement using available technology.

8.7.5 All LWB buses are subject to a stringent maintenance and quality assurance system which keeps the buses in good roadworthy conditions. The existing maintenance and quality assurance system will be continued.

8.7.6 The electronic tachograph is now standard equipment on new buses. At the end of June 2011, all LWB buses are installed with electronic tachographs, which are used to monitor bus captain performance, especially with regard to speeding.

8.7.7 All LWB buses are equipped with speed limiting devices which limit the speed on level ground to 70 km/hour.

8.7.8 LWB will continue to review and consider the retrofit of safety features as necessary to the vehicles to enhance road and passenger safety.

8.7.9 Alcoholic breathing test had been introduced randomly to bus captains since October 2010 in order to enhance the message of "If you drink, don't drive". This practice will continue to enhance bus captains' safety awareness.

8.7.10 The existing systems of Safety Bonus and Safety Awards will be continued to positively promote safety awareness among bus captains. Safety awareness is emphasized in in-house VCDs, safety messages on waybills, the "Bus Captain of the Year Competition" (organised by KMB), safety bulletins showing accident numbers and accident rates, safety reminder booklet and visual presentations of wreckages of past accidents displayed at Duty Dispatch Offices.

8.7.11 Education of passengers on the importance of road safety and safety on buses will continue in the form of posters and reminders on buses, and using the Bus Stop Announcement System. This will be supplemented by education videos from time to time.

8.7.12 Cross-company meetings with KMB will be held regularly to monitor accident statistics and propose methods of accident reduction.

8.7.13 LWB will continue to participate in the Road Safety Forum for Franchised Buses organised by Transport Department, and will continue to communicate with Transport Department on road safety issues.

8.8 Target Accident Rate

8.8.1 Transport Department requested the Company to provide a target accident involvement rate in terms of number per million vehicle-km operated as a measure to stimulate continuous improvement to the safety of LWB's bus operations via its letter ref. TD BR 79/63-1 dated 2 May 2013.

8.8.2 Having reviewed the average accident involvement rates of the past years, we continue to adopt the rate of 1.43 per million vehicle-km operated as target for this FPP. As mentioned in paragraph 8.2.9 above, 73% of our bus captains were not blameworthy for the accident cases that occurred in 2011 and 2012.

Annex 8.1

A. Regular Training for New Bus Captains*

	Training Type	Nature	Duration	Frequency	No. of route / bus type trained
1.	Basic Training	To teach bus driving technique to prepare for Transport Department Class 1 7 license test and to equip trainees with the skills required to carry out the duties of a bus captain. Classroom lectures on company rules, passenger safety, accident black spot analysis, emergency handling procedure and concept of quality service. On road training on defensive driving technique, bus familiarization and route training (night drive included).	18 days full time	Before posting to duty	3 routes 3-4 bus types
2.	Special Facilities Training	With the assistance of a simulated bus model, bus captains are trained on the operation of Octopus System, Bus Stop Announcement System, Destination Signboard and Fare Display.	Included in Basic Training	Before posting to duty	Not applicable
3.	Simulation training	Bus Simulator training to provide scenario on potential on-road threats for trainees to rehearse relevant response action.	Included in Basic Training	Before posting to duty	Not applicable

* Training courses are conducted by Bus Captain Training School of KMB.

B. Regular Training for Serving Bus Captains*

	Training Type	Nature	Duration	Frequency	No. of route / bus type trained
1.	Driving Enhancement Training	Experienced bus captains are trained on areas of defensive driving techniques to avoid traffic accident as well as advanced skills in bus maneuvers. Service enhancement training is also included.	1 day full time	For experienced bus captains.	1 route & highway training 1 bus type
2.	Remedial Training	Aimed at bus captains who are found to be inadequate in certain driving areas or service level. The training will specifically tackle these areas until the bus captain reaches an acceptable level before he/she is released to perform normal duties.	1 to 6 days full time	For bus captains who are found to have driving irregularities or away from driving duties for a period of time.	3 routes 1 bus type
3.	Route Training	All bus captains will be trained before being posted to a specific route	1 day full time	As needed	1 route 1 bus type
4.	Bus Type Training	All bus captains will be trained before being posted to drive a specific bus type	1 day full time	As needed	1 route 1 bus type
5.	Safety Enhancement Training	As a corrective measure to prevent similar traffic accident from occurring. It is anticipated that the driving skill and driving attitude of bus captains concerned can be enhanced after receiving the training	1.5 hours	For bus captains involved in traffic accident resulting in serious injury/fatal; or liable traffic accident resulting in slight injury	Not applicable
6.	Simulator training	Bus Simulator training to provide scenario on potential on-road threats for trainees to rehearse relevant response actions.	Included in Driving Enhancement Training and Remedial Training	Included in Driving Enhancement Training and Remedial Training	Not applicable

* Training courses are conducted by Bus Captain Training School of KMB.

5366

LONG WIN BUS

5-YEAR PLAN 2015 - 2019

5367

PRIVATE & CONFIDENTIAL

8. SAFETY REVIEW AND IMPROVEMENT MEASURES IN BUS OPERATION

8.1 Introduction

8.1.1 Safety is always the number one priority in LWB's operation. Safety is enhanced through the strengthening of communications, documentation training, deployment and performance monitoring as well as improvements in maintenance and bus design. Considerable efforts have also been spent in promotion of safety by passenger education and publicity.

8.1.2 This chapter includes an analysis of the types / causes of accidents for the past two calendar years (2012 and 2013) and the relationship of accident rates with respect to different factors including bus captain age, length of service, length of driving hours before the accident, bus type and etc.

8.1.3 This chapter further discusses the various measures being undertaken to promote safety.

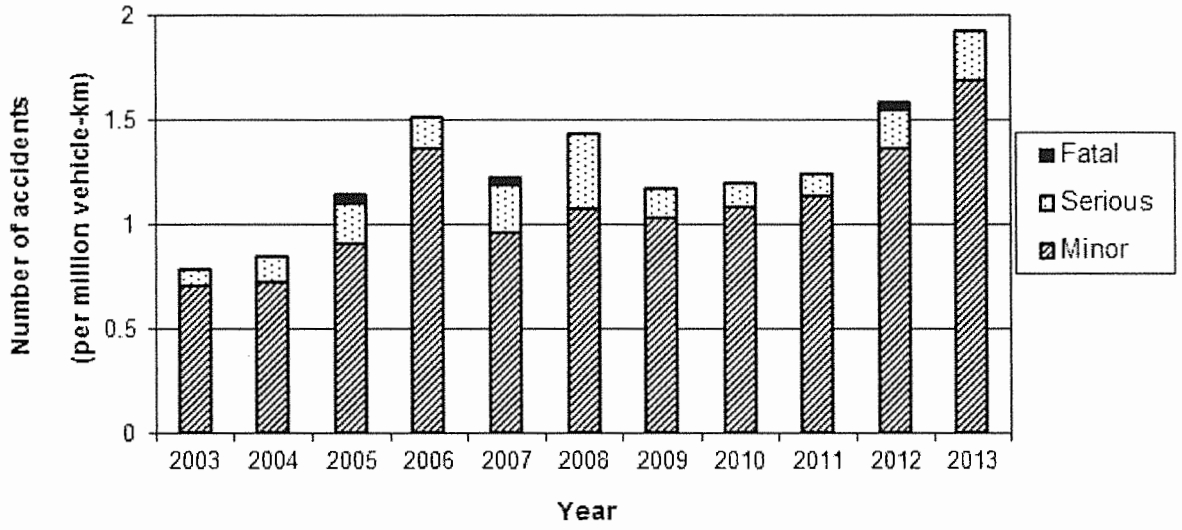
8.2 Analysis of Bus Accidents in the Past Two Calendar Years

8.2.1 The analyses are made for the two-year period 2012 to 2013. The results are presented below.

Trend of Accident Rates

8.2.2 Accidents rates from 2003 to 2013 are shown in Figure 8.1. There was an increase in accident rate in 2013 compared to 2012. The increase of the figure in 2013 is mainly caused by two types of accident nature, which are head on / head tail collision and passenger loss of balance. Further details are shown in paragraph 8.2.6 to 8.2.9.

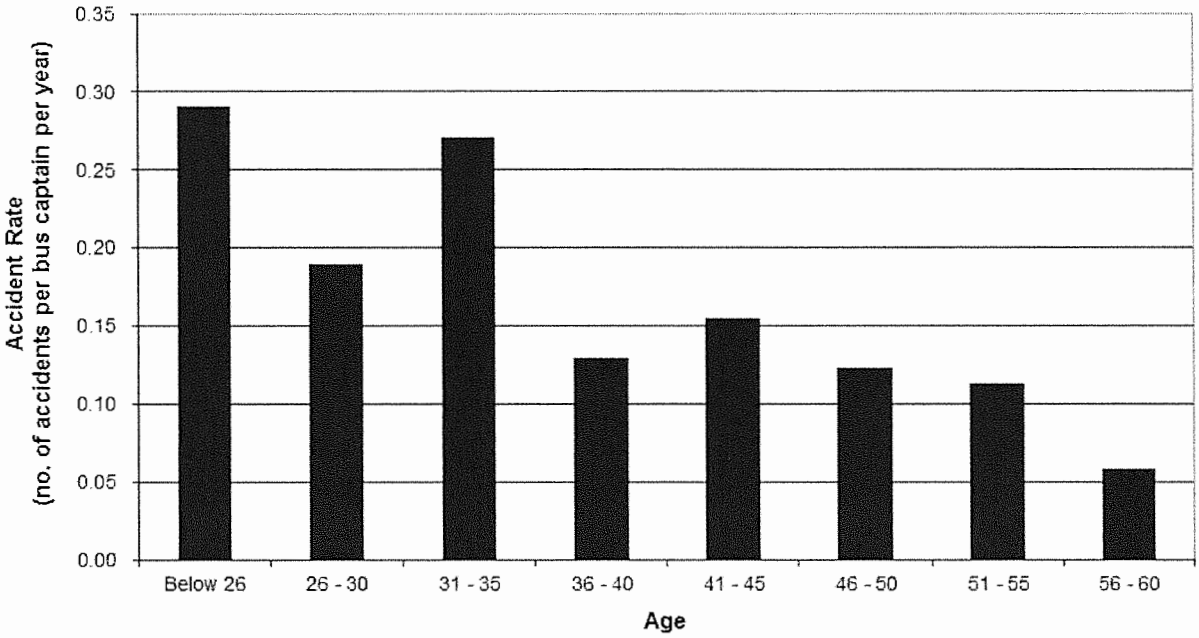
Figure 8.1 Number of accidents involving personal injuries and deaths (per million vehicle-km)



Accident Rate by Bus Captain Age

8.2.3 Results of the analysis of accident rate by bus captain age are shown in Figure 8.2. The results show that younger bus captains are more prone to higher accident rates, but this is mainly due to the fact that these bus captains have relatively less bus driving experience and they are more prone to accidents in their first year of service. This is also shown in the relationship between accident rates and year of services in Section 8.2.4.

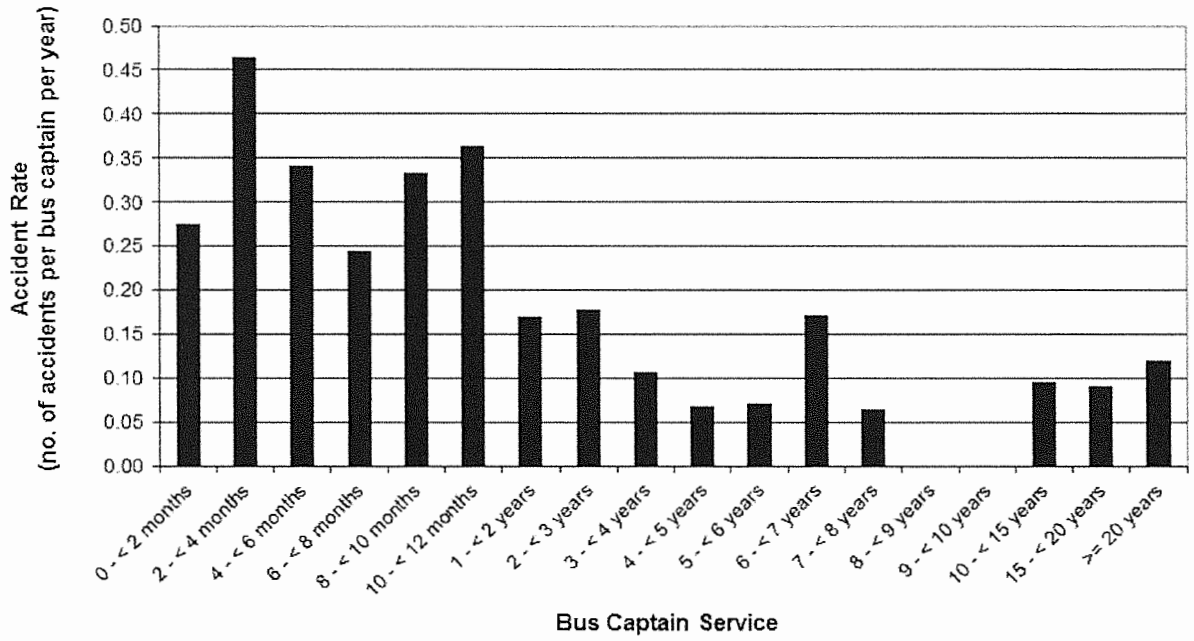
Figure 8.2 Accident Rate by Bus Captain Age



Accident Rate by Year of Service

8.2.4 The results of the analysis on accident rate by experience in terms of service in the Company are shown in Figure 8.3. As mentioned above, the likelihood of an accident occurring in the first year immediately following recruitment is relatively higher. The accident rate then falls as experience is accumulated.

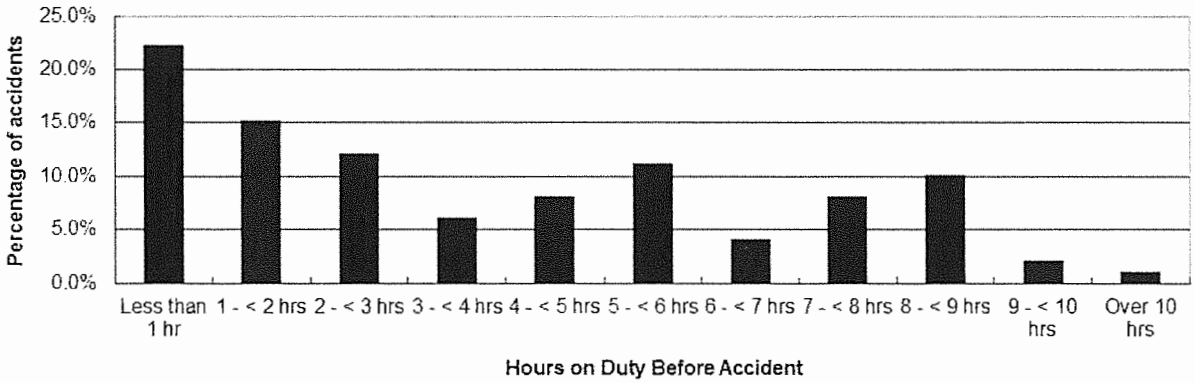
Figure 8.3 Accident Rate by Bus Captain Service in Company



Accident Rate by Hours on Duty Before Accident

8.2.5 The analysis results shown below in Figure 8.4 indicate that the occurrence of accident had no systematic relationship to the number of hours on duty before the accident.

Figure 8.4 Hours on Duty Before Accident



Accidents by Nature

8.2.6 The results of the analysis of accident nature breakdown by our classification for 2012 to 2013 are as follows:

Table 8.1 LWB Accidents by Nature

Nature of Accident	2012	2013
Head On / Head Tail Collision	9	15
Glancing Collision	3	2
Collision with Vehicle - Changing lane	9	6
Collision while Bus / Other Vehicle Reversing	0	0
Collision at Junction	1	2
Collision at Round About	0	0
Hitting Stationary Object	2	3
Overturn/Topple	0	0
Injury To Pedestrian	3	2
Injury To Alighting/Boarding Passenger	0	1
Passenger Loss Of Balance	17	23
Injury To Passenger Inside Bus - Other Nature	0	1
Others	0	0
Total:	44	55

8.2.7 The results of the analysis of accident nature by percentage are shown in Table 8.2 below.

Table 8.2 LWB Accidents by Nature in percentage

Nature of Accident	
Head On/Head Tail Collision	24.3%
Glancing Collision	5.1%
Collision with Vehicle Changing Lane	15.2%
Collision at Junction	0.0%
Collision at Roundabout	3.0%
Collision while Bus/Other Vehicle Reversing	0.0%
Hitting Stationary Object	5.1%
Overturn/Topple	0.0%
Injury to Pedestrian	5.1%
Injury to Boarding/Alighting Passenger	1.0%
Passenger Loss of Balance	40.4%
Injury to Passenger Inside Bus - Other Natures	1.0%
Others	0.0%
Total:	100.0%

8.2.8 The above results are expressed in terms of percentage of all accidents during the two years 2012 – 2013. A significant portion of accidents (40.4%) were due to passenger losing balance. More than half of these cases were caused by the bus braking in traffic. The breakdown of the number of non-collision accident involving passenger casualty is provided as follows:

Table 8.3 Number of Non-collision Franchised Bus Accidents Involving Passenger Casualty

	Number of Non-collision Franchised Bus Accidents Involving Passenger Casualty	Percentage over all accidents involving franchised buses	No. of accidents involving passenger losing balance on stairway (No. of casualty)	No. of accidents involving passenger injured by door (No. of casualty)	No. of accidents involving passenger losing balance elsewhere except on stairway (No. of casualty)
	(i)+(ii)+(iii)		(i)	(ii)	(iii)
2013	25	45.5%	7	1	17

8.2.9 Accidents with injuries sustained as a result of different kinds of collisions accounted for about 48% while accidents with injury to pedestrians accounting for 5.1% of all of the accidents in 2012 – 2013.

Accidents by Liability

8.2.10 The breakdown of liability in the two-year period is shown in Table 8.4 below. For 71% of the cases, the bus captains were not blameworthy.

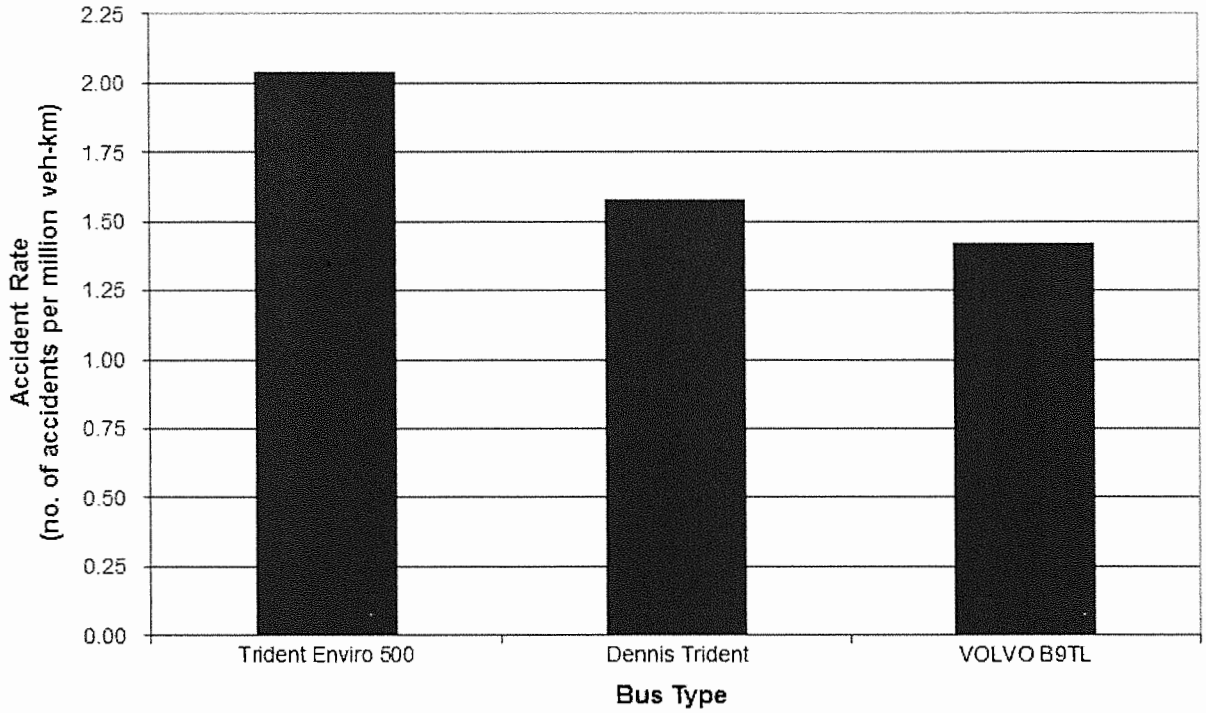
Table 8.4 Accident by Liability of Bus Captain

Liability of Bus Captain	
Negligent	26.3%
Innocent	70.7%
Suspended	3.0%
Total:	100.0%

Accident by Bus Type

8.2.11 The results of the analysis on accidents by bus type are shown in Figure 8.5. As a result of the predominant numbers of Trident Enviro 500 (48.3% as at end 2013) in the fleet of LWB, the findings do not provide conclusive evidence on the relationship between accident potential and bus type.

Figure 8.5 Accident Rate by Bus Type



Duty Deployment with regard to Number of Routes / Buses Operated

8.2.12 The percentage of duties in LWB that involve route or bus hopping is relatively small (17.9% and 35.0% respectively) as at the end of May 2014. Bus captains are deployed to these duties only if they have received the relevant bus route or type training. Our current accident database does not have the information regarding whether the accident occurred during a trip involving route or bus hopping.

Conclusion

8.2.13 The results of the analyses show no systematic relationship between accidents and bus captain age, driving experience in terms of years of service (apart from higher accident potential in the first year of service) and hours on duty before accident. In about 71% of all the accident cases, our bus captains were not blameworthy for the accidents. Loss of balance of passengers on board the buses and passenger injuries sustained as a result of collisions accounted for a significant portion of the accidents.

8.3 Bus Captain Training and Monitoring

8.3.1 As part of LWB's dedication to providing safe, reliable and comfortable services for our passengers, comprehensive systems of bus captain training and monitoring have been adopted in LWB. Elements of defensive driving, good driving attitude and emergency handling are incorporated in the various training courses. Driving performance monitoring is carried out with systematic checking by monitors, driving instructors and mystery passengers, and followed up with disciplinary actions if required.

8.3.2 To enhance road and passenger safety, LWB has implemented various safety-related measures and adopted speed monitoring / speed limiting devices on the buses. Both the electronic tachographs (which had been installed on LWB's entire fleet) and laser gun speed checks have been used to monitor bus captain performance, especially with regard to speed. Real-time Driving Indicators, referred to in the previous chapter and installed on 117 of LWB's buses, provide pro-active feedback to bus captains with the aim of promoting improved driving behaviour and reducing the risk of accidents.

8.3.3 In order to enhance bus captains' ability to deal with emergency incidents such as "dashing out" of pedestrians onto the carriageway, and to improve bus ride comfort, bus captains of LWB attending Driving Enhancement Training and Remedial Training courses at KMB's Bus Captain Training School from March 2008 onwards will receive driving simulator training during the course.

8.3.4 To enhance the recruitment of suitable new bus captains, apart from driving record checks, a personality test for bus captain applicants has been introduced since the second half of 2007.

8.3.5 To prevent similar traffic accidents from recurring, bus captains who are involved in blameworthy traffic accidents resulting in injury are referred to KMB Bus Captain Training School to attend Safety Enhancement Training. The training course includes defensive driving concepts, simulator training, case studies, experience sharing and assessment.

8.3.6 Details of training provided to new and serving bus captains are given in Annex 8.1.

8.3.7 Communication channels with staff and unions are well established and these channels facilitate exchange of views on issues including safety.

8.3.8 As a safety enhancement measure, KMB has appointed a professional counselling service provider to operate a 24-hour Hotline （傾心線） for its staff and their immediate family members, including spouse and children, to raise and discuss any problems or difficulties they may encounter in their daily lives. The purpose is to provide a channel for staff members to relieve pressure and seek help from independent professional counsellors. This service is applicable to bus captains of LWB. The discussions are strictly confidential and contents will not be revealed to the Company. Staff of LWB can also attend a series of seminars on health and disease prevention organized by KMB for its staff members with the aim of raising their awareness of the importance of healthy living.

8.3.9 Bus drivers who are involved in serious traffic accidents will be suspended from driving duty and referred to receive professional counselling service. Remedial driving training will also be arranged for them.

8.4 Rostering, Scheduling and Duty Dispatch

8.4.1 LWB follows rostering, scheduling and duty dispatch systems which fully comply with the Transport Department's "Guidelines on Bus Captain Working Hours, Rest Time and Meal Breaks" ("the Guidelines"). The systems also ensure that only bus captains who satisfy training requirements are assigned to duties. The Guidelines were last revised and implemented in October 2010. LWB completed the review on the duty schedules in the third quarter of 2012.

8.4.2 Arrangements are made to assign new bus captains to a fixed route in the first few months of appointment to allow a period of familiarization and settling in.

8.4.3 In order to help new bus captains adapt to the new working environment, an orientation session is organized for new bus captains prior to the first duty reporting day. On top of this, a "Caring Team" which comprises of some experienced outdoor staff has been set up in early 2011. New bus captains will be introduced with the members of this team as their mentors for the following months when they report duty on the first working day. The objective of the above measures is to enhance the supports provided to new bus captains, in particular in the early stage of their

employment with the company. A hotline set up by the Bus Captain Training School is also available for new bus captains for general enquiry and consultation of driving skills.

8.4.4 Ongoing adjustment in journey time, layover, and meal break is made with the solicited input from frontline staff.

8.5 Bus Maintenance and Safety Features

8.5.1 All LWB buses are subject to a maintenance and quality assurance system which aims to keep the buses in top conditions.

8.5.2 The buses have various safety-related features to enhance road and passenger safety. Speed monitoring and limiting devices are already installed on all LWB buses.

8.5.3 Seat belts are installed on all seats on double-deck buses licensed before 2005 and on exposed seats on double-deck buses licensed from 2005 onwards.

8.5.4 Interlock system is deployed to ensure exit door is closed before vehicle can move, or no door can be opened when vehicle is in motion.

8.5.5 LWB participated in a "priority seats" trial scheme in May 2011 by providing specially-designed priority seats with distinct purple-colour headrests and images of the elderly, pregnant woman, baby and people with disabilities. The trial proved to be successful in promoting a caring culture and raising the safety awareness of the bus captains. Fleet-wide retrofit of the distinct "priority seats" was completed by the end of 2012.

8.6 Promotion of Passenger Safety

8.6.1 Safety Bonus, Safe Driving Annual Bonus and Safe Driving Award Schemes are adopted in LWB to positively promote safe driving.

8.6.2 Various projects to educate the public and passengers on the safe use of bus services have been undertaken. These include Announcement of Public Interest and education video. In addition, on-board stickers and messages remind passengers of safety precautions.

8.6.3 With effect from mid-March 2009, safety messages on "Please hold the handrail" and "Take care of children / elderly" have been added at appropriate en-route stops (subject to journey distance between stops) to be broadcasted / displayed by the Bus Stop Announcement System to remind passengers taking care of themselves while onboard the bus.

8.6.4 Safety awareness among bus captains is promoted by means of in-house videos, safety messages on waybills, safety reminder booklets, safety tips broadcasts on monitors in duty dispatch offices and the "Bus Captain of the Year Competition" which was organised by KMB.

8.6.5 Continuous monitoring of accident data and review of procedures and systems to enhance safety are being undertaken with internal cross-company meetings with KMB and participation in the Road Safety Forum for Franchised Buses organised by Transport Department.

8.6.6 To demonstrate commitment on safety, a new Safety Policy was established and approved in January 2011. Briefings to all relevant staff on new Safety Policy were completed in February 2011. Frontline management staff will continue to conduct briefings on safety and share the causes of accidents and driving tips to accident blackspots to bus captains periodically. To increase bus captains' awareness on the briefings, Long Win operation management staff will join the safety briefings periodically and collect opinions/ feedbacks from bus captains related to safety and accident prevention. A second edition of "Bus Captain Safe Driving Handbook" was distributed to all bus captains from June 2011. The Handbook aims to remind bus captains to maintain a proper and safe driving attitude, so as to ensure the safety of passengers and other road users.

8.6.7 LWB participated in a "priority seats" trial scheme in May 2011 by providing specially-designed priority seats with distinct purple-colour headrests and images of the elderly, pregnant woman, baby and people with disabilities. The trial proved to be successful in promoting a caring culture and raising the safety awareness of the bus captains. Fleet-wide retrofit of the distinct "priority seats" was completed by the end of 2012.

8.6.8 In line with its commitment of providing safe and reliable bus services, especially for those with special needs, such as the elderly, the disabled, pregnant women and infants, a "priority seats" trial scheme was launched in May 2011. Route E34 had been selected for the trial and the priority seats were equipped with a newly-designed headrest for easy recognition. Through the provision of priority seats, passengers in needs can enjoy a safer and more pleasant bus journey. In view of the positive feedback from the public, LWB have completed fleet-wide adoption of this scheme by the end of 2012.

8.7 Measures to be Taken

8.7.1 The current system of bus captain training will continue with regular review of the training course objectives and contents.

8.7.2 2-days Driving Enhancement Training and Route Training are well in place.

8.7.3 The performance monitoring system will continue to uphold driving and safety standards.

8.7.4 The existing rostering and duty dispatch systems are working well and fully comply with Transport Department's requirements. A newly-sourced scheduling software system adopted in 2013 has enhanced the efforts of the Company in ensuring / monitoring full compliance with the Driver's working Guidelines. These current systems and practices will be maintained, with ongoing fine-tuning in response to staff feedback and enhancement using available technology.

8.7.5 All LWB buses are subject to a stringent maintenance and quality assurance system which keeps the buses in good roadworthy conditions. The existing maintenance and quality assurance system will be continued.

8.7.6 The electronic tachograph is now standard equipment on new buses. The equipment installed satisfies Transport Department's requirements for electronic data recording device issued by VSSD dated 17th October 2003. As at the end of June 2014, all LWB buses were installed with electronic tachographs for monitoring bus captain performance, especially with regard to speeding.

8.7.7 Bus Captains of LWB can access the "Driving Trips in Special Attention Area", a database created to provide structured instructions and tips on best driving practices for all bus captains on LWB's bus routes. One advantage of the database is that the expertise and knowledge of the most experienced bus captains can be effectively transferred to all others.

8.7.8 All LWB buses are equipped with speed limiting devices which limit the speed on level ground to 70 km/hour.

8.7.9 LWB will continue to review and consider the retrofit of safety features as necessary to the vehicles to enhance road and passenger safety.

8.7.10 Alcoholic breathing test had been introduced randomly to bus captains since October 2010 in order to enhance the message of "If you drink, don't drive". This practice will continue to enhance bus captains' safety awareness.

8.7.11 10 buses were installed with CCTV system in the first quarter of 2013. The footage from these CCTV cameras will provide objective evidence for accident investigation and encourage positive behavioural change amongst bus captains.

8.7.12 A "Buddy Driver Programme" was launched in the second quarter of 2013. Experienced bus captains are assigned to accompany new bus captains with the aim of providing the new captains with enhanced "on-the-job" support in their early days of employment with the Company.

8.7.13 The existing systems of Safety Bonus and Safety Awards positively promote safety awareness among bus captains. Safety awareness is emphasized in the staff website, safety messages on waybills, the "Bus Captain of the Year Competition" (organised by KMB/LWB), safety bulletins showing accident numbers and accident rates, safety reminder booklet and visual presentations of wreckages of past accidents displayed at Duty Dispatch Offices.

8.7.14 Education of passengers on the importance of road safety and safety on buses will continue in the form of posters and reminders on buses, and using the Bus Stop Announcement System. This will be supplemented by education videos from time to time.

8.7.15 Cross-company meetings with KMB will be held regularly to monitor accident statistics and propose methods of accident reduction.

8.7.16 LWB will continue to participate in the Road Safety Forum for Franchised Buses organised by Transport Department, and will continue to communicate with Transport Department on road safety issues.

8.8 Target Accident Rate

8.8.1 Transport Department requested the Company to provide a target accident involvement rate in terms of number per million vehicle-km operated as a measure to stimulate continuous improvement to the safety of LWB's bus operations vide its letter ref. TD BR 79/63-1 dated 7 April 2014.

8.8.2 Having reviewed the average accident involvement rates of the past years, we propose to use the 3-year average of 2011 to 2013 actual accident involvement rate of 1.58 per million vehicle-km operated as target for this FPP. As mentioned in paragraph 8.2.10 above, 71% of our bus captains were not blameworthy for the accident cases that occurred in 2012 and 2013.

Annex 8.1

A. Regular Training for New Bus Captains*

	Training Type	Nature	Duration	Frequency	No. of route / bus type trained
1.	Basic Training	To teach bus driving technique to prepare for Transport Department Class 17 license test and to equip trainees with the skills required to carry out the duties of a bus captain. Classroom lectures on company rules, passenger safety, accident black spot analysis, emergency handling procedure and concept of quality service. On road training on defensive driving technique, bus familiarization and route training (night drive included).	18 days full time	Before posting to duty	2 routes 3-4 bus types
2.	Special Facilities Training	With the assistance of a simulated bus model, bus captains are trained on the operation of Octopus System, Bus Stop Announcement System, Destination Signboard and Fare Display.	Included in Basic Training	Before posting to duty	Not applicable
3.	Simulation training	Bus Simulator training to provide scenario on potential on-road threats for trainees to rehearse relevant response action.	Included in Basic Training	Before posting to duty	Not applicable

* Training courses are conducted by Bus Captain Training School of KMB.

B. Regular Training for Serving Bus Captains*

	Training Type	Nature	Duration	Frequency	No. of route / bus type trained
1.	Driving Enhancement Training	Experienced bus captains are trained on areas of defensive driving techniques to avoid traffic accident as well as advanced skills in bus maneuvers. Service enhancement training is also included.	1 day full time	For experienced bus captains.	1 route & highway training 1 bus type
2.	Remedial Training	Aimed at bus captains who are found to be inadequate in certain driving areas or service level. The training will specifically tackle these areas until the bus captain reaches an acceptable level before he/she is released to perform normal duties.	1 to 6 days full time	For bus captains who are found to have driving irregularities or away from driving duties for a period of time.	3 routes 1 bus type
3.	Route Training	All bus captains will be trained before being posted to a specific route	1 day full time	As needed	1 route 1 bus type
4.	Bus Type Training	All bus captains will be trained before being posted to drive a specific bus type	1 day full time	As needed	1 route 1 bus type
5.	Safety Enhancement Training	As a corrective measure to prevent similar traffic accident from occurring. It is anticipated that the driving skill and driving attitude of bus captains concerned can be enhanced after receiving the training	1.5 hours	For bus captains involved in traffic accident resulting in serious injury/fatal; or liable traffic accident resulting in slight injury	Not applicable
6.	Simulator training	Bus Simulator training to provide scenario on potential on-road threats for trainees to rehearse relevant response actions.	Included in Driving Enhancement Training and Remedial Training	Included in Driving Enhancement Training and Remedial Training	Not applicable

* Training courses are conducted by Bus Captain Training School of KMB.

龍運巴士
LONG WIN BUS

PRIVATE & CONFIDENTIAL

5-YEAR PLAN 2016-2020

服務為先，顧客為本
For the service, For the customer

5384

8. SAFETY REVIEW AND IMPROVEMENT MEASURES IN BUS OPERATION

8.1 Introduction

8.1.1 Safety is always the number one priority in LWB's operation. Safety is enhanced through the strengthening of communications, documentation, training, deployment and performance monitoring as well as improvements in maintenance and bus design. Considerable efforts have also been made to promote traffic safety by passenger education and publicity.

8.1.2 This chapter includes an analysis of the types / causes of accidents for the past two calendar years (2013 and 2014) and the relationship of accident rates with respect to different factors including bus captain age, length of service, length of driving hours before the accident, bus type, etc.

8.1.3 This chapter further discusses the various measures that have been or are being undertaken to promote safety.

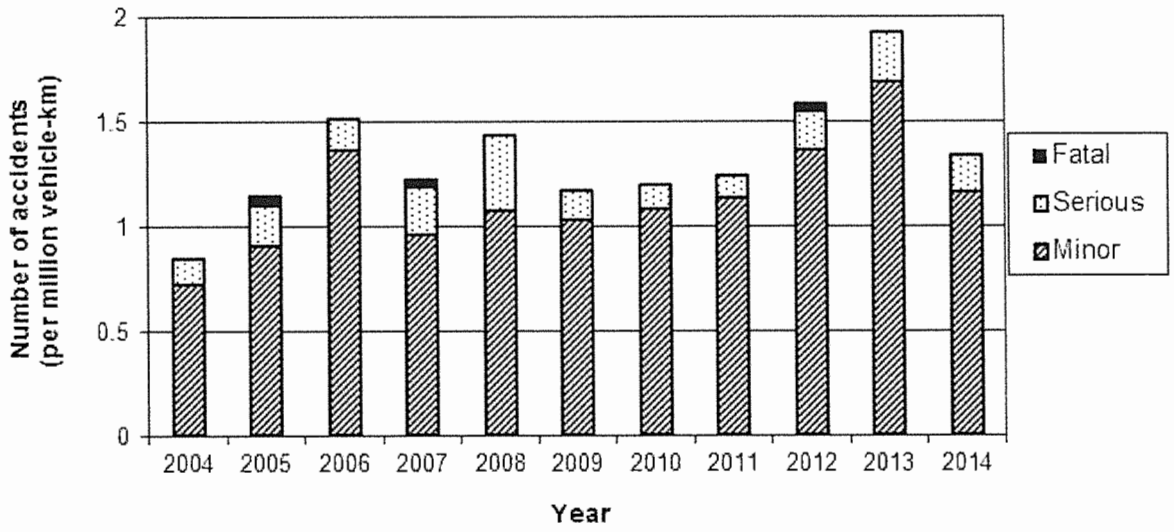
8.2 Analysis of Bus Accidents in the Past Two Calendar Years

8.2.1 The analyses are made for the two-year period 2013 to 2014. The results are presented below.

Trend of Accident Rates

8.2.2 Accidents rates from 2004 to 2014 are shown in Figure 8.1. There was a decrease in accident rate in 2014 compared to 2012 and 2013. The decrease of the figure in 2014 is mainly due to the improvement under two types of accident nature, which are head on / head tail collision and passenger loss of balance. Further details are shown in paragraph 8.2.6 to 8.2.9.

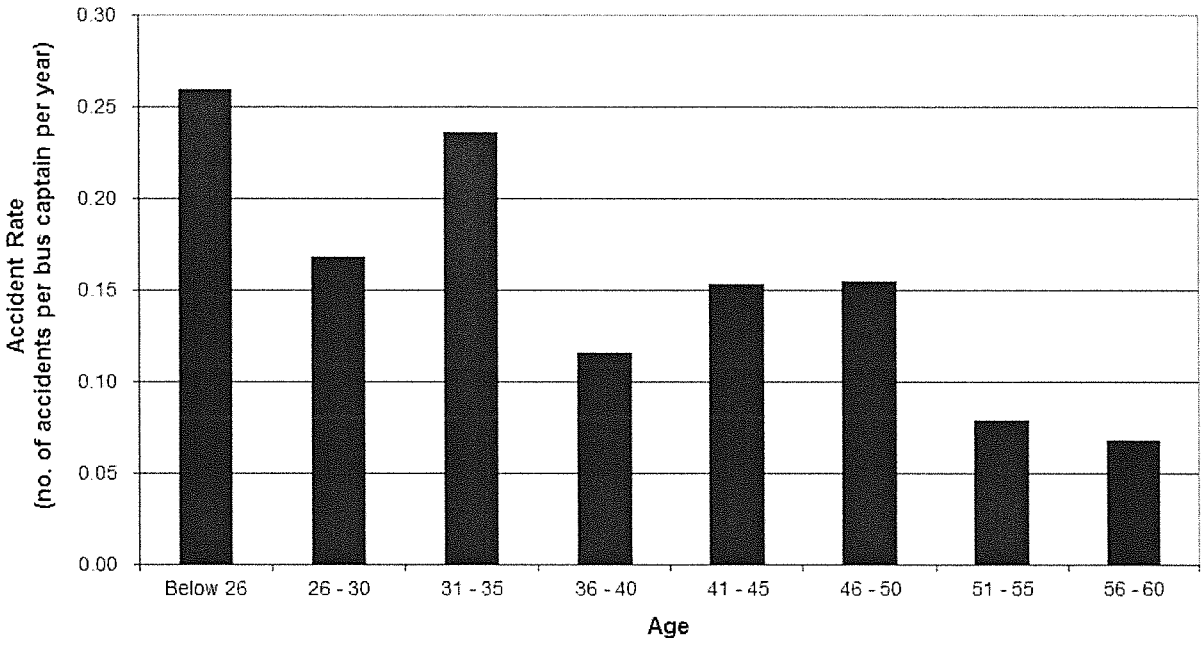
Figure 8.1 Number of accidents involving personal injuries and deaths (per million vehicle-km)



Accident Rate by Bus Captain Age

8.2.3 Results of the analysis of accident rate by bus captain age are shown in Figure 8.2. The results show that younger bus captains have comparatively higher accident rates, but this is mainly due to the fact that these bus captains have relatively less bus driving experience and they are more prone to accidents in their first year of service. This is also shown in the relationship between accident rates and year of services in Section 8.2.4.

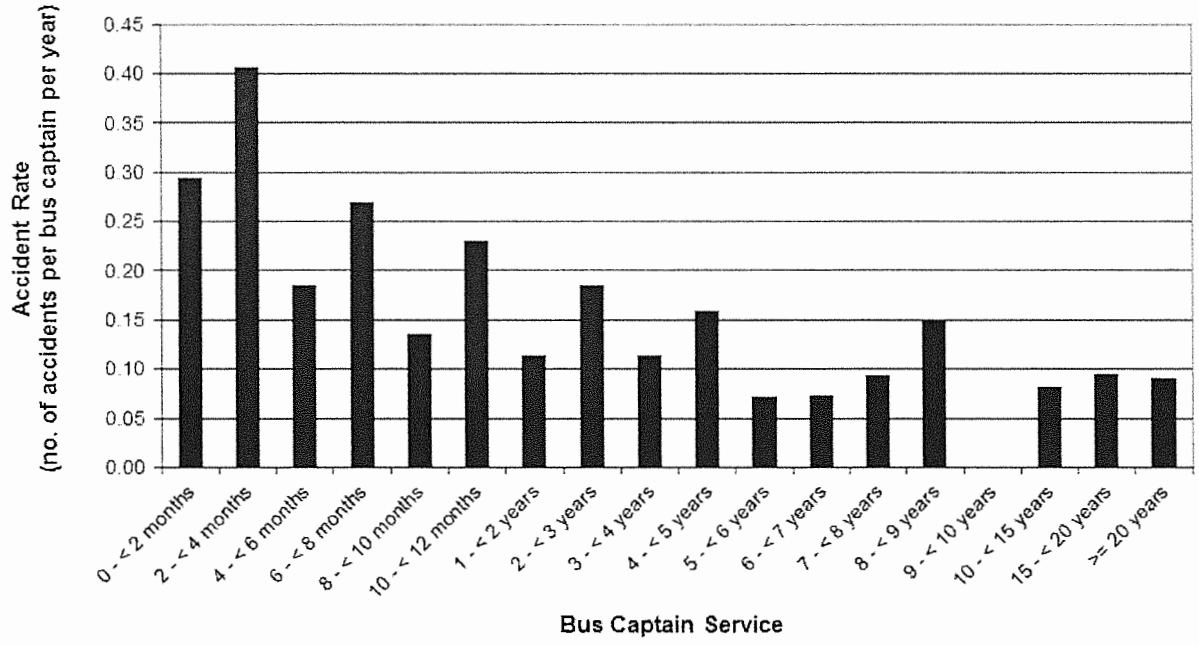
Figure 8.2 Accident Rate by Bus Captain Age



Accident Rate by Year of Service

8.2.4 The results of the analysis on accident rate by experience in terms of service in the Company are shown in Figure 8.3. As mentioned above, the likelihood of an accident occurring in the first year immediately following recruitment is relatively higher. The accident rate then falls as experience is accumulated.

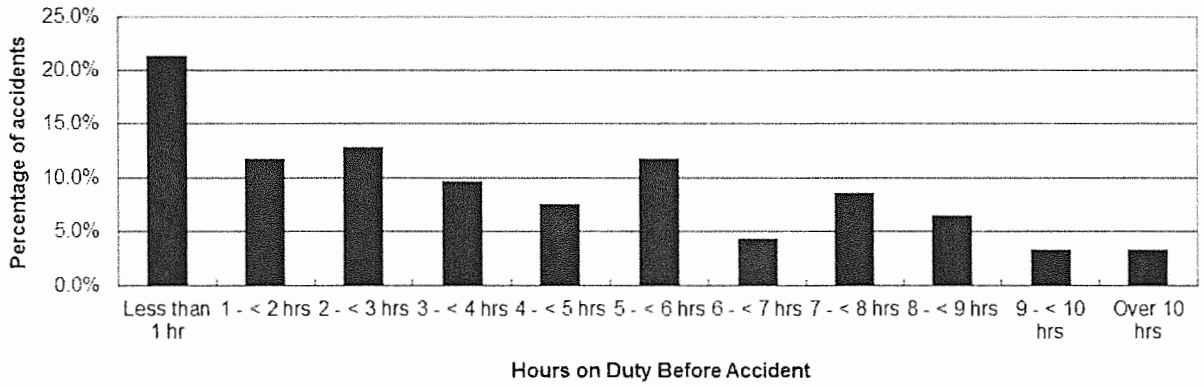
Figure 8.3 Accident Rate by Bus Captain Service in Company



Accident Rate by Hours on Duty Before Accident

8.2.5 The analysis results shown below in Figure 8.4 indicate that the occurrence of accident had no systematic relationship to the number of hours on duty before the accident.

Figure 8.4 Hours on Duty Before Accident



Accidents by Nature

8.2.6 The results of the analysis of accident nature breakdown by our classification for 2013 to 2014 are as follows:

Table 8.1 LWB Accidents by Nature

Nature of Accident	2013	2014
Head On / Head Tail Collision	15	6
Glancing Collision	2	0
Collision with Vehicle - Changing lane	6	4
Collision while Bus / Other Vehicle Reversing	0	1
Collision at Junction	2	2
Collision at Roundabout	0	0
Hitting Stationary Object	3	1
Overturn/Topple	0	0
Injury To Pedestrian	2	5
Injury To Alighting/Boarding Passenger	1	1
Passenger Loss Of Balance	23	17
Injury To Passenger Inside Bus - Other Nature	1	1
Others	0	1
Total:	55	39

8.2.7 The results of the analysis of accident nature by percentage are shown in Table 8.2 below.

Table 8.2 LWB Accidents by Nature in percentage

Nature of Accident	
Head On / Head Tail Collision	22.4%
Glancing Collision	2.1%
Collision with Vehicle - Changing lane	10.6%
Collision while Bus / Other Vehicle Reversing	1.1%
Collision at Junction	4.3%
Collision at Roundabout	0.0%
Hitting Stationary Object	4.3%
Overturn/Topple	0.0%
Injury To Pedestrian	7.5%
Injury To Alighting/Boarding Passenger	2.1%
Passenger Loss Of Balance	42.6%
Injury To Passenger Inside Bus - Other Nature	2.1%
Others	1.1%
Total:	100.0%

8.2.8 The above results are expressed in terms of percentage of all accidents during the two years 2013 – 2014. A significant portion of accidents (42.6%) were due to passenger losing balance. More than half of these cases were caused by the bus braking in traffic. The breakdown of the number of non-collision accident involving passenger casualty is provided as follows:

Table 8.3 Number of Non-collision Franchised Bus Accidents Involving Passenger Casualty

	Number of Non-collision Franchised Bus Accidents Involving Passenger Casualty	Percentage over all accidents involving franchised buses	No. of accidents involving passenger losing balance on stairway (No. of casualty)	No. of accidents involving passenger injured by door (No. of casualty)	No. of accidents involving passenger losing balance elsewhere except on stairway (No. of casualty)
	(i)+(ii)+(iii)		(i)	(ii)	(iii)
2014	19	48.7%	3	1	15

8.2.9 Accidents with injuries sustained as a result of different kinds of collisions accounted for about 41% while accidents with injury to pedestrians accounting for 7.5% of all of the accidents in 2013 – 2014.

Accidents by Liability

8.2.10 The breakdown of liability in the two-year period is shown in Table 8.4 below. For 71% of the cases, the bus captains were not blameworthy.

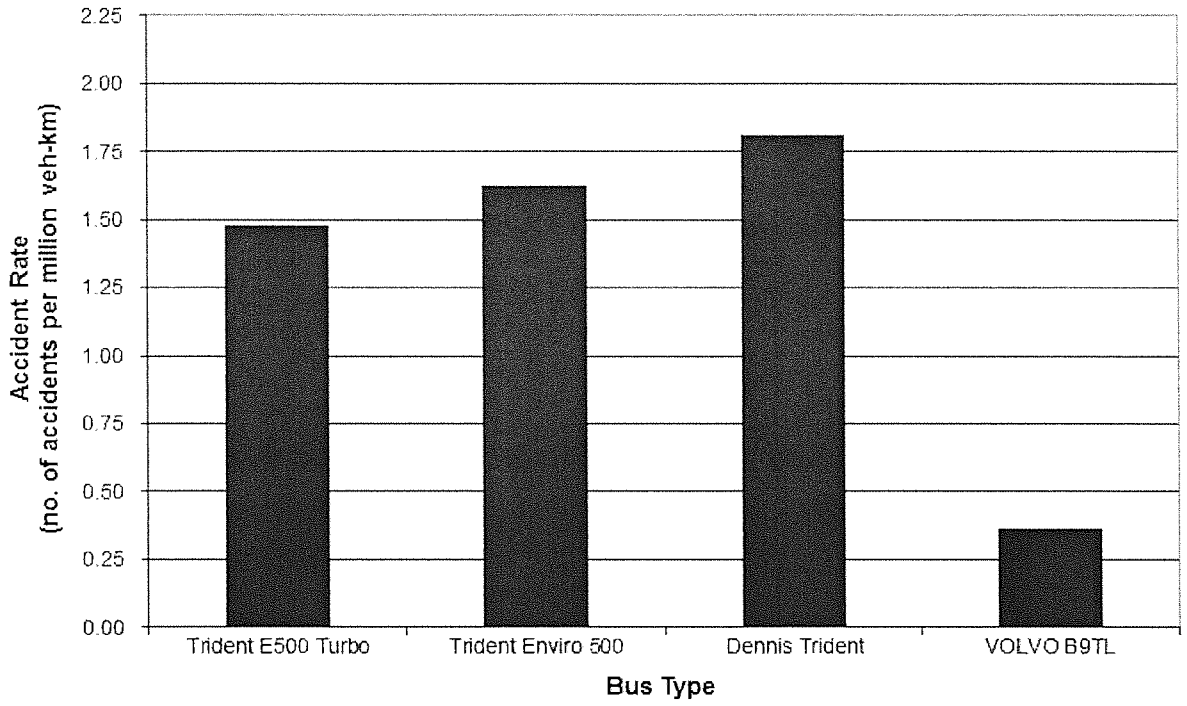
Table 8.4 Accident by Liability of Bus Captain

Liability of Bus Captain	
Negligent	27.7%
Innocent	71.3%
Suspended	1.0%
Total:	100.0%

Accident by Bus Type

8.2.11 The results of the analysis on accidents by bus type are shown in Figure 8.5. As a result of the predominant numbers of Trident Enviro 500 and Trident E500 Turbo (68.7% as at end 2014) in the fleet of LWB, the findings do not provide conclusive evidence on the relationship between accident potential and bus type.

Figure 8.5 Accident Rate by Bus Type



Duty Deployment with regard to Number of Routes / Buses Operated

8.2.12 The percentage of duties in LWB that involve route or bus hopping is relatively small (23.2% and 33.8% respectively) as at the end of May 2015. Bus captains are deployed to these duties only if they have received the relevant bus route or type training. Our current accident database does not have the information regarding whether the accident occurred during a trip involving route or bus hopping.

Conclusion

8.2.13 The results of the analyses show no systematic relationship between accidents and bus captain age, driving experience in terms of years of service (apart from higher accident potential in the first year of service) and hours on duty before accident. In about 71% of all the accident cases, our bus captains were not blameworthy for the accidents. Loss of balance of passengers on board the buses and passenger injuries sustained as a result of collisions accounted for a significant portion of the accidents.

8.3 Bus Captain Training and Monitoring

8.3.1 As part of LWB's dedication to providing safe, reliable and comfortable services for our passengers, comprehensive systems of bus captain training and monitoring have been adopted in LWB. Elements of defensive driving, good driving attitude and emergency handling are incorporated in the various training courses. Driving performance monitoring is carried out with systematic checking by monitors, driving instructors and mystery passengers, and followed up with disciplinary actions if required.

8.3.2 To enhance road and passenger safety, LWB has implemented various safety-related measures and adopted speed monitoring / speed limiting devices on the buses. Both the electronic tachographs (which had been installed on LWB's entire fleet) and laser gun speed checks have been used to monitor bus captain performance, especially with regard to speed. Real-time Driving Indicators, referred to in the previous chapter and installed on full fleet of 184 LWB buses, provide pro-active feedback to bus captains with the aim of promoting improved driving behaviour and reducing the risk of accidents.

8.3.3 To enhance the recruitment of suitable new bus captains, apart from driving record checks, a personality test for bus captain applicants has been introduced since the second half of 2007.

8.3.4 To prevent similar traffic accidents from recurring, bus captains who are involved in blameworthy traffic accidents resulting in injury are referred to KMB Bus Captain Training School to attend Safety Enhancement Training. The training course includes defensive driving concepts, case studies, experience sharing and assessment.

8.3.5 Details of training provided to new and serving bus captains are given in Annex 8.1.

8.3.6 Communication channels with staff and unions are well established and these channels facilitate exchange of views on issues including safety.

8.3.7 As a safety enhancement measure, KMB has appointed a professional counselling service provider to operate a 24-hour Hotline （傾心線） for its staff and their immediate family members, including spouse and children, to raise and discuss

any problems or difficulties they may encounter in their daily lives. The purpose is to provide a channel for staff members to relieve pressure and seek help from independent professional counsellors. This service is applicable to bus captains of LWB. The discussions are strictly confidential and contents will not be revealed to the Company. Staff of LWB can also attend a series of seminars on health and disease prevention organized by KMB for its staff members with the aim of raising their awareness of the importance of healthy living.

8.3.8 Bus drivers who are involved in serious traffic accidents will be suspended from driving duty and referred to receive professional counselling service. Remedial driving training as referred to in 8.3.4 above will also be arranged for them.

8.4 Rostering, Scheduling and Duty Dispatch

8.4.1 LWB follows rostering, scheduling and duty dispatch systems which fully comply with the Transport Department's "Guidelines on Bus Captain Working Hours, Rest Time and Meal Breaks" ("the Guidelines"). The systems also ensure that only bus captains who satisfy training requirements are assigned to duties. The Guidelines were last revised and implemented in October 2010. LWB completed the review on the duty schedules in the third quarter of 2012.

8.4.2 Arrangements are made to assign new bus captains to a fixed route in the first few months of appointment to allow a period of familiarization and settling in.

8.4.3 In order to help new bus captains adapt to the new working environment, an orientation session is organized for new bus captains prior to the first duty reporting day. On top of this, a "Caring Team" which comprises of some experienced outdoor staff has been set up in early 2011. New bus captains will be introduced with the members of this team as their mentors for the following months when they report duty on the first working day. The objective of the above measures is to enhance the supports provided to new bus captains, in particular in the early stage of their employment with the company. A hotline set up by the Bus Captain Training School is also available for new bus captains for general enquiry and consultation of driving skills.

8.4.4 Ongoing adjustment in journey time, layover, and meal break is made with the solicited input from frontline staff.

8.5 Bus Maintenance and Safety Features

8.5.1 All LWB buses are subject to a maintenance and quality assurance system which aims to keep the buses in top conditions.

8.5.2 The buses have various safety-related features to enhance road and passenger safety. Speed monitoring and limiting devices are already installed on all LWB buses.

8.5.3 Seat belts are installed on all seats on double-deck buses licensed before 2005 and on exposed seats on double-deck buses licensed from 2005 onwards.

8.5.4 Interlock system is deployed to ensure exit door is closed before vehicle can move, or no door can be opened when vehicle is in motion.

8.5.5 Since the end of 2012, all LWB buses have provided specially-designed "priority seats" with distinct purple-colour headrests and images of the elderly, pregnant woman, baby and people with disabilities. The measure proved to be successful in promoting a caring culture and raising the safety awareness of the bus captains.

8.6 Promotion of Passenger Safety

8.6.1 Safety Bonus, Safe Driving Annual Bonus and Safe Driving Award Schemes are adopted in LWB to positively promote safe driving.

8.6.2 Various projects to educate the public and passengers on the safe use of bus services have been undertaken. These include Announcement of Public Interest and education video. In addition, on-board stickers and messages remind passengers of safety precautions.

8.6.3 With effect from mid-March 2009, safety messages on "Please hold the handrail" and "Take care of children / elderly" have been added at appropriate en-route stops (subject to journey distance between stops) to be broadcasted / displayed by the Bus Stop Announcement System to remind passengers taking care of themselves while onboard the bus.

8.6.4 Safety awareness among bus captains is promoted by means of in-house videos, safety messages on waybills, safety reminder booklets, safety tips broadcasts on monitors in duty dispatch offices and the "Bus Captain of the Year Competition" which was organised by KMB.

8.6.5 Continuous monitoring of accident data and review of procedures and systems to enhance safety are being undertaken with internal cross-company meetings with KMB and participation in the Road Safety Forum for Franchised Buses organised by Transport Department.

8.6.6 To demonstrate commitment on safety, a new Safety Policy was established and approved in January 2011. Briefings to all relevant staff on new Safety Policy were completed in February 2011. Frontline management staff will continue to conduct briefings on safety and share the causes of accidents and driving tips to accident blackspots to bus captains periodically. To increase bus captains' awareness on the briefings, Long Win operation management staff will join the safety briefings periodically and collect opinions/ feedbacks from bus captains related to safety and accident prevention. A second edition of "Bus Captain Safe Driving Handbook" was distributed to all bus captains from June 2011. The Handbook aims to remind bus captains to maintain a proper and safe driving attitude, so as to ensure the safety of passengers and other road users.

8.6.7 LWB participated in a "priority seats" trial scheme in May 2011 by providing specially-designed priority seats with distinct purple-colour headrests and images of the elderly, pregnant woman, baby and people with disabilities. The trial proved to be successful in promoting a caring culture and raising the safety awareness of the bus captains. Fleet-wide retrofit of the distinct "priority seats" was completed by the end of 2012.

8.6.8 In line with its commitment of providing safe and reliable bus services, especially for those with special needs, such as the elderly, the disabled, pregnant women and infants, a "priority seats" trial scheme was launched in May 2011. Route E34 had been selected for the trial and the priority seats were equipped with a newly-

designed headrest for easy recognition. Through the provision of priority seats, passengers in needs can enjoy a safer and more pleasant bus journey. In view of the positive feedback from the public, LWB have completed fleet-wide adoption of this scheme by the end of 2012.

8.7 Measures to be Taken

8.7.1 The current system of bus captain training will continue with regular review of the training course objectives and contents.

8.7.2 1-day Driving Enhancement Training and Route Training are well in place.

8.7.3 The performance monitoring system will continue to uphold driving and safety standards.

8.7.4 The existing rostering and duty dispatch systems are working well and fully comply with Transport Department's requirements. A newly-sourced scheduling software system adopted in 2013 has enhanced the efforts of the Company in ensuring / monitoring full compliance with the Driver's working Guidelines. These current systems and practices will be maintained, with ongoing fine-tuning in response to staff feedback and enhancement using available technology.

8.7.5 All LWB buses are subject to a stringent maintenance and quality assurance system which keeps the buses in good roadworthy conditions. The existing maintenance and quality assurance system will be continued.

8.7.6 The electronic tachograph is now standard equipment on new buses. The equipment installed satisfies Transport Department's requirements for electronic data recording device issued by VSSD dated 17th October 2003. As at the end of June 2015, all LWB buses were installed with electronic tachographs for monitoring bus captain performance, especially with regard to speeding.

8.7.7 Bus Captains of LWB can access the "Driving Trips in Special Attention Area", a database created to provide structured instructions and tips on best driving practices for all bus captains on LWB's bus routes. One advantage of the database is that the expertise and knowledge of the most experienced bus captains can be effectively transferred to all others.

8.7.8 All LWB buses are equipped with speed limiting devices which limit the speed on level ground to 70 km/hour.

8.7.9 LWB will continue to review and consider the retrofit of safety features as necessary to the vehicles to enhance road and passenger safety.

8.7.10 Alcoholic breathing test had been introduced randomly to bus captains since October 2010 in order to enhance the message of "If you drink, don't drive". This practice will continue to enhance bus captains' safety awareness.

8.7.11 10 buses were installed with CCTV system in the first quarter of 2013. The footage from these CCTV cameras will provide objective evidence for accident investigation and encourage positive behavioural change amongst bus captains.

8.7.12 A "Buddy Driver Programme" was launched in the second quarter of 2013. Experienced bus captains are assigned to accompany new bus captains with the aim of providing the new captains with enhanced "on-the-job" support in their early days of employment with the Company.

8.7.13 The existing systems of Safety Bonus and Safety Awards positively promote safety awareness among bus captains. Safety awareness is emphasized in the staff website, safety messages on waybills, the "Bus Captain of the Year Competition" (organised by KMB/LWB), safety bulletins showing accident numbers and accident rates, safety reminder booklet and visual presentations of wreckages of past accidents displayed at Duty Dispatch Offices.

8.7.14 Education of passengers on the importance of road safety and safety on buses will continue in the form of posters and reminders on buses, and using the Bus Stop Announcement System. This will be supplemented by education videos from time to time.

8.7.15 Cross-company meetings with KMB will be held regularly to monitor accident statistics and propose methods of accident reduction.

8.7.16 LWB will continue to participate in the Road Safety Forum for Franchised Buses organised by Transport Department, and will continue to communicate with Transport Department on road safety issues.

8.8 Target Accident Rate

8.8.1 Transport Department requested the Company to provide a target accident involvement rate in terms of number per million vehicle-km operated as a measure to stimulate continuous improvement to the safety of LWB's bus operations vide its letter ref. TD BR 79/63-1 dated 30 March 2015.

8.8.2 Having reviewed the average accident involvement rates of the past years, we propose to use the 3-year average of 2012 to 2014 actual accident involvement rate of 1.61 per million vehicle-km operated as target for this FPP. As mentioned in paragraph 8.2.10 above, 71% of our bus captains were not blameworthy for the accident cases that occurred in 2013 and 2014.

Annex 8.1

A. Regular Training for New Bus Captains*

	Training Type	Nature	Duration	Frequency	No. of route / bus type trained
1.	Basic Training	To teach bus driving technique to prepare for Transport Department Class 17 license test and to equip trainees with the skills required to carry out the duties of a bus captain. Classroom lectures on company rules, passenger safety, accident black spot analysis, emergency handling procedure and concept of quality service. On road training on defensive driving technique, bus familiarization and route training (night drive included).	18 days full time	Before posting to duty	2 routes 2 bus types
2.	Special Facilities Training	Bus captains are trained on the operation of Octopus System, Bus Stop Announcement System, Destination Signboard and Fare Display.	Included in Basic Training	Before posting to duty	Not applicable

* Training courses are conducted by Bus Captain Training School of KMB.

B. Regular Training for Serving Bus Captains*

	Training Type	Nature	Duration	Frequency	No. of route / bus type trained
1.	Driving Enhancement Training	Experienced bus captains are trained on areas of defensive driving techniques to avoid traffic accident as well as advanced skills in bus maneuvers. Service enhancement training is also included.	1 day full time	For experienced bus captains.	1 route & highway training 1 bus type
2.	Remedial Training	Aimed at bus captains who are found to be inadequate in certain driving areas or service level. The training will specifically tackle these areas until the bus captain reaches an acceptable level before he/she is released to perform normal duties.	1 to 3 days full time	For bus captains who are found to have driving irregularities or away from driving duties for a period of time.	1 route 1 bus type
3.	Route Training	All bus captains will be trained before being posted to a specific route	1 day full time	As needed	1 route 1 bus type
4.	Bus Type Training	All bus captains will be trained before being posted to drive a specific bus type	1 day full time	As needed	1 route 1 bus type
5.	Safety Enhancement Training	As a corrective measure to prevent similar traffic accident from occurring. It is anticipated that the driving skill and driving attitude of bus captains concerned can be enhanced after receiving the training	1.5 hours	For bus captains involved in traffic accident resulting in serious injury/fatal; or liable traffic accident resulting in slight injury	Not applicable

* Training courses are conducted by Bus Captain Training School of KMB.

龍運巴士
LONG WIN BUS

Five-year Plan 2017-2021

PRIVATE & CONFIDENTIAL

服務為先 • 顧客為本

For the service • For the customer

8. SAFETY REVIEW AND IMPROVEMENT MEASURES IN BUS OPERATION

8.1 Introduction

8.1.1 Safety is always the number one priority in LWB's operation. Safety is enhanced through the strengthening of communications, documentation, training, deployment and performance monitoring as well as improvements in maintenance and bus design. Considerable efforts have also been made to promote traffic safety by passenger education and publicity.

8.1.2 This chapter includes an analysis of the types / causes of accidents for the past two calendar years (2014 and 2015) and the relationship of accident rates with respect to different factors including bus captain age, length of service, length of driving hours before the accident, bus type, etc.

8.1.3 This chapter further discusses the various measures that have been or are being undertaken to promote safety.

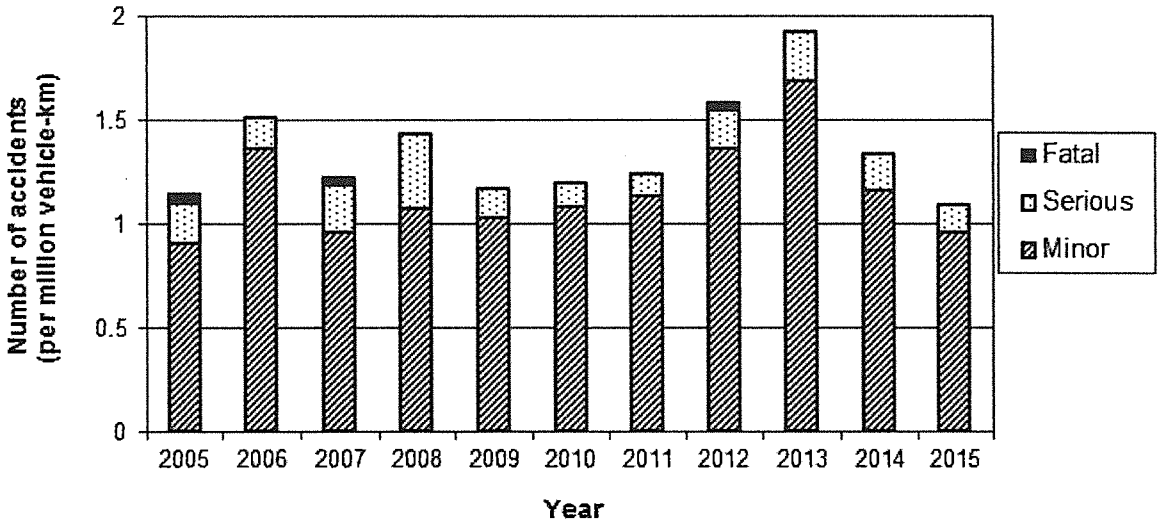
8.2 Analysis of Bus Accidents in the Past Two Calendar Years

8.2.1 The analyses are made for the two-year period 2014 to 2015. The results are presented below.

Trend of Accident Rates

8.2.2 Accidents rates from 2005 to 2015 are shown in Figure 8.1. There was a decrease in accident rate in 2015 compared to 2013 and 2014. The decrease of the figure in 2015 is mainly due to the improvement under the accident nature for passenger loss of balance. Further details are shown in paragraph 8.2.6 to 8.2.9.

Figure 8.1 Number of accidents involving personal injuries and deaths (per million vehicle-km)

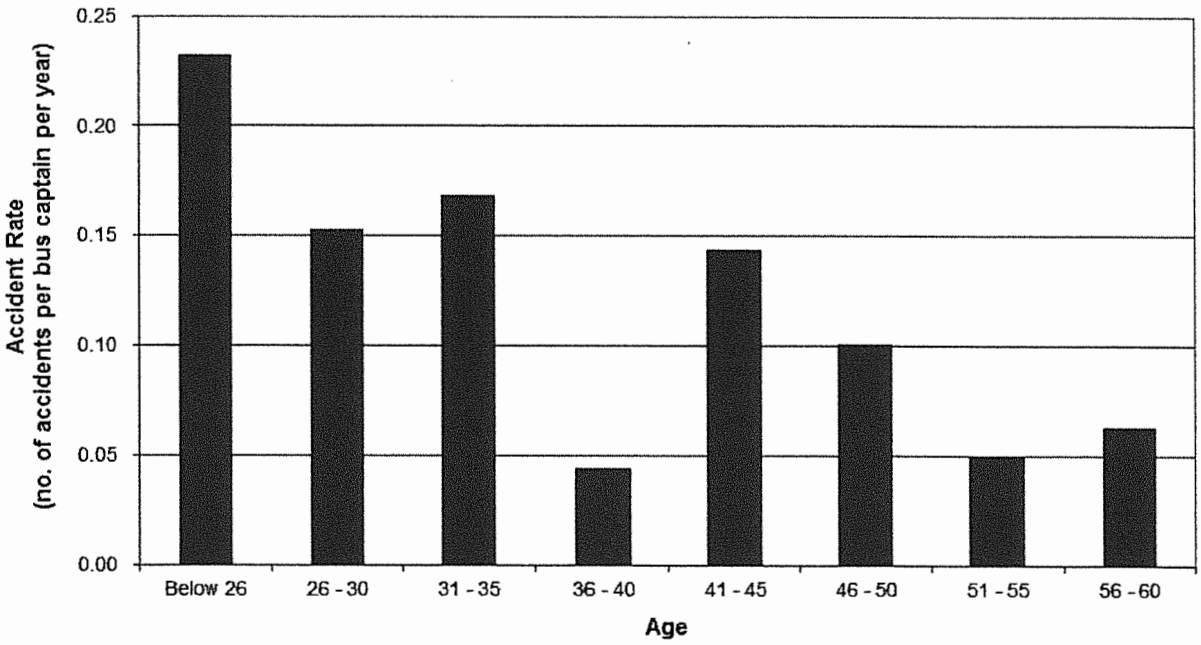


5403

Accident Rate by Bus Captain Age

8.2.3 Results of the analysis of accident rate by bus captain age are shown in Figure 8.2. The results show that younger bus captains have comparatively higher accident rates, but this is mainly due to the fact that these bus captains have relatively less bus driving experience and they are more prone to accidents in their first few months of service. This is also shown in the relationship between accident rates and year of services in Section 8.2.4.

Figure 8.2 Accident Rate by Bus Captain Age

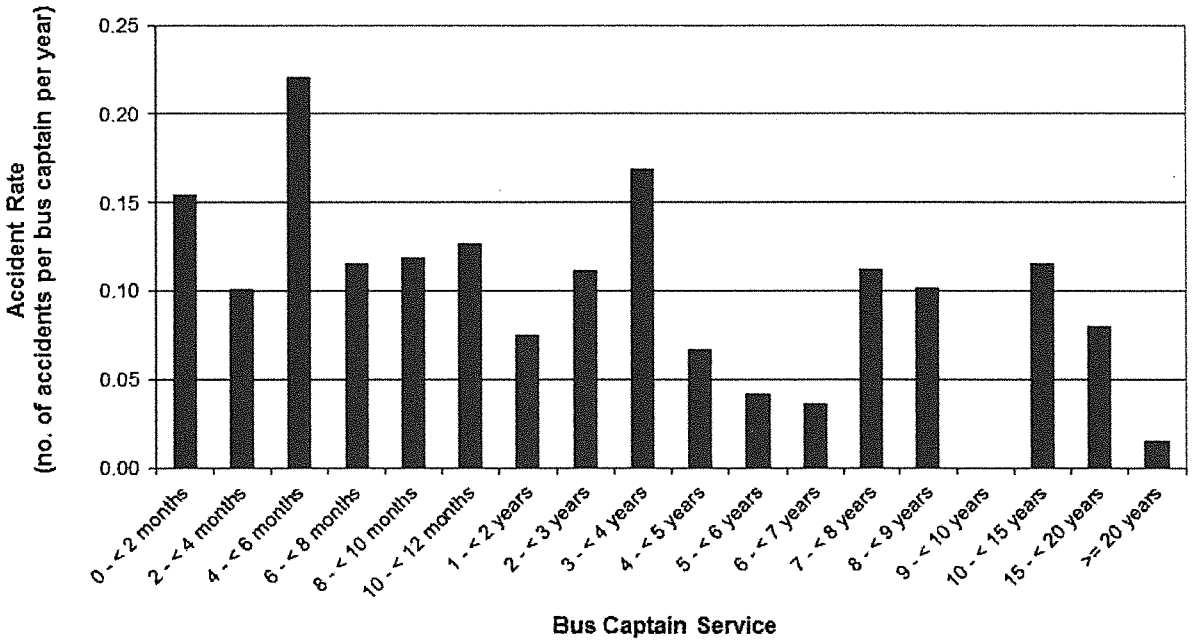


5404

Accident Rate by Year of Service

8.2.4 The results of the analysis on accident rate by experience in terms of years of service in the Company are shown in Figure 8.3. As mentioned above, the likelihood of an accident occurring in the first year immediately following recruitment is relatively higher. The accident rate then falls as experience is accumulated.

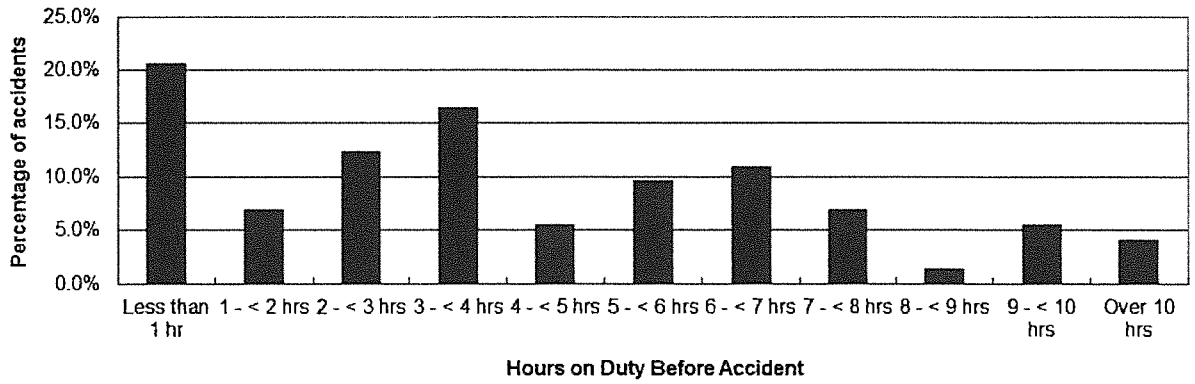
Figure 8.3 Accident Rate by Bus Captain Service in Company



Accident Rate by Hours on Duty Before Accident

8.2.5 The analysis results shown below in Figure 8.4 indicate that there is no correlation between the occurrence of accident and the number of hours on duty before the accident.

Figure 8.4 Hours on Duty Before Accident



5405

Accidents by Nature

8.2.6 The results of the analysis of accident nature breakdown by our classification for 2014 to 2015 are as follows:

Table 8.1 LWB Accidents by Nature

Nature of Accident	2014	2015
Head On / Head Tail Collision	6	8
Glancing Collision	0	2
Collision with Vehicle - Changing lane	4	5
Collision while Bus / Other Vehicle Reversing	1	0
Collision at Junction	2	4
Collision at Roundabout	0	0
Hitting Stationary Object	1	0
Overturn/Topple	0	0
Injury To Pedestrian	5	2
Injury To Alighting/Boarding Passenger	1	0
Passenger Loss Of Balance	17	12
Injury To Passenger Inside Bus - Other Nature	1	1
Others	1	0
Total:	39	34

8.2.7 The results of the analysis of accident nature by percentage are shown in Table 8.2 below.

Table 8.2 LWB Accidents by Nature in percentage

Nature of Accident	
Head On / Head Tail Collision	19.2%
Glancing Collision	2.7%
Collision with Vehicle - Changing lane	12.3%
Collision while Bus / Other Vehicle Reversing	1.4%
Collision at Junction	8.2%
Collision at Roundabout	0.0%
Hitting Stationary Object	1.4%
Overturn/Topple	0.0%
Injury To Pedestrian	9.6%
Injury To Alighting/Boarding Passenger	1.4%
Passenger Loss Of Balance	39.7%
Injury To Passenger Inside Bus - Other Nature	2.7%
Others	1.4%
Total:	100.0%

8.2.8 The above results are expressed in terms of percentage of all accidents during the two years 2014 – 2015. A significant portion of accidents (39.7%) were due to passenger losing balance. More than half of these cases were caused by the bus braking in traffic. The breakdown of the number of non-collision accident involving passenger casualty is provided as follows:

Table 8.3 Number of Non-collision Franchised Bus Accidents Involving Passenger Casualty

	Number of Non-collision Franchised Bus Accidents Involving Passenger Casualty	Percentage over all accidents involving franchised buses	No. of accidents involving passenger losing balance on stairway (No. of casualty)	No. of accidents involving passenger injured by door (No. of casualty)	No. of accidents involving passenger losing balance elsewhere except on stairway (No. of casualty)
	(i)+(ii)+(iii)		(i)	(ii)	(iii)
2015	13	38.2%	2	0	11

8.2.9 Accidents with injuries sustained as a result of different kinds of collisions accounted for 43.8% while accidents with injury to pedestrians accounting for 9.6% of all of the accidents in 2014 – 2015.

Accidents by Liability

8.2.10 The breakdown of liability in the two-year period is shown in Table 8.4 below. For 72.6% of the cases, the bus captains were not blameworthy.

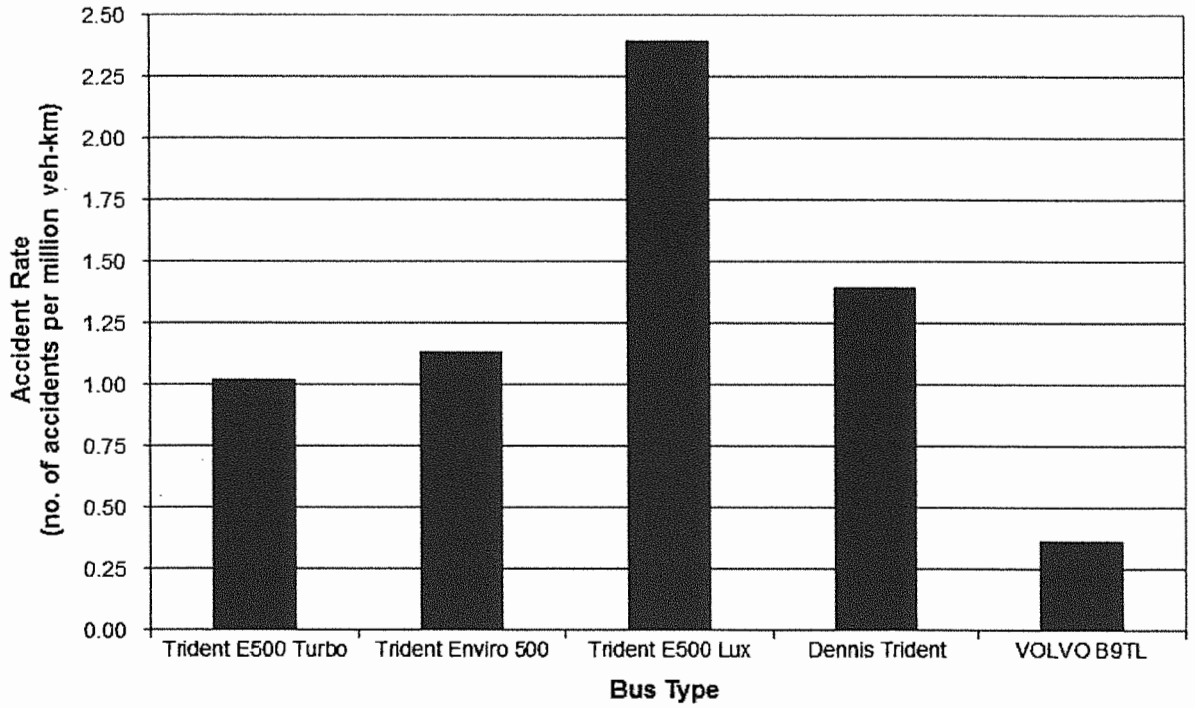
Table 8.4 Accident by Liability of Bus Captain

Liability of Bus Captain	
Negligent	23.3%
Innocent	72.6%
Suspended	4.1%
Total:	100.0%

Accident by Bus Type

8.2.11 The results of the analysis on accidents by bus type were also analysed and the results are shown in Figure 8.5. The general results are not significant enough to show any direct relationships between accident rate and bus type, and the differences among bus types can be attributable to operating environment (e.g. route), roads, bus captains and other factors.

Figure 8.5 Accident Rate by Bus Type



Duty Deployment with regard to Number of Routes / Buses Operated

8.2.12 The percentage of duties in LWB that involve route or bus hopping is relatively small (16.4% and 43.3% respectively) as at the end of April 2016. Bus captains are deployed to these duties only if they have received the relevant bus route or type training. Our current accident database does not have the information regarding whether the accident occurred during a trip involving route or bus hopping.

Conclusion

8.2.13 The results of the analyses show no systematic relationship between accidents and bus captain age, driving experience in terms of years of service (apart from higher accident potential in the first few months of service) and hours on duty before accident. In about 73% of all the accident cases, our bus captains were not blameworthy for the accidents. Loss of balance of passengers on board the buses and passenger injuries sustained as a result of collisions accounted for a significant portion of the accidents.

8.3 Bus Captain Training and Monitoring

8.3.1 As part of LWB's dedication to providing safe, reliable and comfortable services for our passengers, comprehensive systems of bus captain training and monitoring have been adopted in LWB. Elements of defensive driving, good driving attitude and emergency handling are incorporated in the various training courses. Driving performance monitoring is carried out with systematic checking by driving instructors and followed up with disciplinary actions if required. Moreover, the new 'Drive Green' hardware and software will also help to identify those bus captains who have a higher incidence of 'harsh braking' on a given route than is normal. This information can be used as to ensure that appropriate proactive feedback is given to a bus captain with aim of promoting improved driving behaviour that will in turn serve to prevent/reduce 'loss of balance' cases (as well as accidents in general).

8.3.2 LWB buses have various safety related features to enhance road and passenger safety. Speed monitoring and limiting devices are already installed or are being installed on buses.

- The electronic tachographs are being used to monitor bus captain performance, especially with regard to speeding. The new 'Drive Green' Initiative has not only enhanced environmental management but also bus safety and ride comfort. An electronic tachograph is standard equipment on new buses. At the end of May 2016, a total of 188 buses (i.e. 100% of registered fleet) were installed with electronic tachographs; and,

- Real-time Driving Indicators 駕駛提示器 (see above reference to the Drive Green initiative) are being installed in buses from mid 2013 which can help bus captains to utilize the driving skills learnt in the Eco-safe Driving Training Course. As denoted above, the benefits of such Eco-safe driving to the bus captains are:

    1. Reduce the risk of accidents while driving;
    2. Reduce stress levels and enhanced satisfaction of driving; and,
    3. Increase confidence in vehicle control and driving technique.

8.3.3 Details of training provided to new and serving bus captains are given in Annex 8.1.

8.3.4 Bus captains who are involved in serious traffic accidents will be suspended from driving duty and referred to receive professional counselling service. Remedial driving training will also be arranged for them.

8.3.5 Communication channels with staff and labour unions are well established and these channels facilitate the exchange of views on issues including safety.

8.3.6 As a safety enhancement measure, KMB has appointed a professional counselling service provider to operate a 24-hour Hotline （傾心線） for its staff and their immediate family members, including spouse and children, to raise and discuss any problems or difficulties they may encounter in their daily lives. The purpose is to provide a channel for staff members to relieve pressure and seek help from independent professional counsellors. This service is applicable to bus captains of LWB. The discussions are strictly confidential and contents will not be revealed to the Company. Staff of LWB can also attend a series of seminars on health and disease prevention organized by KMB for its staff members with the aim of raising their awareness of the importance of healthy living.

8.3.7 Alcoholic Breathing Test of Bus Captains is randomly conducted to control the incidence of driving under influence.

8.3.8 The current system of bus captain training will continue to be reviewed regularly.

8.3.9 The performance monitoring system will continue to uphold driving and safety standards.

8.3.10 A new training module, in the form of classroom discussion led by Driving Instructors of KMB's Bus Captain Training School, has been added to the bus captain training programmes from March 2016. Besides the new bus captains, other in-service bus captains have participated in this "Care for Passenger" classroom discussion when they attend refresher training. To make sure that the "Care for Passenger" message can reach existing bus captains in a timely manner, highlights of this training module has been available on the staff web from April 2016 and bus captains are required to log-on the staff web to go through the content.

8.4 Rostering, Scheduling and Duty Dispatch

8.4.1 LWB follows rostering, scheduling and duty dispatch systems having due regard to the Transport Department Guidelines on Driver Working Hours. The systems also ensure that only bus captains who satisfy training requirements are assigned to duties.

8.4.2 Arrangements are made to assign new bus captains to fixed duties in the first few months of appointment to allow for a period of familiarisation and settling in.

8.4.3 In order to help new bus captains adapt to the new working environment, LWB has enhanced and introduced an all-rounded "Buddy Scheme for New Bus Captain" in May 2015. In this enhanced scheme, new bus captains are provided with New Bus Captain Orientation regarding bus operational and mechanical aspects. Experienced bus captains accompany new bus captains with the aim of providing the new bus captains with enhanced 'on the job' support in their early days with the Company. A hotline set up by the Bus Captain Training School is available for new bus captains to obtain consultation from driving instructors and mentors respectively.

8.4.4 Ongoing adjustment in journey time, layover, and meal break is made with the solicited input from frontline staff and efforts in this regard have been accelerated in recent years.

8.4.5 New scheduling software was implemented in Year 2013. It enhances the Company's ability in ensuring/ monitoring compliance with Driver Working Guidelines.

8.5 Bus Maintenance and Safety Features

8.5.1 All LWB buses are subject to a maintenance and quality assurance system which aims to keep the buses in top conditions. Speed monitoring and limiting devices are already installed on LWB buses.

8.5.2 The buses have various safety-related features to enhance road and passenger safety, such as:

- seat belts have been retrofitted at the four seats on the first row on the upper deck;

- double hand rails have been retrofitted to all double deck buses with straight staircases; and

- To help reduce accidents involving elderly passengers due to 'losing balance on board', the new bus specifications have included continuous railing, extending from the entrance into the saloon (as far as is practicable).

8.5.3 All LWB buses are subject to a stringent maintenance and quality assurance system which keeps the buses in good roadworthy conditions. The existing maintenance and quality assurance system will be continued.

8.5.4 Speed limiting devices have been a standard feature of all LWB buses.

8.5.5 LWB will continue to review and consider the retrofit of safety features as necessary to the vehicles to enhance road and passenger safety.

8.5.6 Interlock system is deployed to ensure exit door is closed before vehicle can move, or no door can be opened when vehicle is in motion.

8.5.7 According to the bus manufacturers, the current bus models available do not have the required structural integrity to have all seats or seats in upper deck seatbelt-enabled. Currently, all buses in LWB already have seatbelts fitted at the "vulnerable" positions, i.e. the exposed seats. It would be a complete bus body structural re-design of the vehicle to have all seats with seatbelts that are currently non-existent in the market. Not only do the standard seats need to be changed to ones with stronger anchorage points and wider pedestal legs, but the overall bus construction would need extensive localized reinforcement along the floor / inter-floor structure that inevitably render the vehicle unnecessarily heavy, reduced passenger carrying capacity and less fuel efficient for public bus application.

8.6 Promotion of Passenger Safety

8.6.1 Safety awareness among bus captains is promoted by means of in-house videos, safety messages on waybills, internal posters, tool-box talk, and safety tips provided at staff website.

8.6.2 LWB produces its "Bus Captain Safe Driving Handbook" which is posted at staff website for all bus captains currently. The handbook includes driving regulations and points to note about safe driving, covering every aspect of a bus captain's daily work. It is aimed at assisting bus captains in establishing a proper safe driving attitude and encouraging them to take all practical steps aimed at achieving safe driving.

8.6.3 Various projects to educate the public and passengers on the safe use of bus services have been undertaken. These include education video, on-board stickers, company Facebook and KMB/LWB mobile phone Apps to remind passengers from taking safety precautions.

8.6.4 Education of passengers on the importance of road safety and safety on buses by using the Bus Stop Announcement System ("BSAS") will continue. The safety messages were broadcast in Cantonese, English and Putonghua to encourage passengers to hold the handrail and to give their seats to those in need.

8.6.5 To further enhance passengers' safety awareness when they ride on the buses, a new musical safety video called "Hold the Handrails – Safety First" was launched in November 2014. It was broadcast in Cantonese on the Multi-media On-board ("MMOB") system in LWB buses. Passengers were encouraged to hold the handrails to prevent loss of balance.

8.6.6 Company Facebook and KMB/LWB mobile phone Apps have been used to increase passenger awareness to "Hold the Handrail", and to be available from March 2016.

8.6.7 A sticker "請緊握扶手" has been posted at a prominent place near the Octopus machine from March 2016 to catch the attention of boarding passengers.

8.6.8 During the journey, the "請緊握扶手" message has been broadcast via the Bus Stop Announcement System before approaching appropriate en-route stops (subject to journey distance between stops) on all LWB routes. Re-arrangement of the sound track has started in March 2016.

8.6.9 A sticker "請緊握扶手" has been posted at the exit door frame from March 2016 to catch the attention of alighting passengers.

8.6.10 Continuous monitoring of accident data and review of procedures and systems to enhance safety are being undertaken with internal cross-company meetings with KMB and participation in the Road Safety Forum for Franchised Buses organised by Transport Department.

8.6.11 To demonstrate commitment on safety, a new Safety Policy was established and approved in January 2011. Briefings to all relevant staff on new Safety Policy were completed in February 2011. Frontline management staff will continue to conduct briefings on safety and share the causes of accidents and driving tips to accident blackspots to bus captains periodically. To increase bus captains' awareness on the briefings, Long Win operation management staff will join the safety briefings periodically and collect opinions/ feedbacks from bus captains related to safety and accident prevention.

8.6.12 LWB participated in a "priority seats" trial scheme in May 2011 by providing specially-designed priority seats with distinct colour headrests and images of the elderly, pregnant woman, baby and people with disabilities for easy recognition. The trial proved to be successful in promoting a caring culture and raising the safety awareness of the bus captains. Through the provision of priority seats, passengers in needs can enjoy a safer and more pleasant bus journey. In view of the positive feedback from the public, LWB have completed fleet-wide adoption of this scheme by the end of 2012.

8.7 Measures to be Taken

8.7.1 As part of its efforts to promote a caring culture, LWB broadcasts on all LWB buses fitted with MMOB an educational video, which encourages passengers to hold the handrail and to give their seat to those in need.

8.7.2 To promote operational safety and share the experience of safe driving, representatives of the Police were invited to conduct a series of tailor-made Road Safety Lectures.

8.7.3 Bus Stop Assistants have been assisting persons in need to find a seat and helping wheelchair users while boarding/alighting starting from May 2016.

8.7.4 The existing rostering and duty dispatch systems are working well and fully comply with Transport Department's requirements. A newly-sourced scheduling software system adopted in 2013 has enhanced the efforts of the Company in ensuring / monitoring full compliance with the Driver's working Guidelines. These current systems and practices will be maintained, with ongoing fine-tuning in response to staff feedback and enhancement using available technology.

8.7.5 All LWB buses are subject to a stringent maintenance and quality assurance system which keeps the buses in good roadworthy conditions. The existing maintenance and quality assurance system will be continued.

8.7.6 The electronic tachograph is now standard equipment on new buses. The equipment installed satisfies Transport Department's requirements for electronic data recording device issued by VSSD dated 17th October 2003. As at the end of June 2015, all LWB buses were installed with electronic tachographs for monitoring bus captain performance, especially with regard to speeding.

8.7.7 Bus Captains of LWB can access the "Driving Trips in Special Attention Area", a database created to provide structured instructions and tips on best driving practices for all bus captains driving on particular routes, so that expertise and knowledge of the most experienced bus captains can be effectively transferred to all others. To promote bus captains' awareness of safe driving, all relevant bus routes are listed in the database, supplemented by photos and layout drawings for easy reference.

8.7.8 All LWB buses are equipped with speed limiting devices which limit the speed on level ground to 70 km/hour.

8.7.9 LWB will continue to review and consider the retrofit of safety features as necessary to the vehicles to enhance road and passenger safety.

8.7.10 Alcoholic breathing test had been introduced randomly to bus captains since October 2010 in order to enhance the message of "If you drink, don't drive". This practice will continue to enhance bus captains' safety awareness.

8.7.11 10 buses were installed with CCTV system in the first quarter of 2013. The footage from these CCTV cameras will provide objective evidence for accident investigation and encourage positive behavioural change amongst bus captains.

8.7.12 A "Buddy Driver Programme" was launched in the second quarter of 2013. Experienced bus captains are assigned to accompany new bus captains with the aim of providing the new captains with enhanced "on-the-job" support in their early days of employment with the Company.

8.7.13 The existing systems of Safety Bonus and Safety Awards will continue to promote safety awareness among bus captains. Safety awareness is emphasized in the staff website, safety messages on waybills, safety bulletins showing accident numbers and accident rates, safety reminder booklet and visual presentations of wreckages of past accidents displayed at Duty Dispatch Offices. In addition to the existing individual safe driving award, route-based awards on bus safety will be continued to encourage frontline staff to strive for continual improvement in bus safety performance.

8.7.14 Education of passengers on the importance of road safety and safety on buses will continue in the form of posters and reminders on buses, and using the Bus Stop Announcement System. This will be supplemented by education videos from time to time.

8.7.15 Cross-company meetings with KMB will be held regularly to monitor accident statistics and propose methods of accident reduction. The importance of systematic 'feedback loops' in safety management will be emphasised to ensure that lessons are learned from any incidents that do occur.

8.7.16 LWB will continue to participate in the Road Safety Forum for Franchised Buses organised by Transport Department, and will continue to communicate with Transport Department on road safety issues.

8.7.17 On-street monitoring and promotion by outdoor staff will be conducted in strategic locations on a regular basis to promote safety messages to passengers.

8.8 Target Accident Rate

8.8.1 Transport Department requested the Company to provide a target accident involvement rate in terms of number per million vehicle-km operated as a measure to stimulate continuous improvement to the safety of LWB's bus operations vide its letter ref. TD BR 79/63-1 dated 15 April 2016.

8.8.2 Having reviewed the average accident involvement rates of the past years, we propose to use the 3-year average of 2013 to 2015 actual accident involvement rate of 1.43 (defined as the number of buses involved in accidents per million km operated) as target for the purpose of this Five-Year Plan period. As mentioned in paragraph 8.2.10 above, 72.6% of our bus captains were not blameworthy for the accident cases that occurred in 2014 and 2015.

Annex 8.1

A. Regular Training for New Bus Captains*

	Training Type	Nature	Duration	Frequency	No. of route / bus type trained
1.	Basic Training	To teach bus driving technique to prepare for Transport Department Class 17 license test and to equip trainees with the skills required to carry out the duties of a bus captain. Classroom lectures on company rules, passenger safety, accident black spot analysis, emergency handling procedure and concept of quality service. On road training on defensive driving technique, bus familiarization and route training (night drive included).	18 days full time	Before posting to duty	2 routes 3-4 bus types
2.	Special Facilities Training	Bus captains are trained on the operation of Octopus System, Bus Stop Announcement System, Destination Signboard and Fare Display.	Included in Basic Training	Before posting to duty	Not applicable

* Training courses are conducted by Bus Captain Training School of KMB.

B. Regular Training for Serving Bus Captains*

	Training Type	Nature	Duration	Frequency	No. of route / bus type trained
1.	Driving Enhancement Training	Experienced bus captains are trained on areas of defensive driving techniques to avoid traffic accident as well as advanced skills in bus maneuvers. Service enhancement training is also included.	1 day full time	For experienced bus captains.	1 route & highway training 1 bus type
2.	Remedial Training	Aimed at bus captains who are found to be inadequate in certain driving areas or service level. The training will specifically tackle these areas until the bus captain reaches an acceptable level before he/she is released to perform normal duties.	1 to 3 days full time	For bus captains who are found to have driving irregularities or away from driving duties for a period of time.	1 route 1 bus type
3.	Route Training	All bus captains will be trained before being posted to a specific route	1 day full time	As needed	1 route 1 bus type
4.	Bus Type Training	All bus captains will be trained before being posted to drive a specific bus type	1 day full time	As needed	1 route 1 bus type

* Training courses are conducted by Bus Captain Training School of KMB.

Training protocols are subject to ongoing review, albeit that the aim will be to continue to do all that is reasonably practicable to ensure the safety and comfort of passengers, staff and other road users at all times

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 12:17:44	5.7	8.7	22.377803	114.1746678
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 12:17:45	4.8	13.6	22.377803	114.1746677
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 12:19:11	4.1	13.2	22.37680583	114.174979
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 12:19:17	4.5	21.8	22.3766435	114.1750012
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 12:19:18	4.1	26	22.37661967	114.1749712
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 12:19:53	4.3	22.8	22.37733367	114.1733362
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 12:20:36	4.4	20.4	22.3759835	114.1705343
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 12:21:39	4	22	22.37630667	114.1710992
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 12:22:10	5.4	17.8	22.3766905	114.1718432
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 12:22:11	5.1	23	22.376695	114.1718637
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 12:22:48	6.4	15	22.37734733	114.1736298
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 12:22:49	5.6	20.6	22.37735517	114.1736357
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 12:22:50	4.1	24.7	22.37736767	114.1736558
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 12:23:39	5.8	13.2	22.37604117	114.175448
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 12:23:40	5.7	19	22.37603267	114.175452
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 12:25:10	6.5	15.5	22.37437083	114.1765147
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 12:25:11	5.6	21.2	22.3743625	114.176521
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 12:26:14	4.4	18.1	22.37381667	114.176979
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 12:26:49	5	19.6	22.37178983	114.178543
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 12:29:03	5.3	8.9	22.36793933	114.1746325
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 12:29:04	5.5	14.5	22.3679385	114.1746322
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 12:29:05	6	20.5	22.367931	114.174627
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 12:29:58	5.1	13	22.36532717	114.1730208
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 12:29:59	5.8	18.8	22.36532033	114.1730135
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 12:30:37	4.9	12.6	22.36416267	114.1719777
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 12:30:38	5.6	18.2	22.36415467	114.1719693
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 12:32:01	4.1	13.1	22.36355633	114.17138
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 12:32:08	4.4	23.4	22.363386	114.1713332
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 12:33:09	5	11.5	22.36388267	114.1737213
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 12:33:10	6.7	18.2	22.3638865	114.1737273
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 12:33:11	4.6	22.9	22.36389817	114.1737423
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 12:34:14	4.6	20.2	22.36543783	114.1752173
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 12:36:55	5.8	13.6	22.36699867	114.1763297
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 12:36:56	4.4	18.1	22.36700667	114.1763267
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 12:37:49	5.3	14.7	22.36861517	114.1783192
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 12:37:50	4.3	19.1	22.36862217	114.1783298
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 12:39:02	5.2	16.1	22.36902967	114.1792162
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 12:39:03	4.5	20.7	22.3690345	114.1792335
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 12:39:21	5.3	12.1	22.36931617	114.1800338
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 12:39:22	4.8	17	22.369319	114.1800408
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 12:39:23	4.2	21.2	22.369327	114.1800582
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 12:46:41	4.9	12	22.341815	114.191809
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 12:46:42	5	17	22.34181317	114.1918163
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 12:47:45	4.1	21.5	22.34178767	114.1957627
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 12:52:54	5.1	13	22.32534083	114.2143253
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 12:52:55	5.8	18.9	22.32533183	114.2143227
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 12:52:56	4	22.9	22.325311	114.2143133
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 12:54:54	5	12.2	22.3178565	114.2151197
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 12:54:55	5.1	17.4	22.31785	114.2151223
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 12:54:56	4.5	21.9	22.31783267	114.2151298
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 12:58:38	4.1	8.7	22.31598983	114.2168833

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 13:00:18	4.6	9.2	22.31584933	114.2173922
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 13:01:52	4.7	10.5	22.31558333	114.2181342
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 13:05:14	4.5	10.2	22.3142795	114.2207563
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 13:07:17	5.7	13.4	22.31392383	114.222304
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 13:08:37	5.1	10.1	22.313314	114.2243957
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 13:08:38	4.6	14.8	22.31331433	114.2243922
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 13:08:52	5	21.4	22.313129	114.224712
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 13:10:52	5.6	14.4	22.30987633	114.2242202
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 13:10:53	5.6	20.1	22.3098695	114.2242153
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 12:13:42	2018-07-24 12:16:00	2018-07-24 13:10:54	4.8	25	22.3098575	114.2241965
69496	[redacted]	STD	NULL	NULL	UX8921	NULL	NULL	2018-07-24 13:19:56	NULL	2018-07-24 13:21:57	4.4	10.1	22.30793067	114.2218667
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 13:22:04	4.3	21.4	22.30806967	114.2219397
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 13:22:37	5.6	15.9	22.30855533	114.2220225
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 13:22:38	5.3	21.2	22.30856567	114.2220293
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 13:25:35	4.2	23.9	22.3103455	114.2292113
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 13:28:37	4.8	10.5	22.31412017	114.2212292
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 13:28:38	5.4	16	22.31413233	114.2212333
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 13:28:39	5.3	21.4	22.31413767	114.2212202
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 13:29:36	4	25.3	22.31601767	114.2165043
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 13:29:52	4	23.7	22.31644767	114.215875
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 13:30:55	4.4	8.2	22.31991283	114.2145717
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 13:30:56	4.8	13	22.31991383	114.2145697
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 13:31:14	5.7	18.1	22.32019283	114.21453
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 13:31:15	4.6	22.7	22.32021233	114.2145302
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 13:31:42	5	19.9	22.32188817	114.2143393
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 13:32:10	5.2	15.2	22.3221125	114.2143293
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 13:32:11	5.1	20.4	22.32212883	114.2143298
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 13:33:10	5.3	15.7	22.325605	114.2140035
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 13:33:11	5	20.7	22.3256205	114.214004
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 13:35:37	5.8	11.7	22.33356033	114.2077258
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 13:35:38	5.1	16.8	22.33356383	114.20773
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 13:38:18	4.5	7.6	22.33915833	114.2024647
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 13:38:19	4.7	12.4	22.33916017	114.2024635
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 13:38:20	5.9	18.3	22.3391675	114.202456
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 13:39:49	5.1	12.3	22.34158983	114.194287
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 13:39:50	5.4	17.8	22.3415915	114.1942787
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 13:39:51	4.1	22	22.34159283	114.1942587
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 13:41:17	4	21	22.342385	114.1882512
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 13:47:03	6.2	13.3	22.36571667	114.1806663
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 13:47:04	5.7	19.1	22.36572133	114.1806647
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 13:47:05	4.1	23.3	22.36574017	114.1806595
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 13:48:42	4.4	21.5	22.3690105	114.179412
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 13:49:30	4.8	12.7	22.368466	114.1780795
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 13:49:31	5.4	18.2	22.368462	114.17807
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 13:49:32	4.6	22.8	22.368454	114.1780493
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 13:51:19	5	10.6	22.36742033	114.176365
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 13:51:20	4.2	14.8	22.36741833	114.1763618
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 13:52:28	4.7	20.1	22.3654345	114.1753513
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 13:53:32	5.6	14.7	22.36303183	114.172747
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 13:54:00	5.7	19	22.3629185	114.1725685
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 13:54:01	4.7	23.7	22.362916	114.1725452

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 13:55:23	5.7	12	22.363379	114.171428
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 13:55:24	5.7	17.8	22.36337583	114.1713852
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 13:56:12	4.8	9.9	22.36556933	114.172989
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 13:56:14	5.5	21.4	22.36558467	114.1730042
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 13:57:07	6.2	14.1	22.36883617	114.175052
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 13:57:08	6.1	20.2	22.36884267	114.1750568
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 13:57:09	4.1	24.3	22.36885783	114.175072
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 13:57:54	6.3	15.1	22.37143783	114.1783718
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 13:57:55	5.9	21.1	22.37144517	114.1783755
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 13:58:23	5	10.5	22.37266717	114.1776725
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 13:58:24	5.7	16.3	22.37267133	114.177668
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 13:58:25	5.1	21.5	22.37268367	114.1776583
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 14:00:08	5.7	13	22.37397	114.1767588
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 14:00:09	5.5	18.6	22.373985	114.1767478
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 14:01:11	4.5	9.6	22.37549267	114.1775907
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 14:01:12	5.6	15.2	22.37549617	114.177587
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 14:01:48	4.6	15.8	22.37606333	114.177135
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 14:01:49	4.3	20.1	22.3760765	114.1771213
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 14:03:10	5.4	13.3	22.3758135	114.1760283
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 14:03:11	5.7	19.1	22.37581183	114.1760235
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 14:04:14	6.1	13.2	22.37722967	114.1740435
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 14:04:15	5	18.3	22.37723033	114.1740382
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 14:04:53	5.2	18	22.3773015	114.1730672
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 14:04:54	4.1	22.2	22.377299	114.173041
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 14:06:25	4.7	10.1	22.37656083	114.1709245
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 13:19:56	2018-07-24 13:22:00	2018-07-24 14:06:29	4.7	24.6	22.376644	114.1709515
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 14:44:46	4.8	12.1	22.37777333	114.1747853
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 14:44:47	4	16.1	22.3777775	114.1747848
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 14:46:12	5.8	11	22.37687517	114.1750848
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 14:47:25	4.8	18.6	22.3762395	114.1704478
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 14:48:48	4.9	22	22.37654267	114.1710655
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 14:49:14	5.7	17.1	22.37683133	114.1718067
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 14:49:15	4.9	22.1	22.37683533	114.1718232
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 14:49:47	6.4	17.7	22.37743833	114.1736043
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 14:49:48	4.6	22.4	22.37744333	114.1736188
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 14:50:31	6.3	10.6	22.37585433	114.1756092
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 14:50:32	6.6	17.2	22.37585417	114.1756093
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 14:53:48	4.7	7.5	22.36863967	114.175135
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 14:53:49	5.2	12.8	22.3686395	114.1751348
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 14:53:50	6	18.8	22.36863367	114.175128
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 14:53:51	4.4	23.3	22.3686195	114.1751117
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 14:54:54	5.5	10.9	22.36817667	114.1747132
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 14:54:55	4.2	15.2	22.36817433	114.1747117
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 14:55:50	4.8	10.7	22.365314	114.1729657
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 14:55:51	6	16.8	22.36531017	114.1729623
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 14:55:52	4.7	21.5	22.3653	114.1729475
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 14:56:26	5.7	17.1	22.36416567	114.1719157
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 14:56:27	4.2	21.4	22.36415367	114.1719015
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 14:58:14	5	13.6	22.36383783	114.1737812
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 14:58:15	6.7	20.4	22.363846	114.1737885
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 14:59:00	5.5	14.7	22.36537917	114.1751872

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 14:59:01	5.7	20.4	22.3653955	114.1752073
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 14:59:02	4.3	24.8	22.36541583	114.1752327
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 15:00:32	5.8	14.1	22.36631283	114.1763717
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 15:01:44	6.1	17.2	22.367035	114.1762923
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 15:01:45	4.4	21.7	22.36704883	114.1762863
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 15:03:08	6.5	11.3	22.36868517	114.1783398
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 15:03:09	6.3	17.7	22.36868667	114.1783432
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 15:03:10	4.4	22.1	22.36869233	114.1783563
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 15:04:10	5	15.5	22.36906567	114.1791988
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 15:04:11	4	19.6	22.36906467	114.1792167
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 15:04:12	4.1	23.8	22.369066	114.1792463
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 15:04:44	5.6	13.8	22.36929933	114.1798877
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 15:04:45	4.9	18.7	22.3693025	114.179895
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 15:06:17	4.6	16.7	22.36470517	114.181249
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 15:11:06	6	12.2	22.34265483	114.186389
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 15:11:07	6.6	18.8	22.34265533	114.1863923
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 15:11:08	5.2	24	22.3426515	114.186411
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 15:11:09	4.3	28.4	22.34264267	114.1864457
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 15:11:59	4.3	17.8	22.3421865	114.1900465
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 15:12:00	4.3	22.2	22.34217167	114.1900667
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 15:12:41	5.1	12.7	22.341755	114.1918275
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 15:12:42	5.6	18.4	22.34175567	114.1918377
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 15:13:53	5.1	12	22.34180233	114.1957237
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 15:13:54	4.9	16.9	22.34180183	114.1957315
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 15:13:55	4.5	21.5	22.34179533	114.1957513
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 15:15:19	5.4	14.7	22.33954383	114.202788
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 15:15:20	4.8	19.5	22.339534	114.202799
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 15:15:44	5.6	12.7	22.3386585	114.2038372
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 15:15:45	4.9	17.7	22.3386525	114.2038438
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 15:15:46	4.9	22.6	22.33863967	114.2038595
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 15:16:42	4.8	25.6	22.33673733	114.2070667
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 15:19:12	4.6	10.5	22.32532883	114.214335
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 15:19:14	4.5	21.2	22.325309	114.2143002
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 15:20:16	5.4	17.5	22.3211555	114.2146635
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 15:20:17	4.8	22.3	22.32113633	114.2146652
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 15:21:07	5.1	12.3	22.31744683	114.215283
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 15:21:08	6	18.4	22.31744083	114.2152885
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 15:21:09	4.3	22.7	22.3174235	114.2152975
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 15:21:51	5.6	14	22.31558567	114.2182082
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 15:21:52	4.2	18.3	22.31558317	114.2182183
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 15:22:45	4.6	16.9	22.31437267	114.221105
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 15:23:14	5.1	18.6	22.31422733	114.2215907
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 15:23:56	5.2	15.2	22.31399333	114.2224385
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 15:25:39	5.4	11.5	22.31311467	114.224833
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 15:25:40	6.3	17.9	22.31311367	114.2248338
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 15:26:15	6.7	15.6	22.31258033	114.2261133
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 15:26:16	5.1	20.7	22.312579	114.22612
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 15:27:06	5.8	8.5	22.31104383	114.2253592
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 15:27:07	5.8	14.3	22.31104383	114.2253592
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 15:27:08	5.1	19.5	22.31103917	114.225355
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 15:28:14	5.2	19.9	22.30976	114.2238552

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 15:28:15	4.5	24.4	22.30974617	114.223831
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 15:29:30	5.1	10.5	22.30708833	114.2219083
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 15:29:31	5.3	15.9	22.30709167	114.2219055
69496	[redacted]	STD	2018-07-24	80	UX8921	80	MEILAM	2018-07-24 14:40:41	2018-07-24 14:44:00	2018-07-24 15:29:32	5.3	21.2	22.30710383	114.2218952
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 15:53:33	2018-07-24 15:56:00	2018-07-24 15:56:05	4.9	23.1	22.30806733	114.2219285
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 15:53:33	2018-07-24 15:56:00	2018-07-24 15:56:27	5.6	10.7	22.30854117	114.2220313
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 15:53:33	2018-07-24 15:56:00	2018-07-24 15:56:28	6	16.8	22.308541	114.2220292
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 15:53:33	2018-07-24 15:56:00	2018-07-24 15:56:29	5.3	22.1	22.3085515	114.2220375
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 15:53:33	2018-07-24 15:56:00	2018-07-24 15:58:07	5.5	14.6	22.30797867	114.2255363
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 15:53:33	2018-07-24 15:56:00	2018-07-24 15:58:08	5.5	20.2	22.30798583	114.2255478
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 15:53:33	2018-07-24 15:56:00	2018-07-24 15:59:49	5.6	9.1	22.30902183	114.227081
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 15:53:33	2018-07-24 15:56:00	2018-07-24 15:59:50	5.2	14.3	22.30902183	114.227081
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 15:53:33	2018-07-24 15:56:00	2018-07-24 16:00:37	4.5	10	22.308985	114.228425
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 15:53:33	2018-07-24 15:56:00	2018-07-24 16:00:38	5.6	15.7	22.30899317	114.2284268
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 15:53:33	2018-07-24 15:56:00	2018-07-24 16:00:39	5.5	21.2	22.30900633	114.2284355
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 15:53:33	2018-07-24 15:56:00	2018-07-24 16:01:11	4.5	23.1	22.310343	114.2292035
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 15:53:33	2018-07-24 15:56:00	2018-07-24 16:03:12	4.9	9.5	22.313047	114.2239903
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 15:53:33	2018-07-24 15:56:00	2018-07-24 16:03:14	5.4	20.5	22.3130545	114.2239773
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 15:53:33	2018-07-24 15:56:00	2018-07-24 16:03:15	4.2	24.8	22.31306817	114.2239555
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 15:53:33	2018-07-24 15:56:00	2018-07-24 16:03:59	4.8	11.5	22.3141215	114.2213172
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 15:53:33	2018-07-24 15:56:00	2018-07-24 16:04:00	6	17.5	22.3141285	114.2213152
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 15:53:33	2018-07-24 15:56:00	2018-07-24 16:04:01	4.5	22	22.31414233	114.2213018
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 15:53:33	2018-07-24 15:56:00	2018-07-24 16:05:07	5	10.8	22.31511017	114.2188155
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 15:53:33	2018-07-24 15:56:00	2018-07-24 16:05:08	4.7	15.6	22.31511183	114.2188108
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 15:53:33	2018-07-24 15:56:00	2018-07-24 16:05:09	4.9	20.6	22.3151175	114.2187948
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 15:53:33	2018-07-24 15:56:00	2018-07-24 16:05:55	5.1	12.4	22.31648817	114.2157953
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 15:53:33	2018-07-24 15:56:00	2018-07-24 16:05:56	5.8	18.3	22.3164955	114.2157877
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 15:53:33	2018-07-24 15:56:00	2018-07-24 16:05:57	4.5	22.9	22.31650967	114.2157713
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 15:53:33	2018-07-24 15:56:00	2018-07-24 16:06:44	5.4	14.8	22.320164	114.2144947
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 15:53:33	2018-07-24 15:56:00	2018-07-24 16:06:45	5.7	20.6	22.320177	114.214496
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 15:53:33	2018-07-24 15:56:00	2018-07-24 16:07:41	4.2	11.1	22.322127	114.2142952
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 15:53:33	2018-07-24 15:56:00	2018-07-24 16:07:42	5.8	17	22.3221345	114.2142957
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 15:53:33	2018-07-24 15:56:00	2018-07-24 16:08:30	5.4	13.2	22.32560533	114.2139643
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 15:53:33	2018-07-24 15:56:00	2018-07-24 16:08:31	6	19.3	22.32561583	114.213964
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 15:53:33	2018-07-24 15:56:00	2018-07-24 16:09:51	5.4	16.9	22.32862283	114.2121368
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 15:53:33	2018-07-24 15:56:00	2018-07-24 16:09:52	4.6	21.6	22.32863133	114.2121207
69496	[redacted]	STD	2018-07-24	80	UX8921	80	KT.FRY	2018-07-24 15:53:33	2018-07-24 15:56:00	2018-07-24 16:10:10	4.9	20.4	22.3288375	114.2117965
69496	[redacted]	STD	2018-07-24	80	KU5626	80	MEILAM	2018-07-24 18:17:51	2018-07-24 18:21:00	2018-07-24 18:21:03	4.5	7.2	22.37781167	114.1748807
69496	[redacted]	STD	2018-07-24	80	KU5626	80	MEILAM	2018-07-24 18:17:51	2018-07-24 18:21:00	2018-07-24 18:25:55	4.5	14.4	22.37683467	114.1717615
69496	[redacted]	STD	2018-07-24	80	KU5626	80	MEILAM	2018-07-24 18:17:51	2018-07-24 18:21:00	2018-07-24 18:25:57	4.5	22.9	22.37684133	114.1718532
69496	[redacted]	STD	2018-07-24	80	KU5626	80	MEILAM	2018-07-24 18:17:51	2018-07-24 18:21:00	2018-07-24 18:26:45	4.5	8.1	22.37743467	114.1735048
69496	[redacted]	STD	2018-07-24	80	KU5626	80	MEILAM	2018-07-24 18:17:51	2018-07-24 18:21:00	2018-07-24 18:29:13	4.5	10.3	22.37433583	114.1765442
69496	[redacted]	STD	2018-07-24	80	KU5626	80	MEILAM	2018-07-24 18:17:51	2018-07-24 18:21:00	2018-07-24 18:30:37	4.3	18.8	22.37300067	114.1775747
69496	[redacted]	STD	2018-07-24	80	KU5626	80	MEILAM	2018-07-24 18:17:51	2018-07-24 18:21:00	2018-07-24 18:33:08	4.5	8.1	22.3690825	114.1755478
69496	[redacted]	STD	2018-07-24	80	KU5626	80	MEILAM	2018-07-24 18:17:51	2018-07-24 18:21:00	2018-07-24 18:33:09	4.5	12.6	22.3690675	114.1755317
69496	[redacted]	STD	2018-07-24	80	KU5626	80	MEILAM	2018-07-24 18:17:51	2018-07-24 18:21:00	2018-07-24 18:33:10	4.5	17.1	22.3690445	114.1755075
69496	[redacted]	STD	2018-07-24	80	KU5626	80	MEILAM	2018-07-24 18:17:51	2018-07-24 18:21:00	2018-07-24 18:33:36	5	15.3	22.36857617	114.175113
69496	[redacted]	STD	2018-07-24	80	KU5626	80	MEILAM	2018-07-24 18:17:51	2018-07-24 18:21:00	2018-07-24 18:35:20	4.5	15.3	22.365287	114.1729648
69496	[redacted]	STD	2018-07-24	80	KU5626	80	MEILAM	2018-07-24 18:17:51	2018-07-24 18:21:00	2018-07-24 18:36:42	4.5	16.6	22.363398	114.1713648
69496	[redacted]	STD	2018-07-24	80	KU5626	80	MEILAM	2018-07-24 18:17:51	2018-07-24 18:21:00	2018-07-24 18:38:52	4.5	15.7	22.36543033	114.1752602
69496	[redacted]	STD	2018-07-24	80	KU5626	80	MEILAM	2018-07-24 18:17:51	2018-07-24 18:21:00	2018-07-24 18:39:48	4.5	11.2	22.36622767	114.1761848

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-24	80	KU5626	80	MEILAM	2018-07-24 18:17:51	2018-07-24 18:21:00	2018-07-24 18:39:49	4.5	15.7	22.3662385	114.1762128
69496	[redacted]	STD	2018-07-24	80	KU5626	80	MEILAM	2018-07-24 18:17:51	2018-07-24 18:21:00	2018-07-24 18:41:18	4.5	12.1	22.36698383	114.1763033
69496	[redacted]	STD	2018-07-24	80	KU5626	80	MEILAM	2018-07-24 18:17:51	2018-07-24 18:21:00	2018-07-24 18:42:06	5.3	14.4	22.36874117	114.1784855
69496	[redacted]	STD	2018-07-24	80	KU5626	80	MEILAM	2018-07-24 18:17:51	2018-07-24 18:21:00	2018-07-24 18:42:40	4.5	14.8	22.369056	114.1792247
69496	[redacted]	STD	2018-07-24	80	KU5626	80	MEILAM	2018-07-24 18:17:51	2018-07-24 18:21:00	2018-07-24 18:49:42	4.8	7.6	22.3426625	114.1863972
69496	[redacted]	STD	2018-07-24	80	KU5626	80	MEILAM	2018-07-24 18:17:51	2018-07-24 18:21:00	2018-07-24 18:49:43	5	12.6	22.34265033	114.1864185
69496	[redacted]	STD	2018-07-24	80	KU5626	80	MEILAM	2018-07-24 18:17:51	2018-07-24 18:21:00	2018-07-24 18:49:45	4.8	22.4	22.34263483	114.1865003
69496	[redacted]	STD	2018-07-24	80	KU5626	80	MEILAM	2018-07-24 18:17:51	2018-07-24 18:21:00	2018-07-24 18:49:46	5.8	28.3	22.34262067	114.1865608
69496	[redacted]	STD	2018-07-24	80	KU5626	80	MEILAM	2018-07-24 18:17:51	2018-07-24 18:21:00	2018-07-24 18:49:47	4.9	33.2	22.34261183	114.1866388
69496	[redacted]	STD	2018-07-24	80	KU5626	80	MEILAM	2018-07-24 18:17:51	2018-07-24 18:21:00	2018-07-24 18:50:54	4.5	16.6	22.34180167	114.1918883
69496	[redacted]	STD	2018-07-24	80	KU5626	80	MEILAM	2018-07-24 18:17:51	2018-07-24 18:21:00	2018-07-24 18:51:43	5	14.4	22.341794	114.1954233
69496	[redacted]	STD	2018-07-24	80	KU5626	80	MEILAM	2018-07-24 18:17:51	2018-07-24 18:21:00	2018-07-24 19:02:48	4.4	9.9	22.321158	114.2146885
69496	[redacted]	STD	2018-07-24	80	KU5626	80	MEILAM	2018-07-24 18:17:51	2018-07-24 18:21:00	2018-07-24 19:02:49	4.5	14.4	22.32113317	114.2146912
69496	[redacted]	STD	2018-07-24	80	KU5626	80	MEILAM	2018-07-24 18:17:51	2018-07-24 18:21:00	2018-07-24 19:12:29	4.8	13	22.3129195	114.2248893
69496	[redacted]	STD	2018-07-24	80	KU5626	80	MEILAM	2018-07-24 18:17:51	2018-07-24 18:21:00	2018-07-24 19:16:46	4.5	7.2	22.3071025	114.2219245
69496	[redacted]	STD	2018-07-24	80	KU5626	80	MEILAM	2018-07-24 18:17:51	2018-07-24 18:21:00	2018-07-24 19:16:47	4.5	11.7	22.30711733	114.2219128
69496	[redacted]	STD	2018-07-24	80	KU5626	80	MEILAM	2018-07-24 18:17:51	2018-07-24 18:21:00	2018-07-24 19:16:48	4.5	16.2	22.30714183	114.221893
69496	[redacted]	STD	2018-07-24	80	KU5626	80	KT.FRY	2018-07-24 19:29:24	2018-07-24 19:32:00	2018-07-24 19:35:20	4.5	10.8	22.30895217	114.2267877
69496	[redacted]	STD	2018-07-24	80	KU5626	80	KT.FRY	2018-07-24 19:29:24	2018-07-24 19:32:00	2018-07-24 19:45:09	4.5	15.7	22.31658383	114.2157268
69496	[redacted]	STD	2018-07-24	80	KU5626	80	KT.FRY	2018-07-24 19:29:24	2018-07-24 19:32:00	2018-07-24 20:08:51	4.5	27.4	22.36622117	114.1762742
69496	[redacted]	STD	2018-07-24	80	KU5626	80	KT.FRY	2018-07-24 19:29:24	2018-07-24 19:32:00	2018-07-24 20:11:06	4.5	16.2	22.3629195	114.1723908
69496	[redacted]	STD	2018-07-24	80	KU5626	80	KT.FRY	2018-07-24 19:29:24	2018-07-24 19:32:00	2018-07-24 20:11:07	4.3	20.6	22.3629155	114.1723378
69496	[redacted]	STD	2018-07-24	80	KU5626	80	KT.FRY	2018-07-24 19:29:24	2018-07-24 19:32:00	2018-07-24 20:12:19	4.5	7.2	22.365555	114.1730448
69496	[redacted]	STD	2018-07-24	80	KU5626	80	KT.FRY	2018-07-24 19:29:24	2018-07-24 19:32:00	2018-07-24 20:12:21	5	16.2	22.36559167	114.1730997
69496	[redacted]	STD	2018-07-24	80	KU5626	80	KT.FRY	2018-07-24 19:29:24	2018-07-24 19:32:00	2018-07-24 20:13:11	4.5	14.8	22.3675485	114.1743287
69496	[redacted]	STD	2018-07-24	80	KU5626	80	KT.FRY	2018-07-24 19:29:24	2018-07-24 19:32:00	2018-07-24 20:13:57	5	14.4	22.36887567	114.1750947
69496	[redacted]	STD	2018-07-24	80	KU5626	80	KT.FRY	2018-07-24 19:29:24	2018-07-24 19:32:00	2018-07-24 20:13:58	4.3	18.8	22.368906	114.1751292
69496	[redacted]	STD	2018-07-24	80	KU5626	80	KT.FRY	2018-07-24 19:29:24	2018-07-24 19:32:00	2018-07-24 20:15:54	4.9	16.6	22.37329717	114.1772313
69496	[redacted]	STD	2018-07-24	80	KU5626	80	KT.FRY	2018-07-24 19:29:24	2018-07-24 19:32:00	2018-07-24 20:18:08	4.5	13	22.37551233	114.1775837
69496	[redacted]	STD	2018-07-24	80	KU5626	80	KT.FRY	2018-07-24 19:29:24	2018-07-24 19:32:00	2018-07-24 20:19:38	4.5	12.6	22.37567733	114.1759087
69496	[redacted]	STD	2018-07-24	80	KU5626	80	KT.FRY	2018-07-24 19:29:24	2018-07-24 19:32:00	2018-07-24 20:21:18	4.8	13	22.37728833	114.17298
69496	[redacted]	STD	2018-07-24	80	KU5626	80	KT.FRY	2018-07-24 19:29:24	2018-07-24 19:32:00	2018-07-24 20:24:15	4.5	5.4	22.37748017	114.1736027
69496	[redacted]	STD	2018-07-24	80	KU5626	80	KT.FRY	2018-07-24 19:29:24	2018-07-24 19:32:00	2018-07-24 20:24:17	5	14.4	22.377492	114.173661
69496	[redacted]	STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 20:34:30	2018-07-24 20:37:00	2018-07-24 20:37:16	5.1	6.4	22.37785983	114.1747143
69496	[redacted]	STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 20:34:30	2018-07-24 20:37:00	2018-07-24 20:37:17	4.6	11.1	22.37785983	114.1747132
69496	[redacted]	STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 20:34:30	2018-07-24 20:37:00	2018-07-24 20:38:38	5.3	5.3	22.3769015	114.1749222
69496	[redacted]	STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 20:34:30	2018-07-24 20:37:00	2018-07-24 20:38:39	4.4	9.7	22.376899	114.1749242
69496	[redacted]	STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 20:34:30	2018-07-24 20:37:00	2018-07-24 20:41:03	4.2	6.8	22.376878	114.171727
69496	[redacted]	STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 20:34:30	2018-07-24 20:37:00	2018-07-24 20:41:05	4.1	15.2	22.376883	114.1717545
69496	[redacted]	STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 20:34:30	2018-07-24 20:37:00	2018-07-24 20:42:14	5.1	10.6	22.37747583	114.1737115
69496	[redacted]	STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 20:34:30	2018-07-24 20:37:00	2018-07-24 20:42:59	4.2	9.6	22.3759465	114.1755102
69496	[redacted]	STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 20:34:30	2018-07-24 20:37:00	2018-07-24 20:43:40	5.1	8.1	22.37383467	114.1770128
69496	[redacted]	STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 20:34:30	2018-07-24 20:37:00	2018-07-24 20:44:30	5.8	7	22.3723315	114.1781653
69496	[redacted]	STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 20:34:30	2018-07-24 20:37:00	2018-07-24 20:44:31	4.4	11.4	22.37232733	114.1781688
69496	[redacted]	STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 20:34:30	2018-07-24 20:37:00	2018-07-24 20:44:58	4.5	11	22.3717795	114.1786167
69496	[redacted]	STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 20:34:30	2018-07-24 20:37:00	2018-07-24 20:44:59	4.5	15.5	22.37176917	114.1786298
69496	[redacted]	STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 20:34:30	2018-07-24 20:37:00	2018-07-24 20:46:08	5.1	7.6	22.36917583	114.175604
69496	[redacted]	STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 20:34:30	2018-07-24 20:37:00	2018-07-24 20:46:09	4	11.7	22.36917167	114.1755998
69496	[redacted]	STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 20:34:30	2018-07-24 20:37:00	2018-07-24 20:46:10	4.1	15.9	22.3691575	114.1755863
69496	[redacted]	STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 20:34:30	2018-07-24 20:37:00	2018-07-24 20:47:44	4.8	8.6	22.3653105	114.1729832
69496	[redacted]	STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 20:34:30	2018-07-24 20:37:00	2018-07-24 20:48:16	4.7	10	22.3651015	114.172756

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 20:34:30	2018-07-24 20:37:00	2018-07-24 20:48:17	4.1	14.2	22.365091	114.1727462
69496		STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 20:34:30	2018-07-24 20:37:00	2018-07-24 20:48:53	4.3	9.4	22.36418883	114.1719528
69496		STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 20:34:30	2018-07-24 20:37:00	2018-07-24 20:49:46	5.5	5.5	22.363633	114.1714288
69496		STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 20:34:30	2018-07-24 20:37:00	2018-07-24 20:49:47	4.4	9.9	22.36363083	114.1714272
69496		STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 20:34:30	2018-07-24 20:37:00	2018-07-24 20:50:53	4.5	6.7	22.36385467	114.1737608
69496		STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 20:34:30	2018-07-24 20:37:00	2018-07-24 20:50:54	4.8	11.6	22.36385783	114.1737652
69496		STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 20:34:30	2018-07-24 20:37:00	2018-07-24 20:50:55	4.1	15.7	22.36386917	114.1737802
69496		STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 20:34:30	2018-07-24 20:37:00	2018-07-24 20:51:57	5.7	8.9	22.36538217	114.1751707
69496		STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 20:34:30	2018-07-24 20:37:00	2018-07-24 20:51:58	4	12.9	22.36538517	114.1751818
69496		STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 20:34:30	2018-07-24 20:37:00	2018-07-24 20:53:20	4.8	7.3	22.36678183	114.1763807
69496		STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 20:34:30	2018-07-24 20:37:00	2018-07-24 20:54:47	4.1	10.6	22.369031	114.1791513
69496		STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 20:34:30	2018-07-24 20:37:00	2018-07-24 20:55:42	4.1	11.2	22.3693515	114.1800745
69496		STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 20:34:30	2018-07-24 20:37:00	2018-07-24 21:02:26	5.4	7.5	22.3418325	114.1917717
69496		STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 20:34:30	2018-07-24 20:37:00	2018-07-24 21:03:24	5.8	5.8	22.34181833	114.1957102
69496		STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 20:34:30	2018-07-24 20:37:00	2018-07-24 21:07:07	5.2	8.7	22.336796	114.2070022
69496		STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 20:34:30	2018-07-24 20:37:00	2018-07-24 21:09:36	5.1	6.9	22.32535	114.2143222
69496		STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 20:34:30	2018-07-24 20:37:00	2018-07-24 21:10:36	5	9.4	22.32118567	114.2146865
69496		STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 20:34:30	2018-07-24 20:37:00	2018-07-24 21:11:35	4.3	9.7	22.31747617	114.2153188
69496		STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 20:34:30	2018-07-24 20:37:00	2018-07-24 21:13:01	4.6	9.7	22.31553533	114.2183938
69496		STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 20:34:30	2018-07-24 20:37:00	2018-07-24 21:13:54	4.9	8.2	22.31448967	114.2211333
69496		STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 20:34:30	2018-07-24 20:37:00	2018-07-24 21:14:35	4.2	10.7	22.3138025	114.2228892
69496		STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 20:34:30	2018-07-24 20:37:00	2018-07-24 21:16:05	4.8	12	22.31304033	114.2249593
69496		STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 20:34:30	2018-07-24 20:37:00	2018-07-24 21:16:06	4.2	16.2	22.313032	114.2249743
69496		STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 20:34:30	2018-07-24 20:37:00	2018-07-24 21:18:52	6	7.5	22.309628	114.2235453
69496		STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 20:34:30	2018-07-24 20:37:00	2018-07-24 21:18:53	4.7	12.2	22.30962367	114.2235432
69496		STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 20:34:30	2018-07-24 20:37:00	2018-07-24 21:18:54	4.1	16.4	22.30961133	114.2235287
69496		STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 20:34:30	2018-07-24 20:37:00	2018-07-24 21:22:17	5.1	8.6	22.30782	114.2217892
69496		STD	NULL	NULL	PV2956	NULL	NULL	2018-07-24 21:32:39	NULL	2018-07-24 21:34:59	4.2	4.2	22.3078965	114.2218557
69496		STD	NULL	NULL	PV2956	NULL	NULL	2018-07-24 21:32:39	NULL	2018-07-24 21:34:59	4.2	4.2	22.3078965	114.2218557
69496		STD	NULL	NULL	PV2956	NULL	NULL	2018-07-24 21:32:39	NULL	2018-07-24 21:34:59	4.2	4.2	22.3078965	114.2218557
69496		STD	NULL	NULL	PV2956	NULL	NULL	2018-07-24 21:32:39	NULL	2018-07-24 21:34:59	4.2	4.2	22.3078965	114.2218557
69496		STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 21:37:11	5.9	9.4	22.3091145	114.2270707
69496		STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 21:37:11	5.9	9.4	22.3091145	114.2270707
69496		STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 21:37:11	5.9	9.4	22.3091145	114.2270707
69496		STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 21:37:11	5.9	9.4	22.3091145	114.2270707
69496		STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 21:37:12	4.8	14.2	22.309123	114.2270763
69496		STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 21:37:12	4.8	14.2	22.309123	114.2270763
69496		STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 21:37:12	4.8	14.2	22.309123	114.2270763
69496		STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 21:37:12	4.8	14.2	22.309123	114.2270763
69496		STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 21:38:30	5.1	8.7	22.30895383	114.2284508
69496		STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 21:38:30	5.1	8.7	22.30895383	114.2284508
69496		STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 21:38:30	5.1	8.7	22.30895383	114.2284508
69496		STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 21:38:30	5.1	8.7	22.30895383	114.2284508
69496		STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 21:38:56	5.1	9.9	22.310043	114.2291012
69496		STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 21:38:56	5.1	9.9	22.310043	114.2291012
69496		STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 21:38:56	5.1	9.9	22.310043	114.2291012
69496		STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 21:38:56	5.1	9.9	22.310043	114.2291012
69496		STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 21:45:28	4.6	4.6	22.31651183	114.2158108
69496		STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 21:45:28	4.6	4.6	22.31651183	114.2158108
69496		STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 21:45:28	4.6	4.6	22.31651183	114.2158108
69496		STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 21:45:28	4.6	4.6	22.31651183	114.2158108

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 21:45:29	4.4	9.1	22.31651917	114.2158045
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 21:45:29	4.4	9.1	22.31651917	114.2158045
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 21:45:29	4.4	9.1	22.31651917	114.2158045
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 21:45:29	4.4	9.1	22.31651917	114.2158045
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 21:46:25	4.3	9.9	22.3201625	114.2145448
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 21:46:25	4.3	9.9	22.3201625	114.2145448
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 21:46:25	4.3	9.9	22.3201625	114.2145448
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 21:46:25	4.3	9.9	22.3201625	114.2145448
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 21:48:39	5.4	6.8	22.3255825	114.213979
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 21:48:39	5.4	6.8	22.3255825	114.213979
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 21:48:39	5.4	6.8	22.3255825	114.213979
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 21:48:39	5.4	6.8	22.3255825	114.213979
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 21:49:33	4.6	6.5	22.3288005	114.211846
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 21:49:33	4.6	6.5	22.3288005	114.211846
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 21:49:33	4.6	6.5	22.3288005	114.211846
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 21:49:33	4.6	6.5	22.3288005	114.211846
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 21:52:14	5	7.5	22.33359917	114.2088177
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 21:52:14	5	7.5	22.33359917	114.2088177
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 21:52:14	5	7.5	22.33359917	114.2088177
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 21:52:14	5	7.5	22.33359917	114.2088177
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 21:54:05	4.2	9.6	22.33658533	114.20681
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 21:54:05	4.2	9.6	22.33658533	114.20681
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 21:54:05	4.2	9.6	22.33658533	114.20681
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 21:54:05	4.2	9.6	22.33658533	114.20681
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 21:55:36	4.6	7.5	22.33917	114.2024685
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 21:55:36	4.6	7.5	22.33917	114.2024685
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 21:55:36	4.6	7.5	22.33917	114.2024685
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 21:55:36	4.6	7.5	22.33917	114.2024685
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 21:57:54	4.8	4.8	22.341629	114.1943222
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 21:57:54	4.8	4.8	22.341629	114.1943222
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 21:57:54	4.8	4.8	22.341629	114.1943222
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 21:57:54	4.8	4.8	22.341629	114.1943222
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 21:57:55	4.4	9.2	22.34162933	114.1943182
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 21:57:55	4.4	9.2	22.34162933	114.1943182
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 21:57:55	4.4	9.2	22.34162933	114.1943182
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 21:57:55	4.4	9.2	22.34162933	114.1943182
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 22:12:19	4.1	6.5	22.36543483	114.1754177
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 22:12:19	4.1	6.5	22.36543483	114.1754177
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 22:12:19	4.1	6.5	22.36543483	114.1754177
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 22:12:19	4.1	6.5	22.36543483	114.1754177
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 22:14:33	5.5	5.5	22.36330167	114.1714392
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 22:14:33	5.5	5.5	22.36330167	114.1714392
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 22:14:33	5.5	5.5	22.36330167	114.1714392
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 22:14:33	5.5	5.5	22.36330167	114.1714392
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 22:16:53	5.6	7	22.3674815	114.1743285
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 22:16:53	5.6	7	22.3674815	114.1743285
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 22:16:53	5.6	7	22.3674815	114.1743285
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 22:16:53	5.6	7	22.3674815	114.1743285
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 22:17:32	4.6	6.5	22.36883467	114.1750773
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 22:17:32	4.6	6.5	22.36883467	114.1750773
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 22:17:32	4.6	6.5	22.36883467	114.1750773

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 22:17:32	4.6	6.5	22.36883467	114.1750773
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 22:17:33	4.4	10.9	22.3688395	114.1750813
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 22:17:33	4.4	10.9	22.3688395	114.1750813
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 22:17:33	4.4	10.9	22.3688395	114.1750813
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 22:17:33	4.4	10.9	22.3688395	114.1750813
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 22:19:20	5	9.5	22.37269167	114.1777262
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 22:19:20	5	9.5	22.37269167	114.1777262
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 22:19:20	5	9.5	22.37269167	114.1777262
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 22:19:20	5	9.5	22.37269167	114.1777262
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 22:19:54	4.2	9.6	22.37329617	114.1771997
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 22:19:54	4.2	9.6	22.37329617	114.1771997
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 22:19:54	4.2	9.6	22.37329617	114.1771997
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 22:19:54	4.2	9.6	22.37329617	114.1771997
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 22:23:47	4.7	9.6	22.37704183	114.1739947
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 22:23:47	4.7	9.6	22.37704183	114.1739947
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 22:23:47	4.7	9.6	22.37704183	114.1739947
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 22:23:47	4.7	9.6	22.37704183	114.1739947
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 22:26:13	5.6	5.6	22.37595467	114.1705662
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 22:26:13	5.6	5.6	22.37595467	114.1705662
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 22:26:13	5.6	5.6	22.37595467	114.1705662
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 22:26:13	5.6	5.6	22.37595467	114.1705662
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 22:26:14	5.7	11.4	22.37595483	114.1705682
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 22:26:14	5.7	11.4	22.37595483	114.1705682
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 22:26:14	5.7	11.4	22.37595483	114.1705682
69496	[redacted]	STD	2018-07-24	80	PV2956	80	KT.FRY	2018-07-24 21:32:39	2018-07-24 21:35:00	2018-07-24 22:26:14	5.7	11.4	22.37595483	114.1705682
69496	[redacted]	STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 21:32:39	2018-07-24 22:28:00	2018-07-24 22:28:52	6.1	9.2	22.3777205	114.1752633
69496	[redacted]	STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 21:32:39	2018-07-24 22:28:00	2018-07-24 22:28:52	6.1	9.2	22.3777205	114.1752633
69496	[redacted]	STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 21:32:39	2018-07-24 22:28:00	2018-07-24 22:28:52	6.1	9.2	22.3777205	114.1752633
69496	[redacted]	STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 21:32:39	2018-07-24 22:28:00	2018-07-24 22:28:52	6.1	9.2	22.3777205	114.1752633
69496	[redacted]	STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 21:32:39	2018-07-24 22:28:00	2018-07-24 22:28:53	4.2	13.4	22.37770833	114.1752437
69496	[redacted]	STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 21:32:39	2018-07-24 22:28:00	2018-07-24 22:28:53	4.2	13.4	22.37770833	114.1752437
69496	[redacted]	STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 21:32:39	2018-07-24 22:28:00	2018-07-24 22:28:53	4.2	13.4	22.37770833	114.1752437
69496	[redacted]	STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 21:32:39	2018-07-24 22:28:00	2018-07-24 22:28:53	4.2	13.4	22.37770833	114.1752437
69496	[redacted]	STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 21:32:39	2018-07-24 22:28:00	2018-07-24 22:29:46	5.7	9	22.3776855	114.1747902
69496	[redacted]	STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 21:32:39	2018-07-24 22:28:00	2018-07-24 22:29:46	5.7	9	22.3776855	114.1747902
69496	[redacted]	STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 21:32:39	2018-07-24 22:28:00	2018-07-24 22:29:46	5.7	9	22.3776855	114.1747902
69496	[redacted]	STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 21:32:39	2018-07-24 22:28:00	2018-07-24 22:29:46	5.7	9	22.3776855	114.1747902
69496	[redacted]	STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 21:32:39	2018-07-24 22:28:00	2018-07-24 22:30:16	4.2	10	22.3769175	114.1749467
69496	[redacted]	STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 21:32:39	2018-07-24 22:28:00	2018-07-24 22:30:16	4.2	10	22.3769175	114.1749467
69496	[redacted]	STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 21:32:39	2018-07-24 22:28:00	2018-07-24 22:30:16	4.2	10	22.3769175	114.1749467
69496	[redacted]	STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 21:32:39	2018-07-24 22:28:00	2018-07-24 22:30:16	4.2	10	22.3769175	114.1749467
69496	[redacted]	STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 21:32:39	2018-07-24 22:28:00	2018-07-24 22:31:00	5.3	7.5	22.37590717	114.1755493
69496	[redacted]	STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 21:32:39	2018-07-24 22:28:00	2018-07-24 22:31:00	5.3	7.5	22.37590717	114.1755493
69496	[redacted]	STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 21:32:39	2018-07-24 22:28:00	2018-07-24 22:31:00	5.3	7.5	22.37590717	114.1755493
69496	[redacted]	STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 21:32:39	2018-07-24 22:28:00	2018-07-24 22:31:00	5.3	7.5	22.37590717	114.1755493
69496	[redacted]	STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 21:32:39	2018-07-24 22:28:00	2018-07-24 22:32:35	4.9	9.4	22.36971083	114.1802422
69496	[redacted]	STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 21:32:39	2018-07-24 22:28:00	2018-07-24 22:32:35	4.9	9.4	22.36971083	114.1802422
69496	[redacted]	STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 21:32:39	2018-07-24 22:28:00	2018-07-24 22:32:35	4.9	9.4	22.36971083	114.1802422
69496	[redacted]	STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 21:32:39	2018-07-24 22:28:00	2018-07-24 22:32:35	4.9	9.4	22.36971083	114.1802422
69496	[redacted]	STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 21:32:39	2018-07-24 22:28:00	2018-07-24 22:46:10	4.9	8.2	22.30890567	114.2223185
69496	[redacted]	STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 21:32:39	2018-07-24 22:28:00	2018-07-24 22:46:10	4.9	8.2	22.30890567	114.2223185

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 21:32:39	2018-07-24 22:28:00	2018-07-24 22:46:10	4.9	8.2	22.30890567	114.2223185
69496	[redacted]	STD	2018-07-24	80	PV2956	80	MEILAM	2018-07-24 21:32:39	2018-07-24 22:28:00	2018-07-24 22:46:10	4.9	8.2	22.30890567	114.2223185
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:21:18	4.7	12.3	22.37777967	114.1746542
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:22:43	4.5	8.8	22.37678717	114.1749982
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:22:50	5.3	23	22.37662917	114.1749847
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:25:30	6.3	17.1	22.37684117	114.1717908
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:25:31	4.4	21.6	22.37684633	114.1718112
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:26:19	5.4	11	22.3774645	114.1736548
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:26:20	5.6	16.6	22.37746717	114.1736632
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:26:21	5.4	22	22.377472	114.1736847
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:27:04	5.9	14.3	22.37583317	114.1755837
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:28:04	5.1	15.5	22.3737935	114.17699
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:28:34	5.9	15.9	22.37306817	114.177496
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:29:16	6.4	15.7	22.371777	114.1786097
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:29:17	5.2	21	22.371768	114.1786233
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:30:09	6	18	22.3706965	114.1778138
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:30:10	4	22.1	22.37068783	114.1777932
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:30:56	5.7	12.6	22.36905117	114.1754457
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:30:57	6	18.6	22.36904617	114.1754398
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:30:58	4.7	23.4	22.3690305	114.1754247
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:31:25	5.5	16.3	22.36863583	114.175124
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:31:26	4.6	21	22.36862217	114.1751118
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:32:48	5.4	10.5	22.36785783	114.1746193
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:32:49	6	16.5	22.367856	114.174614
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:32:50	5.1	21.7	22.36784317	114.1746017
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:34:12	5	17.9	22.36511717	114.1727662
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:34:13	4.5	22.4	22.36510167	114.1727527
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:34:56	5.2	12.2	22.3641575	114.1719492
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:34:57	5.4	17.7	22.3641515	114.1719433
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:34:58	4.1	21.8	22.36413883	114.1719282
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:36:02	4.4	11	22.36356833	114.1713888
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:36:10	4	24.7	22.36337183	114.1713662
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:37:33	5.7	12.5	22.36386217	114.1738128
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:37:34	5	17.6	22.36386883	114.1738197
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:38:36	4.1	9.9	22.36540167	114.1752102
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:39:23	5.6	11.4	22.36620483	114.1761035
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:39:24	5.7	17.2	22.36620567	114.1761068
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:39:25	4.1	21.3	22.36621217	114.1761253
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:40:34	5	10.4	22.36687283	114.1763818
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:41:46	5.1	14.9	22.36790717	114.176932
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:41:47	5	19.9	22.36792167	114.1769468
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:42:50	5	19	22.36870217	114.1784052
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:42:51	4.4	23.4	22.36871367	114.178432
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:43:39	4.9	16.3	22.36905667	114.1792002
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:43:40	4.4	20.8	22.36905833	114.1792218
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:44:23	5.1	11	22.3693235	114.1799845
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:44:24	5.2	16.3	22.36932717	114.179993
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:44:25	4.1	20.5	22.36933533	114.180013
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:51:49	4.8	15.3	22.34273017	114.1864188
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:51:50	5.2	20.5	22.34272583	114.1864382
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:51:51	5.3	25.9	22.34271833	114.186469

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:52:44	5.5	13.3	22.34227033	114.1900142
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:52:45	6.1	19.5	22.34226117	114.190023
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:52:46	5.6	25.1	22.34224283	114.1900433
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:53:36	5	18.4	22.34182167	114.1918227
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:54:43	4.8	20.5	22.34181033	114.1957323
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:56:10	4.3	17.1	22.33956417	114.2028327
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:57:25	4.8	23	22.33675417	114.2070883
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:59:57	4.7	15.3	22.32534217	114.2143417
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 12:59:58	4.9	20.3	22.32532183	114.2143365
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 13:00:53	4.8	10.7	22.32118433	114.2146423
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 13:00:54	5.6	16.3	22.32117683	114.2146423
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 13:00:55	5	21.4	22.32115783	114.214642
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 13:02:51	5.3	11	22.3157025	114.2182095
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 13:03:47	4.9	12.9	22.3144805	114.2210927
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 13:06:18	5.5	13.7	22.31294917	114.2247568
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 13:06:19	4.7	18.4	22.31293983	114.2247667
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 13:08:23	5.1	15.1	22.309917	114.224279
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 13:08:24	4.5	19.7	22.30990733	114.2242652
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 13:09:49	6.1	18.6	22.3089905	114.2229482
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 13:09:50	4.9	23.6	22.308975	114.2229275
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 13:10:52	5	11.3	22.30712133	114.2219733
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 13:10:53	6	17.3	22.307135	114.2219588
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 12:17:54	2018-07-25 12:20:00	2018-07-25 13:10:54	4.5	21.8	22.30715067	114.2219418
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 13:27:30	5.2	11.5	22.30771117	114.2233962
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 13:27:31	5.8	17.4	22.30770433	114.2233997
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 13:27:32	5.5	22.9	22.3076875	114.2234122
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 13:28:22	5.2	14.7	22.30803467	114.2256452
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 13:28:23	5.3	20	22.30804517	114.2256602
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 13:29:36	4.6	9.9	22.30907783	114.2272437
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 13:29:37	5.6	15.5	22.30908333	114.2272477
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 13:30:17	5.4	10.2	22.30911533	114.2285207
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 13:30:18	6.1	16.3	22.309126	114.2285223
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 13:30:19	5.6	22	22.30914083	114.2285317
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 13:32:17	4.5	8.3	22.31295283	114.2239462
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 13:33:12	5	12.2	22.314119	114.2212107
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 13:33:13	6	18.2	22.3141235	114.2212002
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 13:33:14	4.4	22.6	22.31413433	114.221179
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 13:35:46	5.5	17.6	22.32213967	114.2143143
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 13:35:47	4	21.6	22.32216233	114.2143153
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 13:36:50	4.7	13.1	22.32561933	114.2139872
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 13:36:51	6.1	19.2	22.32563283	114.2139857
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 13:39:16	5.9	14.2	22.33399133	114.2078948
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 13:39:17	5.2	19.4	22.33400233	114.2079028
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 13:40:12	5.6	17.5	22.33664617	114.2068095
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 13:40:13	4.4	22	22.33666133	114.2067928
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 13:41:11	4.7	14.5	22.33921667	114.202482
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 13:41:12	5	19.5	22.33922517	114.2024687
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 13:43:02	4.8	10.5	22.34163967	114.194281
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 13:43:03	5.4	16	22.34164517	114.1942745
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 13:43:04	4.6	20.7	22.34164583	114.1942535
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 13:43:47	5.3	15.6	22.3414955	114.1914837

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 13:43:48	4.5	20.2	22.3414975	114.1914645
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 13:50:50	5.3	11	22.36889583	114.1790443
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 13:50:51	4.8	15.8	22.3688905	114.1790352
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 13:51:31	4.6	11.9	22.36850983	114.1781033
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 13:51:32	5.1	17	22.36850533	114.1780923
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 13:51:33	4.2	21.3	22.36849683	114.1780702
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 13:53:13	5.6	12.1	22.36754767	114.1765653
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 13:53:47	4.4	28.2	22.36624283	114.1763927
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 13:54:31	4.5	19.6	22.365485	114.1753462
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 13:55:49	5.8	14.5	22.36286883	114.1724797
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 13:55:50	5.6	20.1	22.36286617	114.172462
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 13:55:51	4.9	25	22.36286317	114.1724308
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 13:56:29	5.3	14	22.36336667	114.1713523
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 13:56:37	4.3	24.3	22.3636495	114.171317
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 13:57:19	6.2	16	22.36559633	114.1729793
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 13:57:20	5.4	21.5	22.36561017	114.1729913
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 13:58:20	4.7	10	22.3675325	114.1742598
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 13:58:21	5.7	15.8	22.3675375	114.1742623
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 13:58:22	4.6	20.5	22.36755333	114.174269
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 13:59:25	5.5	11.1	22.36890033	114.1750678
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 13:59:26	5.4	16.6	22.36890333	114.1750745
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 13:59:27	4.2	20.9	22.36891367	114.1750922
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 14:00:14	4.9	20.1	22.3714265	114.1783212
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 14:01:09	5.6	17.5	22.373297	114.1771212
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 14:01:10	4.3	21.8	22.373322	114.1771182
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 14:02:09	5.9	12.8	22.37402383	114.1766915
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 14:02:10	4.2	17.1	22.37403383	114.1766802
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 14:05:26	4.5	11.8	22.376229	114.1769607
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 14:06:40	5.4	12.1	22.375688	114.1759678
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 14:06:41	4.8	17	22.375685	114.1759575
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 14:07:47	5.2	10.3	22.3772645	114.1740138
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 14:07:48	5.3	15.7	22.37726717	114.1740102
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 14:10:07	4.4	23.4	22.37660317	114.1709512
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 14:11:18	5.3	13	22.3774915	114.173731
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 14:11:19	6.9	19.9	22.37750083	114.1737403
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 13:24:04	2018-07-25 13:26:00	2018-07-25 14:11:20	4.3	24.3	22.37750833	114.1737658
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 14:39:18	4.7	13.4	22.37778267	114.1746227
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 14:43:16	4.5	23.5	22.37652067	114.1710355
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 14:44:18	5.4	12.7	22.37742283	114.1736958
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 14:44:19	5.8	18.6	22.3774355	114.173705
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 14:44:20	4.1	22.8	22.377441	114.173729
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 14:45:06	4.6	20.2	22.375871	114.1755672
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 14:45:59	5.2	11.8	22.37381217	114.1770145
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 14:46:00	5.2	17	22.37380433	114.1770178
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 14:46:01	4.3	21.4	22.37378617	114.1770282
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 14:46:33	5.6	14.9	22.37307317	114.1775482
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 14:46:34	5.7	20.7	22.37306033	114.177559
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 14:47:03	4.2	23.7	22.37172633	114.1787148
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 14:48:17	5	18.4	22.36866517	114.1750558
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 14:48:18	4.1	22.6	22.368649	114.175034
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 14:50:00	4.2	8.9	22.36417567	114.1719663

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 14:50:01	5.3	14.3	22.36417183	114.1719622
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 14:50:02	5.4	19.7	22.36416033	114.1719502
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 14:50:59	4.7	12.4	22.3635885	114.1713877
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 14:51:57	5.4	11.3	22.3638585	114.1738018
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 14:51:58	6.1	17.4	22.36386317	114.1738067
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 14:51:59	5.1	22.5	22.3638765	114.1738215
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 14:52:45	5.5	15.7	22.36543333	114.1752025
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 14:52:46	5.7	21.4	22.365447	114.1752142
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 14:52:47	4.1	25.6	22.365469	114.175237
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 14:56:08	5.5	11	22.36868667	114.1782632
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 14:56:09	5.2	16.3	22.36867283	114.1782817
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 14:57:28	5.2	18.4	22.36905517	114.179214
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 14:57:29	4.4	22.8	22.36905567	114.1792412
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 14:58:43	4.9	14.6	22.36610533	114.1807633
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 15:04:02	6.7	18.9	22.34271183	114.1864122
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 15:04:03	5.2	24.1	22.34270833	114.1864342
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 15:04:04	5.5	29.7	22.3426995	114.1864725
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 15:04:07	4.2	42.2	22.34265917	114.186678
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 15:05:09	4.8	10.6	22.34184083	114.1918235
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 15:05:10	5.1	15.7	22.34184083	114.1918437
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 15:05:11	5.3	21.1	22.34184083	114.1918437
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 15:06:01	4.6	13.4	22.34176267	114.1951973
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 15:06:02	4.3	17.7	22.34176183	114.1952133
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 15:06:33	5.4	12.2	22.34179533	114.1955725
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 15:06:34	5.6	17.9	22.341795	114.1955838
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 15:08:20	5.4	12.3	22.33935683	114.2029998
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 15:08:21	5.7	18	22.339351	114.2030083
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 15:08:22	4.7	22.7	22.3393355	114.2030268
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 15:08:42	6.2	15.5	22.3386705	114.2038808
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 15:08:43	5.4	20.9	22.33865683	114.2038883
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 15:09:33	4.1	10.2	22.33680883	114.2070318
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 15:11:34	4	8.3	22.33366167	114.2079772
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 15:15:59	4.7	16.4	22.32604367	114.2142565
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 15:16:40	4.8	20	22.32526967	114.2142733
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 15:17:57	4.7	21.5	22.32136333	114.2146135
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 15:18:52	5.1	11.6	22.31746867	114.2152742
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 15:18:53	5.6	17.2	22.31745017	114.2152837
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 15:18:54	4.8	22	22.3174205	114.2153013
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 15:20:11	4.6	23.3	22.3143895	114.2209903
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 15:21:45	4.6	22	22.31341617	114.2239462
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 15:23:17	5.1	19.7	22.31258133	114.2261637
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 15:25:26	6.2	17.6	22.31139917	114.2257578
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 15:27:12	5.2	21.5	22.309699	114.2239717
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 15:28:30	4.6	9.5	22.3071215	114.2218727
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 15:28:31	5.6	15.1	22.307136	114.2218598
69496	[redacted]	STD	2018-07-25	80	UX8921	80	MEILAM	2018-07-25 14:35:51	2018-07-25 14:38:00	2018-07-25 15:28:32	5.7	20.9	22.30715917	114.2218405
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 15:56:59	4.6	17.8	22.30874	114.2221047
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 15:57:00	4.2	22	22.3087755	114.2221183
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 15:58:19	4.8	12.6	22.30796717	114.2256337
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 15:58:20	5.4	18	22.30798367	114.2256527
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 15:58:21	4.1	22.2	22.30800467	114.2256848

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 15:58:45	5.1	19.4	22.30880767	114.2268732
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:05:27	5.2	17.4	22.31040733	114.2291437
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:05:28	4.8	22.3	22.31043233	114.229119
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:07:20	4.8	11	22.3131295	114.22404
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:08:02	6.4	17.1	22.31335467	114.223557
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:08:03	5.1	22.2	22.31336733	114.2235268
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:08:45	4.9	10.6	22.31424867	114.2212975
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:08:46	5.8	16.4	22.3142555	114.2212802
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:08:47	4.6	21.1	22.31426517	114.2212488
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:10:03	5.7	12.2	22.31510267	114.2189013
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:10:04	5.8	18.1	22.31511017	114.2188788
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:10:52	4.9	9.5	22.31655017	114.2158268
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:10:53	5.8	15.4	22.31656233	114.2158148
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:10:54	5.3	20.7	22.316584	114.2157932
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:11:47	5.4	19.6	22.32022267	114.2145292
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:12:38	5.5	16.7	22.3221605	114.2143123
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:12:39	4.3	21.1	22.32219433	114.2143168
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:13:38	5.2	15.1	22.32564283	114.213986
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:13:39	5.3	20.5	22.32567267	114.2139852
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:17:19	4.6	10.4	22.33667117	114.2068042
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:17:20	5.2	15.6	22.336683	114.2067888
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:17:21	5.1	20.8	22.33670283	114.206764
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:19:29	5.2	18.3	22.33924683	114.2024297
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:21:48	5	16.4	22.34163433	114.194226
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:21:49	4.3	20.8	22.34163367	114.1941893
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:24:09	4.7	15.5	22.3423825	114.1882903
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:24:10	4.1	19.6	22.3423855	114.1882733
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:30:21	6.7	13.7	22.365729	114.1806865
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:30:22	6.3	20.1	22.365741	114.180682
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:30:23	4.1	24.2	22.36576783	114.1806772
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:32:26	4	8.4	22.36921117	114.179838
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:33:31	4	14.8	22.36890817	114.1791243
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:34:30	5.5	18.1	22.36848333	114.1780735
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:36:20	4.9	11.1	22.36743333	114.1763667
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:36:49	4.1	27.9	22.36624667	114.1763933
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:37:30	4.9	14.1	22.365447	114.1753767
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:37:31	4.9	19	22.365437	114.1753618
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:38:51	5.3	12.8	22.362874	114.1724743
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:38:52	5.4	18.2	22.36287417	114.1724607
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:38:53	5.2	23.5	22.36287933	114.1724308
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:39:57	5.1	19.2	22.364933	114.1724805
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:40:23	5.8	15.5	22.36557283	114.1730178
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:40:24	5.6	21.2	22.36558417	114.1730322
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:40:43	4.5	22.6	22.3662195	114.173636
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:42:09	5.4	14.9	22.3675305	114.174304
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:42:10	5.1	20.1	22.36754483	114.17431
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:42:55	5.4	12.3	22.36885	114.175075
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:42:56	6.3	18.7	22.36885633	114.1750807
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:42:57	4.9	23.6	22.36887183	114.1750957
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:45:04	5	15.4	22.37384183	114.176861
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:46:57	5	12	22.37544917	114.177672

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:46:58	5.6	17.7	22.37546267	114.177662
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:46:59	4.8	22.5	22.37548467	114.1776467
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:47:40	5.3	11.7	22.37618417	114.1770668
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:47:41	4.1	15.8	22.376191	114.1770622
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:48:18	5.1	15.1	22.375798	114.1760955
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:48:19	5.4	20.6	22.3757875	114.1760785
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:49:24	6.1	16.3	22.37725617	114.174028
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:49:59	5.9	15.6	22.37729067	114.1730372
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:50:00	5.2	20.8	22.37728667	114.1730147
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:53:00	4.5	13.7	22.3775335	114.1737127
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:53:01	4.2	17.9	22.3775365	114.1737272
69496	[redacted]	STD	2018-07-25	80	UX8921	80	KT.FRY	2018-07-25 15:53:06	2018-07-25 15:56:00	2018-07-25 16:53:02	4	22	22.3775405	114.1737565
69496	[redacted]	STD	2018-07-25	80	KL 631	80	MEILAM	2018-07-25 18:22:39	2018-07-25 18:25:00	2018-07-25 18:29:01	4.1	11.7	0	0
69496	[redacted]	STD	2018-07-25	80	KL 631	80	MEILAM	2018-07-25 18:22:39	2018-07-25 18:25:00	2018-07-25 18:30:42	4.5	10.8	22.377533	114.1736783
69496	[redacted]	STD	2018-07-25	80	KL 631	80	MEILAM	2018-07-25 18:22:39	2018-07-25 18:25:00	2018-07-25 18:30:43	4.8	15.7	22.37753733	114.1737057
69496	[redacted]	STD	2018-07-25	80	KL 631	80	MEILAM	2018-07-25 18:22:39	2018-07-25 18:25:00	2018-07-25 18:30:44	4	19.7	22.37754317	114.173747
69496	[redacted]	STD	2018-07-25	80	KL 631	80	MEILAM	2018-07-25 18:22:39	2018-07-25 18:25:00	2018-07-25 18:31:35	4.5	14.4	22.37596033	114.1755222
69496	[redacted]	STD	2018-07-25	80	KL 631	80	MEILAM	2018-07-25 18:22:39	2018-07-25 18:25:00	2018-07-25 18:33:13	4	20.2	22.3743145	114.176545
69496	[redacted]	STD	2018-07-25	80	KL 631	80	MEILAM	2018-07-25 18:22:39	2018-07-25 18:25:00	2018-07-25 18:55:57	4.8	13.9	22.342649	114.18643
69496	[redacted]	STD	2018-07-25	80	KL 631	80	MEILAM	2018-07-25 18:22:39	2018-07-25 18:25:00	2018-07-25 18:55:58	5.3	19.3	22.34263617	114.1864608
69496	[redacted]	STD	2018-07-25	80	KL 631	80	MEILAM	2018-07-25 18:22:39	2018-07-25 18:25:00	2018-07-25 18:55:59	5.4	24.7	22.342626	114.186505
69496	[redacted]	STD	2018-07-25	80	KL 631	80	MEILAM	2018-07-25 18:22:39	2018-07-25 18:25:00	2018-07-25 18:56:00	4.8	29.6	22.34261333	114.1865662
69496	[redacted]	STD	2018-07-25	80	KL 631	80	MEILAM	2018-07-25 18:22:39	2018-07-25 18:25:00	2018-07-25 18:56:01	4.9	34.6	22.34260367	114.1866407
69496	[redacted]	STD	2018-07-25	80	KL 631	80	MEILAM	2018-07-25 18:22:39	2018-07-25 18:25:00	2018-07-25 18:56:02	4.4	39	22.34259517	114.186728
69496	[redacted]	STD	2018-07-25	80	KL 631	80	MEILAM	2018-07-25 18:22:39	2018-07-25 18:25:00	2018-07-25 19:10:17	4	18.4	22.32109083	114.2146797
69496	[redacted]	STD	2018-07-25	80	KL 631	80	MEILAM	2018-07-25 18:22:39	2018-07-25 18:25:00	2018-07-25 19:19:16	4.5	10.8	22.30959433	114.2238177
69496	[redacted]	STD	2018-07-25	80	KL 631	80	KT.FRY	2018-07-25 19:27:18	2018-07-25 19:29:00	2018-07-25 19:59:56	5	12.6	22.36564783	114.180701
69496	[redacted]	STD	2018-07-25	80	KL 631	80	KT.FRY	2018-07-25 19:27:18	2018-07-25 19:29:00	2018-07-25 19:59:57	4	16.6	22.36567083	114.1806975
69496	[redacted]	STD	2018-07-25	80	KL 631	80	KT.FRY	2018-07-25 19:27:18	2018-07-25 19:29:00	2018-07-25 20:07:06	4.4	19.7	22.36291533	114.1723773
69496	[redacted]	STD	2018-07-25	80	KL 631	80	KT.FRY	2018-07-25 19:27:18	2018-07-25 19:29:00	2018-07-25 20:08:10	4	13	22.36329133	114.1714872
69496	[redacted]	STD	2018-07-25	80	KL 631	80	KT.FRY	2018-07-25 19:27:18	2018-07-25 19:29:00	2018-07-25 20:09:04	4.1	16.2	22.36556683	114.173056
69496	[redacted]	STD	2018-07-25	80	KL 631	80	KT.FRY	2018-07-25 19:27:18	2018-07-25 19:29:00	2018-07-25 20:21:56	4.1	13.5	22.37753533	114.1737057
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 20:39:23	4.9	11.4	22.37781633	114.1746223
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 20:39:24	4.1	15.5	22.37781367	114.1746212
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 20:42:30	5.6	11.5	22.37610683	114.1708563
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 20:42:31	5.1	16.7	22.37611017	114.1708625
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 20:42:51	11.2	28.4	22.37656817	114.1709742
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 20:42:52	5.1	23.2	22.37660217	114.1710075
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 20:43:18	4.9	10.3	22.37682783	114.1718043
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 20:43:19	4.8	15.1	22.37683033	114.1718098
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 20:44:25	5.7	13.3	22.37743583	114.1737383
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 20:44:26	7	20.3	22.37743867	114.173748
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 20:44:27	4.1	24.5	22.37744517	114.173773
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 20:45:09	5	10.7	22.3758515	114.1755687
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 20:45:10	6.1	16.8	22.3758475	114.1755715
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 20:45:11	4.7	21.6	22.3758325	114.1755802
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 20:46:05	5.6	14	22.3737965	114.1769982
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 20:46:06	5.8	19.8	22.37378283	114.176999
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 20:46:07	4.1	24	22.37375633	114.1770067
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 20:46:34	5.8	14.5	22.37305683	114.1774992
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 20:46:35	6.4	20.9	22.37304717	114.1775085

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 20:47:34	7.2	16.9	22.370684	114.177823
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 20:48:24	5.2	13.2	22.36900667	114.1754617
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 20:48:25	6.4	19.6	22.36899733	114.1754532
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 20:48:26	4.1	23.8	22.36897867	114.1754365
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 20:48:49	5.8	15.8	22.36859017	114.175144
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 20:48:50	5.5	21.4	22.36857717	114.1751323
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 20:49:41	4.2	8.8	22.36528483	114.1729943
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 20:49:42	5.9	14.7	22.36528083	114.1729898
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 20:50:12	5	11.2	22.36413	114.1719592
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 20:50:14	4.8	22.2	22.364111	114.1719362
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 20:50:50	5.3	11.5	22.36363217	114.1714697
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 20:50:51	6	17.6	22.36362567	114.1714632
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 20:52:00	5.4	11.3	22.363856	114.173803
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 20:52:27	4.9	24.7	22.3647955	114.1746893
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 20:52:54	6	14.5	22.36540933	114.175211
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 20:52:55	5.8	20.3	22.3654135	114.1752312
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 20:52:56	4.5	24.9	22.36542867	114.1752547
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 20:53:51	4.5	9.6	22.3662735	114.1763467
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 20:55:18	6.1	13.7	22.36707067	114.1762338
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 20:55:19	4.2	18	22.36709583	114.1762233
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 20:56:06	5.5	13.8	22.36870183	114.1783962
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 20:57:00	5.6	17.2	22.36903183	114.1791642
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 20:57:01	4.9	22.2	22.3690335	114.1791897
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 21:03:09	5.1	13.9	22.34262983	114.1864008
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 21:03:10	5.6	19.6	22.342625	114.186417
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 21:03:11	5.2	24.8	22.342614	114.186445
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 21:03:12	4.2	29	22.342602	114.1864862
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 21:03:14	4.5	38.5	22.34257783	114.1866125
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 21:03:15	4	42.5	22.342563	114.1866945
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 21:04:23	4.9	13.1	22.34085483	114.1923545
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 21:04:24	6.1	19.2	22.34085183	114.1923672
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 21:05:46	6	13.5	22.34170583	114.1952667
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 21:05:47	4.5	18.1	22.34170717	114.1952797
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 21:06:11	5.7	17.8	22.34174933	114.1956582
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 21:06:12	5	22.9	22.3417435	114.1956813
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 21:07:50	4.7	9.2	22.33932633	114.2029328
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 21:07:51	6	15.3	22.339325	114.2029365
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 21:07:52	5.2	20.5	22.33931583	114.20295
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 21:07:53	4.1	24.7	22.33929817	114.2029742
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 21:09:04	5.8	20.4	22.3363555	114.207288
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 21:09:05	4.2	24.7	22.33633033	114.2073025
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 21:11:28	5.6	16.1	22.32532417	114.2143153
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 21:11:29	5.2	21.3	22.32530517	114.2143082
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 21:12:44	5.7	14.7	22.3213845	114.214699
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 21:12:45	6.1	20.8	22.32137083	114.2147003
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 21:12:46	4.1	24.9	22.3213435	114.2147035
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 21:13:39	5.3	12.3	22.31787817	114.2151388
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 21:13:40	6.2	18.5	22.31786867	114.2151415
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 21:13:41	4.8	23.3	22.31784683	114.2151495
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 21:16:57	5.2	16	22.31382867	114.2229555
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 21:18:29	4	13.7	22.31307217	114.2249705

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 21:18:55	5	15.4	22.31261283	114.2261803
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 21:18:56	5.2	20.7	22.31261217	114.226201
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 21:19:31	5.2	19.1	22.31149517	114.226043
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 21:19:32	5.5	24.6	22.31147867	114.2260178
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 21:20:36	5.8	14.1	22.3099585	114.22416
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 20:35:03	2018-07-25 20:38:00	2018-07-25 21:21:06	4.5	14.1	22.309739	114.2238555
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:36:21	4.8	9.8	22.30854067	114.2220243
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:36:21	4.8	9.8	22.30854067	114.2220243
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:36:21	4.8	9.8	22.30854067	114.2220243
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:36:21	4.8	9.8	22.30854067	114.2220243
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:36:22	5.5	15.3	22.30854467	114.2220258
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:36:22	5.5	15.3	22.30854467	114.2220258
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:36:22	5.5	15.3	22.30854467	114.2220258
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:36:22	5.5	15.3	22.30854467	114.2220258
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:36:23	5.9	21.2	22.30855983	114.2220313
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:36:23	5.9	21.2	22.30855983	114.2220313
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:36:23	5.9	21.2	22.30855983	114.2220313
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:36:23	5.9	21.2	22.30855983	114.2220313
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:36:24	4.3	25.5	22.308588	114.2220398
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:36:24	4.3	25.5	22.308588	114.2220398
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:36:24	4.3	25.5	22.308588	114.2220398
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:36:24	4.3	25.5	22.308588	114.2220398
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:37:46	5.6	16.7	22.30827433	114.2255008
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:37:46	5.6	16.7	22.30827433	114.2255008
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:37:46	5.6	16.7	22.30827433	114.2255008
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:37:46	5.6	16.7	22.30827433	114.2255008
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:37:47	5.4	22.1	22.30828683	114.2255148
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:37:47	5.4	22.1	22.30828683	114.2255148
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:37:47	5.4	22.1	22.30828683	114.2255148
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:37:47	5.4	22.1	22.30828683	114.2255148
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:38:18	4.9	17.4	22.30914133	114.2269492
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:38:18	4.9	17.4	22.30914133	114.2269492
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:38:18	4.9	17.4	22.30914133	114.2269492
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:38:18	4.9	17.4	22.30914133	114.2269492
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:38:38	4.6	18.2	22.309143	114.2276085
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:38:38	4.6	18.2	22.309143	114.2276085
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:38:38	4.6	18.2	22.309143	114.2276085
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:38:38	4.6	18.2	22.309143	114.2276085
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:39:18	5.2	22.2	22.30894817	114.2284098
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:39:18	5.2	22.2	22.30894817	114.2284098
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:39:18	5.2	22.2	22.30894817	114.2284098
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:39:18	5.2	22.2	22.30894817	114.2284098
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:39:39	4.8	24.6	22.310302	114.2291622
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:39:39	4.8	24.6	22.310302	114.2291622
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:39:39	4.8	24.6	22.310302	114.2291622
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:39:39	4.8	24.6	22.310302	114.2291622
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:39:58	4.2	26.9	22.311016	114.227967
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:39:58	4.2	26.9	22.311016	114.227967
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:39:58	4.2	26.9	22.311016	114.227967
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:39:58	4.2	26.9	22.311016	114.227967
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:40:55	6.2	19.8	22.31176083	114.2266377

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:40:55	6.2	19.8	22.31176083	114.2266377
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:40:55	6.2	19.8	22.31176083	114.2266377
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:40:55	6.2	19.8	22.31176083	114.2266377
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:40:56	4.7	24.5	22.31176783	114.226611
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:40:56	4.7	24.5	22.31176783	114.226611
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:40:56	4.7	24.5	22.31176783	114.226611
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:40:56	4.7	24.5	22.31176783	114.226611
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:42:30	5.4	16.9	22.31299967	114.2239307
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:42:30	5.4	16.9	22.31299967	114.2239307
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:42:30	5.4	16.9	22.31299967	114.2239307
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:42:30	5.4	16.9	22.31299967	114.2239307
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:44:02	5.1	14.3	22.31405783	114.2211873
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:44:02	5.1	14.3	22.31405783	114.2211873
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:44:02	5.1	14.3	22.31405783	114.2211873
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:44:02	5.1	14.3	22.31405783	114.2211873
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:44:03	5.9	20.3	22.31406517	114.2211715
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:44:03	5.9	20.3	22.31406517	114.2211715
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:44:03	5.9	20.3	22.31406517	114.2211715
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:44:03	5.9	20.3	22.31406517	114.2211715
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:45:35	4.1	11.2	22.314928	114.219309
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:45:35	4.1	11.2	22.314928	114.219309
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:45:35	4.1	11.2	22.314928	114.219309
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:45:35	4.1	11.2	22.314928	114.219309
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:46:53	4.9	10.8	22.31520683	114.2185672
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:46:53	4.9	10.8	22.31520683	114.2185672
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:46:53	4.9	10.8	22.31520683	114.2185672
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:46:53	4.9	10.8	22.31520683	114.2185672
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:46:54	5.9	16.8	22.31520967	114.2185595
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:46:54	5.9	16.8	22.31520967	114.2185595
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:46:54	5.9	16.8	22.31520967	114.2185595
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:46:54	5.9	16.8	22.31520967	114.2185595
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:46:55	5.1	21.9	22.3152165	114.2185402
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:46:55	5.1	21.9	22.3152165	114.2185402
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:46:55	5.1	21.9	22.3152165	114.2185402
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:46:55	5.1	21.9	22.3152165	114.2185402
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:50:03	4.8	12.9	22.32214767	114.2143033
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:50:03	4.8	12.9	22.32214767	114.2143033
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:50:03	4.8	12.9	22.32214767	114.2143033
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:50:03	4.8	12.9	22.32214767	114.2143033
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:50:04	5.5	18.5	22.32215833	114.214303
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:50:04	5.5	18.5	22.32215833	114.214303
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:50:04	5.5	18.5	22.32215833	114.214303
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:50:04	5.5	18.5	22.32215833	114.214303
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:51:19	4.6	10.8	22.32559317	114.2139652
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:51:19	4.6	10.8	22.32559317	114.2139652
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:51:19	4.6	10.8	22.32559317	114.2139652
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:51:19	4.6	10.8	22.32559317	114.2139652
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:51:20	5.6	16.5	22.32559917	114.2139687
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:51:20	5.6	16.5	22.32559917	114.2139687
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:51:20	5.6	16.5	22.32559917	114.2139687
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:51:20	5.6	16.5	22.32559917	114.2139687

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:51:21	4.7	21.3	22.325619	114.2139705
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:51:21	4.7	21.3	22.325619	114.2139705
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:51:21	4.7	21.3	22.325619	114.2139705
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:51:21	4.7	21.3	22.325619	114.2139705
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:55:08	4.8	18.4	22.33663383	114.2067815
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:55:08	4.8	18.4	22.33663383	114.2067815
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:55:08	4.8	18.4	22.33663383	114.2067815
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:55:08	4.8	18.4	22.33663383	114.2067815
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:56:33	5	13.2	22.33918783	114.2024433
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:56:33	5	13.2	22.33918783	114.2024433
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:56:33	5	13.2	22.33918783	114.2024433
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:56:33	5	13.2	22.33918783	114.2024433
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:56:34	5	18.2	22.3391925	114.2024355
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:56:34	5	18.2	22.3391925	114.2024355
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:56:34	5	18.2	22.3391925	114.2024355
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:56:34	5	18.2	22.3391925	114.2024355
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:59:03	4.7	16	22.34162783	114.1942782
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:59:03	4.7	16	22.34162783	114.1942782
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:59:03	4.7	16	22.34162783	114.1942782
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:59:03	4.7	16	22.34162783	114.1942782
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:59:04	4.1	20.1	22.34162733	114.1942532
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:59:04	4.1	20.1	22.34162733	114.1942532
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:59:04	4.1	20.1	22.34162733	114.1942532
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 21:59:04	4.1	20.1	22.34162733	114.1942532
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:11:24	4.6	17.7	22.36901283	114.179398
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:11:24	4.6	17.7	22.36901283	114.179398
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:11:24	4.6	17.7	22.36901283	114.179398
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:11:24	4.6	17.7	22.36901283	114.179398
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:11:25	4	21.8	22.36900267	114.1793705
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:11:25	4	21.8	22.36900267	114.1793705
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:11:25	4	21.8	22.36900267	114.1793705
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:11:25	4	21.8	22.36900267	114.1793705
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:13:47	4.9	10.3	22.36750967	114.1764443
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:13:47	4.9	10.3	22.36750967	114.1764443
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:13:47	4.9	10.3	22.36750967	114.1764443
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:13:47	4.9	10.3	22.36750967	114.1764443
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:13:48	4.8	15.2	22.367507	114.1764372
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:13:48	4.8	15.2	22.367507	114.1764372
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:13:48	4.8	15.2	22.367507	114.1764372
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:13:48	4.8	15.2	22.367507	114.1764372
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:15:20	5.3	17.4	22.36546033	114.175368
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:15:20	5.3	17.4	22.36546033	114.175368
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:15:20	5.3	17.4	22.36546033	114.175368
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:15:20	5.3	17.4	22.36546033	114.175368
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:16:47	5.7	13.6	22.36288883	114.1724677
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:16:47	5.7	13.6	22.36288883	114.1724677
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:16:47	5.7	13.6	22.36288883	114.1724677
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:16:47	5.7	13.6	22.36288883	114.1724677
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:16:48	5.9	19.6	22.36288667	114.1724565
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:16:48	5.9	19.6	22.36288667	114.1724565
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:16:48	5.9	19.6	22.36288667	114.1724565

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:16:48	5.9	19.6	22.36288667	114.1724565
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:17:15	4.1	23.2	22.3636065	114.1712802
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:17:15	4.1	23.2	22.3636065	114.1712802
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:17:15	4.1	23.2	22.3636065	114.1712802
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:17:15	4.1	23.2	22.3636065	114.1712802
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:18:00	6	15.5	22.36556533	114.1730112
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:18:00	6	15.5	22.36556533	114.1730112
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:18:00	6	15.5	22.36556533	114.1730112
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:18:00	6	15.5	22.36556533	114.1730112
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:18:01	4.6	20.2	22.3655745	114.173024
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:18:01	4.6	20.2	22.3655745	114.173024
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:18:01	4.6	20.2	22.3655745	114.173024
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:18:01	4.6	20.2	22.3655745	114.173024
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:18:45	5.7	13.6	22.36738733	114.1742312
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:18:45	5.7	13.6	22.36738733	114.1742312
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:18:45	5.7	13.6	22.36738733	114.1742312
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:18:45	5.7	13.6	22.36738733	114.1742312
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:18:46	5.6	19.2	22.36739817	114.1742363
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:18:46	5.6	19.2	22.36739817	114.1742363
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:18:46	5.6	19.2	22.36739817	114.1742363
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:18:46	5.6	19.2	22.36739817	114.1742363
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:19:46	6.3	14.6	22.36893367	114.175163
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:19:46	6.3	14.6	22.36893367	114.175163
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:19:46	6.3	14.6	22.36893367	114.175163
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:19:46	6.3	14.6	22.36893367	114.175163
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:19:47	5.7	20.4	22.36894267	114.175172
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:19:47	5.7	20.4	22.36894267	114.175172
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:19:47	5.7	20.4	22.36894267	114.175172
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:19:47	5.7	20.4	22.36894267	114.175172
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:19:48	4.4	24.8	22.36896167	114.1751905
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:19:48	4.4	24.8	22.36896167	114.1751905
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:19:48	4.4	24.8	22.36896167	114.1751905
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:19:48	4.4	24.8	22.36896167	114.1751905
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:21:30	4.8	11.1	22.37265983	114.1776437
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:21:30	4.8	11.1	22.37265983	114.1776437
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:21:30	4.8	11.1	22.37265983	114.1776437
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:21:30	4.8	11.1	22.37265983	114.1776437
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:21:31	5.7	16.8	22.37266633	114.1776425
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:21:31	5.7	16.8	22.37266633	114.1776425
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:21:31	5.7	16.8	22.37266633	114.1776425
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:21:31	5.7	16.8	22.37266633	114.1776425
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:21:32	4.6	21.5	22.372682	114.17763
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:21:32	4.6	21.5	22.372682	114.17763
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:21:32	4.6	21.5	22.372682	114.17763
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:21:32	4.6	21.5	22.372682	114.17763
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:22:04	4.9	19.4	22.37330333	114.1771265
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:22:04	4.9	19.4	22.37330333	114.1771265
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:22:04	4.9	19.4	22.37330333	114.1771265
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:22:04	4.9	19.4	22.37330333	114.1771265
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:23:14	5.1	13.9	22.37404483	114.1766582
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:23:14	5.1	13.9	22.37404483	114.1766582

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:23:14	5.1	13.9	22.37404483	114.1766582
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:23:14	5.1	13.9	22.37404483	114.1766582
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:23:58	4.2	15.3	22.3748	114.1776292
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:23:58	4.2	15.3	22.3748	114.1776292
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:23:58	4.2	15.3	22.3748	114.1776292
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:23:58	4.2	15.3	22.3748	114.1776292
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:26:17	5.6	13.9	22.3757565	114.1759032
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:26:17	5.6	13.9	22.3757565	114.1759032
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:26:17	5.6	13.9	22.3757565	114.1759032
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:26:17	5.6	13.9	22.3757565	114.1759032
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:26:18	4.8	18.7	22.37574783	114.1758915
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:26:18	4.8	18.7	22.37574783	114.1758915
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:26:18	4.8	18.7	22.37574783	114.1758915
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:26:18	4.8	18.7	22.37574783	114.1758915
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:27:25	5	10.9	22.37714733	114.1739495
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:27:25	5	10.9	22.37714733	114.1739495
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:27:25	5	10.9	22.37714733	114.1739495
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:27:25	5	10.9	22.37714733	114.1739495
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:27:26	5.9	16.8	22.37715367	114.1739478
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:27:26	5.9	16.8	22.37715367	114.1739478
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:27:26	5.9	16.8	22.37715367	114.1739478
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:27:26	5.9	16.8	22.37715367	114.1739478
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:28:11	4.6	10.2	22.37729683	114.172999
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:28:11	4.6	10.2	22.37729683	114.172999
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:28:11	4.6	10.2	22.37729683	114.172999
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:28:11	4.6	10.2	22.37729683	114.172999
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:28:12	6.1	16.3	22.37729383	114.1729962
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:28:12	6.1	16.3	22.37729383	114.1729962
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:28:12	6.1	16.3	22.37729383	114.1729962
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:28:12	6.1	16.3	22.37729383	114.1729962
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:28:55	4.1	20.6	22.37623467	114.170361
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:28:55	4.1	20.6	22.37623467	114.170361
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:28:55	4.1	20.6	22.37623467	114.170361
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:28:55	4.1	20.6	22.37623467	114.170361
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:30:22	4.5	22.8	22.37698167	114.1708223
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:30:22	4.5	22.8	22.37698167	114.1708223
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:30:22	4.5	22.8	22.37698167	114.1708223
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:30:22	4.5	22.8	22.37698167	114.1708223
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:30:58	5.4	23.2	22.37758167	114.1735963
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:30:58	5.4	23.2	22.37758167	114.1735963
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:30:58	5.4	23.2	22.37758167	114.1735963
69496		STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 21:33:55	2018-07-25 21:36:00	2018-07-25 22:30:58	5.4	23.2	22.37758167	114.1735963
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:32:25	4.5	11.9	22.37786567	114.1749125
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:32:25	4.5	11.9	22.37786567	114.1749125
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:32:25	4.5	11.9	22.37786567	114.1749125
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:32:25	4.5	11.9	22.37786567	114.1749125
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:33:23	5.6	13.2	22.37783633	114.1747572
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:33:23	5.6	13.2	22.37783633	114.1747572
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:33:23	5.6	13.2	22.37783633	114.1747572
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:33:23	5.6	13.2	22.37783633	114.1747572
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:33:53	6.2	14.2	22.37682033	114.1750315

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:33:53	6.2	14.2	22.37682033	114.1750315
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:33:53	6.2	14.2	22.37682033	114.1750315
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:33:53	6.2	14.2	22.37682033	114.1750315
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:33:54	6.4	20.6	22.37681	114.1750377
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:33:54	6.4	20.6	22.37681	114.1750377
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:33:54	6.4	20.6	22.37681	114.1750377
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:33:54	6.4	20.6	22.37681	114.1750377
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:33:55	4.3	24.9	22.376787	114.175051
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:33:55	4.3	24.9	22.376787	114.175051
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:33:55	4.3	24.9	22.376787	114.175051
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:33:55	4.3	24.9	22.376787	114.175051
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:34:37	6	16.8	22.37581367	114.1756283
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:34:37	6	16.8	22.37581367	114.1756283
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:34:37	6	16.8	22.37581367	114.1756283
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:34:37	6	16.8	22.37581367	114.1756283
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:34:38	4.9	21.8	22.37579817	114.1756388
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:34:38	4.9	21.8	22.37579817	114.1756388
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:34:38	4.9	21.8	22.37579817	114.1756388
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:34:38	4.9	21.8	22.37579817	114.1756388
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:35:37	6.5	14.6	22.3717945	114.178632
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:35:37	6.5	14.6	22.3717945	114.178632
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:35:37	6.5	14.6	22.3717945	114.178632
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:35:37	6.5	14.6	22.3717945	114.178632
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:35:38	6.2	20.9	22.37178817	114.1786423
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:35:38	6.2	20.9	22.37178817	114.1786423
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:35:38	6.2	20.9	22.37178817	114.1786423
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:35:38	6.2	20.9	22.37178817	114.1786423
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:35:39	4.6	25.6	22.37177367	114.1786673
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:35:39	4.6	25.6	22.37177367	114.1786673
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:35:39	4.6	25.6	22.37177367	114.1786673
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:35:39	4.6	25.6	22.37177367	114.1786673
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:36:31	6.5	15.9	22.36957467	114.1802777
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:36:31	6.5	15.9	22.36957467	114.1802777
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:36:31	6.5	15.9	22.36957467	114.1802777
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:36:31	6.5	15.9	22.36957467	114.1802777
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:36:32	4.5	20.4	22.369561	114.1802852
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:36:32	4.5	20.4	22.369561	114.1802852
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:36:32	4.5	20.4	22.369561	114.1802852
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:36:32	4.5	20.4	22.369561	114.1802852
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:47:39	5.5	12.9	22.31666883	114.214268
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:47:39	5.5	12.9	22.31666883	114.214268
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:47:39	5.5	12.9	22.31666883	114.214268
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:47:39	5.5	12.9	22.31666883	114.214268
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:47:40	6.3	19.3	22.31666267	114.2142752
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:47:40	6.3	19.3	22.31666267	114.2142752
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:47:40	6.3	19.3	22.31666267	114.2142752
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:47:40	6.3	19.3	22.31666267	114.2142752
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:47:41	4.8	24.1	22.316647	114.2142933
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:47:41	4.8	24.1	22.316647	114.2142933
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:47:41	4.8	24.1	22.316647	114.2142933
69496		STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:47:41	4.8	24.1	22.316647	114.2142933

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:47:42	4.2	28.4	22.3166215	114.2143223
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:47:42	4.2	28.4	22.3166215	114.2143223
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:47:42	4.2	28.4	22.3166215	114.2143223
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:47:42	4.2	28.4	22.3166215	114.2143223
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:49:48	5.2	12.9	22.30898033	114.2221475
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:49:48	5.2	12.9	22.30898033	114.2221475
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:49:48	5.2	12.9	22.30898033	114.2221475
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:49:48	5.2	12.9	22.30898033	114.2221475
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:49:49	5.8	18.8	22.30897067	114.2221548
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:49:49	5.8	18.8	22.30897067	114.2221548
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:49:49	5.8	18.8	22.30897067	114.2221548
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:49:49	5.8	18.8	22.30897067	114.2221548
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:49:50	5	23.9	22.3089655	114.2221858
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:49:50	5	23.9	22.3089655	114.2221858
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:49:50	5	23.9	22.3089655	114.2221858
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:49:50	5	23.9	22.3089655	114.2221858
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:49:51	4.1	28	22.30896383	114.2222377
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:49:51	4.1	28	22.30896383	114.2222377
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:49:51	4.1	28	22.30896383	114.2222377
69496	[redacted]	STD	2018-07-25	80	UV7724	80	MEILAM	2018-07-25 21:33:55	2018-07-25 22:32:00	2018-07-25 22:49:51	4.1	28	22.30896383	114.2222377
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:10:55	4.9	10.8	22.308941	114.222305
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:12:02	5	15.3	22.3079195	114.2253352
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:12:17	5.1	12	22.30807333	114.2255418
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:12:18	6	18	22.30807967	114.2255482
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:12:19	4.9	23	22.3080915	114.2255667
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:13:49	5	10.9	22.30879433	114.2277543
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:13:50	5.4	16.3	22.30878883	114.2277605
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:13:57	6.3	23.2	22.30860483	114.227969
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:14:18	4.6	10.9	22.30902667	114.2283745
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:14:19	5.8	16.8	22.309034	114.2283812
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:14:20	6	22.8	22.30904883	114.228396
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:15:31	5.8	19.1	22.31188933	114.2266132
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:15:32	4.7	23.9	22.3118975	114.2265865
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:17:58	5.5	16	22.3143325	114.2212402
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:17:59	5.3	21.4	22.314341	114.2212225
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:19:46	5.2	12.3	22.32018267	114.2144178
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:19:47	5.8	18.1	22.3201935	114.2144247
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:19:48	4.6	22.8	22.32021517	114.2144423
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:20:16	4.8	12	22.321562	114.2143443
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:22:08	4.3	11	22.325486	114.213975
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:22:34	4.8	11.5	22.3255955	114.2139575
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:22:35	5.5	17.1	22.32560533	114.2139572
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:22:36	5.1	22.2	22.32562667	114.2139578
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:23:38	5.6	17.9	22.32881917	114.211807
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:23:39	4.5	22.4	22.32883683	114.2117913
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:26:15	4.3	10.9	22.336643	114.2068007
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:27:57	5.3	17.5	22.33920167	114.2024585
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:27:58	4	21.5	22.33921783	114.2024423
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:29:47	4.7	15.8	22.34161717	114.1942652
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:30:28	4.2	8.9	22.3415775	114.1918055
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:30:29	5.2	14.2	22.3415775	114.1918008

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:30:30	4.2	18.4	22.34157567	114.1917852
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:30:51	5.4	17.9	22.34156267	114.1915012
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:31:46	4.8	17.5	22.34236767	114.1883423
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:38:44	5.6	16.7	22.36851417	114.1781928
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:38:45	4.7	21.4	22.36850683	114.1781718
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:39:19	4.6	12.6	22.36754433	114.1765277
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:40:55	5.6	13.4	22.36647683	114.1765643
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:41:42	5.5	14.6	22.3654525	114.1753712
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:42:59	5.5	13.7	22.362884	114.172457
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:43:00	4.7	18.5	22.3628805	114.1724357
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:43:27	5.6	14.3	22.363371	114.1713572
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:43:35	5	24.4	22.36361317	114.1712898
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:44:31	5.6	13.7	22.367495	114.174288
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:44:32	6.1	19.9	22.367506	114.1742933
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:45:02	6.1	15.7	22.36884867	114.1750517
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:45:03	5.7	21.5	22.36886	114.1750622
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:46:23	4.9	12.8	22.37327417	114.177125
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:46:24	4.4	17.3	22.37328617	114.1771183
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:46:25	4	21.4	22.37330967	114.1771068
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:47:16	6.1	13.6	22.374062	114.1767028
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:48:33	5.9	15.1	22.37545117	114.177586
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:48:34	5.4	20.6	22.37546233	114.177576
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:49:54	5	14.9	22.3771745	114.1739625
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:50:37	5.6	20.4	22.3772805	114.1729867
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:52:27	4.3	14.3	22.377132	114.1708275
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:52:28	5.2	19.6	22.37713567	114.1708332
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:52:29	4.6	24.2	22.37716233	114.1708567
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:53:24	6.4	17.9	22.37780783	114.1736423
69496	[redacted]	STD	2018-07-25	80	UV7724	80	KT.FRY	2018-07-25 23:08:20	2018-07-25 23:10:00	2018-07-25 23:53:25	5.8	23.8	22.3778025	114.173663
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:20:40	4.8	13.3	22.37774133	114.1747678
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:22:06	5	14.4	22.37684583	114.175059
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:22:14	4.1	23.6	22.37661267	114.1750582
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:24:34	4.7	22	22.3766195	114.1709587
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:24:57	5.3	11	22.376947	114.1716825
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:24:58	5.7	16.7	22.37694817	114.1716882
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:24:59	5.1	21.9	22.37695233	114.1717053
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:25:40	5.3	19.4	22.37753333	114.1735948
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:25:41	4	23.4	22.37753817	114.1736208
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:26:26	5	12.3	22.37588417	114.1755137
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:26:27	4.6	16.9	22.3758775	114.1755185
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:27:36	4.9	13.6	22.37379817	114.176924
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:27:37	5.5	19.2	22.37378217	114.1769195
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:27:56	5.6	14.8	22.37313333	114.1773355
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:27:57	4.7	19.5	22.37312483	114.1773448
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:28:30	4.1	8.9	22.3717895	114.1783893
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:29:21	5	13.5	22.37087033	114.17791
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:29:22	4.6	18.2	22.37086233	114.1779035
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:29:37	5.3	13.8	22.3707145	114.1777267
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:29:38	5.3	19.1	22.3707085	114.1777167
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:30:12	4.8	13.6	22.369223	114.1755632
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:30:13	4.7	18.3	22.369213	114.1755533

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:30:47	4.7	19.5	22.368601	114.1750897
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:31:15	5.3	13.4	22.36802133	114.1746778
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:31:16	4.7	18.1	22.36801483	114.17467
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:32:43	4.4	9.8	22.36416067	114.1719348
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:32:44	5.2	15.1	22.36415967	114.1719342
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:32:45	5.3	20.5	22.36415033	114.1719243
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:33:33	4.2	19.1	22.36332117	114.173001
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:34:16	5.7	14.5	22.36385067	114.1737843
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:34:17	4.9	19.5	22.363863	114.173798
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:35:14	4.9	10.8	22.365422	114.1751647
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:35:15	5	15.8	22.36542533	114.1751678
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:35:43	5.3	13.2	22.3662205	114.176072
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:35:44	4.9	18.2	22.36622433	114.1760827
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:36:58	4.9	9.3	22.36678983	114.1764208
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:36:59	6	15.3	22.36679133	114.17642
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:37:00	4	19.3	22.36680217	114.1764153
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:37:01	4.1	23.5	22.3668245	114.176407
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:38:26	4.6	9.5	22.36873133	114.1784955
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:38:27	5.7	15.2	22.3687325	114.1784982
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:38:28	5.5	20.8	22.36873833	114.1785117
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:39:14	4.3	8.9	22.36905533	114.1791792
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:39:15	4.8	13.7	22.36905533	114.1791795
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:39:16	5	18.7	22.36905833	114.1791918
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:40:01	4.6	10.8	22.3693745	114.1801272
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:40:02	5.3	16.2	22.36937717	114.1801337
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:40:03	4	20.2	22.36938433	114.1801503
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:47:15	5.1	11.5	22.34183233	114.1916922
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:47:16	5.1	16.6	22.34183167	114.1916988
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:47:17	4.2	20.9	22.341832	114.191718
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:48:16	4	7.7	22.3418365	114.1952073
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:48:18	5.1	17.4	22.34183717	114.1952237
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:48:46	4.7	10.4	22.3418445	114.1956042
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:48:47	5	15.5	22.3418435	114.1956113
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:48:48	5	20.5	22.34184167	114.1956308
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:50:17	5.1	13.7	22.33956233	114.2027307
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:50:18	4.6	18.4	22.339552	114.202741
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:51:36	4.7	20.5	22.33678033	114.2070387
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:51:37	4	24.6	22.33675533	114.207061
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:54:21	5.2	16	22.325343	114.2143225
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:54:22	4.5	20.6	22.32532517	114.2143115
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:55:28	4.9	8.4	22.321165	114.2146452
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:55:29	5.2	13.6	22.32116317	114.2146452
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:55:30	5.6	19.2	22.321152	114.2146452
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:55:31	4.4	23.7	22.3211285	114.214645
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:56:26	6	18.7	22.31748083	114.2152702
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:56:27	4	22.8	22.31746183	114.2152803
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:57:52	5	12.6	22.314472	114.2210697
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:57:53	5.3	18	22.31446833	114.2210785
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:57:54	4.4	22.5	22.3144595	114.2210993
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:58:34	4.9	11.2	22.31376483	114.2230973
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:58:35	5.3	16.5	22.31377267	114.2231085

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:58:36	4.9	21.5	22.31377733	114.2231318
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:59:20	4.8	8.6	22.31306533	114.2249103
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:59:21	5.1	13.7	22.31301967	114.2248937
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 12:59:58	4	11.5	22.31264617	114.2259802
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 13:00:00	4.8	20.4	22.31264267	114.2260112
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 13:03:54	5	10.3	22.307096	114.2219888
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 12:18:00	2018-07-26 12:20:00	2018-07-26 13:03:56	4.9	21.2	22.30711617	114.2219703
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 13:26:29	4.4	22.8	22.308616	114.2220427
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 13:27:24	5.3	13.1	22.3078975	114.2231435
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 13:29:17	5.7	14	22.30883667	114.2283585
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 13:29:40	4.5	22.7	22.30915633	114.2284845
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 13:31:36	6.1	11.6	22.311948	114.2267697
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 13:31:37	5.7	17.3	22.31194967	114.226768
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 13:31:38	5	22.4	22.3119565	114.2267525
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 13:33:34	4.4	8.3	22.3142035	114.2213345
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 13:33:35	5.5	13.8	22.314202	114.2213312
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 13:33:36	5.8	19.7	22.3142055	114.2213195
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 13:34:45	5.3	12.3	22.31514967	114.2189357
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 13:35:28	5.3	11	22.316561	114.2158527
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 13:35:29	5.8	16.8	22.31656767	114.2158488
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 13:35:30	4.7	21.6	22.31657967	114.2158362
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 13:36:11	4.7	20.8	22.31967717	114.2146553
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 13:36:43	5.5	13.5	22.32181917	114.2143708
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 13:36:44	4.6	18.1	22.32183267	114.214371
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 13:36:45	4.2	22.4	22.32185683	114.2143747
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 13:37:05	5.3	15.8	22.322168	114.21435
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 13:37:06	4.7	20.5	22.322183	114.214347
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 13:38:07	4.5	11.7	22.32513833	114.2140848
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 13:38:51	5.1	12.6	22.325585	114.213955
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 13:38:52	5.7	18.4	22.325592	114.2139558
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 13:38:53	4.4	22.8	22.32561367	114.2139565
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 13:42:02	4.4	9.8	22.3366525	114.2067755
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 13:43:39	4	16.1	22.33923267	114.2024348
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 13:45:27	4.2	7.7	22.3416195	114.1942832
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 13:45:28	4.9	12.7	22.3416195	114.1942733
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 13:45:29	5.5	18.2	22.34161933	114.1942588
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 13:47:15	5.2	14.8	22.34233233	114.1883352
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 13:47:16	4.5	19.3	22.342334	114.1883188
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 13:53:02	5.2	10.7	22.36555667	114.1806567
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 13:53:03	4.8	15.6	22.36556133	114.1806565
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 13:53:04	4.7	20.3	22.3655775	114.1806537
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 13:53:05	4.1	24.4	22.36560683	114.1806488
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 13:54:33	4.8	9.4	22.3689085	114.1791137
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 13:54:34	4.7	14.1	22.36890383	114.1791055
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 13:55:19	5.3	16.8	22.36852433	114.1781948
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 13:55:20	4.4	21.2	22.368517	114.1781768
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 13:56:50	4.8	10.3	22.36749033	114.1764922
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 13:58:10	5.1	8.8	22.36555367	114.1755283
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 13:58:11	4.2	13.1	22.36555233	114.1755267
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 13:58:12	4.9	18	22.36554283	114.1755182
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 13:58:13	4.4	22.4	22.365525	114.1754995

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 13:59:33	5.1	15.5	22.36295083	114.1725855
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 13:59:34	5.2	20.8	22.362946	114.1725667
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 14:00:28	4.4	6.9	22.363338	114.1714633
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 14:00:31	4.4	18.7	22.36335767	114.1714357
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 14:02:09	4.2	13.5	22.3673685	114.1742287
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 14:03:15	4.9	8.5	22.368963	114.1752168
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 14:03:16	5.5	14.1	22.36896367	114.1752172
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 14:03:17	5.9	20	22.36897133	114.1752245
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 14:03:18	4.1	24.1	22.36898867	114.1752413
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 14:04:20	5.4	14.8	22.37250483	114.1778088
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 14:04:53	5.1	12.7	22.37324067	114.1771122
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 14:04:54	5.6	18.3	22.37324833	114.177106
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 14:05:58	5	13.3	22.37402883	114.1766637
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 14:06:19	4.3	26.6	22.37465317	114.1774503
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 14:07:47	5.1	12.4	22.37612833	114.1770605
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 14:09:06	6.1	13.8	22.37573383	114.1760863
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 14:09:07	6.2	20.1	22.37572883	114.1760807
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 14:10:10	5.8	13.4	22.37708833	114.1739917
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 14:10:11	4.3	17.8	22.37709667	114.173989
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 14:10:49	5	14.2	22.377329	114.1731598
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 13:23:41	2018-07-26 13:26:00	2018-07-26 14:10:50	5.1	19.4	22.37732517	114.1731457
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 14:38:41	5	10.6	22.3778005	114.1748102
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 14:38:42	5.4	16.1	22.37780183	114.1748045
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 14:38:43	4.1	20.3	22.377805	114.1747912
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 14:40:09	4.5	21.5	22.37668933	114.1750875
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 14:42:14	4.9	11.8	22.37610917	114.170827
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 14:42:37	4.9	16	22.3764985	114.1710243
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 14:42:38	4.6	20.6	22.37651867	114.1710258
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 14:43:39	5.3	11.3	22.37744333	114.1736838
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 14:43:40	5.7	17.1	22.37744717	114.1736875
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 14:43:41	5	22.1	22.37745217	114.1737043
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 14:44:26	4.9	10.7	22.37589033	114.175596
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 14:44:27	5.1	15.8	22.375885	114.175599
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 14:45:29	5.2	13.7	22.37382617	114.1770105
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 14:45:30	6.1	19.9	22.37381767	114.1770168
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 14:45:56	5.6	14.4	22.37309633	114.1775387
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 14:45:57	6.1	20.5	22.373087	114.1775465
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 14:47:02	5.2	12.7	22.3707365	114.1779343
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 14:47:03	5.8	18.6	22.3707345	114.177924
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 14:47:04	4	22.6	22.37072883	114.1779003
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 14:47:57	5.1	12.7	22.368597	114.1751648
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 14:47:58	5.4	18.2	22.368591	114.1751562
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 14:47:59	4.2	22.5	22.36857517	114.1751402
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 14:48:50	4.3	8.8	22.3653445	114.1730095
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 14:48:51	5.4	14.3	22.36534217	114.173005
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 14:49:26	5.6	17	22.36417917	114.1719542
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 14:49:27	4.3	21.4	22.364166	114.1719412
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 14:50:36	6.4	13	22.3636495	114.1714365
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 14:51:37	5.4	11	22.36385117	114.1738197
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 14:51:38	5.8	16.9	22.3638545	114.1738222
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 14:51:39	5.1	22	22.36386767	114.1738343

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 14:52:18	5.3	11.6	22.365412	114.1752192
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 14:52:19	5.9	17.6	22.36541683	114.1752243
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 14:52:20	5	22.6	22.36542967	114.175239
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 14:53:11	5.7	14.6	22.3662385	114.1761877
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 14:53:12	6.1	20.7	22.36624317	114.1761997
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 14:54:23	5.3	11.9	22.36700367	114.176305
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 14:54:24	4.5	16.5	22.36700883	114.176302
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 14:55:46	5	8.9	22.36874183	114.1784807
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 14:55:47	5.6	14.6	22.3687425	114.1784848
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 14:55:48	6	20.6	22.36874667	114.178497
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 14:56:39	4.4	22	22.36907333	114.1793217
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 15:04:16	4.2	8.7	22.34180933	114.191692
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 15:04:17	5.2	14	22.34181	114.1916962
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 15:04:18	4.5	18.6	22.34181067	114.1917098
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 15:04:19	4.9	23.5	22.341802	114.1917365
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 15:04:38	4.9	9.7	22.34180483	114.1922858
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 15:04:39	5.5	15.3	22.34180517	114.1922903
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 15:04:40	5.4	20.7	22.3418005	114.1923058
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 15:05:35	4.9	11.1	22.3417725	114.1955703
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 15:05:36	5.5	16.7	22.34177267	114.1955785
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 15:05:37	4.7	21.4	22.34177183	114.1955992
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 15:07:01	4.9	17.8	22.33951533	114.2027167
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 15:12:29	5.5	13.5	22.32538	114.2142833
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 15:12:30	6	19.5	22.32536867	114.2142753
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 15:14:05	4.9	9.6	22.31750783	114.2152872
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 15:14:06	5	14.6	22.31750533	114.2152887
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 15:14:07	5.1	19.7	22.31749383	114.2152955
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 15:14:45	4.3	21.6	22.31577717	114.2179057
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 15:18:24	5.1	10.5	22.313665	114.2230415
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 15:20:54	5	10.5	22.31300817	114.2249287
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 15:20:56	4.3	19.7	22.31299783	114.2249472
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 15:22:21	5	18.1	22.31253367	114.2260995
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 15:22:22	4	22.2	22.3125275	114.2261252
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 15:25:36	5.1	11.6	22.31072467	114.2252613
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 15:25:37	5.5	17.1	22.31072217	114.2252538
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 15:28:09	4.8	13.7	22.3070385	114.2220825
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 15:28:10	5.8	19.6	22.30704817	114.2220675
69496	[redacted]	STD	2018-07-26	80	VA3854	80	MEILAM	2018-07-26 14:36:18	2018-07-26 14:38:00	2018-07-26 15:28:11	4	23.6	22.3070715	114.2220367
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 15:57:23	4.4	20.1	22.30872783	114.2220985
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:00:01	5	13.1	22.30802283	114.2255983
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:00:02	5.6	18.8	22.30802983	114.2256098
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:00:44	4.2	7.8	22.30872967	114.2265368
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:00:45	4.9	12.7	22.30873033	114.226538
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:00:46	5.7	18.4	22.3087355	114.226547
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:00:47	4.3	22.8	22.30874617	114.2265663
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:01:49	4.1	20.3	22.30906483	114.2284663
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:05:42	4.7	14.8	22.31172317	114.2266202
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:05:43	5.5	20.4	22.31172617	114.2266015
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:06:58	4.5	10.4	22.313026	114.2240037
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:06:59	4.9	15.4	22.31302983	114.2239985
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:07:00	4.3	19.7	22.31303917	114.2239828

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:07:34	5.3	12.6	22.3132765	114.2234612
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:07:35	5.7	18.3	22.31328017	114.223452
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:07:36	4.5	22.9	22.3132885	114.2234312
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:08:39	5.1	18.6	22.3142065	114.2212845
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:08:40	4	22.7	22.314221	114.221263
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:09:46	4.4	13.3	22.31492967	114.2194263
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:13:23	4.7	11	22.32213283	114.2142713
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:13:24	5.4	16.4	22.32214033	114.2142707
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:14:27	5.2	14.5	22.325347	114.2139917
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:14:45	4.8	10.2	22.32559633	114.2139505
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:14:46	5.3	15.5	22.32560117	114.2139502
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:14:47	5.4	21	22.32561783	114.213954
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:15:45	4.7	11.3	22.328811	114.211807
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:17:50	4.6	10.8	22.33654217	114.20693
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:20:21	5.1	13.7	22.33931033	114.2022992
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:20:22	4.8	18.6	22.3393195	114.2022898
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:23:42	4.9	16.2	22.34160333	114.191501
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:34:11	4.9	13.2	22.368463	114.1780798
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:34:12	5.1	18.4	22.3684585	114.1780683
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:36:20	4.8	10.7	22.36742433	114.176354
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:37:30	4.5	11.9	22.3654495	114.1754033
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:37:31	4.8	16.7	22.36543983	114.1753937
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:37:32	4	20.8	22.36542783	114.1753757
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:38:52	5.3	14.3	22.36287283	114.1724795
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:38:53	5.4	19.7	22.36287	114.1724638
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:38:54	4.2	24	22.36286783	114.1724362
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:40:19	4	8.4	22.36335983	114.1713685
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:40:20	4.7	13.1	22.36337483	114.1713538
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:41:11	4.9	12	22.365586	114.1730488
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:41:12	5.5	17.5	22.36559067	114.1730553
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:41:13	4.7	22.3	22.365602	114.1730718
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:42:19	4.3	8.9	22.367506	114.1743052
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:42:20	5.3	14.2	22.3675135	114.1743067
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:42:21	4.9	19.1	22.36752667	114.174311
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:42:54	5	15.6	22.368854	114.1750745
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:43:47	4.6	12.9	22.37143883	114.17833
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:43:48	5.5	18.5	22.37144767	114.1783365
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:44:12	5	10.7	22.37229733	114.177991
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:44:13	4.6	15.3	22.37229867	114.1779903
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:45:49	5	12.1	22.373992	114.1767393
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:45:50	4.1	16.3	22.3739985	114.1767322
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:46:21	5.3	11.7	22.37481733	114.1777382
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:47:07	4.2	11.2	22.37542867	114.1776912
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:49:05	5.2	14.3	22.37566517	114.1760017
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:49:06	4.9	19.3	22.37565767	114.1759868
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:50:12	5.9	12.9	22.3772625	114.1739742
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:50:45	5.6	14.3	22.37726833	114.1730242
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:50:46	5.3	19.6	22.3772665	114.173012
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:52:56	4.5	20.9	22.37658067	114.1709848
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:53:52	7	14	22.3774605	114.1736742
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:53:53	5.5	19.5	22.37746367	114.1736805

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-26	80	VA3854	80	KT.FRY	2018-07-26 15:53:48	2018-07-26 15:56:00	2018-07-26 16:53:54	4.1	23.7	22.3774695	114.1737043
69496	[redacted]	STD	2018-07-26	80	KL 631	80	MEILAM	2018-07-26 18:17:16	2018-07-26 18:20:00	2018-07-26 18:25:38	4.4	19.3	22.3769125	114.1718033
69496	[redacted]	STD	2018-07-26	80	KL 631	80	MEILAM	2018-07-26 18:17:16	2018-07-26 18:20:00	2018-07-26 18:27:30	4.5	10.8	22.37589717	114.1755497
69496	[redacted]	STD	2018-07-26	80	KL 631	80	MEILAM	2018-07-26 18:17:16	2018-07-26 18:20:00	2018-07-26 18:29:36	4.5	7.6	22.37177717	114.1785353
69496	[redacted]	STD	2018-07-26	80	KL 631	80	MEILAM	2018-07-26 18:17:16	2018-07-26 18:20:00	2018-07-26 18:29:38	4.9	16.6	22.37175167	114.17857
69496	[redacted]	STD	2018-07-26	80	KL 631	80	MEILAM	2018-07-26 18:17:16	2018-07-26 18:20:00	2018-07-26 18:31:04	4.5	15.7	22.3689465	114.1755008
69496	[redacted]	STD	2018-07-26	80	KL 631	80	MEILAM	2018-07-26 18:17:16	2018-07-26 18:20:00	2018-07-26 18:31:30	4.3	17.9	22.36849333	114.175202
69496	[redacted]	STD	2018-07-26	80	KL 631	80	MEILAM	2018-07-26 18:17:16	2018-07-26 18:20:00	2018-07-26 18:32:53	4.4	9.9	22.36783083	114.1746695
69496	[redacted]	STD	2018-07-26	80	KL 631	80	MEILAM	2018-07-26 18:17:16	2018-07-26 18:20:00	2018-07-26 18:32:55	4.3	17.9	22.3678025	114.1746162
69496	[redacted]	STD	2018-07-26	80	KL 631	80	MEILAM	2018-07-26 18:17:16	2018-07-26 18:20:00	2018-07-26 18:34:23	4.5	18.4	22.36412833	114.1719122
69496	[redacted]	STD	2018-07-26	80	KL 631	80	MEILAM	2018-07-26 18:17:16	2018-07-26 18:20:00	2018-07-26 18:36:27	4.5	16.2	22.36386333	114.1738273
69496	[redacted]	STD	2018-07-26	80	KL 631	80	MEILAM	2018-07-26 18:17:16	2018-07-26 18:20:00	2018-07-26 18:42:08	4	11.2	22.36938233	114.1801388
69496	[redacted]	STD	2018-07-26	80	KL 631	80	MEILAM	2018-07-26 18:17:16	2018-07-26 18:20:00	2018-07-26 19:02:48	4.5	16.6	22.32535783	114.2142297
69496	[redacted]	STD	2018-07-26	80	KL 631	80	MEILAM	2018-07-26 18:17:16	2018-07-26 18:20:00	2018-07-26 19:03:48	4.8	17.5	22.32121867	114.2146153
69496	[redacted]	STD	2018-07-26	80	KL 631	80	MEILAM	2018-07-26 18:17:16	2018-07-26 18:20:00	2018-07-26 19:10:28	4.8	17.5	22.31138017	114.225797
69496	[redacted]	STD	2018-07-26	80	KL 631	80	MEILAM	2018-07-26 18:17:16	2018-07-26 18:20:00	2018-07-26 19:12:14	4	4.9	22.30981867	114.2240128
69496	[redacted]	STD	2018-07-26	80	KL 631	80	KT.FRY	2018-07-26 19:24:54	2018-07-26 19:27:00	2018-07-26 19:30:29	4.5	12.1	22.3090575	114.2284645
69496	[redacted]	STD	2018-07-26	80	KL 631	80	KT.FRY	2018-07-26 19:24:54	2018-07-26 19:27:00	2018-07-26 20:08:48	4.5	14.4	22.36289033	114.1724195
69496	[redacted]	STD	2018-07-26	80	KL 631	80	KT.FRY	2018-07-26 19:24:54	2018-07-26 19:27:00	2018-07-26 20:08:50	4.5	22.9	22.36288033	114.1723233
69496	[redacted]	STD	2018-07-26	80	KL 631	80	KT.FRY	2018-07-26 19:24:54	2018-07-26 19:27:00	2018-07-26 20:10:41	4.5	13.9	22.36496117	114.1725313
69496	[redacted]	STD	2018-07-26	80	KL 631	80	KT.FRY	2018-07-26 19:24:54	2018-07-26 19:27:00	2018-07-26 20:11:10	4.5	15.7	22.36558483	114.173064
69496	[redacted]	STD	2018-07-26	80	KL 631	80	KT.FRY	2018-07-26 19:24:54	2018-07-26 19:27:00	2018-07-26 20:11:55	4.5	16.2	22.36744933	114.1742837
69496	[redacted]	STD	2018-07-26	80	KL 631	80	KT.FRY	2018-07-26 19:24:54	2018-07-26 19:27:00	2018-07-26 20:20:46	4.5	16.6	22.37726983	114.1739582
69496	[redacted]	STD	2018-07-26	80	KL 631	80	KT.FRY	2018-07-26 19:24:54	2018-07-26 19:27:00	2018-07-26 20:21:20	4.5	14.8	22.37727633	114.1730397
69496	[redacted]	STD	2018-07-26	80	KL 631	80	KT.FRY	2018-07-26 19:24:54	2018-07-26 19:27:00	2018-07-26 20:24:11	4.9	14.8	22.377548	114.1737887
69496	[redacted]	STD	2018-07-26	80	KL 631	80	KT.FRY	2018-07-26 19:24:54	2018-07-26 19:27:00	2018-07-26 20:24:13	4.5	22.9	22.377562	114.1738833
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 20:41:35	4	12	22.37675333	114.1749788
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 20:41:41	4.1	22.9	22.3765985	114.1748932
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 20:43:22	4.8	8.4	22.37610083	114.1707603
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 20:43:23	4.7	13.1	22.37610533	114.1707688
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 20:43:40	4.6	24.6	22.37660817	114.17097
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 20:45:10	5.4	10.9	22.37742067	114.1735713
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 20:45:11	6.4	17.3	22.37742367	114.1735868
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 20:45:12	5.1	22.5	22.3774295	114.1736167
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 20:45:55	5.5	10.1	22.37586717	114.1754505
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 20:46:57	4.3	16.7	22.3737695	114.1769702
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 20:47:19	5.7	14.4	22.37303117	114.1775063
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 20:47:20	6.1	20.6	22.37301383	114.1775203
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 20:47:21	4.6	25.3	22.37298483	114.1775433
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 20:47:43	5.5	21.3	22.37168183	114.1786498
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 20:48:47	4.6	9.8	22.36861533	114.1750722
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 20:48:48	5.7	15.6	22.36860617	114.1750637
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 20:48:49	5.2	20.9	22.368589	114.175045
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 20:49:48	4.8	12.1	22.36528133	114.1729212
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 20:49:49	5.3	17.5	22.36526867	114.1729068
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 20:49:50	4.9	22.5	22.36524983	114.1728812
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 20:50:23	4.8	24.4	22.3633495	114.1712833
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 20:51:23	4.5	9.1	22.36386	114.173701
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 20:51:24	5.6	14.8	22.3638675	114.1737095
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 20:51:25	5.2	20.1	22.3638815	114.1737295
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 20:52:16	4.7	23.3	22.36544483	114.1751735

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 20:53:58	4.5	23.2	22.36654967	114.1764345
69496		STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 21:02:28	6.2	14	22.3426385	114.18635
69496		STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 21:02:29	6.5	20.6	22.34263183	114.186376
69496		STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 21:02:30	5.2	25.8	22.34262067	114.186416
69496		STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 21:02:31	4.7	30.6	22.34260583	114.1864732
69496		STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 21:02:32	4.1	34.7	22.3425925	114.1865467
69496		STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 21:02:33	4.5	39.2	22.34258217	114.18663
69496		STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 21:03:16	6.2	17.3	22.3422	114.189998
69496		STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 21:03:17	5.4	22.8	22.342181	114.1900222
69496		STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 21:03:18	4.9	27.7	22.3421555	114.1900617
69496		STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 21:03:19	4	31.8	22.34212217	114.1901137
69496		STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 21:03:54	5.3	12.9	22.341769	114.1918167
69496		STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 21:03:55	6	18.9	22.34176733	114.1918363
69496		STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 21:03:56	4.3	23.3	22.341762	114.1918698
69496		STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 21:04:51	4.5	9	22.34180467	114.1956997
69496		STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 21:04:52	5.7	14.7	22.341801	114.195714
69496		STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 21:04:53	5.6	20.4	22.3417945	114.1957387
69496		STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 21:06:40	5	10.8	22.33931417	114.202988
69496		STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 21:06:41	5.8	16.6	22.33930367	114.2030012
69496		STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 21:06:42	5	21.7	22.33928633	114.2030235
69496		STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 21:10:01	6.1	18.1	22.32575817	114.2142403
69496		STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 21:10:02	5.1	23.2	22.32572833	114.214244
69496		STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 21:10:27	5.8	18.4	22.32544917	114.2142293
69496		STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 21:10:28	4.4	22.8	22.32541783	114.2142293
69496		STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 21:11:28	4.9	10.8	22.3211875	114.2146587
69496		STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 21:11:29	5.8	16.6	22.32117467	114.2146602
69496		STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 21:11:30	5.4	22	22.32114933	114.2146628
69496		STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 21:12:24	5.6	11.9	22.3174665	114.2153143
69496		STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 21:12:25	6	18	22.3174525	114.2153215
69496		STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 21:12:26	5	23	22.31742633	114.215336
69496		STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 21:13:55	5.1	13.1	22.31553817	114.2184192
69496		STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 21:13:56	6	19.2	22.31553	114.2184367
69496		STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 21:13:57	4.3	23.5	22.31551767	114.2184667
69496		STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 21:14:51	5.1	20	22.31448383	114.2212242
69496		STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 21:17:03	5.7	14.3	22.31311217	114.2250148
69496		STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 21:17:04	5.9	20.3	22.31310333	114.2250352
69496		STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 21:17:05	4.4	24.7	22.31308867	114.2250693
69496		STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 21:17:24	5.5	21.4	22.31264083	114.226255
69496		STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 21:19:26	4.9	10	22.30958633	114.223462
69496		STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 21:19:27	5.7	15.7	22.30957833	114.2234512
69496		STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 20:35:38	2018-07-26 20:39:00	2018-07-26 21:19:28	5.8	21.6	22.30955867	114.2234308
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:30:43	5.2	7.7	22.308953	114.2224402
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:30:43	5.2	7.7	22.308953	114.2224402
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:30:43	5.2	7.7	22.308953	114.2224402
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:30:43	5.2	7.7	22.308953	114.2224402
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:30:44	4.1	11.9	22.3089545	114.2224482
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:30:44	4.1	11.9	22.3089545	114.2224482
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:30:44	4.1	11.9	22.3089545	114.2224482
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:30:44	4.1	11.9	22.3089545	114.2224482
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:32:18	4.6	9.6	22.30830283	114.2252812
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:32:18	4.6	9.6	22.30830283	114.2252812

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:32:18	4.6	9.6	22.30830283	114.2252812
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:32:18	4.6	9.6	22.30830283	114.2252812
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:32:19	5.6	15.3	22.308312	114.2252895
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:32:19	5.6	15.3	22.308312	114.2252895
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:32:19	5.6	15.3	22.308312	114.2252895
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:32:19	5.6	15.3	22.308312	114.2252895
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:32:20	5.6	21	22.30833033	114.225307
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:32:20	5.6	21	22.30833033	114.225307
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:32:20	5.6	21	22.30833033	114.225307
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:32:20	5.6	21	22.30833033	114.225307
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:33:03	5.5	14.2	22.30922933	114.2268818
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:33:03	5.5	14.2	22.30922933	114.2268818
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:33:03	5.5	14.2	22.30922933	114.2268818
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:33:03	5.5	14.2	22.30922933	114.2268818
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:33:04	5.3	19.5	22.30923433	114.2269082
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:33:04	5.3	19.5	22.30923433	114.2269082
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:33:04	5.3	19.5	22.30923433	114.2269082
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:33:04	5.3	19.5	22.30923433	114.2269082
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:33:53	4.3	9.8	22.30906733	114.2283125
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:33:53	4.3	9.8	22.30906733	114.2283125
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:33:53	4.3	9.8	22.30906733	114.2283125
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:33:53	4.3	9.8	22.30906733	114.2283125
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:36:48	4.6	27	22.3131495	114.2236945
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:36:48	4.6	27	22.3131495	114.2236945
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:36:48	4.6	27	22.3131495	114.2236945
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:36:48	4.6	27	22.3131495	114.2236945
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:37:46	5.6	14	22.3141245	114.221123
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:37:46	5.6	14	22.3141245	114.221123
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:37:46	5.6	14	22.3141245	114.221123
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:37:46	5.6	14	22.3141245	114.221123
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:37:47	5.7	19.8	22.314134	114.2211058
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:37:47	5.7	19.8	22.314134	114.2211058
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:37:47	5.7	19.8	22.314134	114.2211058
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:37:47	5.7	19.8	22.314134	114.2211058
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:37:48	4.1	23.9	22.3141485	114.221075
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:37:48	4.1	23.9	22.3141485	114.221075
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:37:48	4.1	23.9	22.3141485	114.221075
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:37:48	4.1	23.9	22.3141485	114.221075
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:38:51	5.5	16.2	22.31515283	114.2187468
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:38:51	5.5	16.2	22.31515283	114.2187468
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:38:51	5.5	16.2	22.31515283	114.2187468
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:38:51	5.5	16.2	22.31515283	114.2187468
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:38:52	4.9	21.2	22.31515283	114.2187468
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:38:52	4.9	21.2	22.31515283	114.2187468
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:38:52	4.9	21.2	22.31515283	114.2187468
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:38:52	4.9	21.2	22.31515283	114.2187468
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:39:42	4.4	9	22.3165235	114.2157733
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:39:42	4.4	9	22.3165235	114.2157733
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:39:42	4.4	9	22.3165235	114.2157733
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:39:42	4.4	9	22.3165235	114.2157733
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:39:43	5.7	14.7	22.31653233	114.2157675

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:39:43	5.7	14.7	22.31653233	114.2157675
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:39:43	5.7	14.7	22.31653233	114.2157675
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:39:43	5.7	14.7	22.31653233	114.2157675
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:39:44	5.5	20.3	22.31654917	114.2157507
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:39:44	5.5	20.3	22.31654917	114.2157507
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:39:44	5.5	20.3	22.31654917	114.2157507
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:39:44	5.5	20.3	22.31654917	114.2157507
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:40:35	4.9	12.3	22.320174	114.2144517
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:40:35	4.9	12.3	22.320174	114.2144517
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:40:35	4.9	12.3	22.320174	114.2144517
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:40:35	4.9	12.3	22.320174	114.2144517
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:40:36	6.1	18.4	22.320191	114.2144533
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:40:36	6.1	18.4	22.320191	114.2144533
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:40:36	6.1	18.4	22.320191	114.2144533
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:40:36	6.1	18.4	22.320191	114.2144533
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:40:37	4.3	22.7	22.32022083	114.2144587
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:40:37	4.3	22.7	22.32022083	114.2144587
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:40:37	4.3	22.7	22.32022083	114.2144587
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:40:37	4.3	22.7	22.32022083	114.2144587
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:41:28	4.7	11.3	22.32212533	114.2142812
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:41:28	4.7	11.3	22.32212533	114.2142812
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:41:28	4.7	11.3	22.32212533	114.2142812
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:41:28	4.7	11.3	22.32212533	114.2142812
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:41:29	5.6	17	22.32214217	114.2142795
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:41:29	5.6	17	22.32214217	114.2142795
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:41:29	5.6	17	22.32214217	114.2142795
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:41:29	5.6	17	22.32214217	114.2142795
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:41:30	4.4	21.4	22.32217117	114.2142793
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:41:30	4.4	21.4	22.32217117	114.2142793
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:41:30	4.4	21.4	22.32217117	114.2142793
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:41:30	4.4	21.4	22.32217117	114.2142793
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:42:38	5.5	15.3	22.32562517	114.2139585
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:42:38	5.5	15.3	22.32562517	114.2139585
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:42:38	5.5	15.3	22.32562517	114.2139585
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:42:38	5.5	15.3	22.32562517	114.2139585
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:42:39	5.2	20.6	22.32564933	114.2139608
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:42:39	5.2	20.6	22.32564933	114.2139608
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:42:39	5.2	20.6	22.32564933	114.2139608
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:42:39	5.2	20.6	22.32564933	114.2139608
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:43:24	4.5	20.1	22.32885583	114.21177
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:43:24	4.5	20.1	22.32885583	114.21177
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:43:24	4.5	20.1	22.32885583	114.21177
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:43:24	4.5	20.1	22.32885583	114.21177
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:46:06	4.9	11.9	22.336629	114.2067838
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:46:06	4.9	11.9	22.336629	114.2067838
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:46:06	4.9	11.9	22.336629	114.2067838
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:46:06	4.9	11.9	22.336629	114.2067838
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:46:07	5.4	17.4	22.33663833	114.2067722
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:46:07	5.4	17.4	22.33663833	114.2067722
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:46:07	5.4	17.4	22.33663833	114.2067722
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:46:07	5.4	17.4	22.33663833	114.2067722

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:46:08	4.2	21.6	22.33665633	114.206752
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:46:08	4.2	21.6	22.33665633	114.206752
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:46:08	4.2	21.6	22.33665633	114.206752
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:46:08	4.2	21.6	22.33665633	114.206752
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:47:17	5.3	15.5	22.33918267	114.2024612
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:47:17	5.3	15.5	22.33918267	114.2024612
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:47:17	5.3	15.5	22.33918267	114.2024612
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:47:17	5.3	15.5	22.33918267	114.2024612
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:47:18	4.4	19.9	22.33919083	114.202453
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:47:18	4.4	19.9	22.33919083	114.202453
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:47:18	4.4	19.9	22.33919083	114.202453
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:47:18	4.4	19.9	22.33919083	114.202453
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:49:05	5.1	13.2	22.34162483	114.1942682
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:49:05	5.1	13.2	22.34162483	114.1942682
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:49:05	5.1	13.2	22.34162483	114.1942682
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:49:05	5.1	13.2	22.34162483	114.1942682
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:49:06	5	18.3	22.34162333	114.1942475
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:49:06	5	18.3	22.34162333	114.1942475
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:49:06	5	18.3	22.34162333	114.1942475
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:49:06	5	18.3	22.34162333	114.1942475
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:49:48	4.7	13	22.34161283	114.1914922
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:49:48	4.7	13	22.34161283	114.1914922
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:49:48	4.7	13	22.34161283	114.1914922
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:49:48	4.7	13	22.34161283	114.1914922
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:49:49	4.9	17.9	22.34161467	114.19147
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:49:49	4.9	17.9	22.34161467	114.19147
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:49:49	4.9	17.9	22.34161467	114.19147
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:49:49	4.9	17.9	22.34161467	114.19147
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:50:53	4.7	15.2	22.34232817	114.188301
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:50:53	4.7	15.2	22.34232817	114.188301
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:50:53	4.7	15.2	22.34232817	114.188301
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:50:53	4.7	15.2	22.34232817	114.188301
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:50:54	4.1	19.3	22.34233467	114.188274
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:50:54	4.1	19.3	22.34233467	114.188274
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:50:54	4.1	19.3	22.34233467	114.188274
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:50:54	4.1	19.3	22.34233467	114.188274
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:58:55	5	14	22.36846967	114.1781022
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:58:55	5	14	22.36846967	114.1781022
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:58:55	5	14	22.36846967	114.1781022
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:58:55	5	14	22.36846967	114.1781022
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:58:56	5.4	19.4	22.36846067	114.1780773
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:58:56	5.4	19.4	22.36846067	114.1780773
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:58:56	5.4	19.4	22.36846067	114.1780773
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 21:58:56	5.4	19.4	22.36846067	114.1780773
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:00:18	4	16	22.3674755	114.1764005
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:00:18	4	16	22.3674755	114.1764005
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:00:18	4	16	22.3674755	114.1764005
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:00:18	4	16	22.3674755	114.1764005
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:01:47	4	9	22.36543283	114.1754088
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:01:47	4	9	22.36543283	114.1754088
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:01:47	4	9	22.36543283	114.1754088

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:01:47	4	9	22.36543283	114.1754088
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:01:48	5.4	14.4	22.36543283	114.1754088
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:01:48	5.4	14.4	22.36543283	114.1754088
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:01:48	5.4	14.4	22.36543283	114.1754088
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:01:48	5.4	14.4	22.36543283	114.1754088
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:01:49	5	19.5	22.36541233	114.1753787
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:01:49	5	19.5	22.36541233	114.1753787
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:01:49	5	19.5	22.36541233	114.1753787
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:01:49	5	19.5	22.36541233	114.1753787
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:02:59	4.1	8.7	22.3628555	114.172495
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:02:59	4.1	8.7	22.3628555	114.172495
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:02:59	4.1	8.7	22.3628555	114.172495
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:02:59	4.1	8.7	22.3628555	114.172495
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:03:00	5.6	14.3	22.36285633	114.1724873
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:03:00	5.6	14.3	22.36285633	114.1724873
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:03:00	5.6	14.3	22.36285633	114.1724873
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:03:00	5.6	14.3	22.36285633	114.1724873
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:03:01	5.5	19.9	22.36285533	114.1724665
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:03:01	5.5	19.9	22.36285533	114.1724665
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:03:01	5.5	19.9	22.36285533	114.1724665
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:03:01	5.5	19.9	22.36285533	114.1724665
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:03:02	4.2	24.2	22.3628535	114.1724288
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:03:02	4.2	24.2	22.3628535	114.1724288
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:03:02	4.2	24.2	22.3628535	114.1724288
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:03:02	4.2	24.2	22.3628535	114.1724288
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:04:04	5.4	13.9	22.3633635	114.1713588
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:04:04	5.4	13.9	22.3633635	114.1713588
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:04:04	5.4	13.9	22.3633635	114.1713588
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:04:04	5.4	13.9	22.3633635	114.1713588
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:05:42	5.1	11.5	22.367453	114.1742543
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:05:42	5.1	11.5	22.367453	114.1742543
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:05:42	5.1	11.5	22.367453	114.1742543
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:05:42	5.1	11.5	22.367453	114.1742543
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:05:43	6	17.5	22.367468	114.1742602
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:05:43	6	17.5	22.367468	114.1742602
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:05:43	6	17.5	22.367468	114.1742602
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:05:43	6	17.5	22.367468	114.1742602
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:05:44	4.5	22.1	22.36749183	114.1742708
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:05:44	4.5	22.1	22.36749183	114.1742708
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:05:44	4.5	22.1	22.36749183	114.1742708
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:05:44	4.5	22.1	22.36749183	114.1742708
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:06:31	5.8	16.6	22.36884717	114.175063
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:06:31	5.8	16.6	22.36884717	114.175063
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:06:31	5.8	16.6	22.36884717	114.175063
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:06:31	5.8	16.6	22.36884717	114.175063
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:06:32	5.2	21.8	22.368865	114.175086
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:06:32	5.2	21.8	22.368865	114.175086
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:06:32	5.2	21.8	22.368865	114.175086
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:06:32	5.2	21.8	22.368865	114.175086
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:07:29	5	19.9	22.37144283	114.1783788
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:07:29	5	19.9	22.37144283	114.1783788

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:07:29	5	19.9	22.37144283	114.1783788
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:07:29	5	19.9	22.37144283	114.1783788
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:09:00	5.2	11.4	22.374029	114.1766743
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:09:00	5.2	11.4	22.374029	114.1766743
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:09:00	5.2	11.4	22.374029	114.1766743
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:09:00	5.2	11.4	22.374029	114.1766743
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:09:01	5	16.5	22.37403967	114.1766657
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:09:01	5	16.5	22.37403967	114.1766657
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:09:01	5	16.5	22.37403967	114.1766657
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:09:01	5	16.5	22.37403967	114.1766657
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:10:01	5.5	12.9	22.37548	114.177629
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:10:01	5.5	12.9	22.37548	114.177629
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:10:01	5.5	12.9	22.37548	114.177629
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:10:01	5.5	12.9	22.37548	114.177629
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:10:02	4.5	17.4	22.37549167	114.1776178
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:10:02	4.5	17.4	22.37549167	114.1776178
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:10:02	4.5	17.4	22.37549167	114.1776178
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:10:02	4.5	17.4	22.37549167	114.1776178
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:10:03	4.8	22.2	22.37551517	114.1775968
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:10:03	4.8	22.2	22.37551517	114.1775968
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:10:03	4.8	22.2	22.37551517	114.1775968
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:10:03	4.8	22.2	22.37551517	114.1775968
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:10:53	5.4	11.1	22.37623833	114.1769802
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:10:53	5.4	11.1	22.37623833	114.1769802
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:10:53	5.4	11.1	22.37623833	114.1769802
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:10:53	5.4	11.1	22.37623833	114.1769802
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:10:54	4.9	16	22.37622533	114.1769767
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:10:54	4.9	16	22.37622533	114.1769767
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:10:54	4.9	16	22.37622533	114.1769767
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:10:54	4.9	16	22.37622533	114.1769767
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:12:03	5.5	11.2	22.3757175	114.1760223
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:12:03	5.5	11.2	22.3757175	114.1760223
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:12:03	5.5	11.2	22.3757175	114.1760223
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:12:03	5.5	11.2	22.3757175	114.1760223
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:12:04	5.9	17.2	22.37570783	114.176009
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:12:04	5.9	17.2	22.37570783	114.176009
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:12:04	5.9	17.2	22.37570783	114.176009
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:12:04	5.9	17.2	22.37570783	114.176009
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:12:05	4.8	22.1	22.37568767	114.1759837
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:12:05	4.8	22.1	22.37568767	114.1759837
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:12:05	4.8	22.1	22.37568767	114.1759837
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:12:05	4.8	22.1	22.37568767	114.1759837
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:13:12	5.3	12.1	22.37712567	114.1739978
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:13:12	5.3	12.1	22.37712567	114.1739978
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:13:12	5.3	12.1	22.37712567	114.1739978
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:13:12	5.3	12.1	22.37712567	114.1739978
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:13:13	4.3	16.4	22.37714183	114.1739937
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:13:13	4.3	16.4	22.37714183	114.1739937
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:13:13	4.3	16.4	22.37714183	114.1739937
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:13:13	4.3	16.4	22.37714183	114.1739937
69496		STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:13:51	4.6	8.6	22.37728717	114.1730153

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:13:51	4.6	8.6	22.37728717	114.1730153
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:13:51	4.6	8.6	22.37728717	114.1730153
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:13:51	4.6	8.6	22.37728717	114.1730153
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:13:52	5.9	14.5	22.3772845	114.1730052
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:13:52	5.9	14.5	22.3772845	114.1730052
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:13:52	5.9	14.5	22.3772845	114.1730052
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:13:52	5.9	14.5	22.3772845	114.1730052
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:13:53	5.4	20	22.3772815	114.1729825
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:13:53	5.4	20	22.3772815	114.1729825
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:13:53	5.4	20	22.3772815	114.1729825
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:13:53	5.4	20	22.3772815	114.1729825
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:15:12	4.3	20.9	22.37624433	114.1704035
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:15:12	4.3	20.9	22.37624433	114.1704035
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:15:12	4.3	20.9	22.37624433	114.1704035
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:15:12	4.3	20.9	22.37624433	114.1704035
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:16:28	5.1	24.8	22.37671733	114.1711093
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:16:28	5.1	24.8	22.37671733	114.1711093
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:16:28	5.1	24.8	22.37671733	114.1711093
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:16:28	5.1	24.8	22.37671733	114.1711093
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:18:09	5.1	11	22.3775225	114.173749
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:18:09	5.1	11	22.3775225	114.173749
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:18:09	5.1	11	22.3775225	114.173749
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:18:09	5.1	11	22.3775225	114.173749
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:18:10	4.1	15.2	22.3775225	114.173749
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:18:10	4.1	15.2	22.3775225	114.173749
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:18:10	4.1	15.2	22.3775225	114.173749
69496	[redacted]	STD	2018-07-26	80	UV7724	80	KT.FRY	2018-07-26 21:27:46	2018-07-26 21:30:00	2018-07-26 22:18:10	4.1	15.2	22.3775225	114.173749
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:21:11	5.5	10.6	22.3768565	114.1749912
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:21:11	5.5	10.6	22.3768565	114.1749912
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:21:11	5.5	10.6	22.3768565	114.1749912
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:21:11	5.5	10.6	22.3768565	114.1749912
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:21:12	6.4	17.1	22.376845	114.1749978
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:21:12	6.4	17.1	22.376845	114.1749978
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:21:12	6.4	17.1	22.376845	114.1749978
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:21:12	6.4	17.1	22.376845	114.1749978
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:21:13	5.2	22.3	22.37682117	114.1750118
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:21:13	5.2	22.3	22.37682117	114.1750118
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:21:13	5.2	22.3	22.37682117	114.1750118
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:21:13	5.2	22.3	22.37682117	114.1750118
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:21:54	4.7	9.8	22.375812	114.1756172
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:21:54	4.7	9.8	22.375812	114.1756172
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:21:54	4.7	9.8	22.375812	114.1756172
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:21:54	4.7	9.8	22.375812	114.1756172
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:21:55	5.8	15.6	22.37580117	114.1756245
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:21:55	5.8	15.6	22.37580117	114.1756245
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:21:55	5.8	15.6	22.37580117	114.1756245
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:21:55	5.8	15.6	22.37580117	114.1756245
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:21:56	5.4	21.1	22.37577917	114.1756388
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:21:56	5.4	21.1	22.37577917	114.1756388
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:21:56	5.4	21.1	22.37577917	114.1756388
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:21:56	5.4	21.1	22.37577917	114.1756388

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:23:02	5.1	11.8	22.37178333	114.1786327
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:23:02	5.1	11.8	22.37178333	114.1786327
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:23:02	5.1	11.8	22.37178333	114.1786327
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:23:02	5.1	11.8	22.37178333	114.1786327
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:23:03	6.4	18.3	22.371776	114.1786503
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:23:03	6.4	18.3	22.371776	114.1786503
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:23:03	6.4	18.3	22.371776	114.1786503
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:23:03	6.4	18.3	22.371776	114.1786503
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:23:04	5.3	23.6	22.37176	114.1786788
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:23:04	5.3	23.6	22.37176	114.1786788
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:23:04	5.3	23.6	22.37176	114.1786788
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:23:04	5.3	23.6	22.37176	114.1786788
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:34:55	5	10	22.31411383	114.2171013
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:34:55	5	10	22.31411383	114.2171013
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:34:55	5	10	22.31411383	114.2171013
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:34:55	5	10	22.31411383	114.2171013
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:34:56	4.9	14.9	22.31410783	114.2171128
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:34:56	4.9	14.9	22.31410783	114.2171128
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:34:56	4.9	14.9	22.31410783	114.2171128
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:34:56	4.9	14.9	22.31410783	114.2171128
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:34:57	6.1	21.1	22.31408967	114.2171337
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:34:57	6.1	21.1	22.31408967	114.2171337
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:34:57	6.1	21.1	22.31408967	114.2171337
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:34:57	6.1	21.1	22.31408967	114.2171337
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:34:58	4	25.2	22.31406483	114.217166
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:34:58	4	25.2	22.31406483	114.217166
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:34:58	4	25.2	22.31406483	114.217166
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:34:58	4	25.2	22.31406483	114.217166
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:36:43	5.5	21.4	22.30777367	114.2222342
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:36:43	5.5	21.4	22.30777367	114.2222342
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:36:43	5.5	21.4	22.30777367	114.2222342
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:36:43	5.5	21.4	22.30777367	114.2222342
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:36:44	4	25.4	22.30774333	114.2222598
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:36:44	4	25.4	22.30774333	114.2222598
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:36:44	4	25.4	22.30774333	114.2222598
69496	[redacted]	STD	2018-07-26	80	UV7724	80	MEILAM	2018-07-26 21:27:46	2018-07-26 22:19:00	2018-07-26 22:36:44	4	25.4	22.30774333	114.2222598
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:21:13	4.4	9.8	22.37776333	114.1746138
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:21:14	4.8	14.7	22.37775883	114.174612
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:21:15	4.3	19	22.37775133	114.1745987
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:22:39	4.5	8.1	22.37678183	114.1750033
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:23:53	4.6	15.8	22.376069	114.1704723
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:23:54	4.5	20.3	22.37606467	114.1704952
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:24:50	4.6	9.1	22.37614833	114.1707822
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:24:51	4.9	14	22.37614917	114.170784
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:25:09	4.5	20.5	22.376619	114.1710072
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:25:36	5	14.6	22.37686017	114.1717945
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:25:37	5.4	20	22.37686433	114.1718077
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:26:14	5	8.9	22.37748783	114.1736892
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:26:15	5.8	14.8	22.3774895	114.1736925
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:27:00	5.1	11.5	22.3758825	114.1755617
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:28:36	6	9.3	22.3743185	114.1765043

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:28:37	6.4	15.8	22.37431717	114.176505
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:28:38	5.7	21.6	22.37430767	114.1765133
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:29:50	5.2	20	22.37374383	114.1769868
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:30:34	4.4	20.9	22.37173667	114.1786083
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:31:17	6	19.1	22.3707305	114.1778272
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:31:52	5	8.7	22.3691255	114.1755818
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:31:53	5.6	14.3	22.36912517	114.1755803
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:32:23	4.5	6.2	22.36862517	114.1751287
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:32:24	4.6	10.8	22.36862517	114.1751287
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:32:25	5.7	16.5	22.368615	114.1751295
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:32:26	4.5	21	22.368597	114.1751222
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:33:15	6	6	22.36814417	114.1747808
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:34:09	4.9	10.5	22.365325	114.1730197
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:34:10	6	16.5	22.36531317	114.1730125
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:34:11	4.6	21.1	22.3652975	114.172996
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:34:48	5.1	13	22.36413467	114.1719622
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:34:49	5.4	18.4	22.364127	114.1719545
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:35:19	5	11.5	22.36358317	114.1714302
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:35:28	4.4	20.8	22.36335783	114.1713485
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:36:31	5.1	12.5	22.36383333	114.173827
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:36:32	5.8	18.4	22.36384167	114.1738327
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:36:33	4.7	23.1	22.3638575	114.1738462
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:37:27	4.7	9.5	22.365393	114.1752197
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:37:28	5.4	15	22.36539667	114.175225
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:37:29	4.7	19.8	22.365406	114.175238
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:38:43	5	10.4	22.3670355	114.1762983
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:38:44	6.1	16.6	22.3670415	114.1762953
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:39:30	5.2	7	22.36864267	114.1783053
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:39:31	5.7	12.7	22.36864267	114.1783053
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:39:32	5.7	18.4	22.3686455	114.1783113
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:40:19	4.9	11.4	22.36903417	114.1791882
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:40:20	5.6	17	22.36903733	114.1791985
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:40:21	4.6	21.6	22.36904017	114.1792202
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:41:02	5.2	11.1	22.36936233	114.1801382
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:41:03	5.6	16.7	22.36936383	114.1801405
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:42:01	4.5	14.4	22.36605217	114.1807705
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:47:18	4.7	9.7	22.34267933	114.1863672
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:47:19	5.7	15.4	22.34267767	114.1863712
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:47:20	5.8	21.2	22.34267333	114.1863852
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:47:21	5	26.3	22.342666	114.1864135
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:47:22	4.3	30.7	22.342655	114.1864552
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:48:33	4.5	9.8	22.341772	114.191806
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:48:34	5.3	15.1	22.341766	114.1918063
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:48:35	5.3	20.5	22.341762	114.1918183
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:49:41	4.8	17.2	22.34182867	114.1956872
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:49:42	4.4	21.6	22.341827	114.195714
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:53:01	5	15.1	22.33863183	114.2038698
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:53:02	5.3	20.5	22.33861583	114.2038792
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:56:19	4.7	12.8	22.32582017	114.2143143
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:56:20	5.4	18.3	22.325809	114.2143173
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:56:21	4.1	22.4	22.32578717	114.2143205

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:56:55	4.4	9.1	22.32533767	114.2143148
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:56:56	5.5	14.7	22.325332	114.214313
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:56:57	6.2	20.9	22.3253175	114.2143088
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:58:02	4.5	10.3	22.32156733	114.2146265
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:58:03	4.5	14.8	22.32156133	114.2146268
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:58:04	5.3	20.1	22.321545	114.2146288
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:58:05	4.2	24.4	22.3215175	114.2146313
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:59:02	4.3	5.9	22.3174505	114.2152797
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:59:03	4.8	10.7	22.3174505	114.2152797
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:59:04	5.9	16.7	22.31744667	114.2152838
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 12:59:05	4.8	21.5	22.3174315	114.2152908
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 13:00:34	4.6	21.5	22.3155945	114.2181902
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 13:01:31	4.7	8.7	22.31449133	114.2210638
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 13:01:38	4	24.8	22.31442183	114.2212277
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 13:02:13	5.7	13.1	22.3137765	114.2229252
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 13:02:14	6.3	19.4	22.31376117	114.2229283
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 13:03:56	5.2	9.2	22.312967	114.2248818
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 13:03:57	5.5	14.7	22.312961	114.2248713
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 13:03:58	5.6	20.3	22.3129575	114.2248683
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 13:04:23	5.8	8.6	22.31261317	114.2260713
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 13:04:24	6.6	15.2	22.31261417	114.226071
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 13:04:25	5.4	20.7	22.312616	114.2260793
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 13:06:15	4.4	20.8	22.30972867	114.2240938
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 13:07:26	7	7	22.30951233	114.2236332
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 13:07:27	5.9	13	22.30951233	114.2236332
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 13:07:28	6.6	19.6	22.30951833	114.2236095
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 13:08:20	4.4	23.1	22.30724717	114.2226508
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 13:08:47	5.8	17.1	22.3071705	114.2218992
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 12:17:48	2018-07-27 12:20:00	2018-07-27 13:08:48	4.9	22.1	22.3071865	114.2218885
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 13:32:19	4.7	10.2	22.30831533	114.22267
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 13:33:30	6	9.4	22.30759083	114.2233915
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 13:33:31	5.9	15.3	22.30758467	114.2233958
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 13:33:32	5.5	20.9	22.307567	114.223412
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 13:33:59	5.4	7.7	22.30692383	114.224045
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 13:34:00	5.1	12.9	22.30691933	114.2240527
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 13:34:03	4.7	24.4	22.30692783	114.2241685
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 13:34:40	4	5.6	22.30801833	114.2255375
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 13:35:08	4.8	11.9	22.30828167	114.2259955
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 13:36:19	6.7	6.7	22.309004	114.2270977
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 13:36:20	5.6	12.3	22.309007	114.2271045
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 13:36:40	4.7	6.2	22.30905917	114.2276865
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 13:37:14	4.1	8.1	22.3090555	114.22849
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 13:37:15	4.8	13	22.30906367	114.2284972
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 13:37:29	4.5	13.2	22.309257	114.2286058
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 13:39:53	4.9	21.2	22.3117165	114.2264702
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 13:41:23	5.3	8.1	22.31308733	114.2240023
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 13:41:24	4.4	12.6	22.31309217	114.2239923
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 13:41:25	4.6	17.2	22.31310483	114.2239715
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 13:42:42	4.7	9.8	22.3141805	114.22122
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 13:42:43	5.8	15.6	22.31419133	114.2212113
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 13:42:44	5	20.7	22.314203	114.2211882

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 13:43:45	5.2	10.3	22.31510633	114.2189645
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 13:44:59	4.8	14	22.31655283	114.2157332
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 13:45:00	5.9	19.9	22.31657133	114.2157135
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 13:46:27	4.5	8.1	22.32179833	114.2142673
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 13:46:28	5.2	13.3	22.32180867	114.214267
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 13:46:29	4.7	18.1	22.32183117	114.2142645
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 13:47:08	4.5	8.2	22.322145	114.2142713
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 13:47:09	4.7	13	22.32215717	114.2142763
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 13:48:51	4.4	6.9	22.32561467	114.213988
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 13:48:52	4.5	11.5	22.325622	114.2139853
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 13:48:53	5.8	17.4	22.325641	114.2139847
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 13:48:54	4.7	22.1	22.32567217	114.2139808
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 13:49:53	4	9	22.32882467	114.2118422
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 13:49:54	5.3	14.4	22.32883317	114.2118305
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 13:49:55	5.1	19.5	22.32884983	114.2118108
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 13:52:01	4.9	12.1	22.33661317	114.20678
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 13:53:13	4.5	12.6	22.33918617	114.2024625
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 13:53:14	5.2	17.9	22.33919783	114.2024423
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 13:55:08	4.5	7.9	22.34160283	114.1942535
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 13:55:09	4.7	12.7	22.341604	114.194244
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 13:55:10	5	17.7	22.34160433	114.1942208
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 13:56:03	5.2	14.4	22.34156917	114.1915283
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 13:56:04	4.6	19.1	22.3415715	114.1915002
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 13:56:58	4.8	15.3	22.34235733	114.1883422
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 13:56:59	4	19.3	22.342361	114.1883132
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 14:03:40	4.6	10	22.36903583	114.1794533
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 14:03:41	4.6	14.7	22.36902967	114.1794398
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 14:03:42	4.4	19.1	22.36901867	114.1794157
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 14:04:40	4.5	12.4	22.36846117	114.1780572
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 14:04:41	4.6	17.1	22.3684525	114.1780355
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 14:04:42	4.1	21.3	22.36843883	114.1780025
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 14:05:59	4.8	12.2	22.3674515	114.1763612
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 14:06:29	4.1	26.2	22.36620633	114.1764177
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 14:07:29	4.2	20.3	22.36540233	114.175265
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 14:08:20	5.2	12.7	22.36302067	114.172646
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 14:08:21	4.1	16.9	22.363006	114.1726283
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 14:09:02	5.3	11.6	22.362904	114.1724547
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 14:09:03	6.1	17.7	22.3629	114.172435
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 14:09:04	4.5	22.3	22.36289667	114.1724008
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 14:10:05	5.3	12.2	22.36336883	114.1713483
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 14:10:06	5	17.2	22.3633815	114.1713335
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 14:10:54	5.2	12	22.3655595	114.1730855
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 14:10:55	5.9	18	22.3655735	114.1730993
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 14:10:56	4.5	22.6	22.365596	114.1731245
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 14:12:05	4.5	9.6	22.36887167	114.1750252
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 14:12:06	6.7	16.3	22.36888283	114.175035
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 14:12:07	4.9	21.2	22.36890167	114.1750555
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 14:12:55	4.8	7.3	22.37122083	114.1780672
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 14:13:51	5.2	11.5	22.37267367	114.1776938
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 14:13:52	5.8	17.3	22.37268817	114.177681
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 14:13:53	4.4	21.8	22.37271217	114.1776572

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 14:14:19	4.1	8.5	22.373295	114.1771313
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 14:14:20	4.4	13	22.37330517	114.1771243
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 14:14:21	4.5	17.6	22.37332683	114.1771147
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 14:14:22	4.2	21.8	22.37336167	114.1771048
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 14:15:33	5.3	15.4	22.3740725	114.1766685
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 14:16:45	5.3	8.9	22.374929	114.1777758
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 14:17:26	4.2	8.4	22.3754245	114.1777347
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 14:17:27	5.8	14.2	22.37543467	114.1777268
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 14:17:28	5	19.3	22.37545517	114.1777137
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 14:18:35	4.2	8.8	22.376243	114.1769633
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 14:18:36	5.1	14	22.37625267	114.1769547
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 14:19:41	4.8	8.6	22.37726717	114.1739547
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 14:19:42	5.6	14.2	22.3772765	114.173952
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 14:19:43	5	19.2	22.37729867	114.1739465
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 14:20:14	4.9	15.5	22.37735117	114.1731288
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 14:20:15	4.7	20.3	22.3773485	114.1730962
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 14:21:31	4.3	10.1	22.376005	114.1707977
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 14:21:45	6.3	10	22.37615833	114.1709907
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 13:27:38	2018-07-27 13:30:00	2018-07-27 14:21:59	4.6	22.2	22.376668	114.1710235
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 14:39:12	4.7	6.8	22.37778833	114.1746702
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 14:39:13	4.7	11.6	22.37778267	114.174661
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 14:40:45	4.6	20.3	22.37666683	114.1751242
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 14:42:34	4.3	7.6	22.37602067	114.1708887
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 14:42:35	5.3	12.9	22.37602433	114.1708983
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 14:43:14	4.8	21.1	22.37650633	114.1710732
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 14:43:37	4.9	10.6	22.3768245	114.1718102
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 14:43:38	5.9	16.6	22.376829	114.1718268
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 14:43:39	5.2	21.9	22.37683717	114.1718563
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 14:44:14	5.6	9.8	22.37742383	114.1736485
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 14:44:15	6.1	16	22.37742833	114.1736608
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 14:45:00	4.4	8.3	22.3758555	114.1756223
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 14:45:01	5.6	14	22.3758455	114.175629
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 14:45:02	5.2	19.2	22.375825	114.1756425
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 14:46:37	5.6	10.8	22.37439067	114.1766138
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 14:46:38	6.1	16.9	22.3743795	114.1766233
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 14:46:39	5.4	22.3	22.37435583	114.1766407
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 14:47:20	5.2	12.2	22.373838	114.1770908
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 14:47:21	5.5	17.8	22.37381683	114.1770965
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 14:47:22	5.1	22.9	22.37378883	114.1771133
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 14:47:59	4.3	7.6	22.37229517	114.1781765
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 14:48:00	5.4	13.1	22.37228567	114.1781813
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 14:48:01	5.7	18.9	22.37226583	114.1781927
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 14:48:17	4.6	17	22.37178517	114.1786528
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 14:48:18	4.7	21.7	22.37176333	114.1786798
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 14:48:58	4.4	9	22.37066617	114.1779092
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 14:48:59	5.7	14.7	22.370659	114.1778968
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 14:49:00	5.4	20.1	22.37064633	114.177873
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 14:49:41	5.3	8.3	22.36904183	114.1755173
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 14:49:42	5.9	14.2	22.36903783	114.1755088
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 14:49:43	5.9	20.2	22.36902367	114.1754907
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 14:50:48	4.9	13.5	22.368584	114.1751238

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 14:50:49	5.7	19.2	22.36856533	114.1751098
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 14:51:48	5.2	7.4	22.3679875	114.1746547
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 14:51:49	5.5	13	22.36798217	114.1746477
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 14:51:50	5.6	18.6	22.3679655	114.1746347
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 14:52:40	4.4	7.8	22.36530617	114.1730065
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 14:53:07	4.3	8.3	22.36503583	114.1727113
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 14:53:08	5.4	13.8	22.365051	114.1726877
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 14:53:09	5.6	19.5	22.36503417	114.1726722
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 14:53:39	5.3	16.7	22.36415767	114.171909
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 14:53:40	4.2	21	22.36414067	114.1718827
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 14:53:58	4	25.5	22.36333	114.1713408
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 14:55:08	4.3	19.5	22.36392117	114.1737888
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 14:55:55	4.9	8.7	22.3654315	114.1751737
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 14:55:56	4.5	13.2	22.36543933	114.1751838
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 14:55:57	4.9	18.1	22.365454	114.175205
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 14:58:43	5.5	9.1	22.36623183	114.1760925
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 14:58:44	5.8	15	22.36623683	114.1761045
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 14:58:45	5.7	20.7	22.36624717	114.1761303
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 14:59:35	5.7	5.7	22.36653833	114.1765603
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 14:59:36	5.6	11.4	22.36654217	114.1765588
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 14:59:37	6	17.5	22.36655733	114.176552
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 14:59:38	4.3	21.8	22.366592	114.1765392
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 15:00:14	5	19.3	22.36814917	114.1771138
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 15:00:15	4.3	23.7	22.36817067	114.177148
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 15:00:52	4.8	8.8	22.368633	114.178158
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 15:00:53	5.7	14.6	22.36863733	114.1781698
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 15:00:54	5.3	19.9	22.368648	114.1782012
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 15:01:45	5.4	15.6	22.36906533	114.1792058
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 15:02:24	5	8.8	22.36938017	114.1800957
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 15:02:25	6	14.8	22.36938483	114.1801062
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 15:02:26	4.5	19.4	22.36939583	114.1801302
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 15:08:42	6.8	8.8	22.342695	114.1863888
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 15:08:43	6	14.9	22.34269417	114.1863973
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 15:08:44	6.4	21.3	22.34268933	114.1864227
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 15:08:45	5.4	26.8	22.34268117	114.1864645
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 15:09:54	4.7	7.8	22.34180767	114.1917477
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 15:09:55	4.8	12.6	22.34180667	114.1917592
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 15:09:56	5.4	18.1	22.34180467	114.1917828
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 15:09:57	4.6	22.8	22.34179967	114.1918197
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 15:10:43	5.5	5.5	22.34173483	114.1953035
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 15:10:44	5.8	11.4	22.3417345	114.1953073
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 15:10:45	6.1	17.5	22.34173617	114.1953243
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 15:11:07	4.4	9.5	22.34175917	114.1956298
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 15:11:08	5.3	14.8	22.34175833	114.195645
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 15:11:09	5.7	20.6	22.341755	114.195673
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 15:12:29	5.1	12.2	22.33952433	114.2027855
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 15:12:30	5	17.3	22.33950917	114.2028013
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 15:12:31	4	21.3	22.33948433	114.202826
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 15:13:08	4.9	8.6	22.33867233	114.2038127
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 15:13:09	5.7	14.4	22.338663	114.2038203
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 15:13:10	5.7	20.1	22.33864267	114.2038367

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 15:14:00	4.2	13	22.33676383	114.2070242
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 15:15:39	5.6	9	22.3348705	114.2080627
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 15:19:30	4.5	7.9	22.32534633	114.2142962
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 15:19:31	5.3	13.2	22.32533433	114.2142935
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 15:19:32	5.9	19.1	22.32531233	114.2142857
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 15:20:30	4.9	10.3	22.3213885	114.2146625
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 15:20:31	5.8	16.1	22.32137467	114.2146633
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 15:20:32	5.1	21.3	22.321348	114.214664
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 15:21:31	4.6	9.8	22.31745717	114.21531
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 15:21:32	5.6	15.4	22.31744517	114.2153165
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 15:21:33	5.2	20.7	22.31742117	114.2153305
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 15:22:20	4.7	7.7	22.31564017	114.2182403
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 15:22:21	5.6	13.4	22.31563633	114.2182503
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 15:22:22	4.5	17.9	22.3156285	114.218272
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 15:24:20	4.5	8	22.31389367	114.2227758
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 15:25:02	4.7	9.7	22.31331667	114.2243693
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 15:25:03	5.2	15	22.31330617	114.2243812
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 15:26:07	4.8	8.8	22.31310383	114.2248672
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 15:26:08	5.3	14.2	22.31309483	114.224875
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 15:26:35	4.6	19.9	22.31258867	114.226262
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 15:27:06	4.5	15.2	22.31164083	114.2260968
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 15:27:07	4.8	20	22.31161667	114.22608
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 15:27:35	4.5	8.8	22.3110945	114.2254873
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 15:27:36	5.3	14.1	22.31108417	114.2254797
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 15:28:34	4.2	7	22.31008533	114.2243825
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 15:31:28	5.3	7.1	22.30702783	114.2220432
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 15:31:29	5.3	12.4	22.30703233	114.2220355
69496	[redacted]	STD	2018-07-27	80	UX8921	80	MEILAM	2018-07-27 14:35:53	2018-07-27 14:38:00	2018-07-27 15:31:30	4.5	17	22.30704483	114.2220158
69496	[redacted]	STD	NULL	NULL	UX8921	NULL	NULL	2018-07-27 15:53:47	NULL	2018-07-27 15:55:55	8.1	8.1	22.3079355	114.2218723
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 15:56:17	5.1	9.5	22.30854383	114.2220438
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 15:56:18	5.1	14.7	22.30855467	114.222051
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 15:56:19	6.1	20.9	22.30858117	114.2220548
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 15:56:42	4.2	7.5	22.30893767	114.2222412
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 15:56:43	4.7	12.2	22.308944	114.2222493
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 15:56:44	5.1	17.3	22.30895617	114.2222675
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 15:56:45	4.9	22.2	22.30897233	114.2222977
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 15:57:18	5.6	11.6	22.30848667	114.2226803
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:00:23	5.1	9.3	22.30690333	114.2239188
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:00:27	4.5	24.5	22.30688883	114.2240848
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:02:13	5.3	17.8	22.30907033	114.2284957
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:03:37	4.9	17.7	22.31035467	114.2291825
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:03:38	4.9	22.6	22.3103795	114.229157
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:08:07	4.7	10.2	22.31190917	114.2267385
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:09:07	5.7	5.7	22.3130965	114.2242582
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:09:08	4.4	10.2	22.31309567	114.2242515
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:09:09	5.4	15.7	22.31309933	114.2242342
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:11:02	4.6	9.8	22.31427267	114.2212785
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:11:03	5.5	15.3	22.31428233	114.2212643
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:11:04	5.1	20.5	22.31429583	114.2212382
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:11:37	5.3	5.3	22.31508417	114.2193228
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:11:38	4.3	9.7	22.31508567	114.2193167

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:12:23	4.8	6.6	22.31623867	114.2162472
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:12:24	4.2	10.9	22.316242	114.2162418
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:12:39	4.5	7.3	22.31654433	114.2158813
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:13:10	4.6	10.8	22.31660233	114.215817
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:13:11	5.8	16.6	22.316614	114.215804
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:13:12	4.6	21.2	22.316634	114.2157813
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:15:01	5.5	16.4	22.32180933	114.2143477
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:15:38	4.4	6.2	22.32213767	114.2143085
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:15:39	4.8	11.1	22.322144	114.2143082
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:15:40	4.9	16	22.32216133	114.2143082
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:16:22	4.3	21.2	22.32530667	114.21404
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:16:39	4.8	13.4	22.32559417	114.2139867
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:16:40	5.8	19.2	22.3256175	114.2139852
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:16:41	4.1	23.3	22.3256535	114.2139803
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:19:11	4.4	8.3	22.33365717	114.2077053
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:19:12	6	14.3	22.33366733	114.2077152
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:20:05	4.5	7.2	22.33649567	114.2069225
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:22:28	4	7	22.33920033	114.202468
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:22:29	4.9	12	22.33920667	114.2024577
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:22:30	5.2	17.2	22.33922167	114.2024403
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:23:55	4.1	11.5	22.34166017	114.1948102
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:25:05	4.1	8.1	22.34164717	114.194271
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:25:06	4.7	12.8	22.341647	114.1942587
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:25:07	5.1	18	22.34164683	114.1942343
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:25:59	4.9	17.3	22.34159617	114.1914237
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:32:21	5.4	10.8	22.36568533	114.1806925
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:32:22	6.1	17	22.36570233	114.180689
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:32:23	5.5	22.5	22.36573417	114.1806832
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:32:24	4	26.5	22.36578117	114.1806777
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:34:27	4.7	7.1	22.36914583	114.1797995
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:34:28	5	12.2	22.36912833	114.1797632
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:35:34	4.3	12.4	22.368841	114.1790315
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:35:35	4.8	17.2	22.368832	114.1790098
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:36:40	4.6	12.1	22.3684665	114.1780905
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:36:41	5.2	17.3	22.3684605	114.1780707
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:36:42	4	21.4	22.36844933	114.1780387
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:38:19	4.3	6.6	22.367424	114.1763663
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:38:20	4.6	11.2	22.36741983	114.1763592
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:39:36	5.1	14.3	22.365454	114.1753575
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:39:37	4.9	19.3	22.3654395	114.1753345
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:40:54	4.4	12.4	22.362863	114.1724617
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:40:55	6	18.5	22.36285767	114.172438
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:40:56	4.4	22.9	22.3628545	114.172399
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:41:55	6.1	12.1	22.36331783	114.1713948
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:41:56	5.7	17.9	22.36333067	114.17138
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:42:05	4.1	22.6	22.36370317	114.171355
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:42:56	5.3	11.7	22.36556983	114.1730432
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:42:57	6	17.7	22.36558317	114.1730563
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:42:58	4.7	22.5	22.36560467	114.173081
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:44:18	4.8	10.3	22.367518	114.1743108
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:44:19	5.3	15.6	22.36753233	114.1743152

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:44:20	5.2	20.8	22.3675595	114.1743237
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:45:06	5.1	10.7	22.368847	114.1750818
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:45:07	5.3	16.1	22.36885917	114.1750935
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:45:08	5	21.2	22.368879	114.1751163
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:45:09	4.1	25.4	22.36890617	114.1751513
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:45:56	4.6	19	22.37147833	114.1783665
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:46:21	4.4	14.9	22.37268167	114.17773
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:46:22	4.6	19.6	22.37270383	114.1777108
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:46:58	5.7	14.8	22.37330033	114.177175
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:46:59	4.1	19	22.37333	114.17717
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:47:58	5.8	5.8	22.37404233	114.1767185
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:47:59	4.5	10.3	22.374046	114.176715
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:48:00	5.3	15.6	22.37405767	114.176703
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:49:17	5.2	14	22.37488933	114.1777693
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:52:21	4.6	14.7	22.376017	114.1771577
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:52:22	4.5	19.3	22.376041	114.1771387
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:52:54	4.6	18.4	22.37573733	114.1759872
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:53:56	4.2	9.1	22.377314	114.173969
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:53:57	4.8	14	22.37732667	114.1739663
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:54:32	5.7	16	22.37729433	114.1730462
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:54:33	5.2	21.3	22.377289	114.173016
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:56:33	4.1	17.5	22.37658	114.1709448
69496	[redacted]	STD	2018-07-27	80	UX8921	80	KT.FRY	2018-07-27 15:53:47	2018-07-27 15:56:00	2018-07-27 16:56:34	5.1	22.6	22.37660933	114.1709777
69496	[redacted]	STD	2018-07-27	80	KL 631	80	MEILAM	2018-07-27 18:23:35	2018-07-27 18:26:00	2018-07-27 18:32:15	4.5	8.5	22.377519	114.1737368
69496	[redacted]	STD	2018-07-27	80	KL 631	80	MEILAM	2018-07-27 18:23:35	2018-07-27 18:26:00	2018-07-27 18:32:17	4.5	17.1	22.37753467	114.1738097
69496	[redacted]	STD	2018-07-27	80	KL 631	80	MEILAM	2018-07-27 18:23:35	2018-07-27 18:26:00	2018-07-27 18:33:05	4.5	11.2	22.3759055	114.1755732
69496	[redacted]	STD	2018-07-27	80	KL 631	80	MEILAM	2018-07-27 18:23:35	2018-07-27 18:26:00	2018-07-27 18:34:39	4.5	18.4	22.37302867	114.1775565
69496	[redacted]	STD	2018-07-27	80	KL 631	80	MEILAM	2018-07-27 18:23:35	2018-07-27 18:26:00	2018-07-27 18:42:12	4.5	15.7	22.363896	114.173843
69496	[redacted]	STD	2018-07-27	80	KL 631	80	MEILAM	2018-07-27 18:23:35	2018-07-27 18:26:00	2018-07-27 18:45:21	4.5	10.8	22.36696883	114.1763263
69496	[redacted]	STD	2018-07-27	80	KL 631	80	MEILAM	2018-07-27 18:23:35	2018-07-27 18:26:00	2018-07-27 18:45:23	4.3	18.8	22.36703817	114.1762935
69496	[redacted]	STD	2018-07-27	80	KL 631	80	MEILAM	2018-07-27 18:23:35	2018-07-27 18:26:00	2018-07-27 18:56:51	4.8	6.7	22.34272367	114.186335
69496	[redacted]	STD	2018-07-27	80	KL 631	80	MEILAM	2018-07-27 18:23:35	2018-07-27 18:26:00	2018-07-27 18:56:52	4.5	11.2	22.34271833	114.1863577
69496	[redacted]	STD	2018-07-27	80	KL 631	80	MEILAM	2018-07-27 18:23:35	2018-07-27 18:26:00	2018-07-27 18:56:54	4.9	20.2	22.3426985	114.1864355
69496	[redacted]	STD	2018-07-27	80	KL 631	80	MEILAM	2018-07-27 18:23:35	2018-07-27 18:26:00	2018-07-27 18:56:55	4.8	25.1	22.34268783	114.1864943
69496	[redacted]	STD	2018-07-27	80	KL 631	80	MEILAM	2018-07-27 18:23:35	2018-07-27 18:26:00	2018-07-27 18:56:56	5	30.1	22.34267783	114.1865673
69496	[redacted]	STD	2018-07-27	80	KL 631	80	MEILAM	2018-07-27 18:23:35	2018-07-27 18:26:00	2018-07-27 19:09:42	4.5	18.4	22.32530883	114.2142848
69496	[redacted]	STD	2018-07-27	80	KL 631	80	MEILAM	2018-07-27 18:23:35	2018-07-27 18:26:00	2018-07-27 19:10:40	4	16.6	22.32114683	114.2146672
69496	[redacted]	STD	2018-07-27	80	KL 631	80	MEILAM	2018-07-27 18:23:35	2018-07-27 18:26:00	2018-07-27 19:12:37	4.5	5.4	22.31583383	114.2178122
69496	[redacted]	STD	2018-07-27	80	KL 631	80	MEILAM	2018-07-27 18:23:35	2018-07-27 18:26:00	2018-07-27 19:12:39	4.8	13.9	22.31581133	114.2178833
69496	[redacted]	STD	2018-07-27	80	KL 631	80	MEILAM	2018-07-27 18:23:35	2018-07-27 18:26:00	2018-07-27 19:14:01	4.5	5.4	22.314368	114.2210745
69496	[redacted]	STD	2018-07-27	80	KL 631	80	MEILAM	2018-07-27 18:23:35	2018-07-27 18:26:00	2018-07-27 19:20:34	4.5	15.7	22.30970267	114.22363
69496	[redacted]	STD	2018-07-27	80	KL 631	80	KT.FRY	2018-07-27 19:27:46	2018-07-27 19:30:00	2018-07-27 19:33:41	4.5	11.2	22.30896517	114.2268707
69496	[redacted]	STD	2018-07-27	80	KL 631	80	KT.FRY	2018-07-27 19:27:46	2018-07-27 19:30:00	2018-07-27 19:34:38	4.4	19.3	22.30913917	114.2285222
69496	[redacted]	STD	2018-07-27	80	KL 631	80	KT.FRY	2018-07-27 19:27:46	2018-07-27 19:30:00	2018-07-27 19:49:25	4.5	16.2	22.32567	114.213995
69496	[redacted]	STD	2018-07-27	80	KL 631	80	KT.FRY	2018-07-27 19:27:46	2018-07-27 19:30:00	2018-07-27 20:06:47	4.5	12.6	22.36841533	114.1780663
69496	[redacted]	STD	2018-07-27	80	KL 631	80	KT.FRY	2018-07-27 19:27:46	2018-07-27 19:30:00	2018-07-27 20:10:53	4.5	17.5	22.36286767	114.1723333
69496	[redacted]	STD	2018-07-27	80	KL 631	80	KT.FRY	2018-07-27 19:27:46	2018-07-27 19:30:00	2018-07-27 20:17:02	4.8	17.9	22.372607	114.1776717
69496	[redacted]	STD	2018-07-27	80	KL 631	80	KT.FRY	2018-07-27 19:27:46	2018-07-27 19:30:00	2018-07-27 20:22:50	4.5	6.3	22.37721717	114.1739867
69496	[redacted]	STD	2018-07-27	80	KL 631	80	KT.FRY	2018-07-27 19:27:46	2018-07-27 19:30:00	2018-07-27 20:22:52	4.5	14.8	22.37727883	114.1739692
69496	[redacted]	STD	2018-07-27	80	KL 631	80	KT.FRY	2018-07-27 19:27:46	2018-07-27 19:30:00	2018-07-27 20:24:50	4.5	7.2	0	0
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 20:42:15	5	7.8	22.37671733	114.1750015

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 20:42:16	4.7	12.5	22.37671167	114.1750047
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 20:42:22	5.3	22.3	22.376541	114.174963
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 20:43:51	4.3	8.1	22.376053	114.1708313
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 20:43:52	5	13.2	22.37605817	114.1708407
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 20:44:08	4.2	17.5	22.37650767	114.1709667
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 20:44:09	4.8	22.4	22.37652833	114.1710125
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 20:44:32	4.7	9.5	22.37679233	114.1717457
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 20:44:33	6	15.5	22.37679317	114.171758
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 20:44:34	5.9	21.5	22.3767945	114.1717847
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 20:45:51	5.7	8	22.37739267	114.1736822
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 20:45:52	6.1	14.2	22.37739433	114.1736898
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 20:45:53	6.2	20.4	22.37739767	114.1737123
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 20:46:35	4.9	8.2	22.37571067	114.1755597
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 20:46:36	5.9	14.2	22.37570533	114.1755628
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 20:46:37	6.1	20.3	22.375689	114.1755735
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 20:47:38	5.1	17.9	22.37366967	114.1769892
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 20:47:39	4.9	22.8	22.37364017	114.177005
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 20:48:08	4.9	10.3	22.37298833	114.1775078
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 20:48:09	6	16.3	22.37297867	114.1775167
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 20:48:10	4.8	21.2	22.372958	114.177534
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 20:48:36	5	17.8	22.37170233	114.1786115
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 20:48:37	4.8	22.6	22.37168017	114.1786338
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 20:50:41	5.4	5.4	22.36784917	114.1745677
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 20:50:42	5.2	10.7	22.3678465	114.1745672
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 20:50:43	6.3	17.1	22.3678375	114.174563
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 20:50:44	5.5	22.6	22.36781617	114.1745505
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 20:51:31	4.5	8.3	22.36529533	114.1729533
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 20:51:32	5.5	13.8	22.36528867	114.1729462
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 20:52:03	4.3	6.8	22.36503817	114.1726842
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 20:52:04	5.6	12.5	22.3650425	114.1726942
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 20:52:05	5.4	18	22.36503	114.1726885
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 20:52:35	4.1	12	22.36412833	114.1719107
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 20:52:36	4.6	16.7	22.36411567	114.1718942
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 20:52:38	4.2	25.3	22.364068	114.1718372
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 20:54:03	5.3	7.1	22.363538	114.1713432
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 20:54:04	4.8	11.9	22.36354267	114.1713468
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 20:54:10	4.7	18.2	22.36339667	114.1713202
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 20:54:11	4.8	23	22.36336883	114.1713423
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 20:54:12	4	27.1	22.36333717	114.1713768
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 20:54:58	4.4	10.2	22.363841	114.1737692
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 20:55:00	4.8	18.5	22.36386583	114.173802
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 20:55:01	4.3	22.8	22.363886	114.1738323
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 20:55:50	5.1	12.4	22.36540217	114.1751842
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 20:55:51	5.6	18	22.365413	114.175202
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 20:55:52	5.3	23.3	22.36543267	114.1752278
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 20:57:19	4	10.2	22.36685333	114.1763105
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 20:59:57	5.1	21.4	22.36905567	114.1792492
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 21:00:25	5.2	10.6	22.3693175	114.179989
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 21:00:26	4.5	15.1	22.36932533	114.1800072
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 21:01:23	4.9	11.3	22.366079	114.1807413
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 21:01:24	5.1	16.4	22.36606367	114.1807422

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 21:01:58	4.9	13.5	22.36468833	114.1812173
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 21:01:59	4.8	18.3	22.36466817	114.181223
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 21:06:49	7	16.6	22.34263217	114.1863928
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 21:06:50	6.2	22.8	22.34262483	114.1864212
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 21:06:51	4.9	27.8	22.342613	114.186466
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 21:06:52	4.7	32.6	22.34259917	114.1865268
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 21:06:53	4.5	37.1	22.34258767	114.1866047
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 21:07:31	6.1	8	22.34222533	114.1900197
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 21:07:32	6.1	14.2	22.34221917	114.190029
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 21:07:33	6.2	20.4	22.34220367	114.1900465
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 21:07:34	5.2	25.7	22.34218083	114.1900777
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 21:07:35	4	29.7	22.34215067	114.1901238
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 21:08:28	5.1	22.9	22.34173833	114.1919945
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 21:09:25	4.5	8.3	22.341787	114.1957332
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 21:09:26	5.6	14	22.34178667	114.1957493
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 21:09:27	5.5	19.5	22.34178283	114.1957742
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 21:09:28	4.2	23.7	22.341781	114.195813
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 21:10:46	4.9	11.8	22.33948617	114.2028167
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 21:10:47	5.7	17.5	22.339473	114.202829
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 21:12:00	5	20.1	22.336667	114.2071293
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 21:12:01	4.4	24.6	22.33663383	114.2071523
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 21:14:15	4.8	6.2	22.32532233	114.21428
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 21:14:16	5.1	11.4	22.32532117	114.2142817
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 21:14:17	5.8	17.3	22.32530667	114.2142762
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 21:15:51	4.9	8.9	22.317477	114.2152983
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 21:15:52	5.7	14.7	22.3174685	114.215303
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 21:15:53	5.9	20.7	22.31744733	114.2153152
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 21:15:54	4.3	25	22.31741417	114.2153363
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 21:16:55	4.6	7.6	22.31562317	114.2182983
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 21:16:56	4.9	12.6	22.31562	114.2183033
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 21:17:54	4.9	11.2	22.314595	114.2209533
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 21:17:55	5.8	17.1	22.31458833	114.2209693
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 21:17:56	5.3	22.4	22.31457433	114.2209965
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 21:18:37	4.4	9.8	22.31401583	114.222475
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 21:19:22	4.5	25	22.313619	114.2235592
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 21:20:07	5.1	5.1	22.31332617	114.2245608
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 21:20:49	4.2	25.8	22.31271433	114.2262327
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 21:21:55	5.3	10.3	22.3111575	114.2256095
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 21:21:56	4.6	15	22.31114933	114.2255998
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 21:22:29	4.1	23.7	22.31028583	114.2246118
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 21:23:27	5.2	10.1	22.309579	114.2237492
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 21:23:28	5.5	15.6	22.30956883	114.2237387
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 20:37:50	2018-07-27 20:40:00	2018-07-27 21:23:29	4.4	20.1	22.309551	114.2237162
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:36:07	5.1	18.8	22.3080475	114.2219373
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:36:07	5.1	18.8	22.3080475	114.2219373
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:36:07	5.1	18.8	22.3080475	114.2219373
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:36:07	5.1	18.8	22.3080475	114.2219373
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:36:25	4.3	14.8	22.30855833	114.2220485
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:36:25	4.3	14.8	22.30855833	114.2220485
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:36:25	4.3	14.8	22.30855833	114.2220485
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:36:25	4.3	14.8	22.30855833	114.2220485

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:36:26	5.1	20	22.30858467	114.2220577
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:36:26	5.1	20	22.30858467	114.2220577
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:36:26	5.1	20	22.30858467	114.2220577
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:36:26	5.1	20	22.30858467	114.2220577
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:36:27	4.9	24.9	22.308622	114.2220685
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:36:27	4.9	24.9	22.308622	114.2220685
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:36:27	4.9	24.9	22.308622	114.2220685
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:36:27	4.9	24.9	22.308622	114.2220685
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:37:08	4.5	15.8	22.307263	114.2237483
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:37:08	4.5	15.8	22.307263	114.2237483
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:37:08	4.5	15.8	22.307263	114.2237483
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:37:08	4.5	15.8	22.307263	114.2237483
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:37:09	4	19.9	22.30724117	114.2237685
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:37:09	4	19.9	22.30724117	114.2237685
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:37:09	4	19.9	22.30724117	114.2237685
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:37:09	4	19.9	22.30724117	114.2237685
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:37:20	4.3	23.2	22.306968	114.2242417
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:37:20	4.3	23.2	22.306968	114.2242417
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:37:20	4.3	23.2	22.306968	114.2242417
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:37:20	4.3	23.2	22.306968	114.2242417
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:37:55	5.1	7.1	22.308142	114.2254643
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:37:55	5.1	7.1	22.308142	114.2254643
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:37:55	5.1	7.1	22.308142	114.2254643
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:37:55	5.1	7.1	22.308142	114.2254643
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:37:56	5.2	12.4	22.30814583	114.2254678
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:37:56	5.2	12.4	22.30814583	114.2254678
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:37:56	5.2	12.4	22.30814583	114.2254678
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:37:56	5.2	12.4	22.30814583	114.2254678
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:37:57	5.9	18.4	22.30815817	114.22548
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:37:57	5.9	18.4	22.30815817	114.22548
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:37:57	5.9	18.4	22.30815817	114.22548
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:37:57	5.9	18.4	22.30815817	114.22548
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:37:58	4.6	23	22.30817933	114.2255025
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:37:58	4.6	23	22.30817933	114.2255025
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:37:58	4.6	23	22.30817933	114.2255025
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:37:58	4.6	23	22.30817933	114.2255025
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:38:57	4.1	12.3	22.30896383	114.228445
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:38:57	4.1	12.3	22.30896383	114.228445
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:38:57	4.1	12.3	22.30896383	114.228445
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:38:57	4.1	12.3	22.30896383	114.228445
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:38:58	4.3	16.6	22.30898067	114.2284587
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:38:58	4.3	16.6	22.30898067	114.2284587
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:38:58	4.3	16.6	22.30898067	114.2284587
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:38:58	4.3	16.6	22.30898067	114.2284587
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:39:26	4.3	6.3	22.309807	114.228969
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:39:26	4.3	6.3	22.309807	114.228969
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:39:26	4.3	6.3	22.309807	114.228969
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:39:26	4.3	6.3	22.309807	114.228969
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:39:27	5.6	11.9	22.3098115	114.2289722
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:39:27	5.6	11.9	22.3098115	114.2289722
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:39:27	5.6	11.9	22.3098115	114.2289722

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:39:27	5.6	11.9	22.3098115	114.2289722
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:39:28	4	16	22.3098245	114.2289832
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:39:28	4	16	22.3098245	114.2289832
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:39:28	4	16	22.3098245	114.2289832
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:39:28	4	16	22.3098245	114.2289832
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:39:42	5.3	21.7	22.31021783	114.2291315
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:39:42	5.3	21.7	22.31021783	114.2291315
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:39:42	5.3	21.7	22.31021783	114.2291315
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:39:42	5.3	21.7	22.31021783	114.2291315
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:40:20	4.1	6.2	22.31154933	114.2267627
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:40:20	4.1	6.2	22.31154933	114.2267627
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:40:20	4.1	6.2	22.31154933	114.2267627
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:40:20	4.1	6.2	22.31154933	114.2267627
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:40:31	4.7	16.8	22.31163733	114.2265793
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:40:31	4.7	16.8	22.31163733	114.2265793
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:40:31	4.7	16.8	22.31163733	114.2265793
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:40:31	4.7	16.8	22.31163733	114.2265793
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:40:32	5.4	22.2	22.31165017	114.2265492
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:40:32	5.4	22.2	22.31165017	114.2265492
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:40:32	5.4	22.2	22.31165017	114.2265492
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:40:32	5.4	22.2	22.31165017	114.2265492
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:42:46	4.3	17.6	22.31301617	114.223813
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:42:46	4.3	17.6	22.31301617	114.223813
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:42:46	4.3	17.6	22.31301617	114.223813
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:42:46	4.3	17.6	22.31301617	114.223813
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:43:58	4.2	7.4	22.3140035	114.2211462
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:43:58	4.2	7.4	22.3140035	114.2211462
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:43:58	4.2	7.4	22.3140035	114.2211462
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:43:58	4.2	7.4	22.3140035	114.2211462
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:43:59	5.6	13.1	22.31401217	114.2211403
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:43:59	5.6	13.1	22.31401217	114.2211403
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:43:59	5.6	13.1	22.31401217	114.2211403
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:43:59	5.6	13.1	22.31401217	114.2211403
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:44:00	5.1	18.2	22.31402567	114.221124
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:44:00	5.1	18.2	22.31402567	114.221124
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:44:00	5.1	18.2	22.31402567	114.221124
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:44:00	5.1	18.2	22.31402567	114.221124
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:44:01	4.5	22.8	22.31404217	114.2210937
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:44:01	4.5	22.8	22.31404217	114.2210937
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:44:01	4.5	22.8	22.31404217	114.2210937
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:44:01	4.5	22.8	22.31404217	114.2210937
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:45:25	5.3	12.5	22.31506717	114.21855
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:45:25	5.3	12.5	22.31506717	114.21855
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:45:25	5.3	12.5	22.31506717	114.21855
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:45:25	5.3	12.5	22.31506717	114.21855
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:45:26	5.4	18	22.31507483	114.2185322
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:45:26	5.4	18	22.31507483	114.2185322
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:45:26	5.4	18	22.31507483	114.2185322
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:45:26	5.4	18	22.31507483	114.2185322
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:45:27	4	22.1	22.3150875	114.2185018
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:45:27	4	22.1	22.3150875	114.2185018

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:45:27	4	22.1	22.3150875	114.2185018
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:45:27	4	22.1	22.3150875	114.2185018
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:46:08	4.7	12.6	22.31647967	114.2157702
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:46:08	4.7	12.6	22.31647967	114.2157702
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:46:08	4.7	12.6	22.31647967	114.2157702
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:46:08	4.7	12.6	22.31647967	114.2157702
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:46:09	6.2	18.9	22.31649417	114.215754
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:46:09	6.2	18.9	22.31649417	114.215754
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:46:09	6.2	18.9	22.31649417	114.215754
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:46:09	6.2	18.9	22.31649417	114.215754
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:46:10	4	23	22.3165175	114.2157295
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:46:10	4	23	22.3165175	114.2157295
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:46:10	4	23	22.3165175	114.2157295
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:46:10	4	23	22.3165175	114.2157295
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:49:15	4.8	15.7	22.32563783	114.2139683
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:49:15	4.8	15.7	22.32563783	114.2139683
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:49:15	4.8	15.7	22.32563783	114.2139683
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:49:15	4.8	15.7	22.32563783	114.2139683
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:49:16	4.9	20.7	22.32566567	114.213967
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:49:16	4.9	20.7	22.32566567	114.213967
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:49:16	4.9	20.7	22.32566567	114.213967
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:49:16	4.9	20.7	22.32566567	114.213967
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:50:17	4.9	13.3	22.32881067	114.2117975
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:50:17	4.9	13.3	22.32881067	114.2117975
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:50:17	4.9	13.3	22.32881067	114.2117975
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:50:17	4.9	13.3	22.32881067	114.2117975
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:53:12	5	12.2	22.33663817	114.2067825
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:53:12	5	12.2	22.33663817	114.2067825
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:53:12	5	12.2	22.33663817	114.2067825
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:53:12	5	12.2	22.33663817	114.2067825
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:53:13	5	17.3	22.33665067	114.206766
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:53:13	5	17.3	22.33665067	114.206766
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:53:13	5	17.3	22.33665067	114.206766
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:53:13	5	17.3	22.33665067	114.206766
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:54:50	4.7	13.3	22.33919117	114.20244
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:54:50	4.7	13.3	22.33919117	114.20244
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:54:50	4.7	13.3	22.33919117	114.20244
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:54:50	4.7	13.3	22.33919117	114.20244
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:54:51	4.8	18.1	22.33920833	114.2024245
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:54:51	4.8	18.1	22.33920833	114.2024245
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:54:51	4.8	18.1	22.33920833	114.2024245
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:54:51	4.8	18.1	22.33920833	114.2024245
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:56:14	4	18	22.341622	114.1947643
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:56:14	4	18	22.341622	114.1947643
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:56:14	4	18	22.341622	114.1947643
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:56:14	4	18	22.341622	114.1947643
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:57:19	4.8	16.1	22.341611	114.1942703
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:57:19	4.8	16.1	22.341611	114.1942703
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:57:19	4.8	16.1	22.341611	114.1942703
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:57:19	4.8	16.1	22.341611	114.1942703
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:59:37	4	14.4	22.34236417	114.1882527

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:59:37	4	14.4	22.34236417	114.1882527
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:59:37	4	14.4	22.34236417	114.1882527
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 21:59:37	4	14.4	22.34236417	114.1882527
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:07:42	4.1	11.9	22.36876967	114.1788557
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:07:42	4.1	11.9	22.36876967	114.1788557
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:07:42	4.1	11.9	22.36876967	114.1788557
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:07:42	4.1	11.9	22.36876967	114.1788557
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:07:43	4.6	16.6	22.3687605	114.1788337
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:07:43	4.6	16.6	22.3687605	114.1788337
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:07:43	4.6	16.6	22.3687605	114.1788337
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:07:43	4.6	16.6	22.3687605	114.1788337
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:09:09	4.6	12.8	22.36845817	114.178096
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:09:09	4.6	12.8	22.36845817	114.178096
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:09:09	4.6	12.8	22.36845817	114.178096
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:09:09	4.6	12.8	22.36845817	114.178096
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:09:10	4.7	17.5	22.36844933	114.178074
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:09:10	4.7	17.5	22.36844933	114.178074
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:09:10	4.7	17.5	22.36844933	114.178074
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:09:10	4.7	17.5	22.36844933	114.178074
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:10:45	4.3	8.8	22.3674285	114.1763547
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:10:45	4.3	8.8	22.3674285	114.1763547
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:10:45	4.3	8.8	22.3674285	114.1763547
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:10:45	4.3	8.8	22.3674285	114.1763547
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:12:17	5.3	11.5	22.36544983	114.1753965
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:12:17	5.3	11.5	22.36544983	114.1753965
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:12:17	5.3	11.5	22.36544983	114.1753965
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:12:17	5.3	11.5	22.36544983	114.1753965
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:13:49	6	17.2	22.3628695	114.1724197
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:13:49	6	17.2	22.3628695	114.1724197
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:13:49	6	17.2	22.3628695	114.1724197
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:13:49	6	17.2	22.3628695	114.1724197
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:13:50	5.2	22.5	22.36287067	114.1723868
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:13:50	5.2	22.5	22.36287067	114.1723868
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:13:50	5.2	22.5	22.36287067	114.1723868
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:13:50	5.2	22.5	22.36287067	114.1723868
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:14:11	4.2	24.2	22.36367683	114.1713343
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:14:11	4.2	24.2	22.36367683	114.1713343
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:14:11	4.2	24.2	22.36367683	114.1713343
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:14:11	4.2	24.2	22.36367683	114.1713343
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:15:06	5.1	5.1	22.365575	114.1730158
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:15:06	5.1	5.1	22.365575	114.1730158
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:15:06	5.1	5.1	22.365575	114.1730158
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:15:06	5.1	5.1	22.365575	114.1730158
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:15:07	4.5	9.7	22.36557567	114.1730208
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:15:07	4.5	9.7	22.36557567	114.1730208
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:15:07	4.5	9.7	22.36557567	114.1730208
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:15:07	4.5	9.7	22.36557567	114.1730208
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:15:08	5.9	15.6	22.3655825	114.173033
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:15:08	5.9	15.6	22.3655825	114.173033
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:15:08	5.9	15.6	22.3655825	114.173033
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:15:08	5.9	15.6	22.3655825	114.173033

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:15:09	5.5	21.2	22.3655945	114.1730575
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:15:09	5.5	21.2	22.3655945	114.1730575
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:15:09	5.5	21.2	22.3655945	114.1730575
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:15:09	5.5	21.2	22.3655945	114.1730575
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:15:46	4.6	7.1	22.36750983	114.1742887
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:15:46	4.6	7.1	22.36750983	114.1742887
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:15:46	4.6	7.1	22.36750983	114.1742887
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:15:46	4.6	7.1	22.36750983	114.1742887
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:15:47	5.3	12.4	22.36751467	114.1742913
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:15:47	5.3	12.4	22.36751467	114.1742913
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:15:47	5.3	12.4	22.36751467	114.1742913
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:15:47	5.3	12.4	22.36751467	114.1742913
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:15:49	4.1	22.4	22.36756	114.1743078
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:15:49	4.1	22.4	22.36756	114.1743078
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:15:49	4.1	22.4	22.36756	114.1743078
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:15:49	4.1	22.4	22.36756	114.1743078
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:16:35	4.2	9.5	22.36884883	114.1750555
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:16:35	4.2	9.5	22.36884883	114.1750555
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:16:35	4.2	9.5	22.36884883	114.1750555
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:16:35	4.2	9.5	22.36884883	114.1750555
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:16:36	6.1	15.6	22.36885867	114.1750652
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:16:36	6.1	15.6	22.36885867	114.1750652
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:16:36	6.1	15.6	22.36885867	114.1750652
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:16:36	6.1	15.6	22.36885867	114.1750652
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:16:37	5.6	21.3	22.368876	114.1750855
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:16:37	5.6	21.3	22.368876	114.1750855
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:16:37	5.6	21.3	22.368876	114.1750855
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:16:37	5.6	21.3	22.368876	114.1750855
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:17:25	4.4	18.7	22.371457	114.1783535
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:17:25	4.4	18.7	22.371457	114.1783535
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:17:25	4.4	18.7	22.371457	114.1783535
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:17:25	4.4	18.7	22.371457	114.1783535
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:18:27	4.8	10.9	22.3726795	114.177584
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:18:27	4.8	10.9	22.3726795	114.177584
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:18:27	4.8	10.9	22.3726795	114.177584
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:18:27	4.8	10.9	22.3726795	114.177584
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:18:28	5.6	16.6	22.3726905	114.177574
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:18:28	5.6	16.6	22.3726905	114.177574
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:18:28	5.6	16.6	22.3726905	114.177574
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:18:28	5.6	16.6	22.3726905	114.177574
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:18:29	4.4	21	22.372712	114.1775542
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:18:29	4.4	21	22.372712	114.1775542
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:18:29	4.4	21	22.372712	114.1775542
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:18:29	4.4	21	22.372712	114.1775542
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:20:11	4.5	7.8	22.37404633	114.1766515
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:20:11	4.5	7.8	22.37404633	114.1766515
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:20:11	4.5	7.8	22.37404633	114.1766515
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:20:11	4.5	7.8	22.37404633	114.1766515
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:20:12	5.3	13.2	22.37405417	114.1766457
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:20:12	5.3	13.2	22.37405417	114.1766457
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:20:12	5.3	13.2	22.37405417	114.1766457

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:20:12	5.3	13.2	22.37405417	114.1766457
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:20:50	4.4	9.4	22.37482133	114.1776408
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:20:50	4.4	9.4	22.37482133	114.1776408
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:20:50	4.4	9.4	22.37482133	114.1776408
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:20:50	4.4	9.4	22.37482133	114.1776408
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:20:51	4.6	14	22.37483667	114.1776458
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:20:51	4.6	14	22.37483667	114.1776458
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:20:51	4.6	14	22.37483667	114.1776458
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:20:51	4.6	14	22.37483667	114.1776458
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:21:29	4	5.7	22.37543567	114.177668
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:21:29	4	5.7	22.37543567	114.177668
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:21:29	4	5.7	22.37543567	114.177668
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:21:29	4	5.7	22.37543567	114.177668
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:21:30	5.1	10.8	22.37544267	114.1776645
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:21:30	5.1	10.8	22.37544267	114.1776645
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:21:30	5.1	10.8	22.37544267	114.1776645
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:21:30	5.1	10.8	22.37544267	114.1776645
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:21:31	5.4	16.3	22.37545833	114.1776545
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:21:31	5.4	16.3	22.37545833	114.1776545
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:21:31	5.4	16.3	22.37545833	114.1776545
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:21:31	5.4	16.3	22.37545833	114.1776545
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:21:32	4.6	21	22.37548283	114.1776365
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:21:32	4.6	21	22.37548283	114.1776365
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:21:32	4.6	21	22.37548283	114.1776365
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:21:32	4.6	21	22.37548283	114.1776365
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:23:14	4.2	8.4	22.37573417	114.1759162
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:23:14	4.2	8.4	22.37573417	114.1759162
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:23:14	4.2	8.4	22.37573417	114.1759162
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:23:14	4.2	8.4	22.37573417	114.1759162
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:23:15	5.6	14	22.3757285	114.1759078
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:23:15	5.6	14	22.3757285	114.1759078
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:23:15	5.6	14	22.3757285	114.1759078
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:23:15	5.6	14	22.3757285	114.1759078
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:23:16	5	19.1	22.37571517	114.1758887
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:23:16	5	19.1	22.37571517	114.1758887
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:23:16	5	19.1	22.37571517	114.1758887
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:23:16	5	19.1	22.37571517	114.1758887
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:24:19	4.8	9.2	22.37731533	114.173951
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:24:19	4.8	9.2	22.37731533	114.173951
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:24:19	4.8	9.2	22.37731533	114.173951
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:24:19	4.8	9.2	22.37731533	114.173951
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:24:20	5.3	14.6	22.3773255	114.1739483
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:24:20	5.3	14.6	22.3773255	114.1739483
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:24:20	5.3	14.6	22.3773255	114.1739483
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:24:20	5.3	14.6	22.3773255	114.1739483
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:24:54	5.5	11.3	22.37729433	114.1730107
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:24:54	5.5	11.3	22.37729433	114.1730107
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:24:54	5.5	11.3	22.37729433	114.1730107
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:24:54	5.5	11.3	22.37729433	114.1730107
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:24:55	5.4	16.7	22.377291	114.1729943
69496		STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:24:55	5.4	16.7	22.377291	114.1729943

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:24:55	5.4	16.7	22.377291	114.1729943
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:24:55	5.4	16.7	22.377291	114.1729943
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:24:56	4.9	21.7	22.377286	114.172965
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:24:56	4.9	21.7	22.377286	114.172965
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:24:56	4.9	21.7	22.377286	114.172965
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:24:56	4.9	21.7	22.377286	114.172965
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:25:41	4.5	15.6	22.37620933	114.1703902
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:25:41	4.5	15.6	22.37620933	114.1703902
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:25:41	4.5	15.6	22.37620933	114.1703902
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:25:41	4.5	15.6	22.37620933	114.1703902
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:26:38	4.6	10.9	22.37600067	114.170854
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:26:38	4.6	10.9	22.37600067	114.170854
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:26:38	4.6	10.9	22.37600067	114.170854
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:26:38	4.6	10.9	22.37600067	114.170854
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:27:00	5.2	20.9	22.37652017	114.1711457
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:27:00	5.2	20.9	22.37652017	114.1711457
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:27:00	5.2	20.9	22.37652017	114.1711457
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:27:00	5.2	20.9	22.37652017	114.1711457
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:27:50	5.3	9.8	22.377457	114.17382
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:27:50	5.3	9.8	22.377457	114.17382
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:27:50	5.3	9.8	22.377457	114.17382
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:27:50	5.3	9.8	22.377457	114.17382
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:27:51	6.3	16.2	22.37746	114.1738305
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:27:51	6.3	16.2	22.37746	114.1738305
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:27:51	6.3	16.2	22.37746	114.1738305
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:27:51	6.3	16.2	22.37746	114.1738305
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:27:52	5.3	21.6	22.377465	114.1738558
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:27:52	5.3	21.6	22.377465	114.1738558
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:27:52	5.3	21.6	22.377465	114.1738558
69496	[redacted]	STD	2018-07-27	80	UV7724	80	KT.FRY	2018-07-27 21:34:16	2018-07-27 21:36:00	2018-07-27 22:27:52	5.3	21.6	22.377465	114.1738558
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:29:47	4.9	6.9	22.3777505	114.1750575
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:29:47	4.9	6.9	22.3777505	114.1750575
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:29:47	4.9	6.9	22.3777505	114.1750575
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:29:47	4.9	6.9	22.3777505	114.1750575
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:30:25	5.3	16	22.37771167	114.174803
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:30:25	5.3	16	22.37771167	114.174803
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:30:25	5.3	16	22.37771167	114.174803
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:30:25	5.3	16	22.37771167	114.174803
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:30:54	4.6	4.6	22.376907	114.1749415
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:30:54	4.6	4.6	22.376907	114.1749415
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:30:54	4.6	4.6	22.376907	114.1749415
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:30:54	4.6	4.6	22.376907	114.1749415
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:30:55	5.4	10	22.3769025	114.1749427
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:30:55	5.4	10	22.3769025	114.1749427
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:30:55	5.4	10	22.3769025	114.1749427
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:30:55	5.4	10	22.3769025	114.1749427
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:30:56	6.3	16.4	22.37689133	114.1749492
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:30:56	6.3	16.4	22.37689133	114.1749492
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:30:56	6.3	16.4	22.37689133	114.1749492
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:30:56	6.3	16.4	22.37689133	114.1749492
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:30:57	4.7	21.1	22.376869	114.1749628

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:30:57	4.7	21.1	22.376869	114.1749628
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:30:57	4.7	21.1	22.376869	114.1749628
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:30:57	4.7	21.1	22.376869	114.1749628
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:31:37	5.2	5.2	22.37595267	114.1755043
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:31:37	5.2	5.2	22.37595267	114.1755043
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:31:37	5.2	5.2	22.37595267	114.1755043
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:31:37	5.2	5.2	22.37595267	114.1755043
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:31:38	5.7	10.9	22.37595333	114.1755035
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:31:38	5.7	10.9	22.37595333	114.1755035
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:31:38	5.7	10.9	22.37595333	114.1755035
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:31:38	5.7	10.9	22.37595333	114.1755035
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:31:39	5.9	16.9	22.37594083	114.1755112
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:31:39	5.9	16.9	22.37594083	114.1755112
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:31:39	5.9	16.9	22.37594083	114.1755112
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:31:39	5.9	16.9	22.37594083	114.1755112
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:31:40	4.5	21.5	22.3759155	114.1755273
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:31:40	4.5	21.5	22.3759155	114.1755273
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:31:40	4.5	21.5	22.3759155	114.1755273
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:31:40	4.5	21.5	22.3759155	114.1755273
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:32:40	5.2	6.3	22.37179067	114.1787378
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:32:40	5.2	6.3	22.37179067	114.1787378
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:32:40	5.2	6.3	22.37179067	114.1787378
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:32:40	5.2	6.3	22.37179067	114.1787378
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:32:41	5.7	12.1	22.37178867	114.1787413
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:32:41	5.7	12.1	22.37178867	114.1787413
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:32:41	5.7	12.1	22.37178867	114.1787413
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:32:41	5.7	12.1	22.37178867	114.1787413
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:32:42	6.5	18.6	22.37178083	114.1787563
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:32:42	6.5	18.6	22.37178083	114.1787563
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:32:42	6.5	18.6	22.37178083	114.1787563
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:32:42	6.5	18.6	22.37178083	114.1787563
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:32:43	4.4	23	22.37176667	114.178785
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:32:43	4.4	23	22.37176667	114.178785
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:32:43	4.4	23	22.37176667	114.178785
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:32:43	4.4	23	22.37176667	114.178785
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:33:58	5.5	14.3	22.36642783	114.1808025
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:33:58	5.5	14.3	22.36642783	114.1808025
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:33:58	5.5	14.3	22.36642783	114.1808025
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:33:58	5.5	14.3	22.36642783	114.1808025
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:33:59	4.8	19.1	22.36640683	114.1808015
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:33:59	4.8	19.1	22.36640683	114.1808015
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:33:59	4.8	19.1	22.36640683	114.1808015
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:33:59	4.8	19.1	22.36640683	114.1808015
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:45:22	4.9	8.6	22.31415167	114.2170498
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:45:22	4.9	8.6	22.31415167	114.2170498
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:45:22	4.9	8.6	22.31415167	114.2170498
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:45:22	4.9	8.6	22.31415167	114.2170498
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:45:23	5.6	14.2	22.31414133	114.2170598
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:45:23	5.6	14.2	22.31414133	114.2170598
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:45:23	5.6	14.2	22.31414133	114.2170598
69496		STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:45:23	5.6	14.2	22.31414133	114.2170598

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:45:24	6.2	20.4	22.31411967	114.2170827
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:45:24	6.2	20.4	22.31411967	114.2170827
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:45:24	6.2	20.4	22.31411967	114.2170827
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:45:24	6.2	20.4	22.31411967	114.2170827
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:45:25	4.1	24.6	22.31409533	114.217114
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:45:25	4.1	24.6	22.31409533	114.217114
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:45:25	4.1	24.6	22.31409533	114.217114
69496	[redacted]	STD	2018-07-27	80	UV7724	80	MEILAM	2018-07-27 21:34:16	2018-07-27 22:28:00	2018-07-27 22:45:25	4.1	24.6	22.31409533	114.217114
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:00:30	4.5	9	22.37781483	114.1748168
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:01:53	5.3	9.9	22.37679417	114.1750515
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:01:59	4.7	19.2	22.37664033	114.1750502
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:02:00	4.1	23.4	22.37661667	114.1750042
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:03:50	4.5	10.1	22.37613567	114.1708008
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:04:09	4.4	20.7	22.37665383	114.1709852
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:05:28	5.1	8.8	22.377506	114.1737312
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:05:29	5.4	14.3	22.37750733	114.1737477
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:05:30	4.8	19.1	22.37751133	114.173778
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:06:17	4.5	8.5	22.37590483	114.1755508
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:06:18	5.6	14.2	22.37589317	114.175559
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:06:19	5.3	19.5	22.37587	114.1755742
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:07:52	4.9	9.3	22.3743315	114.17653
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:07:53	5.7	15	22.37431683	114.176541
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:07:54	5.3	20.3	22.37429217	114.1765593
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:08:27	5	6.4	22.373797	114.1769848
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:08:28	5.3	11.7	22.37378967	114.1769872
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:08:29	5.8	17.6	22.37376983	114.1769947
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:08:30	4.6	22.2	22.37373767	114.177008
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:09:19	5.4	11.2	22.37227633	114.1780495
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:10:06	4.8	15.4	22.37170683	114.1785885
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:10:07	5.1	20.5	22.37169367	114.178619
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:12:43	5.1	10.9	22.36860283	114.1751337
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:12:44	5.2	16.2	22.36858833	114.1751192
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:12:45	4.3	20.5	22.36856617	114.1750933
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:13:36	5	10.4	22.3680515	114.1746842
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:13:37	5.6	16	22.36803583	114.174672
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:13:38	4.5	20.6	22.36800883	114.1746537
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:15:17	4.6	10.5	22.364064	114.1718573
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:15:18	5.7	16.2	22.36404867	114.1718427
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:16:37	5.8	10.7	22.36370133	114.1715273
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:16:38	5.4	16.1	22.36368717	114.1715148
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:16:49	4.2	24.2	22.363328	114.1714095
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:17:53	4.4	7.2	22.36384967	114.1738023
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:17:54	5	12.2	22.36385633	114.1738118
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:17:55	5.7	18	22.36387083	114.173832
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:17:56	4.2	22.2	22.3638925	114.173864
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:18:56	4.8	12.3	22.36540883	114.175215
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:18:57	5.6	17.9	22.36542483	114.175235
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:18:58	4.6	22.6	22.36544917	114.1752667
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:20:39	4.4	4.4	22.36630617	114.176411
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:20:40	4.6	9	22.3663085	114.1764238
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:21:54	5.1	9	22.367004	114.176291

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:21:55	5.6	14.6	22.367022	114.1762843
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:21:56	5.1	19.7	22.3670525	114.1762708
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:22:45	5.4	7.8	22.36856767	114.1781515
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:22:46	5	12.9	22.3685745	114.1781622
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:23:53	4.2	10.2	22.36903783	114.179201
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:23:54	5.1	15.4	22.36904083	114.1792108
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:23:55	4.5	19.9	22.36904367	114.1792317
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:24:25	4.9	10.7	22.36928933	114.1799418
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:24:26	4.8	15.5	22.36929333	114.179951
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:31:33	5.5	13.6	22.3422395	114.1900403
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:31:34	5.4	19	22.34222317	114.1900632
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:32:16	4.2	8.6	22.34183367	114.1918483
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:32:17	4.7	13.4	22.34183317	114.1918657
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:32:18	5.2	18.6	22.341831	114.1918955
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:33:17	4.9	12.9	22.34181233	114.1957413
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:33:18	5.2	18.2	22.34180883	114.1957688
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:36:45	4.3	13.6	22.33664983	114.2071633
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:36:46	4.4	18	22.33662517	114.2071785
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:36:56	4	23.5	22.336306	114.2073948
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:37:36	4.9	7.8	22.33354733	114.2079248
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:37:37	5.4	13.2	22.33353483	114.2079135
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:40:16	4.1	10	22.32532583	114.2143112
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:40:17	4.9	14.9	22.32531383	114.2143058
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:40:18	4.8	19.7	22.32529483	114.2142967
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:42:22	4.5	10	22.31777817	114.215132
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:42:23	4.5	14.5	22.31776283	114.2151438
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:42:49	4.4	9.4	22.3174705	114.2153172
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:42:50	4.7	14.1	22.31745533	114.2153252
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:44:18	4.6	9.3	22.31447933	114.22082
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:44:41	4.4	7.5	22.31440483	114.2211137
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:44:42	5.3	12.9	22.31440167	114.221127
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:44:43	5	17.9	22.31439	114.221152
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:45:08	4.8	17.1	22.31385133	114.2223978
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:46:40	6	12.5	22.31300317	114.2249283
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:46:41	6	18.5	22.31299083	114.2249472
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:46:42	4	22.6	22.31297433	114.2249805
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:47:27	5.5	7	22.31176367	114.2262965
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:47:28	5.8	12.9	22.31176067	114.2262845
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:47:29	4.3	17.2	22.31174867	114.2262588
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:47:58	5	7.9	22.31119383	114.2257012
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:49:14	4.3	12	22.30983983	114.224077
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:49:15	5.1	17.2	22.30982717	114.2240508
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:49:16	4.9	22.1	22.30981283	114.22401
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:50:25	5.4	5.4	22.3095705	114.2235905
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:50:26	5.2	10.6	22.3095645	114.2235755
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 14:57:36	2018-07-28 15:00:00	2018-07-28 15:52:21	5.2	12	22.3071715	114.2218833
69496	[redacted]	STD	NULL	NULL	UY6011	NULL	NULL	2018-07-28 16:01:43	NULL	2018-07-28 16:03:58	4.5	10.3	22.30789633	114.221893
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:04:38	4.3	8.7	22.30854933	114.2220237
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:04:40	4.4	17.2	22.30858533	114.222042
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:07:48	4.3	5.9	22.30688517	114.2240218
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:07:49	5.1	11	22.30688217	114.2240327

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:07:50	5.4	16.5	22.30687733	114.2240592
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:07:51	5.3	21.8	22.30688283	114.2241097
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:08:28	5.3	13.8	22.30799067	114.2256055
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:08:29	5.3	19.1	22.30800767	114.2256293
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:08:30	4.2	23.3	22.30803167	114.2256658
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:09:38	5	11.1	22.30897967	114.2284528
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:09:39	5.7	16.9	22.30899633	114.228467
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:09:40	4.9	21.9	22.309025	114.2284907
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:10:22	4.9	8.2	22.30989483	114.2289987
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:10:39	4.2	20	22.31032783	114.2292065
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:11:16	4.6	10.5	22.311654	114.2274067
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:11:42	4.8	6.6	22.31194967	114.2268308
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:11:43	5.8	12.4	22.31195	114.226817
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:11:44	6.1	18.6	22.3119545	114.226787
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:11:45	4.3	22.9	22.31196317	114.2267412
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:14:43	4.4	7.4	22.31443567	114.2213858
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:14:44	4.9	12.3	22.31443517	114.2213682
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:15:35	4	6.2	22.31532033	114.218823
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:15:36	4.5	10.7	22.31531633	114.2188108
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:15:37	5.5	16.2	22.31531783	114.218789
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:16:26	5	13.5	22.31666733	114.2158197
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:16:27	5.3	18.8	22.31668483	114.2158003
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:18:01	4.5	10.2	22.3221415	114.21431
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:18:03	4.5	19.9	22.32219133	114.2143133
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:19:16	4.9	12.3	22.32560617	114.214002
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:19:17	5.1	17.4	22.3256305	114.2140013
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:20:16	4.5	14	22.3287575	114.2118145
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:20:17	4.4	18.4	22.32877617	114.2117912
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:22:58	4.6	9.9	22.33399767	114.2080345
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:22:59	5.3	15.3	22.33401433	114.2080462
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:23:00	4.5	19.9	22.33401433	114.2080462
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:25:14	4.1	8.1	22.3391645	114.202616
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:25:46	4.9	14	22.339204	114.2025223
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:25:47	4.3	18.4	22.33921383	114.2025058
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:27:37	4.5	10	22.3417425	114.1942782
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:27:38	4.7	14.7	22.34174283	114.1942585
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:27:39	4.1	18.8	22.341745	114.194226
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:35:48	4.9	17	22.3687185	114.1805183
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:35:49	5.2	22.2	22.36875033	114.1804995
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:35:50	4.3	26.5	22.36875033	114.1804995
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:37:35	4.5	11.1	22.36849717	114.1780938
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:37:36	4.9	16.1	22.36849317	114.1780833
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:38:24	4.4	6.6	22.36765533	114.1766048
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:38:25	4.8	11.5	22.36765333	114.176605
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:38:26	4.6	16.2	22.36764733	114.1765963
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:39:42	4.5	10.2	22.36549067	114.175322
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:39:43	5.3	15.6	22.36548033	114.1753057
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:39:44	4.3	19.9	22.365461	114.175283
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:40:54	4.2	6.6	22.362897	114.1724795
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:40:55	5.2	11.9	22.36289583	114.1724765
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:40:56	6.1	18.1	22.362893	114.1724645

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:40:57	4.3	22.4	22.36289017	114.1724393
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:42:13	4.9	9.2	22.363354	114.1714215
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:42:14	5.2	14.4	22.36336567	114.1714083
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:42:15	4	18.5	22.36338617	114.1713857
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:43:16	5.3	13.6	22.36556267	114.1730347
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:43:17	5.9	19.5	22.36558017	114.173057
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:43:18	4.1	23.7	22.3656055	114.1730923
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:44:29	4.8	4.8	22.36749533	114.1743052
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:44:30	5.3	10.2	22.3675005	114.174308
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:44:31	5.6	15.8	22.3675005	114.174308
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:45:27	5.2	11.4	22.369021	114.1752588
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:45:28	6	17.4	22.3690395	114.1752718
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:45:29	4.8	22.3	22.36906933	114.1752937
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:46:24	4.2	10.7	22.37144	114.1783395
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:46:25	5	15.8	22.3714575	114.1783517
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:46:26	4.8	20.6	22.3714855	114.178369
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:47:01	4.5	8.4	22.3730595	114.1773752
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:47:26	5.6	15.6	22.37327467	114.1771585
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:47:27	4.5	20.2	22.37329817	114.1771545
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:48:13	5	10.2	22.374043	114.1766747
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:48:14	5.3	15.5	22.37404767	114.1766712
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:50:40	4.8	8.2	22.37602267	114.1771722
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:51:33	5.7	16.8	22.37569733	114.175977
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:51:34	4.6	21.5	22.37567617	114.1759475
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:52:37	4.5	7.9	22.3773065	114.1739615
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:52:38	5.4	13.3	22.3773085	114.1739612
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:53:09	4	6.1	22.377364	114.1730695
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:53:10	5	11.1	22.377363	114.1730682
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:53:11	5.5	16.7	22.37735933	114.173058
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:53:12	4.6	21.4	22.37735367	114.1730363
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:54:53	5.4	7.9	22.37644033	114.1719953
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:55:09	4.7	19.8	22.37651867	114.171585
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:56:17	7	12.6	22.3773865	114.1738162
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 16:01:43	2018-07-28 16:04:00	2018-07-28 16:56:18	5.1	17.7	22.37739117	114.1738202
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:07:03	6.6	6.6	22.37764883	114.175005
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:07:04	5.8	12.5	22.37764883	114.175005
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:08:31	5.7	5.7	22.37669133	114.1752278
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:10:17	5.9	5.9	22.37703283	114.1741298
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:10:18	5.7	11.6	22.37703283	114.1741298
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:12:23	4.4	7.2	22.37641533	114.1710958
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:12:26	4.8	18	22.3764575	114.1710898
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:12:27	4.1	22.2	22.37648867	114.1710947
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:12:58	4.9	4.9	22.3767365	114.1718577
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:13:00	5.5	14.7	22.3767385	114.1718628
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:13:01	5	19.7	22.3767405	114.1718797
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:14:05	5.6	8.1	22.37734933	114.1737495
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:14:06	6.2	14.4	22.37735417	114.1737497
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:14:07	5.4	19.9	22.37735983	114.1737618
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:14:54	5.1	9.6	22.3757955	114.1757012
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:14:55	5.9	15.6	22.37579167	114.175704
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:14:56	4.8	20.4	22.37577717	114.1757132

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:16:18	4.5	7.9	22.3737785	114.1769698
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:16:19	5	13	22.373778	114.1769703
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:16:20	5.5	18.6	22.37376767	114.1769758
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:18:07	4.9	4.9	22.3723605	114.1779838
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:18:38	4	15.3	22.3719985	114.17833
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:18:50	4.6	18.2	22.37174483	114.1785762
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:18:51	4.1	22.4	22.37172633	114.1786007
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:20:10	4.4	7.2	22.36867817	114.1750912
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:20:11	5.2	12.5	22.36867817	114.1750895
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:20:12	4.8	17.4	22.368671	114.1750803
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:20:13	4	21.4	22.3686545	114.175062
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:21:30	5	13.1	22.36419467	114.171935
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:21:31	5.1	18.2	22.3641835	114.1719258
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:22:49	4.9	9.1	22.36365817	114.1714303
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:22:50	4.9	14.1	22.363649	114.1714393
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:22:58	4.1	19.6	22.363425	114.1713462
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:24:10	4.3	7.8	22.36392133	114.1737423
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:24:11	5.3	13.2	22.36389917	114.1737612
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:24:12	5.6	18.8	22.3638925	114.1737812
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:24:59	4.3	5.8	22.3654055	114.175207
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:25:00	5.1	10.9	22.36540567	114.175207
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:25:01	4.7	15.6	22.36541317	114.1752132
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:25:48	4.5	10.6	22.366227	114.1761425
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:25:49	4.7	15.3	22.3662345	114.1761643
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:27:19	4	18.8	22.3669375	114.1763715
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:28:51	4.1	7.8	22.369053	114.1791828
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:28:52	5	12.8	22.36905583	114.1791975
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:28:53	5.5	18.4	22.369063	114.179223
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:30:09	5.1	10.5	22.36942767	114.1801033
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:30:10	5.9	16.5	22.3694325	114.1801145
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:32:10	4.2	10.8	22.364714	114.1812127
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:37:52	5.4	16.3	22.34277633	114.1863652
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:37:53	5.2	21.6	22.3427655	114.1863997
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:37:54	5	26.7	22.34275317	114.1864492
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:39:30	4.6	11.7	22.341876	114.191804
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:39:31	5.3	17.1	22.3418765	114.1918163
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:40:45	7.5	8.6	22.34182967	114.1956382
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:40:46	6.3	14.9	22.34182583	114.1956527
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:40:47	4.9	19.9	22.34180983	114.1956862
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:43:57	4.6	16.5	22.3364245	114.2073688
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:43:58	4.4	20.9	22.33637117	114.2073987
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:48:15	4.4	8.6	22.32557267	114.2142945
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:48:16	4.7	13.3	22.32556867	114.2142948
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:48:17	5.3	18.7	22.32555417	114.2142943
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:48:18	4.3	23.1	22.3255275	114.2142918
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:49:16	4.5	7.4	22.32121533	114.2147677
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:49:17	4.9	12.4	22.32120383	114.2147678
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:49:18	5.6	18	22.32118033	114.2147723
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:50:10	4.3	8.8	22.31768917	114.2152892
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:50:11	5.5	14.4	22.31767567	114.2152962
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:50:29	4.2	5.7	22.31751283	114.215412

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:50:30	4.8	10.6	22.31751267	114.215412
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:50:31	5.5	16.2	22.31748917	114.2154248
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:51:46	5.2	10.6	22.3156955	114.2182913
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:51:47	4.8	15.4	22.3156885	114.2183112
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:55:45	4.2	19.2	22.31307183	114.2251338
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:56:13	6	10.7	22.31262767	114.2261933
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:56:14	6.3	17	22.31262767	114.2261933
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:56:15	4.2	21.3	22.3126235	114.226248
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:57:11	4.6	10.5	22.311445	114.2259762
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:57:12	5	15.6	22.31144083	114.2259643
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:57:13	5.4	21	22.3114105	114.225916
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:57:47	4.1	18.9	22.31096883	114.2254245
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 17:03:36	2018-07-28 17:06:00	2018-07-28 17:58:39	4.6	20.9	22.30974817	114.223982
69496	[redacted]	STD	NULL	NULL	UY6011	NULL	NULL	2018-07-28 17:03:36	NULL	2018-07-28 18:00:03	5.2	12.9	22.30716233	114.2217525
69496	[redacted]	STD	NULL	NULL	UY6011	NULL	NULL	2018-07-28 17:03:36	NULL	2018-07-28 18:00:04	5.8	18.8	22.307174	114.2217455
69496	[redacted]	STD	NULL	NULL	UY6011	NULL	NULL	2018-07-28 17:03:36	NULL	2018-07-28 18:00:05	4.3	23.1	22.30719417	114.2217297
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:08:10	4.5	9.8	22.30794567	114.2217373
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:08:15	4.4	20.5	22.30806867	114.2218297
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:08:29	4.4	24.6	22.3086825	114.2219302
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:09:14	5	9.7	22.3077185	114.223322
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:09:15	5.5	15.3	22.30770583	114.2233342
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:09:51	5.2	9.9	22.30704783	114.2238908
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:10:38	4.3	8	22.30801467	114.2255447
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:10:39	5.1	13.2	22.308022	114.225557
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:10:40	5.7	18.9	22.30803633	114.2255802
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:11:21	5.8	11.6	22.309038	114.2271765
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:11:22	5.1	16.8	22.3090485	114.2271958
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:12:33	4.7	6.7	22.30893233	114.2284487
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:12:34	5.3	12	22.30894583	114.2284545
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:12:35	5.9	18	22.30896883	114.228469
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:12:36	4.8	22.8	22.30900333	114.2284937
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:13:23	4.7	9.1	22.30995567	114.229071
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:13:24	4	13.2	22.30996917	114.2290807
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:17:23	4.9	18.9	22.31183833	114.2266327
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:17:24	4.3	23.2	22.31184633	114.2266025
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:18:39	4.4	7.7	22.31317983	114.2240303
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:18:40	5	12.8	22.31317983	114.2240303
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:18:41	5.4	18.2	22.31319167	114.2239925
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:19:40	4.3	5.5	22.31422033	114.221281
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:19:59	4.7	21.3	22.31439717	114.2209032
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:20:35	4.8	17.5	22.31512633	114.218854
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:20:36	4.2	21.8	22.31514133	114.218816
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:21:33	5.3	14	22.31654783	114.215877
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:21:34	5.4	19.5	22.31655867	114.2158662
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:22:26	4.1	8.2	22.32006583	114.2145807
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:23:21	4.1	10.5	22.32212883	114.2143468
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:24:14	5	13.5	22.325604	114.2139535
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:24:15	5.3	18.9	22.32561867	114.2139545
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:27:20	4.9	8.9	22.33381217	114.207634
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:27:21	5	14	22.33381217	114.207634
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:28:33	5	11.7	22.33670117	114.2068392

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:28:34	4.5	16.2	22.336709	114.2068298
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:29:52	5.1	13.8	22.33920967	114.2024658
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:29:53	4.7	18.5	22.33921767	114.2024523
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:31:43	4.5	11.3	22.34165333	114.1942632
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:31:44	5	16.4	22.34165383	114.1942408
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:32:41	4.2	9.5	22.341578	114.1914953
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:32:42	5	14.6	22.34157883	114.1914762
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:32:43	4.1	18.8	22.34158233	114.1914442
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:34:07	4.8	8.8	22.34238167	114.1882803
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:34:08	5	13.9	22.34238217	114.1882772
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:34:09	4.4	18.3	22.3423845	114.1882625
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:41:47	5.3	8.2	22.3657115	114.1806775
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:41:48	5.6	13.8	22.365731	114.1806752
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:41:49	5.1	19	22.3657625	114.1806712
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:41:50	5	24	22.36580833	114.1806667
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:43:34	4.1	15.7	22.36860683	114.1783043
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:44:16	5.2	15.7	22.36850733	114.1780528
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:44:17	4.5	20.2	22.36849517	114.17802
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:45:49	5.2	13.6	22.36545233	114.1754237
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:45:50	4.6	18.3	22.36545233	114.1754237
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:47:07	4.7	4.7	22.36291183	114.1724802
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:47:08	4.3	9	22.36291	114.1724762
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:47:09	6.1	15.2	22.362904	114.1724605
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:47:10	5.3	20.5	22.3628965	114.1724303
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:48:42	5.5	5.5	22.36334117	114.1713573
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:48:43	5.4	11	22.36334533	114.1713533
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:48:44	4.4	15.4	22.36335783	114.1713365
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:48:52	4.6	22.2	22.363632	114.171252
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:49:18	5.2	8	22.3649315	114.172495
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:49:19	5.8	13.8	22.36494067	114.1725028
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:49:20	5.1	18.9	22.3649605	114.1725207
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:49:53	4.1	7	22.36556033	114.1730203
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:49:54	5	12	22.36556717	114.1730307
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:49:55	5.7	17.8	22.36557883	114.1730532
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:49:56	4.5	22.4	22.36559933	114.173085
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:50:43	4.4	8.3	22.36726283	114.1742483
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:50:44	5.3	13.6	22.36727633	114.174254
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:50:45	5.5	19.1	22.3673015	114.1742643
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:51:14	5.2	8.8	22.36881633	114.175077
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:51:15	6.1	15	22.368827	114.1750857
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:51:16	5.3	20.3	22.368849	114.1751038
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:52:34	5.1	6.4	22.37152633	114.178226
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:52:35	4.9	11.4	22.37153317	114.1782332
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:52:36	4.7	16.1	22.37155117	114.1782472
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:52:37	4.7	20.9	22.37158	114.178268
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:53:14	4.1	5.8	22.37261167	114.1776903
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:53:15	4.6	10.4	22.37261917	114.1776835
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:55:08	5.5	10.7	22.3738905	114.1767605
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:55:09	5.9	16.6	22.37390517	114.1767497
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:55:10	4.6	21.3	22.373933	114.1767307
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:56:17	4.3	7.6	22.374944	114.1776435

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:56:18	5.1	12.7	22.3749505	114.1776672
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 18:59:04	5	8.8	22.376296	114.1770755
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 19:00:06	4.7	10.4	22.37583467	114.1759737
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 19:00:07	5.2	15.6	22.3758235	114.1759567
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 19:00:08	4.8	20.5	22.3758055	114.1759287
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 19:01:20	5	8.5	22.37734717	114.173987
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 19:01:21	5	13.6	22.37733317	114.1739757
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 19:01:53	4.4	10.1	22.37719	114.1730568
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 19:01:54	5.8	16	22.37718833	114.173049
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 19:01:55	4.5	20.5	22.37718217	114.1730308
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 19:03:15	4.7	7.3	22.37585667	114.1707745
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 19:03:43	4.3	17.4	22.376448	114.1710062
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 19:03:44	4.2	21.6	22.37648517	114.1710183
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 19:05:09	4.9	6.3	22.377528	114.1737228
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 19:05:10	5.9	12.3	22.37753083	114.1737383
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 19:05:11	5.9	18.2	22.37753083	114.1737383
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 19:05:12	4.6	22.9	22.3775415	114.173809
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 18:06:23	2018-07-28 18:08:00	2018-07-28 19:05:51	4.2	16.2	22.3780365	114.1751212
69496	[redacted]	STD	NULL	NULL	UY6011	NULL	NULL	2018-07-28 18:06:23	NULL	2018-07-28 19:06:59	4.4	15.5	22.37774583	114.1749187
69496	[redacted]	STD	NULL	NULL	UY6011	NULL	NULL	2018-07-28 18:06:23	NULL	2018-07-28 19:07:52	4.4	6.4	22.3778495	114.1746552
69496	[redacted]	STD	NULL	NULL	UY6011	NULL	NULL	2018-07-28 18:06:23	NULL	2018-07-28 19:07:53	4.7	11.1	22.37784667	114.1746407
69496	[redacted]	STD	NULL	NULL	UY6011	NULL	NULL	2018-07-28 18:06:23	NULL	2018-07-28 19:07:54	4.9	16	22.377841	114.1746137
69496	[redacted]	STD	NULL	NULL	UY6011	NULL	NULL	2018-07-28 18:06:23	NULL	2018-07-28 19:09:23	5.2	7.4	22.37684217	114.1749888
69496	[redacted]	STD	NULL	NULL	UY6011	NULL	NULL	2018-07-28 18:06:23	NULL	2018-07-28 19:09:24	5.5	13	22.3768335	114.1749947
69496	[redacted]	STD	NULL	NULL	UY6011	NULL	NULL	2018-07-28 18:06:23	NULL	2018-07-28 19:09:29	4.8	19	22.37668017	114.175011
69496	[redacted]	STD	NULL	NULL	UY6011	NULL	NULL	2018-07-28 18:06:23	NULL	2018-07-28 19:09:30	4.5	23.5	22.37665633	114.1749738
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:21:27	5	5	22.37672733	114.1750387
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:21:28	4.5	9.6	22.37672717	114.175039
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:21:34	5.1	19.5	22.376581	114.1750298
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:21:35	4.1	23.7	22.37655817	114.1749898
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:23:08	4.5	8.8	22.37625033	114.170786
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:23:34	4.4	22.1	22.37671233	114.171015
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:23:55	4.7	7.2	22.3770205	114.171704
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:23:56	5.9	13.2	22.37702367	114.1717178
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:23:57	6.1	19.3	22.37702967	114.171746
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:23:58	4.5	23.8	22.37703883	114.1717898
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:25:03	5.2	11	22.37756383	114.1736867
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:25:04	6	17.1	22.37756667	114.1737085
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:25:05	5.1	22.2	22.37757017	114.1737468
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:25:48	5.3	6.4	22.3760265	114.1755243
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:25:49	5.7	12.1	22.376018	114.1755277
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:25:50	4.9	17.1	22.375998	114.1755403
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:26:59	4.9	8.4	22.373809	114.1770757
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:27:00	5.3	13.8	22.37379717	114.1770818
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:27:01	6.1	19.9	22.37377333	114.1770933
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:27:17	5	8.4	22.3730485	114.17754
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:27:18	6.1	14.6	22.373039	114.1775498
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:27:19	6	20.7	22.3730175	114.177568
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:27:46	4.6	11.5	22.3717335	114.1786325
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:27:47	5.3	16.8	22.37172017	114.1786518
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:27:48	4.7	21.5	22.37170117	114.1786845

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:28:45	5.5	5.5	22.36910983	114.175487
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:28:46	5.5	11.1	22.369106	114.1754828
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:28:47	5.8	16.9	22.3690925	114.1754687
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:28:48	4.4	21.4	22.369068	114.1754435
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:29:12	4.7	6.8	22.3686665	114.1751173
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:29:13	5.5	12.3	22.36865917	114.1751115
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:29:14	6.2	18.5	22.36864217	114.1750963
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:29:30	4.6	19.9	22.36800967	114.1746722
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:30:17	5.1	5.1	22.36535083	114.172986
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:30:18	4.6	9.8	22.365346	114.1729807
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:30:19	5.7	15.6	22.36533333	114.1729657
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:30:20	4	19.6	22.36531317	114.1729388
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:30:44	4.8	8.1	22.36509483	114.1727168
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:30:45	5.6	13.8	22.36507967	114.1727123
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:30:46	5.7	19.5	22.365057	114.1726985
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:32:03	4.5	7.5	22.36359183	114.1713783
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:32:04	4.1	11.6	22.36358183	114.1713692
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:32:11	4.4	18.9	22.36338533	114.1713393
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:32:12	4.4	23.3	22.36335083	114.171365
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:33:34	4.2	7.9	22.36450033	114.174403
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:33:35	5	13	22.3645105	114.174412
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:34:20	4.8	15.5	22.36545317	114.1752517
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:34:21	4.7	20.2	22.36547367	114.1752812
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:37:14	5.4	8.6	22.36696467	114.1762937
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:37:15	4.1	12.7	22.36697683	114.1762878
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:38:49	5.1	11.6	22.36876333	114.1784527
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:38:50	5.8	17.5	22.3687705	114.1784755
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:38:51	4.9	22.4	22.36878333	114.178513
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:39:24	4.7	12.8	22.36906583	114.1791845
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:39:25	5.6	18.5	22.36907067	114.1792098
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:39:26	4	22.5	22.36907617	114.1792515
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:40:35	4.9	11.9	22.366056	114.1808272
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:40:36	4.6	16.5	22.36603367	114.1808262
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:41:45	4.1	18.9	22.36394333	114.1808478
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:46:59	4.4	9.9	22.3418225	114.1917195
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:47:00	5.2	15.2	22.34182233	114.1917388
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:47:01	4.6	19.8	22.34182	114.1917722
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:47:59	5.4	10.8	22.34180633	114.1956223
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:48:00	5.4	16.2	22.34179033	114.1956502
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:48:01	4.7	21	22.34178567	114.1956872
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:49:23	5.9	15.2	22.33965167	114.2028208
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:49:24	4.8	20	22.33965167	114.2028208
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:50:53	4.8	17.7	22.336791	114.2070495
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:50:54	4.8	22.5	22.33676267	114.207077
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:53:18	4.6	15.8	22.325301	114.2143403
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:53:19	5.2	21	22.32526917	114.2143332
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:55:13	5	6.5	22.31576233	114.2177585
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:55:14	5.1	11.6	22.31575867	114.2177655
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:55:15	4.3	16	22.31574933	114.2177845
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:57:36	4.5	9.2	22.31327167	114.2244678
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 20:58:14	4.5	10.1	22.31304583	114.2246335

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 21:00:05	5	21	22.30973217	114.2238792
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 21:00:57	4.1	6.7	22.30943583	114.2235328
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 21:00:58	5.1	11.8	22.3094315	114.2235188
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 21:00:59	5.6	17.5	22.30942117	114.2234967
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 20:17:26	2018-07-28 20:20:00	2018-07-28 21:01:00	4.7	22.2	22.30941567	114.2234482
69496	[redacted]	STD	NULL	NULL	UY6011	NULL	NULL	2018-07-28 21:17:27	NULL	2018-07-28 21:19:54	4.8	8.4	22.30781433	114.2218082
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:21:49	5.3	5.3	22.30897517	114.2270778
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:21:50	4.8	10.1	22.30898167	114.2270818
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:23:18	4.8	12.2	22.30898067	114.2284405
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:23:19	5.7	18	22.3090005	114.2284562
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:23:20	5.5	23.5	22.309032	114.2284803
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:23:49	4.3	8	22.309877	114.228952
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:23:50	4.5	12.5	22.3098905	114.228961
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:24:04	4.9	19.9	22.31034583	114.2291252
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:24:05	4.4	24.4	22.31037583	114.2290915
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:24:58	5.2	6.4	22.31169917	114.226588
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:24:59	5.9	12.3	22.3117005	114.2265777
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:25:00	5	17.4	22.3117075	114.2265538
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:25:01	4.8	22.2	22.31171917	114.226517
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:26:18	4.9	9	22.3130255	114.2239892
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:26:19	5.1	14.2	22.313036	114.2239757
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:26:20	5.5	19.7	22.3130525	114.22395
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:26:36	5.2	11	22.31333067	114.2233392
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:26:37	6.1	17.1	22.31333883	114.2233187
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:26:38	4.7	21.8	22.31337383	114.2232867
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:27:18	4.3	7.4	22.314208	114.2212582
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:27:19	5	12.4	22.31421067	114.2212448
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:27:20	5.5	18	22.31421917	114.2212267
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:27:21	4.1	22.2	22.31423617	114.2211938
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:28:06	4.5	9.6	22.3151215	114.2188235
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:29:40	5	13.1	22.32017067	114.214497
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:29:41	5.1	18.3	22.3201825	114.2144982
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:29:42	4.1	22.5	22.32024367	114.2145067
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:30:30	4.1	5.2	22.321819	114.2143368
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:30:31	4.3	9.6	22.321827	114.2143353
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:32:06	4.6	11.1	22.32209833	114.2143067
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:32:07	5.1	16.3	22.32211117	114.2143063
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:32:08	4.5	20.9	22.32213883	114.2143042
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:33:20	4.1	7.8	22.325646	114.2140032
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:33:21	4.8	12.7	22.3256595	114.2140025
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:33:22	5.3	18	22.3256845	114.2140035
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:34:11	4.3	8.5	22.32882983	114.2118762
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:34:18	4.3	12.3	22.3288815	114.211811
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:34:19	5	17.3	22.32889133	114.2117992
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:36:48	4.9	11.1	22.33417417	114.207957
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:36:49	5.2	16.3	22.33418883	114.2079593
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:37:33	4	5.8	22.33662983	114.2068205
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:37:41	4.2	18.4	22.3367115	114.2067175
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:38:56	4.6	11.1	22.33919583	114.2024977
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:38:57	4.8	15.9	22.33920033	114.2024872
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:41:09	4.8	13.9	22.3416255	114.1942635

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:41:10	4.3	18.2	22.34162767	114.1942318
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:52:34	4.4	11	22.36885817	114.1790717
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:53:51	4.8	13.8	22.36847767	114.1780865
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:53:52	4.7	18.6	22.36847033	114.1780667
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:55:49	5	10.2	22.36755183	114.1765032
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:55:50	5.2	15.4	22.36754117	114.176482
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:55:51	4.5	20	22.36752417	114.1764532
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:56:21	4.7	25.3	22.36623883	114.1764055
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:57:06	4.5	10.3	22.36549867	114.175377
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:57:07	4.8	15.1	22.36548617	114.1753618
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:58:37	4	8	22.36293383	114.1724713
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:58:38	4.7	12.7	22.36292617	114.1724567
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:58:39	5.5	18.2	22.36292617	114.1724567
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:58:40	4.4	22.7	22.36292017	114.1724292
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:59:21	4.5	6.7	22.36335617	114.171425
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:59:22	5.1	11.9	22.36336183	114.1714168
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 21:59:23	5.4	17.3	22.36337567	114.171398
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 22:00:21	4.2	6.2	22.3655545	114.1730053
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 22:00:22	4.9	11.2	22.365562	114.173011
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 22:00:23	5.6	16.9	22.365577	114.1730273
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 22:00:24	4.7	21.6	22.36559767	114.1730568
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 22:01:06	5	11.6	22.36747583	114.17429
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 22:01:07	5.2	16.8	22.36748917	114.1743043
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 22:01:08	4.4	21.3	22.36751983	114.1743207
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 22:02:09	4.3	18.3	22.371433	114.1783865
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 22:02:54	4.9	12.8	22.37324617	114.1771463
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 22:02:55	5	17.8	22.373261	114.1771378
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 22:03:55	5.2	8.6	22.37391267	114.1767605
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 22:03:56	5.3	14	22.3739175	114.1767542
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 22:03:57	5.1	19.1	22.3739285	114.176744
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 22:05:08	5.5	5.5	22.374927	114.177746
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 22:05:09	5.9	11.5	22.374927	114.177746
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 22:05:10	4	15.5	22.37493533	114.17776
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 22:05:51	4.6	13.4	22.37543833	114.1776137
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 22:05:52	4.8	18.2	22.375456	114.1776077
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 22:06:55	4.5	8.9	22.3757235	114.1759573
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 22:06:56	5.6	14.5	22.3757225	114.1759537
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 22:06:57	4.7	19.2	22.37571383	114.1759405
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 22:08:01	4.6	6.9	22.377286	114.1739652
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 22:08:48	5.3	13	22.37726567	114.1730403
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 22:08:49	5.7	18.7	22.37726367	114.1730258
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 22:10:11	4.7	6	22.37598683	114.1707957
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 22:10:39	4.7	18.7	22.37654483	114.1710293
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 22:10:40	4.4	23.1	22.37657083	114.1710512
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 22:11:33	6.5	16.9	22.37751683	114.1737398
69496	[redacted]	STD	2018-07-28	80	UY6011	80	KT.FRY	2018-07-28 21:17:27	2018-07-28 21:20:00	2018-07-28 22:11:34	5.2	22.2	22.37752133	114.1737608
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:26:03	4.8	12.2	22.377744	114.1747278
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:27:27	4.4	8.5	22.37673767	114.1750005
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:27:33	4.2	17.1	22.37658917	114.174995
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:27:34	4.7	21.9	22.37657167	114.1749572
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:29:15	4.1	7	22.3760795	114.1707562

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:29:16	5.2	12.3	22.37608333	114.1707675
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:29:36	4.3	8.8	22.37647417	114.1709492
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:29:38	4.5	17.4	22.37649817	114.1709492
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:29:39	4.4	21.8	22.37656117	114.1709793
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:31:03	6.2	16.6	22.3775055	114.173752
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:31:04	5.1	21.8	22.3775055	114.173752
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:31:48	5.2	6.9	22.37590633	114.1755632
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:31:49	6	12.9	22.37590633	114.1755632
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:31:50	5.8	18.7	22.3758985	114.1755688
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:32:56	4.6	6.8	22.37382233	114.1770115
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:32:57	4.6	11.4	22.3738145	114.1770172
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:32:58	5.1	16.6	22.37379633	114.1770318
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:32:59	4.2	20.8	22.37376567	114.1770482
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:33:36	6.2	8.7	22.37176633	114.1785793
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:33:37	4.9	13.6	22.371765	114.178583
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:33:40	4.4	23	22.3717255	114.1786552
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:35:08	4.4	7.9	22.36862433	114.1751607
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:35:09	5.2	13.2	22.36862033	114.1751607
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:35:10	6	19.2	22.368608	114.1751525
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:36:26	5.3	5.3	22.36791533	114.1745825
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:36:27	5.9	11.3	22.36791533	114.1745825
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:36:28	5.5	16.9	22.367909	114.1745788
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:36:29	4.8	21.7	22.36789167	114.1745683
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:37:09	4.3	7.8	22.36530717	114.1729957
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:37:10	5.1	12.9	22.36530517	114.1729922
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:37:11	5.6	18.6	22.36529633	114.172981
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:38:18	4.6	9.2	22.36369267	114.17151
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:38:19	4.1	13.3	22.36369033	114.1715068
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:38:30	4.2	17.9	22.36340133	114.1713475
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:38:31	4.3	22.3	22.3633745	114.1713638
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:38:59	4.6	13.6	22.363331	114.173042
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:39:00	5	18.7	22.36333833	114.1730598
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:40:25	5.2	11	22.36385517	114.1738105
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:40:26	5.4	16.4	22.36386583	114.1738287
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:40:27	4.4	20.9	22.363882	114.1738607
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:41:41	4.6	6.2	22.36538583	114.1752262
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:41:42	4.9	11.2	22.36539417	114.1752315
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:41:43	5.5	16.7	22.36539417	114.1752315
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:41:44	4.6	21.4	22.365435	114.1752742
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:42:58	4.2	13.9	22.366868	114.176352
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:42:59	4.4	18.4	22.36689533	114.1763408
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:44:43	4.1	8.9	22.36905083	114.1791778
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:44:44	5	13.9	22.36905717	114.1791952
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:44:45	5.1	19.1	22.36905717	114.1791952
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:45:34	4.1	5.7	22.36938083	114.1801337
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:45:35	4.6	10.4	22.36938267	114.1801388
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:45:36	5	15.4	22.36939183	114.1801557
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:46:40	4.5	5.8	22.36609117	114.1807768
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:46:41	5	10.9	22.36608833	114.1807767
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:52:04	6.7	6.7	22.34267033	114.1863672
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:52:05	5.8	12.5	22.34267033	114.1863672

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:52:06	6.4	18.9	22.342668	114.1863762
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:52:07	5.3	24.3	22.342661	114.1864007
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:52:08	4.7	29	22.34264983	114.1864415
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:52:58	4.6	7	22.34181067	114.191571
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:53:49	4.7	12.5	22.341807	114.1917602
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:53:50	5.3	17.9	22.34180633	114.1917745
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:53:51	4.2	22.1	22.341805	114.1918008
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:55:16	4.5	6.6	22.3418005	114.195505
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:55:17	4.6	11.3	22.341801	114.1955075
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:55:18	4.2	15.5	22.34180067	114.1955188
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:56:45	5.1	12.4	22.3394045	114.2026467
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:56:46	4.7	17.2	22.33939933	114.2026592
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 22:58:20	4.2	23	22.33651617	114.2071998
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 23:01:16	4.4	9.7	22.3253205	114.2143135
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 23:01:17	5.3	15	22.32531417	114.2143103
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 23:01:18	5.5	20.5	22.32529667	114.2143062
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 23:02:11	4.7	7	22.321153	114.2146322
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 23:02:12	5	12.1	22.32114283	114.2146325
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 23:02:13	5.6	17.8	22.32112067	114.2146325
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 23:02:14	4.4	22.2	22.321085	114.2146295
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 23:03:10	5.2	5.2	22.31747017	114.2152803
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 23:03:11	5	10.3	22.31747017	114.2152803
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 23:03:12	5.8	16.2	22.31746433	114.2152823
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 23:03:13	5.3	21.6	22.31744733	114.2152913
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 23:04:06	5.3	11.9	22.31566517	114.2182963
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 23:04:07	5.5	17.5	22.31565867	114.2183192
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 23:05:39	5.3	12.9	22.313843	114.2229357
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 23:05:40	5	18	22.313844	114.2229493
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 23:07:11	5.5	5.5	22.31303183	114.2247742
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 23:07:12	4.8	10.4	22.313018	114.2247755
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 23:07:13	4.2	14.6	22.31300017	114.2247898
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 23:07:37	4.5	7.1	22.312482	114.2259527
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 23:08:53	4.5	6.8	22.30989333	114.2238895
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 23:08:54	5.5	12.4	22.309886	114.2238813
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 23:09:14	4.5	24.5	22.30950417	114.2233587
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 23:10:22	6	6	22.30703083	114.2218763
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 23:10:23	5.3	11.3	22.30703083	114.2218763
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 23:10:24	6	17.3	22.30703983	114.2218672
69496	[redacted]	STD	2018-07-28	80	UY6011	80	MEILAM	2018-07-28 22:23:30	2018-07-28 22:25:00	2018-07-28 23:10:25	4.8	22.2	22.30705833	114.2218475
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 14:59:12	5.2	9.4	22.376844	114.1750487
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 14:59:13	5.5	14.9	22.37684117	114.1750483
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 14:59:20	4.4	20.7	22.3766285	114.175023
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:01:34	4.4	21.9	22.37664933	114.1710852
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:02:48	6.1	10.3	22.37749033	114.1736397
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:02:49	4.3	14.7	22.37749117	114.173646
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:02:50	4.3	19.1	22.37749467	114.1736697
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:03:32	5.6	13	22.37579017	114.1756478
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:03:33	5.7	18.7	22.37577717	114.1756592
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:04:15	5.7	5.7	22.37391233	114.1769222
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:04:16	5.4	11.1	22.37391067	114.1769233
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:04:45	5.8	5.8	22.37381817	114.1770258

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:04:51	4.5	21.3	22.37371267	114.1770745
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:04:52	4.2	25.5	22.37367583	114.1770937
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:05:07	4.7	25.4	22.37302167	114.1775432
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:06:05	4.6	4.6	22.37070733	114.1779197
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:06:14	4.5	16.3	22.3706655	114.1778232
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:06:15	4.9	21.2	22.37065317	114.1777958
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:06:52	4.1	13.8	22.369151	114.1756245
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:06:53	5.3	19.2	22.36913433	114.1756087
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:06:54	4.6	23.8	22.36911	114.1755855
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:07:15	4.2	8.1	22.36861667	114.1751785
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:07:16	4.9	13.1	22.3686115	114.175174
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:07:17	6.3	19.5	22.36859817	114.1751615
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:08:04	5.3	10.6	22.36792067	114.1746687
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:08:05	6.1	16.7	22.36791183	114.1746602
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:08:55	4.2	7.1	22.365305	114.1730183
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:08:56	5	12.1	22.3653015	114.1730153
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:08:57	5.9	18.1	22.36529133	114.1730025
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:08:58	4.4	22.5	22.36527483	114.1729785
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:09:30	5.4	13.3	22.3641525	114.1719705
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:09:31	5.6	19	22.36414033	114.1719568
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:10:34	4.8	20.8	22.36342617	114.1713642
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:12:05	4.7	6.8	22.36387583	114.1738342
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:12:07	5.6	17.8	22.36388883	114.173852
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:12:08	4.7	22.6	22.36390533	114.1738778
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:13:04	4.6	6.3	22.36544167	114.1752428
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:13:05	5.4	11.8	22.365444	114.1752455
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:13:07	4.8	22.5	22.36547167	114.175284
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:13:29	4	14.9	22.36625367	114.176209
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:14:42	5.1	7.8	22.36712167	114.1762368
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:14:43	5.8	13.7	22.36712583	114.1762347
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:14:44	6.3	20.1	22.36714167	114.1762267
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:15:44	5.3	8.4	22.36867717	114.1784035
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:15:45	6.1	14.5	22.36867867	114.1784053
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:15:46	5.7	20.3	22.3686865	114.1784233
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:16:48	4.8	12.7	22.369036	114.1791947
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:16:49	5.6	18.4	22.36903917	114.1792163
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:17:15	5.5	5.5	22.3693695	114.180136
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:17:16	5	10.6	22.36937033	114.1801377
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:17:17	5.9	16.5	22.36937533	114.1801493
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:17:18	4.2	20.7	22.36938533	114.1801727
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:24:12	6.7	6.7	22.3421905	114.1900882
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:24:13	6	12.7	22.34219133	114.1900882
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:24:14	6.3	19.1	22.34218233	114.1900995
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:24:15	5.2	24.4	22.34216733	114.1901202
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:24:55	4.4	7.5	22.34181417	114.1918837
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:24:56	5	12.5	22.3418145	114.1918898
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:24:57	5.5	18	22.3418155	114.1919078
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:24:58	4.4	22.5	22.34181483	114.1919387
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:25:55	5	14.3	22.34181583	114.1957668
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:25:56	5.1	19.4	22.34181017	114.1957892
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:27:54	5.4	14.1	22.33950917	114.2028083

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:27:55	5	19.1	22.33948917	114.2028195
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:28:16	5.1	5.1	22.33862433	114.2038433
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:28:17	4.8	9.9	22.338623	114.2038452
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:28:18	6.1	16.1	22.33861567	114.203852
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:28:19	5.2	21.3	22.338596	114.2038652
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:29:50	8.4	8.4	22.33641883	114.2073225
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:29:51	7.1	15.5	22.33641433	114.2073265
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:29:52	5.5	21.1	22.33639967	114.207334
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:32:10	4.8	9.8	22.32531383	114.2143132
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:32:11	5.6	15.4	22.3253	114.2143058
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:32:12	5.5	20.9	22.32527667	114.214296
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:33:10	5	10.8	22.32113067	114.2146792
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:33:11	6	16.9	22.32111883	114.2146807
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:33:12	4.9	21.8	22.32109467	114.2146837
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:34:18	5.6	11.7	22.31743233	114.2152923
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:34:19	6.2	17.9	22.31742167	114.2152983
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:34:20	4.5	22.5	22.31739883	114.2153117
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:35:34	5.4	7.8	22.315569	114.2183705
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:35:35	6.1	13.9	22.31556717	114.2183743
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:36:27	4.8	19.5	22.31450517	114.2212285
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:36:28	4.1	23.7	22.31449217	114.2212625
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:37:23	5.2	9.9	22.313804	114.2231318
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:37:24	5.8	15.7	22.31380433	114.2231433
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:37:25	5.2	20.9	22.31379667	114.2231647
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:38:56	5.9	9	22.31308883	114.2249952
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:38:57	6.2	15.2	22.31308483	114.225
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:38:58	5.8	21.1	22.31307417	114.2250185
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:39:22	6.1	9.5	22.3126025	114.2261687
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:39:23	6.8	16.3	22.31260167	114.2261762
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:39:24	5	21.3	22.31259917	114.2262
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 14:55:50	2018-07-29 14:58:00	2018-07-29 15:41:10	4.4	25.3	22.309853	114.2237553
69496	[redacted]	STD	NULL	NULL	UU3927	NULL	NULL	2018-07-29 16:03:35	NULL	2018-07-29 16:05:54	4.5	4.5	22.3079075	114.2219032
69496	[redacted]	STD	NULL	NULL	UU3927	NULL	NULL	2018-07-29 16:03:35	NULL	2018-07-29 16:05:55	4.3	8.9	22.3079075	114.2219032
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:06:01	4.4	21.3	22.3080305	114.2219458
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:08:25	4.3	5.7	22.30693517	114.2240473
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:08:26	4.3	10.1	22.306933	114.2240505
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:08:27	4.8	15	22.30693217	114.2240645
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:08:28	4.4	19.4	22.3069285	114.2240913
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:08:29	4.5	24	22.30692717	114.2241297
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:09:21	4.9	17.4	22.308172	114.2257803
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:09:22	4.4	21.8	22.30818783	114.2258088
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:10:41	7	7	22.30912433	114.2272583
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:10:42	5.5	12.5	22.30912383	114.2272615
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:10:43	6.1	18.6	22.30912933	114.2272748
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:11:01	4.4	15	22.3087595	114.2278295
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:11:33	5	7.7	22.30898783	114.2284163
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:11:34	5.3	13	22.308992	114.2284202
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:12:24	4.6	7.1	22.309884	114.2289733
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:12:25	4.6	11.8	22.30988433	114.2289743
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:12:37	4.3	22	22.3102875	114.2290905
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:13:37	4.8	11.6	22.3117195	114.2266287

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:13:38	5.7	17.3	22.311725	114.2266147
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:13:39	4.4	21.8	22.3117345	114.2265892
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:14:07	4.7	19.4	22.31252617	114.2253363
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:14:08	4.4	23.9	22.3125425	114.2253027
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:15:37	4.3	23	22.313206	114.223858
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:16:45	4.7	10.9	22.3142815	114.2213033
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:16:46	5.2	16.1	22.3143045	114.2212993
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:16:47	5.3	21.5	22.314335	114.2212863
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:18:32	4.5	10	22.31655883	114.2158338
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:18:33	5.6	15.6	22.31656667	114.2158252
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:18:34	5.1	20.7	22.316582	114.2158073
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:19:21	4.4	8.6	22.31968867	114.214604
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:19:22	5	13.6	22.3196955	114.2146028
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:19:23	5.7	19.3	22.31971317	114.2145998
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:20:11	4.4	7.6	22.32185867	114.2143588
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:20:12	5.5	13.2	22.32186483	114.214358
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:20:13	5.1	18.3	22.321882	114.2143547
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:20:31	4.6	4.6	22.3221225	114.214327
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:20:32	4.2	8.9	22.32212283	114.214327
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:20:33	5.3	14.2	22.32213183	114.2143265
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:20:34	5.2	19.5	22.32215183	114.2143268
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:21:34	4.6	10.4	22.32549283	114.2139893
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:21:57	5	11.7	22.3255945	114.2139752
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:21:58	5.7	17.4	22.32560833	114.2139757
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:21:59	4.7	22.2	22.3256335	114.2139768
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:24:08	5.1	10.8	22.33357433	114.2075332
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:24:09	5	15.9	22.33358167	114.2075415
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:25:37	5.3	15.1	22.336597	114.206781
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:27:10	4.1	8.6	22.33909633	114.2026375
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:27:54	4.6	10.3	22.33917833	114.2024777
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:27:55	5.2	15.5	22.33918617	114.202468
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:27:56	4.7	20.2	22.33919917	114.2024532
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:30:18	4.7	12.5	22.34160883	114.1942758
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:30:19	4.9	17.4	22.34160817	114.1942593
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:37:52	5.7	5.7	22.36568917	114.1806813
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:37:53	5.1	10.9	22.36569833	114.180679
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:37:54	5.5	16.5	22.36571417	114.1806745
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:37:55	5.2	21.8	22.36574283	114.1806702
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:37:56	4	25.8	22.36578383	114.1806648
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:38:41	4.1	9.5	22.369132	114.1803563
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:38:42	4.1	13.6	22.36914317	114.18035
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:39:47	4.3	13.2	22.36883167	114.1790128
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:39:48	4.7	18	22.36882583	114.1789935
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:40:42	4.4	9.7	22.36845967	114.178108
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:40:43	5	14.7	22.36845617	114.1780985
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:40:44	4.8	19.5	22.36844933	114.1780808
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:41:32	4.9	12.6	22.367535	114.1765587
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:41:33	5.1	17.8	22.367525	114.1765447
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:42:45	4.6	11.7	22.36543083	114.175392
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:42:46	5	16.7	22.36542267	114.1753787
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:44:03	4.4	5.5	22.36286533	114.1724865

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:44:04	4.4	9.9	22.36286817	114.1724912
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:44:05	6.1	16.1	22.36286717	114.1724798
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:44:25	4.6	7.7	22.36327033	114.1715048
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:44:26	5.4	13.2	22.36327367	114.1715015
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:44:27	5.7	19	22.36328517	114.1714887
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:44:38	4.1	24.2	22.363659	114.1713483
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:45:23	5.1	10.5	22.365574	114.173035
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:45:24	5.9	16.4	22.36558267	114.1730435
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:45:25	5.1	21.6	22.36559717	114.1730642
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:47:13	4.3	4.3	22.36751217	114.1743097
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:47:14	4.8	9.1	22.36751233	114.1743097
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:47:15	5.3	14.5	22.36751283	114.1743108
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:47:16	5.6	20.1	22.367529	114.1743182
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:48:14	4.2	9.9	22.36890467	114.175158
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:48:15	4.7	14.6	22.368913	114.1751675
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:48:16	4.9	19.6	22.36892833	114.175184
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:49:00	4.7	16.8	22.371435	114.1783707
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:49:01	4.8	21.6	22.371459	114.1783873
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:50:47	4.6	9.2	22.37396583	114.1767557
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:50:48	5.9	15.2	22.37397367	114.1767513
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:50:55	4.3	26.5	22.3742785	114.1767942
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:51:40	4.9	6.9	22.374845	114.1778592
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:51:41	5.4	12.4	22.37485067	114.1778567
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:51:56	4.2	15.3	22.3751165	114.1779888
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:51:57	4.5	19.9	22.37514017	114.177975
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:52:37	5.1	14.5	22.37541333	114.1777548
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:53:35	4.6	6.8	22.376036	114.1772133
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:53:37	4.7	17.5	22.37605733	114.177198
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:53:48	4.2	19.8	22.37640433	114.1768472
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:54:10	4.6	7.3	22.375703	114.1760243
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:54:11	5.4	12.8	22.37570133	114.17602
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:54:12	5.8	18.6	22.375693	114.1760055
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:55:24	5.6	11	22.37729617	114.1740215
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:56:01	4.5	4.5	22.37727067	114.1730873
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:56:02	5.6	10.2	22.3772705	114.1730873
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:56:03	6.5	16.7	22.37726917	114.1730762
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:56:04	4.9	21.6	22.37726417	114.173053
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:57:56	4.8	19	22.37651983	114.1710303
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:57:57	4.4	23.4	22.37653133	114.1710887
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:59:13	5.5	7.1	22.37740367	114.17379
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:59:14	6.5	13.7	22.37740633	114.1737957
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 16:03:35	2018-07-29 16:06:00	2018-07-29 16:59:15	6.4	20.1	22.377411	114.1738113
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:03:35	4.5	8.7	22.37772483	114.1747678
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:05:07	4.7	7.8	22.37674183	114.175145
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:05:14	4.9	22.7	22.37658767	114.1751228
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:07:15	4.7	22.3	22.37647967	114.171068
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:08:50	6.8	13	22.377519	114.1742153
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:08:51	6.3	19.4	22.37752383	114.1742268
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:09:49	5.1	9	22.37575133	114.1756045
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:09:50	6.1	15.2	22.37574667	114.1756077
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:09:51	5.6	20.8	22.37573083	114.1756183

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:11:26	4.7	7.3	22.37386133	114.1769542
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:11:32	4.6	25	22.37374083	114.1770368
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:12:59	4.8	20.2	22.369121	114.1754872
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:13:00	4.4	24.6	22.3690955	114.1754613
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:13:33	4.5	6.8	22.36866983	114.1751087
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:13:34	5.7	12.6	22.368667	114.1751065
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:13:35	5.7	18.3	22.368656	114.1750972
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:14:44	5	7.7	22.36531833	114.1730087
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:14:45	5.9	13.6	22.36531567	114.1730065
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:14:46	6.7	20.4	22.36530633	114.1729935
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:15:21	4.7	10.4	22.36415667	114.171978
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:15:22	4.6	15	22.364148	114.1719702
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:16:10	4.2	7.5	22.36368217	114.1714963
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:16:11	5.2	12.7	22.36367817	114.1714918
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:16:21	4.5	18.9	22.36340033	114.1713743
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:16:22	4.7	23.6	22.36337433	114.1713925
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:17:24	5.7	12.6	22.36385117	114.173829
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:17:25	6.2	18.8	22.363858	114.1738477
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:17:26	4.8	23.6	22.36387283	114.1738762
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:18:07	5.4	14.3	22.3654085	114.1752617
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:18:08	6.4	20.7	22.36541917	114.1752852
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:18:09	4.2	25	22.36543983	114.1753137
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:19:14	5.7	5.7	22.36624417	114.1762083
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:19:15	5.3	11.1	22.36624217	114.1762103
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:19:16	5.7	16.8	22.36624417	114.1762205
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:20:39	5.1	7.3	22.3669985	114.1763402
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:20:40	5.9	13.3	22.367003	114.1763373
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:20:41	6.1	19.5	22.36701767	114.1763285
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:22:20	4.2	7	22.36901	114.1791297
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:22:21	4.7	11.8	22.36901567	114.1791438
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:22:22	5.2	17	22.3690195	114.179164
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:22:42	4.1	13.6	22.36933133	114.1800497
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:22:43	4.6	18.2	22.36933983	114.1800723
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:24:16	4.8	10.9	22.364751	114.1812665
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:24:17	4.4	15.3	22.36473983	114.1812703
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:29:28	5.3	17.1	22.3426405	114.1864563
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:29:29	5	22.1	22.34263167	114.1864862
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:29:30	4.3	26.5	22.34262317	114.1865295
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:29:32	4.2	34.8	22.34259983	114.1866547
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:31:07	5.6	18.3	22.3418505	114.1919208
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:31:08	4.3	22.6	22.3418445	114.1919517
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:32:15	4.7	6.4	22.34183967	114.1957557
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:32:16	4.1	10.6	22.34184	114.195755
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:32:17	5	15.6	22.34183717	114.1957653
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:32:18	4.7	20.4	22.34183167	114.1957888
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:33:45	4.6	10.3	22.33954133	114.2028317
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:33:46	5.4	15.8	22.33953233	114.2028392
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:33:47	4.5	20.4	22.33951517	114.2028542
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:35:54	4.6	4.6	22.33680933	114.2070438
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:36:22	4.9	20.2	22.33640483	114.2073733
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:37:07	5.4	5.4	22.33496767	114.2080557

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:40:13	4.6	4.6	22.32552933	114.2143285
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:40:14	5.3	10	22.32552917	114.2143285
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:40:15	5.7	15.8	22.3255195	114.2143305
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:40:16	5.5	21.4	22.32549733	114.2143258
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:41:52	4.6	11.1	22.31755633	114.21527
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:41:53	5.7	16.9	22.317543	114.2152747
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:41:54	4.6	21.5	22.31751917	114.2152802
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:43:24	4.8	9.2	22.31569683	114.2180902
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:43:25	5.7	14.9	22.31569433	114.2180967
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:44:15	6.8	6.8	22.3145275	114.2211878
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:44:16	5.3	12.1	22.31452717	114.2211892
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:44:17	5.1	17.3	22.31452267	114.2212015
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:44:18	4.8	22.1	22.31451217	114.2212268
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:45:29	4.3	6.7	22.31398317	114.2226983
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:45:30	5.2	12	22.31398217	114.2227012
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:45:31	4.4	16.4	22.31397717	114.2227142
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:45:57	4.2	24.3	22.313468	114.224129
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:47:16	4.7	7	22.3131735	114.2249197
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:47:17	6.1	13.1	22.313173	114.2249237
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:47:18	4.2	17.3	22.31316683	114.2249382
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:47:58	5.1	17.7	22.31270817	114.2262543
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:47:59	4.4	22.2	22.312706	114.2262838
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:49:03	5.4	5.4	22.31149117	114.225781
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:49:04	5.8	11.3	22.31149	114.2257792
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:49:05	6.3	17.7	22.3114835	114.2257698
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:49:37	5.7	12.1	22.311041	114.2251315
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:49:38	6	18.2	22.31103	114.2251233
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:49:39	5	23.2	22.31101217	114.2251015
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:50:28	5.3	11.2	22.310023	114.2238622
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:50:29	5.4	16.6	22.31001417	114.2238532
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:50:30	5.3	22	22.3099935	114.2238358
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:51:29	4.7	24.6	22.30719467	114.2225933
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:51:55	6.4	6.4	22.307115	114.2218917
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:51:56	5.9	12.4	22.30711983	114.2218882
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:51:57	6.2	18.7	22.307136	114.2218812
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 17:02:11	2018-07-29 17:03:00	2018-07-29 17:51:58	4.7	23.4	22.30715783	114.2218648
69496	[redacted]	STD	NULL	NULL	UU3927	NULL	NULL	2018-07-29 18:02:54	NULL	2018-07-29 18:04:55	4.6	8.7	22.307942	114.2218052
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:05:12	4.2	15.7	22.3081235	114.2218947
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:05:26	4.2	22.1	22.308597	114.2220368
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:06:07	5.1	21.8	22.30771767	114.2233403
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:07:56	4.1	23.9	22.30850233	114.2280055
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:11:27	4.8	14.5	22.313152	114.2239895
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:11:37	4.1	25.9	22.31330233	114.2235945
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:12:35	5.8	5.8	22.31416117	114.2213168
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:12:37	4.6	15.2	22.314167	114.2213017
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:13:58	4.7	8.4	22.3151405	114.2187378
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:13:59	4.6	13	22.31514383	114.218732
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:14:55	4.8	6.7	22.31654883	114.2157553
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:14:56	5.2	12	22.31655383	114.2157503
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:14:57	5.7	17.8	22.31656383	114.2157392
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:14:58	4.8	22.6	22.31658533	114.2157217

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:15:41	4.1	16.9	22.32023983	114.2144852
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:15:42	4.9	21.8	22.32026967	114.2144908
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:16:54	4.5	7.7	22.32187867	114.214313
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:17:41	4.3	9.6	22.3221435	114.2142862
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:17:42	5.1	14.7	22.322154	114.2142857
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:17:43	5.4	20.1	22.32217583	114.2142858
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:18:40	4.5	7.5	22.325597	114.2139768
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:18:41	5.4	12.9	22.32560267	114.2139757
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:18:42	5.6	18.5	22.325619	114.2139733
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:18:43	4.1	22.7	22.325648	114.2139712
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:19:33	4.3	7.8	22.3288065	114.2118088
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:19:34	5.2	13.1	22.3288105	114.2118045
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:19:35	5.4	18.5	22.32882417	114.2117942
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:24:12	5.1	5.1	22.339208	114.202424
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:24:13	4.4	9.6	22.33920967	114.2024208
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:24:14	5.4	15	22.33921367	114.2024132
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:24:15	4.9	20	22.3392285	114.202397
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:26:21	4.7	12.8	22.34161733	114.1942503
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:26:22	4.9	17.8	22.34161717	114.1942372
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:27:03	4.6	9.8	22.34156183	114.1914877
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:27:04	4.8	14.7	22.3415625	114.1914772
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:27:05	4.3	19	22.3415635	114.1914552
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:28:07	4.1	13	22.342391	114.1882743
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:28:08	4.3	17.3	22.3423975	114.1882547
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:33:59	4.5	22.1	22.365489	114.180678
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:34:00	4.7	26.9	22.365531	114.180673
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:34:01	4.1	31	22.3655825	114.1806655
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:37:19	4.7	8.5	22.369168	114.1796715
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:37:20	5.2	13.8	22.369161	114.1796588
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:37:21	4.2	18.1	22.36914967	114.1796347
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:38:23	4.9	10.8	22.368835	114.1788798
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:38:24	5.5	16.3	22.36883083	114.1788707
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:38:25	4.7	21.1	22.3688215	114.1788485
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:39:17	4.5	7.1	22.36849333	114.1780698
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:39:18	5.2	12.4	22.36849167	114.1780665
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:39:19	5.2	17.6	22.36848583	114.1780515
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:39:20	4.2	21.9	22.36847533	114.1780237
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:39:50	5	5	22.3675925	114.1765657
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:39:51	4.6	9.6	22.36759133	114.1765652
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:39:52	5.5	15.1	22.36758517	114.176557
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:39:53	5	20.2	22.3675715	114.176539
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:40:23	4	23.4	22.36626517	114.1764247
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:41:22	4.2	13.2	22.36543133	114.1753227
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:41:23	4.7	18	22.36542133	114.1753045
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:42:38	4.8	9.2	22.362887	114.1724238
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:42:39	6.2	15.5	22.36288733	114.1724193
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:42:40	5.7	21.2	22.36288733	114.1723983
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:44:37	4.4	25.3	22.363637	114.1712585
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:45:04	4.5	23.3	22.36496833	114.1724983
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:45:31	5.3	9.6	22.36560633	114.1730037
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:45:32	6	15.7	22.36561183	114.1730137

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:45:33	5.6	21.3	22.36562883	114.1730362
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:46:26	5.9	5.9	22.367279	114.1741747
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:46:27	5.9	11.9	22.36727567	114.1741737
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:46:28	4.9	16.8	22.36728367	114.1741772
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:47:15	4.9	7.7	22.36875733	114.1749402
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:47:16	5.7	13.5	22.36876067	114.1749427
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:47:17	6.3	19.9	22.36877383	114.1749532
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:48:05	4.2	26.5	22.371372	114.1782757
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:48:46	4.7	13.1	22.37326467	114.1770698
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:48:47	5.3	18.5	22.373281	114.1770592
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:48:48	4.1	22.6	22.373316	114.1770527
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:50:01	5.5	5.5	22.37406033	114.1766375
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:50:02	5.6	11.2	22.37406033	114.1766375
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:50:03	5.6	16.8	22.37407733	114.1766242
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:50:09	4.1	25.8	22.37431667	114.1766263
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:50:10	4.4	30.2	22.37434567	114.1766698
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:50:33	4.7	7.7	22.37509633	114.1778673
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:51:07	5.1	10	22.37541367	114.177664
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:51:08	6.1	16.1	22.37542067	114.1776585
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:51:09	5	21.1	22.37544117	114.177646
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:52:12	5	6.3	22.37621583	114.1769478
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:52:13	5.5	11.9	22.37621733	114.1769467
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:52:14	5.1	17.1	22.3762315	114.1769425
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:53:23	4.4	4.4	22.375792	114.1759067
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:53:24	4.9	9.4	22.375792	114.1759067
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:53:25	5.9	15.3	22.375788	114.1759005
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:53:26	5.3	20.7	22.37577717	114.1758827
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:54:40	5	9.3	22.37728233	114.173968
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:54:41	5.7	15	22.37728733	114.1739662
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:54:42	5	20.1	22.3773045	114.1739617
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:55:17	7.1	8.5	22.3773555	114.173122
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:55:18	6.6	15.2	22.37735317	114.1731192
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:55:19	5.1	20.4	22.37734767	114.1731002
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:56:00	4.5	9.3	22.37667767	114.1711922
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:56:01	5	14.3	22.3766735	114.1711828
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:57:00	6.4	6.4	22.37593683	114.170573
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:57:01	6.3	12.8	22.37593733	114.170575
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:57:26	4.5	20.2	22.37648067	114.1710143
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:57:27	4.3	24.6	22.3765	114.1710573
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:58:29	5.6	9.3	22.377352	114.1735813
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:58:30	6	15.3	22.37735667	114.173587
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:58:31	4.8	20.1	22.37736433	114.173607
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:58:32	4.9	25.1	22.37737417	114.1736433
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 18:02:54	2018-07-29 18:05:00	2018-07-29 18:59:48	4.4	6.9	22.37783267	114.1752528
69496	[redacted]	STD	NULL	NULL	UU3927	NULL	NULL	2018-07-29 20:06:37	NULL	2018-07-29 20:07:16	6.2	6.2	22.377791	114.1751138
69496	[redacted]	STD	NULL	NULL	UU3927	NULL	NULL	2018-07-29 20:06:37	NULL	2018-07-29 20:09:55	4.2	11.8	22.37771833	114.174943
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:11:12	4.6	8.7	22.37780033	114.1746428
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:11:13	4.3	13	22.37779817	114.1746417
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:12:31	4.2	9.4	22.37679583	114.1750233
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:12:38	4.7	22.5	22.37662283	114.174966
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:14:09	4.7	11	22.37612317	114.1708613

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:14:27	4.5	18.8	22.37657283	114.1710497
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:14:28	4.9	23.7	22.37658317	114.1711185
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:15:54	5.4	5.4	22.3774145	114.1738067
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:15:55	5.7	11.1	22.37744133	114.1738007
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:15:56	6.2	17.4	22.37745367	114.1738092
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:15:57	5.1	22.6	22.377466	114.1738332
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:16:39	5.2	12.8	22.37587267	114.1755618
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:16:40	5.2	18	22.375859	114.1755697
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:16:41	4.2	22.2	22.37583517	114.1755835
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:17:28	5	8.9	22.37389983	114.1769218
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:17:29	4.3	13.3	22.37389533	114.1769277
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:17:54	4.1	14.1	22.37377467	114.1770363
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:17:55	5	19.1	22.37375533	114.1770487
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:18:31	6.8	6.8	22.37176467	114.1786622
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:18:32	4.8	11.7	22.3717605	114.178662
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:18:33	6.4	18.2	22.37174833	114.1786682
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:18:34	4.6	22.8	22.3717305	114.1786858
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:19:52	4.1	7	22.368622	114.1751172
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:19:53	5.3	12.3	22.36861733	114.1751132
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:19:54	5.4	17.8	22.3686055	114.175102
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:20:17	4.1	4.1	22.36792767	114.1746205
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:20:18	5.1	9.2	22.36792767	114.1746205
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:20:19	5.7	15	22.36792083	114.1746168
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:20:20	5.4	20.5	22.36790417	114.174607
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:20:21	4.1	24.7	22.36787367	114.1745923
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:21:41	5.4	14.8	22.36528233	114.1730033
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:21:42	5.7	20.6	22.36527183	114.1729853
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:22:16	4.6	12.1	22.36412817	114.1719633
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:22:17	5.8	17.9	22.364117	114.1719502
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:22:18	4.5	22.4	22.36409933	114.1719277
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:22:35	4.4	21.4	22.36335817	114.1713455
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:23:02	5.5	13.9	22.3632435	114.1729117
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:23:03	5.6	19.6	22.36325067	114.17293
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:24:33	5	9	22.363823	114.1737657
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:24:34	5.9	14.9	22.36382883	114.1737735
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:24:35	5.6	20.5	22.363836	114.1737958
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:25:34	4.4	21.6	22.365762	114.1756023
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:26:41	4.7	4.7	22.36679933	114.176391
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:26:42	5	9.8	22.3667995	114.1763908
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:26:43	5.1	14.9	22.36681433	114.1763828
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:27:47	5	8.1	22.36860883	114.178182
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:27:48	5.4	13.5	22.36860817	114.1781782
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:29:21	5	11.6	22.3692665	114.1798657
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:29:22	4	15.7	22.36927183	114.1798783
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:36:11	5.2	8.6	22.3426275	114.1864112
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:36:12	5.6	14.3	22.3426265	114.1864192
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:36:13	5.9	20.2	22.34261983	114.1864388
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:36:14	5.2	25.4	22.3426085	114.1864725
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:36:15	4.2	29.7	22.34259467	114.1865213
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:36:16	4.5	34.3	22.342583	114.1865865
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:37:58	4.1	23.5	22.34175933	114.1923718

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:39:29	4.4	8.1	22.34176417	114.1953078
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:39:30	5.1	13.3	22.34176517	114.1953147
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:39:31	5	18.4	22.341768	114.1953332
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:39:59	4.4	9.8	22.34179917	114.1956855
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:40:00	5.1	14.9	22.34179767	114.1956995
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:40:01	4.9	19.8	22.34178967	114.1957252
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:40:02	4.3	24.2	22.341792	114.1957647
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:41:52	4.4	17.3	22.33942767	114.2029315
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:42:17	4.9	10	22.33866917	114.2038723
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:42:18	6	16	22.33866067	114.2038788
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:42:19	5.3	21.4	22.33864267	114.203895
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:43:13	4.8	6.9	22.3367975	114.2070307
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:43:14	5	11.9	22.336797	114.207032
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:43:32	4.4	19	22.33642117	114.2073362
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:43:33	4.8	23.9	22.33639033	114.207351
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:45:42	4.2	7.8	22.32534883	114.2143142
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:45:43	5.3	13.2	22.32534283	114.214312
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:45:44	6.2	19.4	22.3253255	114.2143012
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:48:20	4.5	6.3	22.315526	114.2183525
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:48:21	5.6	11.9	22.315524	114.2183535
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:48:22	5.4	17.3	22.31551867	114.2183662
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:49:08	4.7	4.7	22.3144715	114.2211
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:49:09	4.9	9.6	22.31447183	114.2211005
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:49:10	5.8	15.5	22.31446917	114.221109
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:49:11	5.4	21	22.31446167	114.2211302
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:49:52	4.7	9.5	22.31378367	114.2229492
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:49:53	5.6	15.1	22.31378	114.2229563
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:49:54	5.4	20.5	22.31376917	114.2229747
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:51:27	5.2	10.8	22.31306317	114.2249078
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:51:28	6.2	17	22.31305867	114.2249175
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:51:29	5	22.1	22.31304967	114.2249408
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:52:38	5.9	11.5	22.31137433	114.225732
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 20:06:37	2018-07-29 20:10:00	2018-07-29 20:52:39	5.4	16.9	22.3113675	114.2257233
69496	[redacted]	STD	NULL	NULL	UU3927	NULL	NULL	2018-07-29 21:08:21	NULL	2018-07-29 21:09:56	4.4	10.2	22.30793733	114.2218637
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:10:01	4.7	20.4	22.30804233	114.2219382
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:12:10	4.9	7.7	22.30897267	114.2284107
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:12:11	6.2	14	22.3090025	114.2284177
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:12:12	6.6	20.6	22.30902867	114.2284317
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:12:13	4.6	25.2	22.30906067	114.2284542
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:12:35	5.9	5.9	22.310099	114.2291065
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:12:43	4.8	25.2	22.31032017	114.2291238
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:13:21	5.8	9.3	22.31183417	114.2266505
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:13:22	6.2	15.5	22.31184283	114.2266477
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:13:23	5.6	21.2	22.31185283	114.226629
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:14:00	4.5	20.3	22.3128675	114.2246882
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:14:01	4.7	25	22.31288467	114.2246533
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:14:57	4.2	19.3	22.31320133	114.2238703
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:15:21	4.3	6.7	22.31338667	114.2234472
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:15:22	5.2	11.9	22.31338883	114.2234432
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:15:23	5.5	17.5	22.31339467	114.2234295
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:16:15	4.8	11.8	22.31416017	114.2212158

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:16:16	5.3	17.2	22.31416733	114.2212028
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:16:17	4.5	21.8	22.314177	114.2211773
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:16:56	4.6	6.8	22.31506917	114.2188727
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:16:57	5.2	12.1	22.3150715	114.2188685
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:16:58	5.8	17.9	22.31507817	114.218855
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:17:46	4.8	8.5	22.31647633	114.2157313
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:17:47	5.3	13.8	22.31647983	114.2157282
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:17:48	4.2	18	22.316493	114.2157147
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:20:13	4.5	7.9	22.32014433	114.2145172
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:20:14	5.5	13.4	22.32015	114.214519
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:20:15	6.1	19.5	22.32016733	114.2145272
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:20:16	4.5	24.1	22.32019717	114.21453
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:21:08	4.1	6.4	22.322066	114.2143068
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:22:14	4.5	20.4	22.32417017	114.2141983
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:22:58	5.2	9	22.32546083	114.2139812
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:23:13	4.6	10	22.325557	114.2139605
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:23:14	5.9	15.9	22.3255675	114.2139602
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:23:15	5.2	21.2	22.32559017	114.2139622
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:24:31	4.3	10.8	22.32878433	114.2118572
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:26:49	4.4	8.6	22.33659867	114.2067625
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:26:52	5.1	21.8	22.33663783	114.206718
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:28:16	4.9	13.1	22.33918683	114.202466
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:28:17	5.5	18.6	22.33920333	114.202455
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:29:47	4.1	7.5	22.34161767	114.1943105
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:29:48	5.3	12.8	22.34161717	114.194305
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:29:49	5.3	18.2	22.3416165	114.194288
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:30:28	4.8	4.8	22.34157433	114.1915147
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:30:29	4.4	9.2	22.341574	114.191514
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:30:30	5.7	14.9	22.34157367	114.1915047
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:30:31	4.9	19.9	22.34157533	114.1914833
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:31:21	4.4	8.9	22.3423535	114.1883393
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:31:22	5.7	14.6	22.34235717	114.1883305
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:31:23	4.5	19.2	22.3423665	114.1883107
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:39:59	4.5	18.3	22.36909083	114.1795603
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:40:00	4.2	22.5	22.36907367	114.1795252
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:40:46	4.9	9.6	22.36859167	114.1783262
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:40:47	5.5	15.2	22.3685915	114.1783207
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:40:48	5.1	20.3	22.36858367	114.1783022
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:41:56	4.4	8.9	22.36761017	114.1766417
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:41:57	4.5	13.5	22.367602	114.1766255
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:43:21	4.5	8.3	22.36744133	114.1763715
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:43:22	4.4	12.8	22.367445	114.1763687
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:43:48	4.4	22.3	22.36627983	114.1765178
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:44:37	4.3	17.9	22.3655245	114.1754445
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:46:00	5.1	12.7	22.3628985	114.1724712
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:46:01	5	17.8	22.36289717	114.1724523
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:46:02	5.7	23.6	22.36289533	114.1724213
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:47:07	5.4	16.4	22.363379	114.17135
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:47:14	4.2	19.1	22.363587	114.1712483
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:47:15	5	24.1	22.36361633	114.171266
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:47:37	4.2	17.3	22.36468167	114.1722773

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:48:09	4.4	8.6	22.36556917	114.1729838
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:48:15	4.4	21.1	22.36565383	114.173109
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:48:16	4.5	25.7	22.3656775	114.173142
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:48:45	5.2	13.1	22.36724017	114.174171
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:48:46	5.2	18.3	22.36725517	114.1741767
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:50:33	4.4	10.8	22.37251883	114.1776598
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:51:04	4.2	6.8	22.37320633	114.1770323
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:51:05	5.1	11.9	22.37321267	114.1770295
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:51:07	4.6	22.5	22.373285	114.1770413
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:52:08	5.4	10.4	22.37399817	114.1766227
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:52:09	6	16.4	22.37400833	114.1766187
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:53:07	5.9	16.9	22.375454	114.1775925
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:53:08	4.8	21.8	22.37547717	114.1775775
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:54:24	4.8	9.9	22.37624267	114.176904
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:54:56	5.4	9.6	22.37567517	114.1759258
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:54:57	6	15.7	22.3756705	114.1759188
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:54:58	5.3	21	22.375658	114.1759007
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:55:59	5.3	9.2	22.37728183	114.1739205
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:56:00	5.4	14.6	22.37728783	114.1739192
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:56:45	4.1	22.7	22.376239	114.1703628
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:57:44	4.6	20.2	22.3766125	114.171042
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:57:45	4.3	24.6	22.37664267	114.1710688
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:59:19	5.3	9.3	22.37753167	114.1737618
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:59:20	6.3	15.6	22.37752983	114.173752
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:59:21	5.9	21.6	22.37753383	114.1737707
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 21:08:21	2018-07-29 21:10:00	2018-07-29 21:59:22	4.2	25.8	22.37753967	114.1738053
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:05:50	4.7	6.7	22.37673017	114.1750162
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:05:51	4.5	11.3	22.37673667	114.1750127
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:05:56	4.1	18	22.37661533	114.1749927
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:05:57	4.4	22.5	22.37659367	114.1749607
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:07:32	4.8	10.9	22.37610383	114.1707943
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:07:33	4.1	15	22.37610883	114.1708062
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:07:49	4.6	19	22.37653717	114.1709715
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:07:50	4.7	23.8	22.37656983	114.1709822
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:08:37	4.2	4.2	22.37690733	114.1717338
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:08:38	4.6	8.8	22.37690733	114.1717338
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:08:39	5.5	14.4	22.37689833	114.1717497
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:08:40	5.4	19.8	22.37689267	114.1717778
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:08:41	4.2	24.1	22.37690267	114.1718103
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:09:15	6.1	8.5	22.37746983	114.1736143
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:09:16	6.1	14.6	22.37747117	114.1736198
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:09:17	6.3	20.9	22.3774735	114.1736372
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:09:58	4.6	4.6	22.37589117	114.1755332
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:09:59	4.3	8.9	22.37588967	114.1755367
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:10:00	5.5	14.4	22.37588417	114.1755418
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:10:01	5.1	19.5	22.375869	114.1755527
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:10:48	4.7	8.2	22.3738185	114.1770115
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:10:49	5.7	13.9	22.373814	114.1770148
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:10:50	6.5	20.4	22.3737985	114.1770237
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:10:51	4.4	24.8	22.37377017	114.177036
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:11:19	4.6	9.6	22.37307183	114.1775247

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:11:20	5.3	15	22.37306283	114.1775308
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:11:21	5.8	20.9	22.37305017	114.1775477
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:11:22	4.1	25	22.37302983	114.1775657
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:11:47	7.3	9.7	22.37177667	114.1786273
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:11:48	6.8	16.5	22.371776	114.1786318
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:11:49	5.1	21.7	22.37176483	114.1786482
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:12:59	5.2	10	22.36862367	114.1750943
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:13:00	6	16.1	22.36861767	114.1750878
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:13:01	5	21.2	22.36860133	114.1750725
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:14:07	5.3	6.8	22.3678735	114.17457
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:14:08	5.5	12.3	22.367873	114.174566
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:14:09	6.1	18.5	22.3678625	114.1745582
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:14:10	4.6	23.1	22.36784333	114.1745387
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:15:14	4.4	8.9	22.3641545	114.171935
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:15:15	5.4	14.4	22.3641495	114.1719292
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:15:16	5.6	20.1	22.364137	114.1719135
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:15:40	4.6	7.1	22.36368167	114.1714752
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:15:41	4.8	12	22.363679	114.1714752
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:15:42	5.5	17.6	22.36366867	114.1714662
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:15:51	5	22.4	22.3633805	114.1713623
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:16:47	4.6	6.8	22.36388167	114.1737893
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:16:48	5.4	12.2	22.36388267	114.1737942
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:16:49	6	18.2	22.36388633	114.173806
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:16:50	4.5	22.7	22.36389733	114.1738327
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:17:54	5	16.9	22.36547017	114.1753115
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:17:55	5	21.9	22.36548633	114.1753343
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:18:58	4.3	7.4	22.36621233	114.1761758
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:18:59	4.4	11.9	22.36620933	114.1761707
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:19:58	4.9	8.9	22.36702933	114.1762358
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:19:59	6.3	15.2	22.36703583	114.1762325
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:20:00	5.1	20.4	22.36705417	114.1762232
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:21:03	4.7	4.7	22.36862283	114.1782528
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:21:04	4.8	9.6	22.36862283	114.1782528
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:21:05	5.5	15.1	22.368629	114.1782628
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:22:07	4.4	6.6	22.3690275	114.179166
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:22:08	4.6	11.2	22.36902883	114.1791722
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:22:09	5.2	16.4	22.36903267	114.1791875
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:22:10	4.7	21.2	22.36903367	114.1792152
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:22:39	4.5	8.2	22.36928517	114.1799345
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:22:40	4.8	13.1	22.36928883	114.1799462
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:29:32	4.8	9.8	22.34263817	114.1863385
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:29:33	5.5	15.4	22.34263417	114.1863765
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:29:34	5.6	21	22.34262633	114.1864097
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:29:35	4.9	26	22.34261533	114.1864498
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:31:00	5.5	5.5	22.3417595	114.19183
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:33:11	5.4	5.4	22.34179767	114.1954708
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:33:12	4.8	10.2	22.34180567	114.1954827
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:33:13	5.2	15.5	22.34180717	114.195498
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:33:27	4.1	8.3	22.34180683	114.1957322
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:33:28	4.9	13.3	22.3418055	114.1957377
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:33:29	5.7	19	22.34180167	114.1957553

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:33:30	4.1	23.2	22.3417975	114.195786
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:35:18	4.1	12.4	22.33951283	114.202793
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:35:19	4.5	17	22.33949933	114.2028048
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:35:20	4.2	21.2	22.33947783	114.2028235
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:35:44	6.6	9.6	22.33862217	114.2038447
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:35:45	6.2	15.8	22.33862283	114.2038477
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:35:46	5.2	21	22.33861133	114.2038607
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:39:26	4.2	8.1	22.3253355	114.21432
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:39:27	4.9	13	22.3253295	114.2143018
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:39:28	6.1	19.1	22.3253125	114.2142868
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:40:24	4.9	7.3	22.32119217	114.2146947
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:40:25	5.8	13.2	22.3211885	114.2146947
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:40:26	6	19.2	22.321174	114.2146925
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:41:17	5.7	9.5	22.317637	114.2152105
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:41:18	6.2	15.8	22.317636	114.2152133
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:41:19	5.3	21.2	22.31761883	114.215222
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:42:26	5.5	5.5	22.3156845	114.2179713
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:42:27	5.4	11	22.31568267	114.2179748
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:43:21	5	7.4	22.31446617	114.2211548
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:43:22	5.7	13.2	22.31446467	114.221159
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:43:23	5.7	19	22.314459	114.2211737
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:43:58	4.5	10	22.313905	114.2225977
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:43:59	4.9	14.9	22.3139005	114.2226088
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:45:26	6	7.4	22.313051	114.2249635
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:45:27	5.7	13.1	22.31304933	114.2249668
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:45:28	6.4	19.6	22.31304267	114.2249798
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:45:48	4.6	22.1	22.31257267	114.2262198
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:47:03	5.3	9.3	22.309572	114.2234797
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:47:04	5.8	15.1	22.30955767	114.2234822
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-29 22:03:12	2018-07-29 22:04:00	2018-07-29 22:47:05	5.5	20.7	22.30954083	114.2234693
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:05:58	5.4	5.4	22.30790333	114.2218773
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:06:22	4.6	20	22.308575	114.2220545
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:06:23	4.6	24.7	22.30861083	114.2220645
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:07:27	4.6	17.4	22.30807217	114.225619
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:07:28	4.9	22.3	22.308089	114.225644
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:08:52	5.2	11.7	22.3087765	114.2278015
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:08:53	5.8	17.5	22.3087675	114.2278088
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:09:00	4.2	27.1	22.308588	114.2280395
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:09:24	5.3	16.5	22.30908333	114.2283832
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:09:25	5.2	21.7	22.30910483	114.2284023
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:09:44	4.5	26	22.3103505	114.2290962
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:10:15	4.7	26.5	22.3119165	114.226587
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:12:21	4.3	4.3	22.31343583	114.2234235
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:12:22	5.3	9.6	22.31343583	114.2234235
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:12:23	5.9	15.6	22.3134385	114.2234162
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:12:24	5.1	20.8	22.3134475	114.223397
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:13:07	5.3	11.2	22.31422533	114.2212102
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:13:08	6.2	17.5	22.31423183	114.2211987
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:13:09	5	22.5	22.314243	114.2211737
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:13:55	4.2	6.8	22.31519283	114.2187608
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:13:56	4.6	11.4	22.31519383	114.2187562

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:13:57	4.3	15.8	22.31519717	114.218742
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:16:08	4.2	14	22.32231933	114.21432
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:16:09	5.2	19.3	22.3223415	114.2143188
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:17:00	5	8.4	22.32560583	114.2139262
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:17:01	4.7	13.2	22.32561017	114.213928
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:17:02	6	19.2	22.3256265	114.2139263
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:17:03	4.4	23.6	22.32565617	114.2139225
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:17:47	5.8	5.8	22.328804	114.211794
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:17:48	4.8	10.7	22.32880617	114.2117918
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:17:49	5.4	16.2	22.32881317	114.211784
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:17:50	4.9	21.2	22.32882983	114.211768
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:18:34	4.1	23.3	22.33081267	114.2096567
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:20:08	5.3	13.1	22.33422467	114.20792
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:20:09	5.7	18.9	22.3342405	114.2079258
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:20:10	4.7	23.6	22.334268	114.207933
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:21:37	5	11.2	22.33663967	114.2068013
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:21:38	5.5	16.7	22.33664717	114.206793
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:21:39	4.4	21.2	22.33666283	114.2067735
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:22:42	4.5	9.9	22.339198	114.2024775
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:22:43	5.2	15.2	22.339203	114.2024662
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:22:44	4.9	20.2	22.3392175	114.2024483
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:24:25	4.4	9.5	22.34159433	114.1942605
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:24:26	5.2	14.7	22.34159533	114.1942512
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:24:27	5	19.7	22.3415975	114.1942302
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:25:14	5	12.4	22.34153983	114.191485
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:25:15	5.3	17.7	22.34154017	114.1914678
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:26:12	4.8	14.4	22.34235183	114.1883135
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:32:08	5.5	7.2	22.36569283	114.1806132
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:32:09	5.8	13.1	22.3657005	114.180613
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:32:10	5.8	18.9	22.365719	114.1806103
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:32:11	5.3	24.3	22.36575233	114.1806057
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:33:16	4.4	6.6	22.36887883	114.1790293
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:33:17	4.6	11.2	22.3688745	114.1790228
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:33:18	4.9	16.2	22.368867	114.1790078
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:33:19	4.4	20.6	22.36885617	114.1789823
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:34:04	4.7	12.6	22.36847033	114.178057
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:34:05	5.2	17.9	22.36846383	114.1780407
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:35:35	5.1	14.1	22.36543817	114.175348
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:36:52	4.9	9.5	22.36286467	114.1724588
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:36:53	5.9	15.4	22.36286317	114.1724497
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:36:54	5.4	20.8	22.36286183	114.1724273
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:37:34	4.2	4.2	22.363355	114.1713423
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:37:35	5.2	9.4	22.363355	114.1713423
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:37:44	4.6	21.3	22.36361167	114.1712887
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:38:24	5.1	7	22.365551	114.1730053
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:38:25	5.7	12.8	22.36555283	114.1730085
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:38:26	6.3	19.1	22.36556133	114.1730198
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:39:11	5.9	7.6	22.36744183	114.1742572
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:39:12	6	13.6	22.36743983	114.1742563
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:39:13	5.5	19.2	22.36745317	114.174262
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:39:50	4.4	6.3	22.368843	114.1750378

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:39:51	6.3	12.7	22.36884467	114.1750392
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:39:52	5.8	18.5	22.36885417	114.1750478
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:39:53	5.1	23.6	22.36887217	114.1750685
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:42:15	4.7	14	22.37329767	114.1770747
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:42:16	4.8	18.8	22.3733195	114.177071
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:43:40	4.3	6.8	22.37403867	114.1766193
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:43:41	5.6	12.4	22.37403733	114.1766207
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:43:42	4.9	17.3	22.37404817	114.1766132
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:44:24	4.1	5.8	22.37487467	114.1776485
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:44:25	5.3	11.2	22.37488133	114.1776547
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:44:26	5.5	16.8	22.37489083	114.1776653
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:46:55	5.9	5.9	22.37697133	114.174005
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:46:56	5.6	11.6	22.37696867	114.1740058
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:46:57	4.8	16.4	22.37697467	114.1740025
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:47:37	5	10.4	22.3773245	114.1731295
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:47:38	5.8	16.2	22.37732083	114.1731185
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:47:39	5	21.3	22.37731783	114.1730933
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:49:15	5.5	8.8	22.37600983	114.1705505
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:49:16	6.2	15.1	22.3760115	114.1705552
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:49:17	5.2	20.3	22.37601767	114.1705727
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:49:47	4.6	19.9	22.37660633	114.1709118
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:49:48	5	25	22.3766335	114.1709408
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:50:59	6.1	12.3	22.37746867	114.173505
69496	[redacted]	STD	2018-07-29	80	UU3927	80	KT.FRY	2018-07-29 23:05:30	2018-07-29 23:05:00	2018-07-29 23:51:00	6.4	18.7	22.37747017	114.1735163
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:10:02	8	8	22.37778567	114.1749133
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:10:29	5.7	8.6	22.37775583	114.1747
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:10:31	5	18.7	22.37775267	114.1746713
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:11:45	5.6	7.4	22.37676433	114.1750537
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:11:51	4.8	17.9	22.3766395	114.1750673
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:11:52	5.2	23.2	22.3766155	114.1750452
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:13:21	5.1	10	22.37607233	114.1708632
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:13:22	4.1	14.2	22.37607583	114.170872
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:13:40	4.6	20.3	22.37655033	114.1710717
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:13:41	4.8	25.1	22.37658017	114.1710998
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:15:08	5.5	8.4	22.37740283	114.1737775
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:15:09	5.8	14.3	22.377407	114.1737807
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:15:10	5.9	20.2	22.3774135	114.173797
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:15:53	5.8	5.8	22.3758745	114.1755227
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:15:54	5.7	11.6	22.37587433	114.1755237
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:15:55	6.2	17.9	22.3758675	114.1755305
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:15:56	4.8	22.7	22.37584717	114.1755455
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:16:45	5	10.5	22.3738115	114.177018
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:16:46	6.2	16.7	22.373805	114.1770235
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:16:47	5.7	22.5	22.37378833	114.1770365
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:17:09	5.4	5.4	22.373072	114.1775253
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:17:10	6.3	11.8	22.373072	114.1775253
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:17:11	6.5	18.3	22.37306333	114.1775333
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:17:12	5.5	23.8	22.3730445	114.17755
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:17:41	5.6	9.1	22.37176083	114.178636
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:17:42	7	16.2	22.37175867	114.178641
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:17:43	5.6	21.8	22.3717455	114.178656

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:19:24	4.8	8.4	22.36414867	114.1719518
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:19:25	5.3	13.8	22.36414367	114.1719487
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:19:26	6.3	20.1	22.3641325	114.1719327
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:20:10	5.2	10.7	22.36354733	114.1713703
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:20:16	4.2	18.5	22.36340917	114.1713335
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:20:17	4.7	23.2	22.36338233	114.1713555
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:21:04	5.5	8.2	22.363846	114.1738097
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:21:05	5.7	14	22.36384483	114.173812
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:21:06	6.2	20.2	22.36385383	114.1738253
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:21:07	4.4	24.7	22.36387283	114.1738505
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:21:44	4.5	7.9	22.36539967	114.1752155
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:21:45	5.5	13.5	22.36540367	114.1752167
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:21:46	5.6	19.1	22.36541483	114.1752308
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:21:47	5.1	24.2	22.36543333	114.1752563
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:22:12	4.3	9.5	22.36630633	114.176396
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:22:13	4.6	14.2	22.36630983	114.1764065
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:22:18	4.2	22.1	22.36641417	114.1765465
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:23:05	5.7	10.5	22.36705783	114.1762508
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:23:06	6.2	16.8	22.36706633	114.1762475
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:23:07	5.6	22.5	22.367087	114.1762387
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:24:01	6.5	19.9	22.36871867	114.1784365
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:24:02	4.6	24.5	22.3687305	114.178466
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:24:28	4.6	7.5	22.36905117	114.1791753
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:24:29	5.1	12.7	22.3690515	114.1791768
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:24:31	4.4	23	22.369059	114.1792235
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:30:28	7	8.5	22.342241	114.1900138
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:30:29	6.8	15.4	22.342234	114.1900258
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:30:31	4.9	26.5	22.34219683	114.190076
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:30:35	4.3	42.7	22.34207283	114.1903438
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:31:06	5.2	12	22.34183533	114.1918708
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:31:07	5.9	17.9	22.34183517	114.1918848
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:31:08	5.3	23.3	22.341829	114.1919135
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:31:54	5.3	8.1	22.34183017	114.195729
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:31:55	5.5	13.7	22.34183	114.1957375
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:31:56	5.4	19.1	22.34182633	114.1957577
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:31:57	4.7	23.8	22.34182167	114.1957908
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:32:59	4.2	19.2	22.33961667	114.2025767
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:33:27	5.3	11	22.33937283	114.2029345
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:33:28	6	17	22.339366	114.2029418
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:33:29	4.7	21.8	22.33935033	114.202962
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:34:36	4.5	20	22.33673917	114.2070508
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:34:37	5.2	25.3	22.3367095	114.2070755
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:36:37	5.6	8.8	22.325347	114.2142725
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:36:38	6.1	14.9	22.32533767	114.214276
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:36:39	5.8	20.8	22.325318	114.2142707
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:37:32	5.3	8.3	22.32116683	114.2146792
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:37:33	6	14.4	22.32116183	114.2146802
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:37:34	6	20.4	22.32114383	114.2146822
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:38:55	4.7	9.5	22.3155605	114.2183882
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:38:56	5.6	15.1	22.31555367	114.2183993
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:38:57	5.6	20.8	22.31554433	114.2184215

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:39:40	5	10.5	22.31449233	114.2211795
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:39:41	6.2	16.7	22.314488	114.2211892
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:39:42	5.7	22.4	22.31447817	114.2212118
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:40:15	5.2	8.3	22.313757	114.2231108
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:40:16	6.5	14.8	22.31375433	114.2231152
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:40:17	5.7	20.5	22.3137465	114.2231325
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:41:38	5.6	8.3	22.3131515	114.2250122
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:41:39	6.1	14.5	22.313136	114.2250148
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:41:40	6.2	20.7	22.31312167	114.2250288
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:42:26	4.2	12.5	22.311422	114.2258308
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:42:27	5	17.5	22.311411	114.2258152
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:42:28	5.3	22.9	22.31139417	114.2257912
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:43:07	5.4	12.5	22.30992417	114.2239815
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:43:08	6.4	19	22.30991667	114.2239713
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:43:09	4.7	23.8	22.30990133	114.2239488
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:43:24	5.1	5.1	22.309609	114.2235662
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:43:25	5.7	10.8	22.309609	114.2235662
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:43:26	6.7	17.5	22.309609	114.2235547
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:43:27	4.9	22.5	22.3095945	114.2235333
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:44:28	4.5	16.5	22.30755817	114.2217472
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:44:29	5.1	21.7	22.30759567	114.221768
69496	[redacted]	STD	2018-07-29	80	UU3927	80	MEILAM	2018-07-30 00:07:57	2018-07-30 00:10:00	2018-07-30 00:44:44	5.1	18	22.307987	114.2219948
69496	[redacted]	STD	NULL	NULL	UU3927	NULL	NULL	2018-07-30 00:07:57	NULL	2018-07-30 00:45:59	6.7	9.3	22.30989483	114.2212132
69496	[redacted]	STD	NULL	NULL	UU3927	NULL	NULL	2018-07-30 00:07:57	NULL	2018-07-30 00:46:01	5.9	21.5	22.309911	114.2211963
69496	[redacted]	STD	NULL	NULL	UU3927	NULL	NULL	2018-07-30 00:07:57	NULL	2018-07-30 00:47:36	5.9	11.2	22.3137785	114.2173933
69496	[redacted]	STD	NULL	NULL	UU3927	NULL	NULL	2018-07-30 00:07:57	NULL	2018-07-30 00:47:37	6.1	17.4	22.31378567	114.2173872
69496	[redacted]	STD	NULL	NULL	UU3927	NULL	NULL	2018-07-30 00:07:57	NULL	2018-07-30 00:47:38	5.2	22.6	22.31379833	114.2173653
69496	[redacted]	STD	NULL	NULL	UU3927	NULL	NULL	2018-07-30 00:07:57	NULL	2018-07-30 00:58:39	4.8	19.1	22.37241767	114.180039
69496	[redacted]	STD	NULL	NULL	UU3927	NULL	NULL	2018-07-30 00:07:57	NULL	2018-07-30 00:58:40	6.1	25.2	22.37244967	114.1800222
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-23 23:49:31	2018-07-23 23:50:00	2018-07-24 00:03:49	5.2	7.9	22.3915265	114.2062825
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-23 23:49:31	2018-07-23 23:50:00	2018-07-24 00:05:22	4.1	4.1	22.38745067	114.2006483
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-23 23:49:31	2018-07-23 23:50:00	2018-07-24 00:05:23	5.2	9.3	22.38744783	114.2006488
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-23 23:49:31	2018-07-23 23:50:00	2018-07-24 00:08:08	5	6.7	22.37807467	114.1960948
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-23 23:49:31	2018-07-23 23:50:00	2018-07-24 00:08:09	4.5	11.3	22.378072	114.196091
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-23 23:49:31	2018-07-23 23:50:00	2018-07-24 00:08:45	5.4	15.3	22.37673983	114.1941968
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-23 23:49:31	2018-07-23 23:50:00	2018-07-24 00:08:47	4.5	23.8	22.37671067	114.194149
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-23 23:49:31	2018-07-23 23:50:00	2018-07-24 00:09:23	9.2	9.4	22.37567383	114.1922983
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-23 23:49:31	2018-07-23 23:50:00	2018-07-24 00:11:16	9.4	28.4	22.3733765	114.1820085
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-23 23:49:31	2018-07-23 23:50:00	2018-07-24 00:11:17	9.5	18.8	22.37331667	114.1819197
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-23 23:49:31	2018-07-23 23:50:00	2018-07-24 00:11:18	8.1	10.7	22.37327067	114.1818518
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-23 23:49:31	2018-07-23 23:50:00	2018-07-24 00:11:19	7.4	3.2	22.37323817	114.1818062
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-23 23:49:31	2018-07-23 23:50:00	2018-07-24 00:12:08	5.7	6.2	22.37321	114.1817317
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-23 23:49:31	2018-07-23 23:50:00	2018-07-24 00:12:09	4.4	10.6	22.37320783	114.181714
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-23 23:49:31	2018-07-23 23:50:00	2018-07-24 00:12:47	5.3	6.3	22.37218167	114.1802062
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-23 23:49:31	2018-07-23 23:50:00	2018-07-24 00:12:50	4	17.6	22.37215433	114.1801507
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-23 23:49:31	2018-07-23 23:50:00	2018-07-24 00:13:06	7.4	0.7	22.37148333	114.1791345
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-23 23:49:31	2018-07-23 23:50:00	2018-07-24 00:13:10	5.1	8.1	22.37146233	114.1791127
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-23 23:49:31	2018-07-23 23:50:00	2018-07-24 00:13:11	5.5	13.7	22.37145683	114.1791062
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-23 23:49:31	2018-07-23 23:50:00	2018-07-24 00:13:12	5.2	19	22.3714405	114.179092
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-23 23:49:31	2018-07-23 23:50:00	2018-07-24 00:13:13	4.2	23.2	22.37141117	114.179071
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-23 23:49:31	2018-07-23 23:50:00	2018-07-24 00:16:52	5.8	6.7	22.3670985	114.1762422

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-23 23:49:31	2018-07-23 23:50:00	2018-07-24 00:16:53	4.4	11.1	22.367102	114.1762405
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-23 23:49:31	2018-07-23 23:50:00	2018-07-24 00:16:54	4.2	15.3	22.36711717	114.1762372
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-23 23:49:31	2018-07-23 23:50:00	2018-07-24 00:17:50	5.3	8	22.36871117	114.1783817
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-23 23:49:31	2018-07-23 23:50:00	2018-07-24 00:18:18	8.3	8.6	22.36901767	114.1790658
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-23 23:49:31	2018-07-23 23:50:00	2018-07-24 00:23:43	4.2	44.7	22.34291333	114.1785887
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-23 23:49:31	2018-07-23 23:50:00	2018-07-24 00:24:52	5.4	11.7	22.34041567	114.1792555
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-23 23:49:31	2018-07-23 23:50:00	2018-07-24 00:24:53	4.4	16.1	22.34040183	114.1792555
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-23 23:49:31	2018-07-23 23:50:00	2018-07-24 00:24:54	5.1	21.3	22.34037333	114.179255
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-23 23:49:31	2018-07-23 23:50:00	2018-07-24 00:26:13	6	7.6	22.33467483	114.1787463
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-23 23:49:31	2018-07-23 23:50:00	2018-07-24 00:27:49	5.4	6.9	22.3310185	114.1785357
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-23 23:49:31	2018-07-23 23:50:00	2018-07-24 00:27:50	4.5	11.5	22.33101017	114.1785352
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-23 23:49:31	2018-07-23 23:50:00	2018-07-24 00:30:03	5.7	7.8	22.321545	114.1781747
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-23 23:49:31	2018-07-23 23:50:00	2018-07-24 00:30:06	4.5	19.5	22.32150417	114.1781272
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-23 23:49:31	2018-07-23 23:50:00	2018-07-24 00:31:22	5.7	8.5	22.32093517	114.1773055
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-23 23:49:31	2018-07-23 23:50:00	2018-07-24 00:32:20	7.1	20.1	22.31784733	114.1750083
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-23 23:49:31	2018-07-23 23:50:00	2018-07-24 00:33:02	5.7	7	22.31684783	114.1743035
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-23 23:49:31	2018-07-23 23:50:00	2018-07-24 00:33:47	5	8.5	22.314594	114.1725765
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-23 23:49:31	2018-07-23 23:50:00	2018-07-24 00:34:16	4.7	4.9	22.31413833	114.1722465
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-23 23:49:31	2018-07-23 23:50:00	2018-07-24 00:34:43	7	7	22.31350617	114.1718342
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-23 23:49:31	2018-07-23 23:50:00	2018-07-24 00:35:26	6.6	7	22.31209333	114.1710303
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-23 23:49:31	2018-07-23 23:50:00	2018-07-24 00:35:28	4.2	15.7	22.31207183	114.1710353
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-23 23:49:31	2018-07-23 23:50:00	2018-07-24 00:36:37	5.8	6.5	22.3069025	114.1716197
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-23 23:49:31	2018-07-23 23:50:00	2018-07-24 00:36:58	5	6.8	22.30608	114.1716087
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-23 23:49:31	2018-07-23 23:50:00	2018-07-24 00:38:08	5.4	6.8	22.30380433	114.1716968
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-23 23:49:31	2018-07-23 23:50:00	2018-07-24 00:38:09	4.4	11.3	22.3037965	114.171685
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-23 23:49:31	2018-07-23 23:50:00	2018-07-24 00:39:26	6.1	9.9	22.2999925	114.1720353
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-23 23:49:31	2018-07-23 23:50:00	2018-07-24 00:41:14	5.5	8.6	22.29522717	114.1723893
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-23 23:49:31	2018-07-23 23:50:00	2018-07-24 00:41:16	4.3	16.5	22.29518267	114.1723502
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-23 23:49:31	2018-07-23 23:50:00	2018-07-24 00:42:27	5.6	8.9	22.29686133	114.1753428
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-23 23:49:31	2018-07-23 23:50:00	2018-07-24 00:42:54	5.6	7.6	22.297591	114.1754665
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-23 23:49:31	2018-07-23 23:50:00	2018-07-24 00:43:39	5.6	6.1	22.29915117	114.1757442
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-23 23:49:31	2018-07-23 23:50:00	2018-07-24 00:43:40	4.5	10.7	22.299155	114.1757438
76129	[redacted]	STD	NULL	NULL	VD8812	NULL	NULL	2018-07-24 01:18:23	NULL	2018-07-24 01:19:42	4.7	8.3	22.30387867	114.1819762
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 01:21:50	9.7	9.7	22.3010635	114.1766745
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 01:22:13	5.1	8.7	22.30073183	114.1765493
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 01:22:58	5.8	7.5	22.299763	114.1762465
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 01:23:25	5.2	7.8	22.2989395	114.1761303
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 01:24:41	6.4	7	22.29638633	114.1753868
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 01:24:42	4.5	11.5	22.2963835	114.1753732
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 01:25:02	8.4	6.8	22.29555867	114.1741185
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 01:25:11	5.1	6.5	22.29553	114.1740593
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 01:25:12	4.2	10.8	22.29552583	114.1740575
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 01:26:36	4.2	4.2	22.29517167	114.172485
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 01:26:37	5	9.2	22.29516433	114.172485
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 01:27:37	5.5	6.9	22.29669117	114.1721035
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 01:28:20	4.8	6.1	22.29815883	114.171979
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 01:30:34	5.1	8.3	22.30326333	114.171634
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 01:31:02	4.9	8.8	22.30439417	114.1715845
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 01:32:14	5.5	5.8	22.304986	114.1716518
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 01:32:15	4.5	10.4	22.30498733	114.171655
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 01:32:17	4	18.4	22.305025	114.171659

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 01:32:55	4.4	4.5	22.30701083	114.171439
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 01:32:56	4.7	9.3	22.30701133	114.1714358
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 01:33:25	5.8	10.7	22.30809483	114.1714263
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 01:33:59	4.2	4.9	22.30955567	114.1713882
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 01:34:17	4.7	4.7	22.309877	114.1713465
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 01:34:18	4.3	9.1	22.30987817	114.1713467
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 01:34:51	5.1	8.4	22.31146017	114.1709898
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 01:35:37	4.6	5.2	22.31183033	114.1709515
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 01:35:38	4.5	9.8	22.31183183	114.1709495
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 01:36:11	4.8	8.6	22.31286517	114.1707685
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 01:37:29	5	6.6	22.31596483	114.1700525
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 01:38:16	4.5	9.2	22.318021	114.1696165
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 01:39:38	5.4	7.9	22.3189595	114.169499
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 01:40:09	4.2	10.6	22.3192775	114.1685203
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 01:41:28	4.5	8	22.321112	114.1700723
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 01:43:40	4.8	9	22.320029	114.1725368
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 01:45:13	5.7	9.8	22.32117	114.1768972
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 01:48:23	5.3	5.3	22.33404783	114.178803
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 01:48:24	4	9.4	22.33405067	114.1788042
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 01:48:55	6.1	6.2	22.33595767	114.1788592
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 01:54:03	5.5	18.3	22.35887533	114.1740978
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 01:56:59	4.8	7.3	22.36845367	114.1781182
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 01:58:44	5.1	7.1	22.3654465	114.175453
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 01:59:44	8.2	11	22.36286	114.1724872
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 01:59:46	4.2	18	22.36285683	114.1724302
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 02:00:56	4.8	9	22.36333333	114.171392
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 02:02:49	4.5	4.9	22.36747267	114.1743245
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 02:02:50	4.7	9.6	22.36747233	114.1743298
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 02:04:27	4.4	9.7	22.37263183	114.180396
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 02:05:55	4.4	5.8	22.3744635	114.1853037
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 02:06:29	5.2	7.6	22.374427	114.1863957
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 02:06:54	4.5	9.4	22.37489917	114.1877238
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 02:08:01	4.1	10.1	22.37599033	114.189426
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 02:08:53	4.6	9.8	22.37611117	114.1915802
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 02:10:03	4.9	6.3	22.37595533	114.1924892
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 02:10:04	4.5	10.8	22.375953	114.1924893
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 02:10:39	4.6	4.6	22.37649617	114.1938058
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 02:10:40	5	9.7	22.37649933	114.1938073
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 02:11:17	5	8.4	22.377583	114.1952272
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 02:13:08	5.1	6.1	22.38250667	114.1956078
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 02:13:12	4.2	19.6	22.382551	114.1956683
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 02:13:29	6	9	22.38300017	114.1961457
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 02:13:31	4.1	16.7	22.383022	114.1961862
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 02:14:28	5.3	6.5	22.38565083	114.1987937
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 02:14:29	4.3	10.9	22.38565667	114.1987985
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 02:14:31	4.7	18.4	22.38568967	114.1988305
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 02:15:03	8.1	8.5	22.38693283	114.2000577
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 02:16:10	5.4	8.9	22.38921067	114.2026
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 02:16:40	5.5	7.7	22.389463	114.2034268
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 02:16:44	4.6	20.6	22.389487	114.2035123
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 02:17:59	5.5	7.8	22.39073933	114.2053923

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 02:18:34	4.8	9.5	22.3917675	114.2063717
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 02:22:45	5.3	6.4	22.40519917	114.2212972
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 02:22:46	4.3	10.8	22.4052005	114.221301
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 02:23:42	4.5	6.3	22.40555217	114.2215355
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 02:23:43	5.1	11.4	22.4055765	114.2215433
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 02:25:32	5.1	8.9	22.406061	114.2224075
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 02:28:23	5.7	9.7	22.41799533	114.2305073
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 02:28:24	4.7	14.5	22.418002	114.2304993
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 02:28:25	5	19.6	22.41801683	114.2304782
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 02:28:50	6.3	9	22.41821433	114.2301377
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 02:28:51	4.6	13.7	22.41821667	114.2301335
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 02:28:52	4.6	18.3	22.418228	114.2301123
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 02:29:53	5.1	8.4	22.42183283	114.2285832
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 02:31:13	5.1	7.4	22.42224417	114.2278823
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 02:31:50	6	7.8	22.42357617	114.2283163
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 02:32:34	4.2	4.3	22.42504067	114.2318092
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 02:32:35	5.2	9.5	22.4250385	114.2318127
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 02:33:19	4.6	4.7	22.42563067	114.2338808
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 02:33:20	5	9.7	22.42562533	114.2338852
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 02:34:41	5	5.7	22.426022	114.2398292
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 02:34:42	4.2	9.9	22.4260135	114.2398302
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 02:35:31	5.5	5.8	22.42568317	114.2399333
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	HH.STN	2018-07-24 01:18:23	2018-07-24 01:20:00	2018-07-24 02:35:32	4.6	10.5	22.42567417	114.2399353
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:01:04	5.3	5.5	22.42520783	114.240002
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:01:05	6.1	11.7	22.42521183	114.240001
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:01:07	4.2	20	22.42524567	114.239986
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:01:09	9.7	29.7	22.4253325	114.2399535
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:02:25	4.9	9.6	22.42621767	114.2393105
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:03:51	5.5	6.7	22.42535283	114.2343327
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:03:52	4.1	10.9	22.42535233	114.2343298
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:05:43	5.3	9.2	22.42253767	114.227966
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:09:06	6.5	11.8	22.408149	114.2232177
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:09:41	5.1	5.2	22.40746217	114.2227483
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:09:42	4.5	9.8	22.40745317	114.2227428
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:10:39	5	7.3	22.40574867	114.2241242
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:12:05	4.7	5.3	22.40657667	114.2224985
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:16:59	5.9	15.4	22.382059	114.1955392
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:17:01	6.5	0.2	22.381975	114.1954843
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:17:14	5.7	8.3	22.38195483	114.1954795
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:18:37	5.9	6.6	22.37798333	114.1959807
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:18:38	4.5	11.1	22.37798267	114.1959765
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:19:08	5.1	9.6	22.37739833	114.195195
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:19:10	4.2	17.3	22.37737917	114.1951633
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:20:35	5.5	9	22.37578567	114.1927348
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:20:57	4.9	9	22.37550633	114.192067
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:22:33	5.3	7	22.37512	114.1884655
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:23:09	5.3	5.6	22.37433733	114.1870877
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:24:15	5.5	9.2	22.37425367	114.1857298
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:25:20	4.7	7.8	22.37213767	114.1802143
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:27:23	4.9	5.4	22.36404917	114.1718963
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:29:11	4.9	6.3	22.3663045	114.1763955

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:30:03	6.5	10.3	22.36714333	114.176241
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:30:58	4.2	10.4	22.36936667	114.1801212
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:37:01	4.4	4.4	22.34026833	114.1793862
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:37:02	6.7	11.1	22.34026367	114.1793955
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:37:03	5	16.2	22.34024967	114.1794025
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:37:04	4.5	20.7	22.34021883	114.1794048
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:37:06	7.5	28.3	22.34011767	114.1794058
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:38:06	5.3	9.2	22.3393805	114.1793987
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:39:36	4.5	4.8	22.332707	114.1788738
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:39:37	5.3	10.1	22.33270333	114.1788688
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:40:29	6.7	7.1	22.33052967	114.1787497
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:43:05	6.1	8	22.3210895	114.1773648
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:43:59	5.4	5.6	22.31786883	114.1750045
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:44:42	5.8	6.5	22.31728767	114.1745848
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:45:48	5.6	8.4	22.31467933	114.172484
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:46:15	5.3	5.6	22.31406733	114.17199
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:46:16	4.5	10.1	22.314065	114.1719867
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:47:02	5.7	7.8	22.312419	114.1713273
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:48:10	5.6	7.2	22.3072025	114.1718653
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:49:32	4.9	7.2	22.30626317	114.1718498
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:49:33	4	11.3	22.30625683	114.171847
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:50:09	4.6	5	22.30478317	114.1718255
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:50:10	4.2	9.3	22.30477733	114.1718137
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:51:51	5.8	8.4	22.300097	114.172047
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:53:07	6.3	7.8	22.296725	114.172308
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:53:10	7.4	19.1	22.29666233	114.1723042
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:55:24	5.1	5.1	22.297735	114.1755882
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:55:25	4.4	9.5	22.29773833	114.1755893
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:56:10	5.8	5.8	22.30030617	114.1761508
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:56:11	4.6	10.5	22.30031067	114.1761525
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:56:12	4	14.5	22.30032633	114.1761568
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:56:39	4.9	21.7	22.302875	114.1770672
76129	[redacted]	STD	2018-07-24	N281	VD8812	N281	KAMYNG	2018-07-24 02:59:10	2018-07-24 03:00:00	2018-07-24 03:57:25	13.8	35.9	22.30244517	114.1811917
76129	[redacted]	STD	NULL	NULL	VD8812	NULL	NULL	2018-07-24 02:59:10	NULL	2018-07-24 04:08:47	4.1	4.4	22.30367717	114.1817873
76129	[redacted]	STD	NULL	NULL	VD8812	NULL	NULL	2018-07-24 02:59:10	NULL	2018-07-24 04:08:48	4.3	8.7	22.30368067	114.1818032
76129	[redacted]	STD	NULL	NULL	VD8812	NULL	NULL	2018-07-24 02:59:10	NULL	2018-07-24 04:14:22	5	7.5	22.33374733	114.1788242
76129	[redacted]	STD	NULL	NULL	VD8812	NULL	NULL	2018-07-24 02:59:10	NULL	2018-07-24 04:23:13	5.9	9.7	22.3783845	114.2039177
76129	[redacted]	STD	NULL	NULL	VD8812	NULL	NULL	2018-07-24 02:59:10	NULL	2018-07-24 04:23:44	6.2	22.5	22.3801925	114.2064593
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 20:56:08	4.9	13.3	22.38298633	114.2122963
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 20:56:09	4.7	18.1	22.38298333	114.2122833
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 20:56:10	4.9	23.1	22.38297783	114.2122557
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 20:56:11	4.2	27.4	22.38296917	114.212216
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 20:56:12	4	31.4	22.38295633	114.212163
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 20:56:47	5.1	13.2	22.38303083	114.2103625
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 20:56:48	5	18.3	22.3830335	114.2103535
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 20:56:49	5	23.3	22.3830405	114.2103297
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 20:56:50	4	27.4	22.38305233	114.2102925
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 20:58:44	4.5	11.8	22.38536967	114.2071108
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 20:58:45	4.5	16.4	22.38537683	114.2071032
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 20:58:46	5	21.4	22.3853925	114.2070868
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 20:58:47	4.1	25.6	22.38541667	114.2070608

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:00:08	4.3	8.2	22.38756617	114.2046465
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:00:09	4.1	12.3	22.38757033	114.2046422
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:00:10	4.4	16.8	22.3875795	114.2046313
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:00:44	4.9	19.6	22.3869685	114.2037837
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:00:45	4.5	24.1	22.38694567	114.2037613
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:01:45	4.3	10.5	22.3864285	114.2032093
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:01:46	4.2	14.8	22.38642133	114.2032037
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:01:47	4.8	19.6	22.38640583	114.2031903
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:01:48	4.1	23.8	22.38638267	114.2031682
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:03:25	4.5	10	22.3818275	114.2024955
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:03:26	4.5	14.5	22.38182117	114.202501
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:03:27	4.9	19.5	22.3818055	114.202514
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:03:28	4.3	23.8	22.38178133	114.2025342
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:04:08	4.7	9.6	22.380566	114.2034393
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:04:09	4.5	14.1	22.3805605	114.2034402
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:04:10	5	19.1	22.38054583	114.2034488
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:04:11	4.5	23.7	22.38051983	114.2034642
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:04:45	4.1	13.7	22.37980217	114.2040302
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:04:46	4.5	18.3	22.379785	114.2040383
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:04:47	4.8	23.1	22.37975967	114.2040542
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:05:46	4	11.1	22.37915417	114.204518
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:05:48	4.5	19.8	22.37912883	114.2045408
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:07:10	4.5	9.3	22.378705	114.1973155
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:07:11	4.4	13.7	22.37870667	114.1973117
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:07:12	4.7	18.5	22.37871233	114.1972945
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:07:13	4.7	23.2	22.3787235	114.1972653
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:08:13	4.8	12.6	22.37802667	114.196093
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:08:14	4.8	17.4	22.37801467	114.1960815
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:08:15	5.1	22.5	22.37799467	114.1960597
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:08:16	4.1	26.7	22.37796683	114.1960275
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:08:50	5.4	21.5	22.37725533	114.1950725
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:10:12	4.6	13	22.3758625	114.1929175
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:10:13	4.9	17.9	22.37585367	114.1928997
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:10:14	4.7	22.6	22.37583917	114.1928703
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:10:57	4.4	10.5	22.37582083	114.1910995
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:10:58	4.3	14.9	22.37581767	114.191086
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:10:59	5.1	20.1	22.37581183	114.1910605
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:11:20	4	12	22.375557	114.190545
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:11:23	4.2	24.5	22.375533	114.190456
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:11:37	4.5	14	22.37587133	114.1899175
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:12:32	4.5	8.8	22.37517267	114.1885735
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:12:33	4.4	13.3	22.37516883	114.1885685
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:12:34	4.7	18	22.37515683	114.1885495
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:12:35	4.5	22.6	22.37513867	114.1885198
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:13:51	4.8	12	22.374215	114.185948
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:13:52	4.9	16.9	22.37421417	114.1859273
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:13:53	5.1	22	22.3742155	114.1858928
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:14:24	4.3	9.5	22.3733855	114.18559
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:14:25	4.2	13.7	22.373372	114.1855942
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:14:26	4.4	18.2	22.37334933	114.1856012
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:14:27	4.6	22.9	22.37331617	114.1856112

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:15:37	4.8	20.1	22.370169	114.1856105
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:15:38	4	24.1	22.37020233	114.1856317
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:16:09	4	10.8	22.37098133	114.1861058
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:16:11	4.7	19.7	22.37099717	114.1861227
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:16:12	4.2	24	22.371015	114.1861447
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:16:48	4.3	20.6	22.370004	114.1878258
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:17:21	4.4	10.7	22.3694925	114.1873913
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:17:22	4.4	15.1	22.369488	114.1873885
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:17:23	5.3	20.5	22.36947533	114.1873807
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:17:24	5.2	25.7	22.36945267	114.1873672
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:17:25	4.4	30.1	22.36941967	114.1873482
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:20:24	4.5	9.3	22.373196	114.1817047
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:20:25	4.4	13.7	22.37319483	114.181702
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:20:26	4.7	18.5	22.37318817	114.1816908
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:20:27	4.8	23.3	22.37317367	114.1816695
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:21:03	4	25.1	22.37211367	114.1801052
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:22:14	4.5	11.2	22.36968617	114.1802178
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:22:15	4.1	15.4	22.36967317	114.1802282
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:23:20	4.9	9.7	22.36882383	114.1789943
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:23:21	4.6	14.4	22.36882017	114.1789848
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:23:22	4.7	19.2	22.3688135	114.1789703
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:23:23	4.7	23.9	22.36880117	114.178941
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:23:54	4.2	10.3	22.36851017	114.1781968
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:23:55	4.1	14.4	22.36851	114.1781952
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:23:56	4.4	18.9	22.36850483	114.1781808
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:23:57	4.5	23.5	22.368496	114.1781548
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:27:02	4	10.5	22.3740225	114.1766703
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:27:05	4.5	23.4	22.3740675	114.1766338
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:27:33	4.7	8.5	22.37533683	114.175764
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:27:34	4.6	13.1	22.37533883	114.1757627
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:27:35	4.8	18	22.37534967	114.1757562
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:27:36	5	23	22.37537083	114.1757438
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:27:37	4	27.1	22.37540267	114.1757252
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:27:38	4.2	31.3	22.375446	114.1756997
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:28:14	4.3	10.5	22.377438	114.174537
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:28:15	4.3	14.9	22.37744417	114.1745332
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	WN.TAU	2018-07-24 20:45:49	2018-07-24 20:55:00	2018-07-24 21:28:16	4.1	19.1	22.37745967	114.1745237
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 21:41:29	4.2	22.7	22.37573683	114.175652
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 21:42:23	4.6	9.3	22.37373867	114.1771295
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 21:42:24	4.2	13.5	22.37373417	114.1771345
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 21:42:25	4.1	17.7	22.37371817	114.1771453
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 21:42:26	4.6	22.4	22.37369233	114.1771638
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 21:42:58	4.7	11.6	22.37310283	114.177573
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 21:42:59	4.5	16.1	22.37309517	114.1775762
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 21:43:32	4.1	14.9	22.37173117	114.1786212
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 21:43:33	4.7	19.7	22.37171733	114.1786448
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 21:43:34	4.3	24.1	22.37169733	114.1786773
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 21:44:37	4.3	11.4	22.368687	114.1751502
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 21:44:38	4.1	15.5	22.36867533	114.1751402
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 21:44:40	4.5	24.6	22.36862817	114.1750955
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 21:45:32	4.9	9.9	22.36732317	114.1759228

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 21:45:33	4.5	14.5	22.3673245	114.175932
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 21:45:34	4.7	19.2	22.367329	114.1759547
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 21:45:35	4.3	23.6	22.36733717	114.1759895
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 21:48:09	4.5	9.7	22.36928967	114.1798167
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 21:48:12	4.6	22.5	22.369322	114.1798852
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 21:49:53	4.4	10	22.372617	114.1803815
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 21:49:54	4.2	14.2	22.372617	114.1803815
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 21:49:55	4.4	18.6	22.37262583	114.1803957
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 21:49:56	4.6	23.2	22.37263883	114.1804172
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 21:51:09	4.2	12.6	22.37335583	114.1855573
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 21:51:10	4.2	16.8	22.37334817	114.1855595
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 21:51:11	4.7	21.6	22.37332933	114.1855643
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 21:51:12	4	25.6	22.37329967	114.1855717
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 21:52:16	4	11.7	0	0
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 21:52:18	4.8	20.7	0	0
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 21:52:19	4	24.7	0	0
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 21:52:55	4.3	11.1	22.370878	114.1859905
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 21:52:56	4.1	15.3	22.37088283	114.1859937
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 21:52:57	4.5	19.9	22.37089467	114.186006
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 21:52:58	4.3	24.2	22.3709115	114.1860298
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 21:54:03	4	23.3	22.36961433	114.1874723
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 21:56:14	4.2	10.8	22.374161	114.1853448
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 21:56:15	4.2	15	22.37416733	114.1853452
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 21:56:16	4.2	19.3	22.37418417	114.1853462
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 21:57:17	4.3	11.6	22.3747525	114.1876873
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 21:57:18	4.1	15.8	22.37475717	114.1876938
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 21:57:19	4.4	20.2	22.37476733	114.1877113
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 21:58:15	4.9	10.3	22.37595733	114.1894427
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 21:58:16	4.6	15	22.37596133	114.1894472
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 21:58:17	4.6	19.7	22.375971	114.1894575
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 21:59:11	4.4	10.2	22.37599567	114.1915672
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 21:59:14	4.1	23.2	22.37601067	114.1916177
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 21:59:43	4.3	11.6	22.37592833	114.1924452
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 21:59:44	4.2	15.9	22.37592917	114.1924477
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 22:00:23	4.5	9.2	22.37635617	114.1936303
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 22:00:24	4.1	13.3	22.37636417	114.1936388
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 22:00:25	4.4	17.8	22.3763745	114.193655
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 22:00:26	4.1	21.9	22.37639067	114.193681
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 22:00:54	4.2	10.3	22.37729817	114.194826
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 22:00:55	4	14.3	22.3773025	114.1948303
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 22:00:57	4.6	23.3	22.377326	114.1948693
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 22:02:11	4.2	11.3	22.37784683	114.1955642
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 22:02:12	4.1	15.5	22.377853	114.19557
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 22:02:13	4.5	20	22.3778655	114.1955857
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 22:02:14	4	24	22.3778835	114.1956113
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 22:03:01	4.8	22.8	22.37878517	114.197734
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 22:04:05	4.2	8.5	22.378443	114.1990273
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 22:04:06	5	13.5	22.37844667	114.1990442
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 22:04:07	4.4	18	22.37844983	114.1990488
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 22:04:08	4.8	22.9	22.378446	114.1990715
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 22:04:22	4.8	9.5	22.37824933	114.1997438

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 22:04:23	4.4	13.9	22.37825217	114.1997512
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 22:04:24	4.6	18.6	22.37824667	114.1997637
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 22:04:25	4.6	23.2	22.378237	114.1997885
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 22:05:52	4.5	10.8	22.38116917	114.2027867
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 22:05:53	4.4	15.2	22.38117033	114.2027835
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 22:05:54	4.5	19.8	22.38117967	114.2027698
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 22:05:55	4.5	24.3	22.38119767	114.2027472
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 22:07:15	4.6	9.4	22.38478183	114.202002
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 22:07:16	4.1	13.5	22.3847845	114.2020003
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 22:07:18	4.7	22.6	22.38481667	114.2019995
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 22:08:29	4.4	9.1	22.38662867	114.2032002
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 22:08:31	4.2	17.4	22.38663767	114.2032133
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 22:08:32	4	21.5	22.3866535	114.2032327
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 22:08:33	4.1	25.6	22.38667533	114.2032612
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 22:09:01	4.1	10.5	22.38769783	114.2043608
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 22:09:54	4.7	9.8	22.38707717	114.2054685
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 22:09:55	4.5	14.4	22.38708217	114.2054577
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 22:09:56	4.5	18.9	22.38707267	114.2054638
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 22:09:57	4.6	23.6	22.38705167	114.2054837
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 22:11:12	4.3	11.2	22.385903	114.2066642
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 22:11:13	4.1	15.4	22.3858945	114.206673
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 22:11:14	4.3	19.8	22.38587883	114.20669
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 22:11:15	4.1	23.9	22.3858555	114.2067153
76129	[redacted]	STD	2018-07-24	N281	TX5380	82K	MEILAM	2018-07-24 21:38:38	2018-07-24 21:40:00	2018-07-24 22:12:42	4.8	20	22.38334433	114.2139758
76129	[redacted]	STD	NULL	NULL	TX5380	NULL	NULL	2018-07-24 21:38:38	NULL	2018-07-24 22:23:18	5.5	9.5	22.38313733	114.2143908
76129	[redacted]	STD	NULL	NULL	TX5380	NULL	NULL	2018-07-24 21:38:38	NULL	2018-07-24 22:23:19	4.9	14.5	22.38314067	114.2143795
76129	[redacted]	STD	NULL	NULL	TX5380	NULL	NULL	2018-07-24 21:38:38	NULL	2018-07-24 22:23:20	4.6	19.1	22.38314417	114.214366
76129	[redacted]	STD	NULL	NULL	TX5380	NULL	NULL	2018-07-24 21:38:38	NULL	2018-07-24 22:23:21	4.5	23.7	22.38315417	114.2143382
76129	[redacted]	STD	NULL	NULL	TX5380	NULL	NULL	2018-07-24 21:38:38	NULL	2018-07-24 22:23:22	4	27.7	22.383167	114.2142982
76129	[redacted]	STD	NULL	NULL	TX5380	NULL	NULL	2018-07-24 21:38:38	NULL	2018-07-24 22:25:24	5	9.4	22.3831005	114.2102213
76129	[redacted]	STD	NULL	NULL	TX5380	NULL	NULL	2018-07-24 21:38:38	NULL	2018-07-24 22:25:25	4.6	14	22.3831035	114.2102147
76129	[redacted]	STD	NULL	NULL	TX5380	NULL	NULL	2018-07-24 21:38:38	NULL	2018-07-24 22:25:26	4	18	22.38310883	114.2101993
76129	[redacted]	STD	NULL	NULL	TX5380	NULL	NULL	2018-07-24 21:38:38	NULL	2018-07-24 22:32:22	4.6	8.7	22.421365	114.2324018
76129	[redacted]	STD	NULL	NULL	TX5380	NULL	NULL	2018-07-24 21:38:38	NULL	2018-07-24 22:32:23	4.3	13	22.42137083	114.2324055
76129	[redacted]	STD	NULL	NULL	TX5380	NULL	NULL	2018-07-24 21:38:38	NULL	2018-07-24 22:32:24	4.2	17.3	22.42138617	114.2324103
76129	[redacted]	STD	NULL	NULL	TX5380	NULL	NULL	2018-07-24 21:38:38	NULL	2018-07-24 22:32:25	4.4	21.7	22.42141417	114.2324182
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-24 23:50:17	4.6	8.2	22.4237765	114.2376075
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-24 23:50:18	4.1	12.3	22.42378	114.23761
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-24 23:51:13	5.9	11.5	22.424938	114.2400252
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-24 23:51:14	5	16.6	22.424945	114.2400217
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-24 23:51:15	4.9	21.5	22.42496167	114.240019
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-24 23:51:16	4.2	25.8	22.42499283	114.2400153
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-24 23:51:17	4.4	30.2	22.42503767	114.2400082
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-24 23:51:50	4.4	10.6	22.42623733	114.2392243
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-24 23:53:34	5.1	10.6	22.4252765	114.2343685
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-24 23:53:35	4.7	15.3	22.42527583	114.2343635
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-24 23:53:36	4.8	20.2	22.42527233	114.2343478
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-24 23:55:37	4.8	13.2	22.42246517	114.2279443
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-24 23:56:55	4	21.1	22.4180925	114.2306752
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:03:48	4.8	11.3	22.39288767	114.207677
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:03:49	4.6	15.9	22.392887	114.2076745

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:03:50	4.7	20.7	22.39287	114.2076602
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:03:51	4	24.7	22.39284467	114.2076337
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:04:24	4.8	10.3	22.39138583	114.2062688
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:04:25	4.5	14.9	22.39138483	114.20627
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:04:26	4.6	19.6	22.39137417	114.2062587
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:04:27	4.7	24.3	22.39135567	114.2062353
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:07:31	4.9	8.7	22.3792135	114.196471
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:07:32	4.5	13.3	22.379212	114.1964738
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:07:33	4.7	18	22.37920633	114.1964842
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:08:12	5	11.2	22.3780615	114.1960382
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:08:13	5	16.2	22.37806517	114.1960388
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:08:14	5.4	21.6	22.37805583	114.196025
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:08:15	4.5	26.2	22.37803633	114.1959993
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:08:16	4.2	30.5	22.37800867	114.1959625
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:08:36	4.8	9	22.3773965	114.195189
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:08:37	4.5	13.6	22.3773955	114.195188
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:08:38	4.7	18.3	22.37738983	114.1951788
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:08:39	4.9	23.3	22.37737733	114.1951578
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:10:09	4.7	11.4	22.37579267	114.1927523
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:10:10	4.5	15.9	22.3757905	114.1927468
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:10:11	4.7	20.7	22.375783	114.1927295
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:10:38	4.7	20.9	22.37551	114.1920543
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:10:39	4.2	25.1	22.37549917	114.1920232
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:11:41	5.3	10	22.375939	114.189887
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:11:42	4.9	15	22.37593367	114.1898932
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:12:23	4.6	9.4	22.37513117	114.1884742
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:12:24	4.3	13.7	22.37512233	114.1884608
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:12:26	5.6	23	22.37509883	114.1884197
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:13:56	4.9	9	22.372122	114.1801118
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:13:57	4.7	13.7	22.37212233	114.1801102
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:13:58	4.8	18.6	22.37211933	114.1801025
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:13:59	4.9	23.5	22.37210933	114.1800817
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:15:35	4.8	10.2	22.36798667	114.1745818
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:15:36	4.5	14.7	22.36799183	114.1745833
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:15:37	4.7	19.5	22.36798217	114.1745783
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:15:38	4.7	24.2	22.36795883	114.1745663
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:16:34	4.3	12.7	22.3641745	114.1719587
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:16:35	4.4	17.2	22.36417133	114.1719533
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:16:36	4.7	21.9	22.36415933	114.1719373
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:19:26	4.8	12.1	22.36700467	114.1761915
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:19:27	4.6	16.7	22.36701667	114.1761942
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:19:28	5	21.7	22.367039	114.1761915
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:20:25	4.9	21.6	22.36933567	114.1800622
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:26:08	7.4	11.6	22.34022333	114.1794165
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:26:09	5.9	17.5	22.34022217	114.1794172
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:26:10	4.6	22.2	22.340211	114.1794168
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:27:12	5.1	12.8	22.33937833	114.1793672
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:27:13	4.4	17.2	22.33937217	114.1793673
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:27:14	4.5	21.7	22.33935233	114.1793682
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:28:27	4.8	10.3	22.334258	114.1789562
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:28:28	4.3	14.7	22.33425133	114.178955

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:28:29	4.6	19.4	22.33423567	114.178953
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:29:10	4.7	9.7	22.33272717	114.1788478
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:29:11	4.3	14	22.33273183	114.1788505
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:29:12	4.4	18.5	22.33272233	114.1788513
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:29:13	4.6	23.1	22.33269817	114.1788525
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:29:47	4.4	11.6	22.33052983	114.1787153
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:29:48	4.2	15.8	22.33052267	114.1787155
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:29:49	4.2	20.1	22.33050483	114.1787152
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:29:50	4.5	24.6	22.33047517	114.1787137
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:31:21	4.5	8.2	22.321803	114.1781862
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:31:22	4.1	12.4	22.32179783	114.1781873
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:31:23	4.2	16.7	22.321787	114.1781907
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:31:24	4	20.7	22.32176483	114.1781985
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:31:54	4.4	8.8	22.32140717	114.1782447
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:31:56	4.5	17.5	22.32139633	114.1782332
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:31:57	5	22.5	22.32138033	114.178214
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:33:13	4.5	10.8	22.32080817	114.177342
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:33:14	4.2	15.1	22.3208035	114.1773385
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:33:15	4.4	19.6	22.32078967	114.177327
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:33:16	4	23.6	22.3207665	114.1773085
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:33:43	4.7	10.3	22.31987383	114.1766467
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:33:44	4.4	14.7	22.31987083	114.1766437
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:33:45	4.5	19.2	22.3198585	114.1766335
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:33:46	4.5	23.8	22.31983783	114.1766142
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:33:47	4	27.8	22.319809	114.1765862
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:35:03	4.8	12	22.31863	114.1756943
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:35:04	4.5	16.5	22.31862633	114.1756885
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:35:05	4.5	21.1	22.3186105	114.1756765
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:35:06	4.1	25.2	22.31858367	114.1756578
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:36:33	4.9	11.6	22.31661217	114.1741842
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:36:34	4.7	16.4	22.316607	114.1741805
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:36:35	4.5	20.9	22.31658783	114.1741752
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:36:36	4	24.9	22.316562	114.1741572
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:36:39	4	35.9	22.31642417	114.1740662
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:37:44	4.6	12.2	22.3139625	114.1721605
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:37:45	4.5	16.7	22.31395417	114.1721532
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:37:46	4.6	21.3	22.31393683	114.1721412
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:38:33	4.9	12	22.3119325	114.170955
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:38:34	4.8	16.8	22.31192667	114.1709498
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:38:35	5	21.8	22.31190767	114.1709475
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:40:01	4.3	10.4	22.30592067	114.171502
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:40:02	4.3	14.8	22.30592083	114.1715122
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:40:03	4.6	19.4	22.30590633	114.1715187
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:40:04	4.5	24	22.30588	114.1715272
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:40:38	4.3	10.6	22.3035425	114.1715947
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:40:39	4.3	15	22.303533	114.171589
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:40:40	4.8	19.8	22.30351233	114.1715835
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:40:41	4.3	24.2	22.30348117	114.1715797
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:41:57	5.2	12.6	22.29988483	114.1719367
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:41:58	5	17.6	22.2998795	114.1719385
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:41:59	4.8	22.5	22.299861	114.1719363

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:42:55	4.9	13.4	22.29819733	114.1720608
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:42:56	4.7	18.2	22.29819167	114.1720642
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:42:57	4.7	23	22.2981745	114.1720675
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:44:26	4.9	9.3	22.295081	114.1722838
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:44:27	4.4	13.7	22.29507267	114.172282
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:47:26	4	11.4	22.29988117	114.175938
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-24 23:48:02	2018-07-24 23:50:00	2018-07-25 00:47:29	4.3	24	22.2999335	114.175968
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:21:19	5.1	10.3	22.30246017	114.1783723
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:21:20	4.9	15.3	22.30246367	114.17836
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:21:21	4.6	19.9	22.302468	114.1783447
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:21:22	4.3	24.3	22.30247683	114.1783178
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:22:23	4.5	9.4	22.3007355	114.1763742
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:22:24	4.1	13.5	22.30073167	114.1763718
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:22:26	4.5	22.2	22.30069583	114.1763577
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:23:08	4.9	8.7	22.29951917	114.1759828
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:23:09	4.3	13	22.29952033	114.1759817
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:23:10	4.4	17.5	22.29951033	114.17598
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:23:11	4.9	22.4	22.29948833	114.1759747
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:23:37	4.2	11.4	22.2985875	114.1758145
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:23:38	4.2	15.7	22.29857883	114.1758118
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:23:40	4.6	24.7	22.29853067	114.1758008
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:24:56	4.6	9.1	22.29557483	114.1752585
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:24:57	4.3	13.4	22.29556917	114.175259
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:24:58	4.5	18	22.29555683	114.1752563
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:24:59	4.5	22.5	22.29553083	114.1752578
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:25:29	4.3	12	22.2947355	114.1740432
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:25:31	4.7	21.1	22.29473133	114.1740125
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:26:47	4.7	10.5	22.29468417	114.1724732
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:26:48	4.2	14.8	22.29468367	114.1724818
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:27:20	4.2	14.5	22.29537	114.172346
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:27:21	4.4	19	22.29538683	114.172348
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:27:22	4.4	23.4	22.29541433	114.1723502
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:27:47	4.6	9.9	22.29633433	114.1723198
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:27:48	4.4	14.3	22.29634017	114.1723405
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:27:49	4.6	19	22.29635433	114.1723413
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:27:50	4.7	23.7	22.296382	114.1723455
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:28:23	4.4	18	22.297843	114.172303
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:28:24	4.4	22.4	22.29786717	114.1723032
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:29:20	4.5	18.9	22.29947183	114.1721102
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:29:21	4.2	23.2	22.29949717	114.172104
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:29:46	4.5	9.7	22.30040567	114.1720162
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:29:47	4.5	14.3	22.3004085	114.172016
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:29:48	4.9	19.2	22.3004205	114.1720132
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:29:49	4.4	23.7	22.30044417	114.1720108
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:30:21	4.5	19	22.30186	114.1718765
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:30:22	4.4	23.4	22.30188667	114.1718742
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:30:55	4.6	12.7	22.30425967	114.1716995
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:30:56	4	16.8	22.30426933	114.1716997
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:31:43	4.8	8.7	22.30480083	114.1717588
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:31:44	4.5	13.3	22.304806	114.1717613
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:31:45	4.6	17.9	22.30481683	114.1717627

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:31:46	4.6	22.6	22.3048395	114.1717657
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:32:28	4.4	11.1	22.3068965	114.1716237
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:32:29	4.2	15.4	22.30690217	114.1716233
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:32:31	4.3	24.1	22.306948	114.171618
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:33:20	4.5	9.4	22.30810167	114.171469
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:33:21	4.4	13.8	22.30810883	114.1714718
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:33:22	4.4	18.2	22.30812183	114.1714727
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:33:23	4.6	22.9	22.30814633	114.1714728
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:34:07	4.9	8.3	22.310082	114.1711955
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:34:08	4.6	13	22.31008633	114.1711927
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:34:09	4.8	17.8	22.31009567	114.1711893
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:34:10	4.8	22.7	22.31011767	114.1711832
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:34:37	4.6	22.1	22.3113735	114.1709688
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:35:22	4.2	11.2	22.3141725	114.1704725
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:35:23	4.3	15.6	22.314179	114.1704775
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:35:24	4.6	20.2	22.314197	114.1704803
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:35:25	4	24.3	22.31422533	114.1704782
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:36:01	4.2	14.9	22.3159595	114.1701483
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:36:02	4.5	19.5	22.315976	114.1701443
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:36:03	4.7	24.2	22.31600433	114.1701425
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:38:37	4.1	11.2	22.31902567	114.1695875
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:41:19	4.2	11.7	22.32101117	114.1702258
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:41:20	4.2	16	22.32101717	114.1702318
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:41:21	4.9	20.9	22.32102183	114.17025
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:42:49	4.1	13	22.320152	114.1736417
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:42:51	4.1	21.5	22.3201605	114.1736803
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:46:26	4.1	12.1	22.33382283	114.1788005
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:53:02	5.6	13	22.3662615	114.1806178
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:53:03	5.2	18.2	22.36627433	114.1806213
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:53:04	5.2	23.5	22.36629817	114.1806277
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:53:05	4.5	28	22.366336	114.1806365
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:53:06	4.6	32.7	22.36638783	114.1806435
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:53:07	4	36.7	22.366452	114.180652
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:53:08	4.3	41.1	22.36652767	114.1806633
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 01:58:24	4.7	21.9	22.36288083	114.1724252
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:01:29	4.3	21.7	22.36753567	114.1743232
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:02:01	4.2	15.3	22.3688135	114.1750463
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:02:02	4.7	20.1	22.3688265	114.1750592
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:02:03	4.4	24.5	22.36884633	114.1750813
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:03:44	4	10.4	22.37264033	114.180423
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:03:47	4.9	23.3	22.37266817	114.1804657
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:04:25	4.3	11	22.37313917	114.1812405
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:04:26	4.2	15.2	22.3731425	114.1812455
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:04:27	4.6	19.8	22.37315233	114.1812602
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:04:28	4.1	24	22.3731695	114.1812843
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:05:16	4.5	20.2	22.37463433	114.1842125
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:05:17	4.1	24.3	22.374632	114.1842442
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:06:27	4.4	23.2	22.374472	114.1864327
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:06:49	4.1	12.3	22.37485283	114.1877392
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:06:51	4.4	21	22.37487067	114.1877643
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:07:53	4	12	22.37592517	114.1894127

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:07:55	4.5	20.8	22.37594717	114.1894352
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:08:51	4.2	12.2	22.37607417	114.1914265
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:08:52	4.2	16.4	22.37607833	114.1914347
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:08:53	4.5	20.9	22.37608683	114.1914548
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:10:10	4.2	8.9	22.37592783	114.1924695
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:10:45	4.5	11.5	22.37651717	114.1937908
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:10:46	4.7	16.2	22.376522	114.193796
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:10:47	5	21.3	22.3765335	114.1938112
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:11:22	4.2	13.1	22.37760333	114.1952247
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:11:23	4.2	17.3	22.377609	114.1952353
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:11:24	4.4	21.8	22.37762067	114.1952558
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:12:31	4.2	9.2	22.380579	114.1945573
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:12:32	4	13.3	22.38058267	114.1945502
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:12:34	4.4	22.1	22.3806085	114.1945215
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:13:33	4.7	21.8	22.38252983	114.1956733
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:14:21	4.1	12	22.3850025	114.1980615
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:14:22	4.5	16.6	22.38500717	114.1980692
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:14:23	4.9	21.5	22.38501867	114.1980872
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:15:09	4.2	12.5	22.38683767	114.1999112
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:15:10	4.3	16.8	22.38684333	114.1999185
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:15:11	4.6	21.5	22.38685783	114.1999345
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:16:42	4.3	9.5	22.38917483	114.2025883
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:16:43	4.2	13.7	22.38917733	114.2025975
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:16:44	4.3	18.1	22.389182	114.2026122
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:16:45	4.6	22.7	22.38918933	114.2026378
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:17:13	4	22.6	22.3894405	114.2034683
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:18:34	4.4	9	22.39072017	114.2054237
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:18:35	4	13	22.3907335	114.2054377
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:18:36	4.2	17.3	22.39074667	114.205449
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:19:09	4.4	11.5	22.39173883	114.2063732
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:19:10	4	15.5	22.3917455	114.2063802
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:19:12	4.1	24.2	22.39177967	114.2064197
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:19:51	4.6	10.1	22.39268567	114.2073647
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:19:52	4.3	14.4	22.39268983	114.207368
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:19:53	4.7	19.2	22.39269967	114.2073758
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:19:54	4.6	23.9	22.39271917	114.2073935
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:23:01	4.7	13.4	22.40618717	114.2219248
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:23:02	4.7	18.1	22.406194	114.2219292
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:24:24	4.5	11.9	22.40642033	114.2220778
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:24:25	4.1	16	22.40642983	114.2220833
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:25:19	4.2	14.8	22.40540917	114.2240253
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:25:20	4	18.9	22.40539883	114.224011
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:26:28	4.6	11.9	22.40634333	114.2224585
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:26:29	4.5	16.5	22.406346	114.2224565
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:29:05	5.3	10.4	22.41798817	114.2304725
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:29:06	4.2	14.6	22.41799167	114.2304652
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:29:07	5.1	19.7	22.418	114.2304505
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:29:08	4.6	24.4	22.41801567	114.2304233
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:29:09	4.2	28.6	22.41803883	114.2303875
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:30:06	4.4	12.9	22.42180583	114.2285602
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:30:07	4.5	17.4	22.42181267	114.2285525

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:30:08	4.9	22.3	22.42182817	114.2285357
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:31:33	4.3	21.7	22.4221975	114.2279325
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:32:11	4.4	11.2	22.4234885	114.228247
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:32:12	4.4	15.6	22.4234945	114.2282527
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:32:13	4.8	20.5	22.42350983	114.2282643
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:32:14	4.2	24.7	22.42352983	114.2282878
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:33:39	4.7	11.3	22.42425667	114.2293427
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:33:40	4.4	15.7	22.42425917	114.2293473
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:33:41	4.3	20.1	22.42426817	114.2293637
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:33:42	4.4	24.5	22.42428283	114.2293913
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:34:19	4.4	11	22.42505833	114.2317578
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:34:20	4.4	15.5	22.42506017	114.2317642
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:34:21	4.6	20.1	22.42506233	114.2317833
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:34:22	4.6	24.8	22.425068	114.2318135
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:35:41	4.6	21	22.425933	114.2365235
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:37:09	4.3	9.3	22.4265735	114.2389315
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:37:10	4.2	13.5	22.42657717	114.2389347
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	HH.STN	2018-07-25 01:19:03	2018-07-25 01:20:00	2018-07-25 02:37:11	4	17.6	22.4265855	114.2389463
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:02:27	5.7	13.3	22.4252085	114.2399548
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:02:28	5.2	18.6	22.42520933	114.2399535
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:02:29	4.5	23.2	22.4252285	114.239948
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:02:48	5.7	9	22.42600983	114.2394742
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:02:49	5	14.1	22.42601133	114.2394715
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:02:50	4.7	18.9	22.4260185	114.2394647
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:04:02	4.6	12.1	22.4262525	114.2392053
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:04:03	4	16.1	22.42625617	114.2391972
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:04:04	4.4	20.5	22.42626033	114.2391743
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:05:28	4.8	8.8	22.4253485	114.2343257
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:05:29	4.4	13.3	22.425351	114.2343273
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:05:31	4.3	21.9	22.42534183	114.2342905
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:07:35	4.6	11.5	22.42252083	114.227918
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:08:12	4.3	10.6	22.42021933	114.2295627
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:08:13	4.1	14.8	22.42021417	114.2295622
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:08:14	4.6	19.5	22.4201985	114.2295577
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:08:15	4.3	23.8	22.42017217	114.2295503
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:11:41	4.6	8.7	22.40535233	114.2239208
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:11:42	4.2	12.9	22.40535267	114.223917
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:16:39	5.2	9.3	22.39287383	114.207723
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:16:40	4.7	14	22.39287567	114.2077233
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:16:41	4.7	18.7	22.39286933	114.2077162
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:16:42	4.6	23.4	22.3928525	114.2076998
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:17:31	4.3	14.1	22.39096167	114.2058553
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:17:32	4.6	18.8	22.390951	114.2058473
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:17:33	4.8	23.7	22.39093133	114.2058307
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:18:22	4.3	13.8	22.38852583	114.2018297
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:18:23	5	18.8	22.38851883	114.2018213
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:18:24	4.7	23.6	22.38850533	114.2018022
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:18:54	4.5	10.3	22.387255	114.2005492
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:18:55	4.5	14.8	22.38724933	114.2005458
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:18:56	4.9	19.8	22.38723917	114.200536
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:18:57	4.4	24.3	22.38721917	114.2005182

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:20:16	4.3	10.4	22.38190567	114.1954312
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:20:17	4.4	14.8	22.38190533	114.1954307
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:20:18	4.7	19.6	22.38189433	114.1954207
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:20:19	4.2	23.8	22.381875	114.1954015
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:21:38	5.1	8.4	22.3779465	114.195883
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:21:39	4.6	13	22.377951	114.1958905
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:21:40	4.6	17.7	22.37794667	114.1958855
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:21:41	4.9	22.6	22.377933	114.1958675
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:22:08	4.4	12.9	22.3774225	114.1952005
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:22:09	4.6	17.5	22.37741417	114.1951887
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:22:10	4.6	22.2	22.37739967	114.1951663
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:23:40	4.2	24.6	22.37508767	114.1884132
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:24:11	4.4	10.5	22.37435933	114.187111
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:24:12	4.4	14.9	22.37435783	114.1871033
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:24:13	4.7	19.7	22.374353	114.1870855
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:24:14	4.8	24.5	22.37434517	114.1870563
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:25:16	4.8	9.8	22.37426133	114.1857698
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:25:17	4.5	14.3	22.3742565	114.1857765
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:25:18	4.6	19	22.3742565	114.1857625
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:25:19	4.8	23.8	22.37425967	114.1857335
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:26:18	4.7	10.6	22.37215433	114.1801642
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:26:19	4.5	15.2	22.37215117	114.180157
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:26:20	5	20.2	22.37214283	114.1801408
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:26:21	4.5	24.8	22.37212917	114.1801133
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:28:15	5	8.7	22.36790433	114.174557
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:28:16	4.3	13.1	22.36791267	114.1745615
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:28:17	4.6	17.7	22.36790433	114.1745567
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:28:18	4.8	22.6	22.367883	114.1745453
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:31:22	5	11.2	22.3671585	114.1762303
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:31:23	4.8	16	22.3671675	114.176225
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:32:26	4.9	9.7	22.368724	114.1784965
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:32:27	4.5	14.2	22.36872133	114.1784935
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:32:28	4.6	18.9	22.36872583	114.1785057
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:32:29	4.8	23.8	22.368737	114.1785322
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:32:47	4.5	11.5	22.368999	114.17907
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:32:48	4.5	16	22.369001	114.1790763
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:32:49	4.9	21	22.36900733	114.179095
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:32:50	4	25	22.36901617	114.1791265
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:39:21	5.6	10	22.3393525	114.1792888
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:39:22	4.7	14.7	22.33934917	114.1792892
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:39:23	4.5	19.2	22.339336	114.1792887
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:39:24	4.6	23.8	22.339309	114.1792875
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:40:33	4.2	11.7	22.33303033	114.1788775
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:40:34	4.1	15.9	22.33302167	114.178878
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:40:35	4	20	22.33300183	114.178878
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:40:36	4	24	22.33297133	114.178877
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:41:24	4.5	9.2	22.33079283	114.1787548
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:41:25	4	13.2	22.33079017	114.1787527
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:43:05	4.2	21.3	22.32171367	114.1782098
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:43:33	5.1	9.3	22.32136717	114.1782545
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:43:34	4.7	14.1	22.32136633	114.1782537

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:43:35	5	19.1	22.3213585	114.1782458
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:43:36	5.3	24.4	22.32134167	114.1782273
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:43:37	4.1	28.5	22.32131833	114.1781977
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:44:52	4.2	11.7	22.32078883	114.1773278
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:44:53	4.2	15.9	22.32078767	114.1773253
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:44:54	4.4	20.4	22.32077267	114.1773118
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:45:47	4.4	12.4	22.31769567	114.1749697
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:45:48	4.3	16.8	22.3176885	114.1749648
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:45:49	4.7	21.5	22.31767233	114.1749522
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:46:33	4.6	11.5	22.31661117	114.1741487
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:46:34	4.5	16	22.316604	114.1741487
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:46:35	4.5	20.6	22.31658733	114.174141
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:46:36	4	24.7	22.31655933	114.1741283
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:46:39	4.1	35.7	22.316421	114.1740462
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:47:16	4.3	11.7	22.314377	114.1724943
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:47:17	4.1	15.9	22.314371	114.17249
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:47:18	4	19.9	22.31435567	114.1724788
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:47:42	4.3	11.4	22.31397083	114.1721778
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:47:43	4.3	15.7	22.3139655	114.172174
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:47:45	4.1	24.6	22.3139275	114.172146
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:48:31	4.2	12.9	22.311883	114.1708495
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:48:32	4.3	17.2	22.31187283	114.1708522
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:48:33	4.7	22	22.311851	114.170857
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:48:34	4	26	22.311819	114.1708633
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:50:52	4.2	10.3	22.30600567	114.171622
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:50:53	4.2	14.6	22.3060015	114.1716217
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:50:54	4.2	18.9	22.3059865	114.1716247
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:52:02	4.4	9.5	22.30109833	114.1719823
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:53:07	5.1	13.7	22.29968	114.1720635
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:53:08	5	18.7	22.29966983	114.172064
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:53:09	4.6	23.4	22.29964567	114.1720663
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:53:10	4.1	27.5	22.2996095	114.172068
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:54:54	4.3	11.5	22.29495267	114.1724317
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:55:36	4.1	8.2	22.295161	114.1746832
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:55:39	4.7	21.1	22.29517667	114.174726
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:56:22	4.2	11.1	22.29702517	114.1754403
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:56:23	4.2	15.4	22.29703383	114.1754443
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:56:24	4.3	19.7	22.29705517	114.1754495
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:56:25	4.5	24.3	22.29708767	114.1754522
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:57:20	4.8	8.3	22.3002665	114.1761088
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:57:21	4.4	12.7	22.30027183	114.1761122
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:57:23	4.7	22	22.300309	114.1761248
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:57:24	4	26	22.30034333	114.176136
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:58:05	4.8	10.1	22.30270883	114.1769773
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:58:06	4.4	14.6	22.30271283	114.1769785
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:58:07	4.6	19.3	22.30272717	114.1769872
76129	[redacted]	STD	2018-07-25	N281	TX5380	N281	KAMYNG	2018-07-25 03:00:54	2018-07-25 03:00:00	2018-07-25 03:58:08	4.4	23.7	22.30275217	114.1770018
76129	[redacted]	STD	NULL	NULL	TX5380	NULL	NULL	2018-07-25 03:00:54	NULL	2018-07-25 04:09:26	4.7	8.5	22.30217683	114.1837133
76129	[redacted]	STD	NULL	NULL	TX5380	NULL	NULL	2018-07-25 03:00:54	NULL	2018-07-25 04:09:27	4.2	12.8	22.30217683	114.1837173
76129	[redacted]	STD	NULL	NULL	TX5380	NULL	NULL	2018-07-25 03:00:54	NULL	2018-07-25 04:13:51	4.9	8.6	22.330267	114.1786243
76129	[redacted]	STD	NULL	NULL	TX5380	NULL	NULL	2018-07-25 03:00:54	NULL	2018-07-25 04:13:52	4.5	13.2	22.33027067	114.1786253

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	NULL	NULL	TX5380	NULL	NULL	2018-07-25 03:00:54	NULL	2018-07-25 04:13:53	4.6	17.8	22.330281	114.1786265
76129	[redacted]	STD	NULL	NULL	TX5380	NULL	NULL	2018-07-25 03:00:54	NULL	2018-07-25 04:13:54	4.8	22.7	22.33030433	114.1786285
76129	[redacted]	STD	NULL	NULL	TX5380	NULL	NULL	2018-07-25 03:00:54	NULL	2018-07-25 04:14:27	5.4	9.3	22.3324695	114.1787575
76129	[redacted]	STD	NULL	NULL	TX5380	NULL	NULL	2018-07-25 03:00:54	NULL	2018-07-25 04:14:28	4.9	14.2	22.33247483	114.1787577
76129	[redacted]	STD	NULL	NULL	TX5380	NULL	NULL	2018-07-25 03:00:54	NULL	2018-07-25 04:14:29	4.9	19.2	22.33248517	114.1787583
76129	[redacted]	STD	NULL	NULL	TX5380	NULL	NULL	2018-07-25 03:00:54	NULL	2018-07-25 04:15:09	5.4	9	22.33399483	114.1788512
76129	[redacted]	STD	NULL	NULL	TX5380	NULL	NULL	2018-07-25 03:00:54	NULL	2018-07-25 04:15:10	4.8	13.8	22.333995	114.1788512
76129	[redacted]	STD	NULL	NULL	TX5380	NULL	NULL	2018-07-25 03:00:54	NULL	2018-07-25 04:15:11	4.8	18.7	22.33400733	114.178851
76129	[redacted]	STD	NULL	NULL	TX5380	NULL	NULL	2018-07-25 03:00:54	NULL	2018-07-25 04:15:12	4.8	23.6	22.33403283	114.1788523
76129	[redacted]	STD	NULL	NULL	TX5380	NULL	NULL	2018-07-25 03:00:54	NULL	2018-07-25 04:23:55	4.9	8.8	22.3786705	114.204282
76129	[redacted]	STD	NULL	NULL	TX5380	NULL	NULL	2018-07-25 03:00:54	NULL	2018-07-25 04:23:56	4.5	13.3	22.37867633	114.2042933
76129	[redacted]	STD	NULL	NULL	TX5380	NULL	NULL	2018-07-25 03:00:54	NULL	2018-07-25 04:23:57	4.4	17.7	22.3786865	114.2043122
76129	[redacted]	STD	NULL	NULL	TX5380	NULL	NULL	2018-07-25 03:00:54	NULL	2018-07-25 04:23:58	4.6	22.4	22.37870233	114.2043387
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-25 20:47:43	NULL	2018-07-25 20:51:16	5.8	15.7	22.38419683	114.2083087
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-25 20:47:43	NULL	2018-07-25 20:51:17	4.8	20.6	22.38420567	114.2083202
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-25 20:47:43	NULL	2018-07-25 20:51:55	5.7	18.2	22.38347833	114.2097367
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-25 20:47:43	NULL	2018-07-25 20:51:56	4	22.2	22.3834655	114.2097602
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 20:55:37	4.2	26.8	22.38193133	114.2177937
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 20:55:38	4.2	31	22.38191083	114.217742
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 20:57:54	5.7	15.6	22.38286433	114.2117297
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 20:57:55	5.7	21.4	22.38286167	114.211705
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 20:59:07	6.2	16	22.3830655	114.210246
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 20:59:08	5.6	21.7	22.383077	114.2102213
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:00:43	5.1	10.3	22.38541867	114.2070713
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:00:44	5.5	15.9	22.38542733	114.2070628
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:00:45	5	20.9	22.38544167	114.2070463
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:01:32	6.5	16.5	22.38658783	114.2057458
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:01:33	4.8	21.4	22.38660333	114.2057263
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:02:09	4.7	15.1	22.38754117	114.2046938
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:02:47	4.7	12.2	22.38697517	114.2038263
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:02:48	5.8	18	22.38696133	114.2038133
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:02:49	4.1	22.2	22.38693883	114.2037898
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:03:19	5.9	15.8	22.38653967	114.2032972
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:03:20	5.2	21.1	22.38653217	114.2032875
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:05:23	7	14.1	22.38191717	114.2023807
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:05:24	5.2	19.4	22.38190833	114.2023902
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:06:42	5.8	16.3	22.3807855	114.2032288
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:06:43	4.8	21.1	22.3807805	114.203232
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:07:25	4.5	11.6	22.37985367	114.2039668
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:07:26	6	17.6	22.37984667	114.2039732
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:08:13	5.4	7.9	22.37925283	114.2043655
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:08:14	5.9	13.8	22.37925283	114.2043655
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:08:15	5.3	19.1	22.37925217	114.204366
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:09:30	6.3	13.1	22.37790433	114.2002602
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:09:31	5	18.2	22.37790467	114.2002538
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:11:17	6.6	15.4	22.37802567	114.1960777
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:11:18	4.4	19.8	22.37801817	114.196071
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:11:19	4.3	24.1	22.37800083	114.1960505
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:11:57	5	10	22.37727517	114.1950667
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:11:59	5	20.8	22.37727033	114.195052
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:13:13	6.6	12.2	22.37585883	114.1928345

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:13:14	5.5	17.8	22.37585817	114.1928332
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:14:00	5.4	16.3	22.375833	114.1910685
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:14:29	4.4	10	22.37557933	114.1905368
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:15:13	4.6	9.4	22.37598033	114.1898553
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:16:13	4.8	9	22.37511967	114.1884878
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:16:14	5.7	14.8	22.37511617	114.188481
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:16:15	5.1	19.9	22.37510917	114.1884682
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:16:45	4.9	13.5	22.374257	114.1868133
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:16:46	5.6	19.2	22.374258	114.1868015
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:17:31	6.3	14.1	22.37421283	114.1858882
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:17:32	5	19.1	22.374214	114.185884
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:19:03	5	20.6	22.37021633	114.1855068
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:19:47	5.2	14.7	22.37100833	114.186046
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:19:48	4.3	19	22.3710135	114.1860567
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:20:30	5.5	16.5	22.37001517	114.1878032
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:20:53	5.2	12.7	22.36948667	114.187364
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:20:54	5.7	18.4	22.36947933	114.1873588
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:20:55	4.3	22.8	22.36946233	114.187346
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:24:03	5.9	10.1	22.3731935	114.1817045
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:24:04	6.1	16.2	22.37319333	114.1817042
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:24:05	5	21.3	22.373179	114.1816812
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:24:56	6.1	17.4	22.37137717	114.1790977
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:26:09	5	12.2	22.36957183	114.1802685
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:26:16	4.5	28.2	22.369369	114.1802508
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:27:15	5.6	14.6	22.36877167	114.1788302
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:27:16	5.2	19.8	22.36876567	114.178818
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:27:39	4.8	13.5	22.3684695	114.1780772
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:27:40	5.7	19.3	22.36846533	114.1780665
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:28:21	5.9	12.3	22.367436	114.1763635
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:28:22	5.7	18.1	22.3674335	114.1763598
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:28:23	4.5	22.7	22.3674235	114.176345
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:29:33	5	9.5	22.36754417	114.1746662
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:29:34	5.2	14.8	22.3675395	114.1746632
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:29:35	4.6	19.4	22.36754517	114.1746463
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:32:00	4.9	11.4	22.372682	114.177651
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:32:01	5.5	16.9	22.37268583	114.1776472
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:32:02	4.6	21.6	22.3726995	114.177634
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:32:25	5.2	10.9	22.37326517	114.1771567
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:32:26	5.5	16.5	22.37326967	114.1771522
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:32:27	5	21.5	22.37328317	114.1771415
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:33:26	5.7	15.4	22.377353	114.1745435
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	WN.TAU	2018-07-25 20:47:43	2018-07-25 20:55:00	2018-07-25 21:33:27	4.2	19.6	22.37736333	114.1745388
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 21:40:53	4.2	9.7	22.37782333	114.1746482
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 21:41:24	4.9	11.2	22.3767885	114.1750133
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 21:41:25	5	16.2	22.37678383	114.175016
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 21:42:07	5.4	11.3	22.37581283	114.1756265
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 21:42:08	6	17.3	22.3758055	114.17563
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 21:42:09	4.2	21.6	22.37578783	114.17564
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 21:42:48	5.6	13.5	22.3737315	114.177121
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 21:42:49	5.3	18.9	22.37372333	114.1771268
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 21:42:50	5	23.9	22.37370667	114.1771408

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 21:44:23	5.2	12.5	22.36873017	114.175301
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 21:44:24	5.9	18.4	22.36872367	114.1752963
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 21:44:52	6.7	10.3	22.368141	114.1748567
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 21:44:53	4.4	14.8	22.368141	114.1748567
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 21:45:48	5.3	13.4	22.367422	114.1751755
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 21:47:09	4.6	9.1	22.36731883	114.1755935
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 21:47:10	4.6	13.7	22.36731883	114.175594
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 21:48:32	5.2	15	22.36735867	114.1761063
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 21:48:33	5.2	20.2	22.3673615	114.1761202
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 21:49:26	5.1	9.1	22.369021	114.1791963
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 21:49:27	5.6	14.8	22.3690215	114.1791972
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 21:49:29	4.2	24.5	22.3690295	114.179234
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 21:50:36	4.8	11.6	22.369416	114.1801028
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 21:51:06	4.6	12.9	22.3702685	114.1796838
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 21:51:41	4.5	16.5	22.37102667	114.178989
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 21:51:42	4.7	21.3	22.3710385	114.178971
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 21:52:21	5	15.9	22.37258183	114.1804242
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 21:52:22	5	21	22.37259283	114.180439
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 21:52:23	4.2	25.2	22.37260717	114.1804655
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 21:53:57	5.3	11.8	22.37443783	114.1851378
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 21:55:30	5.7	19.5	22.37008217	114.1855002
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 21:55:31	4.1	23.7	22.37010233	114.1855127
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 21:56:03	5.2	18.1	22.37091883	114.1860615
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 21:56:04	4.6	22.7	22.37093267	114.1860818
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 21:56:45	4.8	15.4	22.36989383	114.1877632
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 21:57:52	4.1	8.3	22.36964933	114.1874983
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 21:57:54	5.2	18.3	22.36964117	114.187491
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 21:57:55	4	22.3	22.36962567	114.1874775
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 21:59:55	6.1	9.9	22.373874	114.1853023
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 21:59:56	6.3	16.2	22.373874	114.1853023
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 21:59:57	4	20.2	22.37388417	114.1853037
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 22:00:29	5.7	18.5	22.37440983	114.1862828
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 22:00:30	4.6	23.2	22.37440917	114.1863032
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 22:00:55	4.4	12.2	22.37466483	114.1876072
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 22:00:56	4.8	17	22.37468267	114.1876092
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 22:00:57	4	21.1	22.37473283	114.1876172
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 22:01:35	4.8	13.1	22.37596467	114.1894345
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 22:01:36	4.3	17.4	22.37597167	114.189442
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 22:02:37	5.1	13.8	22.37612467	114.1915695
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 22:02:38	4.7	18.5	22.37612883	114.1915798
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 22:03:23	4.4	18.2	22.37670367	114.1937298
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 22:03:57	4.3	9.5	22.37738033	114.1947523
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 22:03:59	5.5	20.5	22.377392	114.1947672
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 22:04:00	4.1	24.6	22.3774055	114.1947913
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 22:05:14	6.2	16.2	22.3778775	114.1955132
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 22:05:15	4.7	20.9	22.37788667	114.1955262
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 22:05:57	5.4	18.4	22.37879667	114.1976665
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 22:06:44	5	13.4	22.37801017	114.2007205
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 22:06:45	5.4	18.8	22.37800733	114.2007308
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 22:06:46	4.6	23.5	22.37799917	114.2007527
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 22:08:12	6.5	17.9	22.38110383	114.2027808

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 22:08:13	4.4	22.4	22.3811175	114.202772
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 22:09:27	6.8	15.6	22.38143583	114.2025792
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 22:10:12	4.9	13.5	22.38462283	114.2019418
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 22:10:13	6	19.5	22.3846325	114.2019427
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 22:10:59	5	17	22.38621867	114.2027118
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 22:11:25	4.7	8.3	22.386557	114.203099
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 22:11:26	4.5	12.9	22.38655833	114.2031003
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 22:11:27	5.6	18.6	22.38656533	114.2031082
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 22:12:47	4.5	12.7	22.387652	114.2042852
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 22:13:40	5.4	9.8	22.3871645	114.2053587
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 22:13:41	5.5	15.3	22.38716217	114.2053635
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 22:13:42	5.1	20.5	22.38715533	114.2053738
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 22:15:00	6.3	13.4	22.385988	114.2066155
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 22:15:39	4.5	12.7	22.38398583	114.2088457
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 22:17:09	4.5	9.9	22.38303883	114.2148097
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 22:17:10	5.1	15.1	22.3830395	114.2148073
76129	[redacted]	STD	2018-07-25	N281	UW3919	82K	MEILAM	2018-07-25 21:38:52	2018-07-25 21:40:00	2018-07-25 22:17:11	5.1	20.3	22.38303483	114.2148172
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-25 21:38:52	NULL	2018-07-25 22:25:06	5.5	10.9	22.38312467	114.2144078
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-25 21:38:52	NULL	2018-07-25 22:25:07	5.7	16.7	22.3831315	114.2143828
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-25 21:38:52	NULL	2018-07-25 22:25:08	5.2	22	22.38313633	114.2143663
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-25 21:38:52	NULL	2018-07-25 22:25:09	4.6	26.6	22.38314467	114.214339
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-25 21:38:52	NULL	2018-07-25 22:26:15	5.3	18.1	22.38302367	114.2103878
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-25 21:38:52	NULL	2018-07-25 22:32:38	5.1	23.4	22.42137767	114.2324572
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-25 21:38:52	NULL	2018-07-25 22:35:25	4.1	9.2	22.42335183	114.2372875
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-25 23:51:12	5	11.3	22.42397233	114.2380542
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-25 23:51:13	5.2	16.6	22.42397117	114.2380587
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-25 23:51:14	5.5	22.1	22.423967	114.2380747
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-25 23:52:39	6	12.7	22.4252035	114.2399873
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-25 23:52:40	5.6	18.4	22.42520917	114.2399818
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-25 23:52:41	5.4	23.8	22.42522817	114.2399698
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-25 23:53:36	5.6	12.5	22.42626167	114.2392242
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-25 23:53:37	5.3	17.8	22.42626333	114.2392187
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-25 23:53:38	4.7	22.5	22.42626533	114.2391948
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-25 23:54:17	5.4	12.9	22.42544083	114.2357323
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-25 23:54:18	5.5	18.4	22.425442	114.2357257
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-25 23:54:19	5.2	23.6	22.42544267	114.2357047
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-25 23:54:20	4.1	27.8	22.4254455	114.2356693
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-25 23:55:23	5.1	11	22.425258	114.2343675
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-25 23:55:24	5.4	16.4	22.425257	114.2343627
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-25 23:55:25	5.3	21.7	22.42525167	114.2343468
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-25 23:56:49	5.2	12.7	22.4230915	114.2284998
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-25 23:56:50	5.7	18.4	22.42308483	114.228493
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-25 23:56:51	4.7	23.2	22.4230715	114.2284768
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-25 23:57:39	5	13.5	22.422582	114.2280725
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-25 23:58:55	5.1	15.9	22.41802267	114.2306092
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-25 23:58:56	4.4	20.4	22.418015	114.2306242
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:01:20	6	14.3	22.406699	114.222478
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:01:21	4.5	18.9	22.4066935	114.2224743
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:02:13	5	0	22.40536833	114.2231708
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:02:26	5.6	13.5	22.40536667	114.2231203
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:02:27	5.1	18.6	22.40536533	114.2231132

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:02:28	4.1	22.8	22.40537317	114.2230908
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:03:43	5.1	9.3	22.4063495	114.2224015
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:06:44	5.3	13.4	22.392897	114.207713
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:06:45	5.9	19.3	22.39288983	114.2077058
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:06:46	4.1	23.5	22.39287517	114.2076907
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:06:47	4	27.6	22.39284967	114.207666
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:07:20	4.9	10.6	22.39142183	114.2063172
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:07:21	5.5	16.2	22.39141583	114.2063117
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:07:22	5.2	21.4	22.3914045	114.2062983
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:07:35	6	11.5	22.39106083	114.2059358
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:07:36	6.3	17.8	22.3910575	114.2059323
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:07:37	4.7	22.6	22.39104767	114.2059212
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:08:35	4.4	9.8	22.388526	114.2018403
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:08:36	5.6	15.4	22.38852333	114.2018373
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:08:37	5.4	20.8	22.38851567	114.201826
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:09:54	6.9	14.3	22.38713417	114.2004268
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:09:55	5.7	20	22.38713067	114.2004222
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:09:56	4.1	24.2	22.38711567	114.2004078
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:11:19	4.4	25.2	22.38080967	114.1944513
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:12:06	5.8	14.1	22.37916883	114.1965128
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:12:16	4.4	23.8	22.3788925	114.1966412
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:12:46	5.4	16.8	22.37802967	114.1959972
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:12:47	4.8	21.7	22.378024	114.1959887
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:13:14	4.5	9	22.377388	114.1951503
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:13:15	5.1	14.1	22.37738433	114.1951465
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:13:16	5.5	19.6	22.37737733	114.1951352
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:14:42	5	10.4	22.375818	114.1927243
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:14:43	5.5	16	22.37581383	114.1927177
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:14:44	5.2	21.3	22.37580533	114.1927027
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:15:45	5.4	13.2	22.37512183	114.188439
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:15:46	5.9	19.2	22.37511767	114.1884325
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:17:55	5.2	10.8	22.370678	114.177851
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:17:56	7.2	18.1	22.37067683	114.1778473
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:18:54	6.4	16.6	22.36797217	114.1746035
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:18:55	4.9	21.5	22.367958	114.1745982
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:19:39	5.2	13.9	22.365305	114.172979
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:19:40	5.8	19.8	22.36529733	114.1729703
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:20:14	4.7	8.7	22.36417983	114.1719653
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:20:15	5.4	14.2	22.36417817	114.1719638
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:20:16	6	20.2	22.36417167	114.1719547
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:20:39	4.2	24.6	22.36337217	114.1713505
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:21:43	5.3	21.4	22.36524217	114.175107
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:21:44	4.5	25.9	22.36526833	114.1751243
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:22:37	5.5	11.5	22.36616967	114.1760925
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:22:38	5.4	17	22.36617167	114.1760987
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:22:39	4.1	21.1	22.3661775	114.1761147
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:23:26	5.1	10.1	22.36695267	114.176218
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:23:27	6.1	16.2	22.36696083	114.1762193
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:23:28	5.5	21.8	22.36697783	114.176218
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:24:36	4.2	7.7	22.36895083	114.1790005
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:24:40	4	24.4	22.36897583	114.179062

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:30:57	7.6	17.3	22.340224	114.179409
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:30:58	5.6	22.9	22.34021833	114.179409
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:32:26	4.8	10.8	22.33328217	114.178879
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:32:27	5.2	16	22.33324467	114.1788818
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:32:28	4.4	20.5	22.3332155	114.1788802
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:33:18	6	11.2	22.33103383	114.1787463
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:33:19	4.9	16.2	22.33102783	114.1787453
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:33:20	4.3	20.5	22.33101333	114.1787443
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:36:21	6.4	11.5	22.32092483	114.1773758
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:36:22	5.4	17	22.32092883	114.1773767
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:37:19	5	12.2	22.31767433	114.1750037
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:37:20	5.8	18	22.31766933	114.1750007
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:37:21	4.7	22.7	22.31765317	114.1749918
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:38:02	6	12.6	22.31672717	114.174407
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:38:50	4.4	8.2	22.31442533	114.1725212
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:38:51	5.2	13.5	22.31442317	114.1725187
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:38:52	4.7	18.3	22.31441667	114.172511
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:39:10	5.3	14.9	22.3141735	114.1722955
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:39:11	4.9	19.8	22.314166	114.1722903
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:40:38	5.1	13.5	22.312965	114.1709353
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:40:44	4	25.7	22.31285233	114.1707885
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:41:10	6.3	15.1	22.3118875	114.171053
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:41:11	5.4	20.6	22.31188167	114.1710395
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:43:10	4	14.1	22.30111367	114.1719293
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:44:08	5.6	11.3	22.29988683	114.1720283
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:44:09	5.3	16.7	22.29988233	114.1720287
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:44:10	4.6	21.4	22.299868	114.1720232
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:46:05	5.6	13.7	22.29504883	114.1722592
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:46:06	5.4	19.1	22.2950355	114.1722572
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:47:36	5	11.9	22.30000617	114.1760108
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:47:37	5.5	17.5	22.3000115	114.1760107
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:47:38	5	22.5	22.3000275	114.176019
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-25 23:49:38	2018-07-25 23:50:00	2018-07-26 00:48:06	4.4	25.5	22.30188983	114.1767488
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:21:29	9.4	16.7	22.3024815	114.1782948
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:21:31	4.4	27	22.30249033	114.1782717
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:22:45	4.9	12.5	22.29865767	114.1758672
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:22:46	5.6	18.1	22.298651	114.175865
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:22:47	4.6	22.8	22.29863283	114.1758627
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:23:33	6.2	16.2	22.29568	114.1752788
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:23:34	5.2	21.4	22.29567033	114.175277
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:24:07	5.7	17.5	22.29473117	114.1740172
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:24:08	4.8	22.3	22.29473117	114.1739978
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:25:32	6.8	15	22.294667	114.1725325
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:25:33	4.9	19.9	22.29466717	114.1725277
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:25:56	5.2	13	22.29533617	114.1722767
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:25:57	5.8	18.9	22.29534533	114.1722785
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:25:58	4.1	23	22.295365	114.172282
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:26:27	6.4	16.5	22.2963185	114.1723523
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:26:28	5.2	21.8	22.2963295	114.1723488
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:27:38	5.8	15.1	22.297956	114.1723825
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:27:39	4.9	20	22.2979655	114.1723785

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:28:14	5.7	15.9	22.3004005	114.1721362
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:28:15	4.9	20.9	22.300412	114.1721357
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:28:43	5.5	16	22.30186517	114.171939
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:28:44	5	21	22.30187967	114.1719353
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:29:21	4	13.3	22.30427567	114.1717887
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:29:54	5.8	16.3	22.30477883	114.171799
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:29:55	5.4	21.7	22.30478933	114.1717992
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:29:56	4.3	26.1	22.3048145	114.1717995
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:30:28	5.4	11.8	22.3068605	114.1716755
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:30:29	5.5	17.4	22.30686483	114.171673
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:31:12	5.9	9.3	22.30809917	114.1715668
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:31:13	6	15.3	22.30809933	114.1715668
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:31:14	5	20.4	22.308109	114.1715667
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:31:42	4.3	9.6	22.30945233	114.1714613
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:31:43	5.1	14.7	22.30945817	114.171453
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:31:44	5.2	20	22.30947117	114.1714423
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:32:03	4.8	12	22.310075	114.1712665
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:32:04	5.9	17.9	22.31008167	114.1712598
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:32:05	4.6	22.5	22.31009917	114.1712528
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:32:47	5	20.3	22.31329	114.1706618
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:33:16	5.1	14.5	22.31421467	114.1705215
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:33:17	4.4	18.9	22.314225	114.17052
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:34:47	5	14.3	22.31801417	114.1697442
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:34:48	5.6	19.9	22.31802683	114.1697442
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:35:59	5.7	15.4	22.31895283	114.1696155
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:36:23	5.3	20.4	22.31917567	114.1686375
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:36:24	4	24.5	22.31916867	114.1686087
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:38:33	5.4	15.8	22.32097433	114.1702743
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:38:34	4.9	20.7	22.320976	114.1702882
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:39:46	5.4	17.9	22.320177	114.1738373
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:39:47	4	21.9	22.320182	114.1738588
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:40:17	5.4	15.6	22.32056717	114.175803
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:40:18	4.9	20.5	22.32056983	114.17582
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:44:24	4.8	11.1	22.33981883	114.1791652
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:44:25	5.6	16.7	22.339824	114.1791655
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:44:26	4.1	20.8	22.33984033	114.1791665
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:44:27	4.2	25.1	22.339869	114.179168
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:49:23	4.2	47.6	22.36475383	114.1808342
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:50:52	5.4	13.2	22.3684655	114.1780732
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:50:53	5	18.2	22.36846133	114.178064
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:50:54	4.5	22.8	22.36845283	114.1780435
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:52:20	6.2	14.5	22.36742033	114.1763665
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:52:21	4.7	19.3	22.36742217	114.1763685
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:53:23	5.6	15.3	22.36543717	114.1753928
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:53:24	4.9	20.2	22.36542967	114.1753812
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:55:18	4.5	14	22.36336667	114.1713892
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:56:54	5.4	11.5	22.36742667	114.1742637
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:56:55	5.9	17.5	22.36743167	114.1742652
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:56:56	4.8	22.3	22.36744717	114.174271
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:58:24	5.4	11.7	22.3726185	114.1804135
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:58:25	5.8	17.5	22.37262417	114.1804183

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:58:26	5	22.5	22.37263367	114.1804343
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:59:06	4.6	9.5	22.3731295	114.1812417
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:59:07	5.3	14.9	22.37313317	114.1812468
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:59:08	5.5	20.4	22.37314083	114.181257
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:59:09	4.3	24.8	22.37315583	114.1812787
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:59:53	5.4	13.4	22.37463183	114.1841645
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 01:59:54	5.7	19.2	22.3746305	114.1841725
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 02:00:25	5.7	18.5	22.37450267	114.1852117
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 02:00:26	4.5	23	22.374499	114.185231
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 02:01:28	6.9	16.4	22.374914	114.1878367
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 02:01:29	5	21.5	22.37491733	114.1878378
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 02:03:19	5.3	13.5	22.3761345	114.1915897
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 02:03:20	6	19.5	22.3761375	114.1916005
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 02:04:11	5.1	9.5	22.375938	114.1924643
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 02:04:12	4.6	14.1	22.37593783	114.1924643
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 02:04:48	6	16.7	22.37653367	114.1938028
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 02:04:49	5	21.7	22.376543	114.1938147
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 02:05:24	4.9	11.9	22.377619	114.19526
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 02:05:25	5.8	17.8	22.377625	114.1952705
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 02:05:26	4.3	22.1	22.377634	114.195289
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 02:06:34	6.4	16.3	22.38073183	114.1944248
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 02:06:35	4.6	21	22.38074167	114.1944157
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 02:08:27	6.1	14.2	22.38917567	114.2025608
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 02:08:28	5.6	19.9	22.3891755	114.202571
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 02:09:24	5.1	8.1	22.39174483	114.2063533
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 02:09:25	5.3	13.5	22.39174483	114.2063533
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 02:09:26	5.7	19.2	22.39175517	114.2063617
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 02:10:01	4.7	22.4	22.39270283	114.2073518
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 02:13:58	4.9	20.7	22.40537717	114.22311
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 02:14:33	5.6	14.1	22.40636783	114.22244
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 02:14:34	5.6	19.8	22.40637267	114.2224325
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 02:14:35	4.3	24.2	22.40638467	114.2224157
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 02:15:05	5.2	14.2	22.40708533	114.2214765
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 02:17:33	6.2	15.2	22.418221	114.230118
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 02:17:34	6	21.3	22.41822783	114.2301047
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 02:17:35	4.6	25.9	22.4182405	114.2300812
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 02:18:32	5	12.6	22.42181667	114.2285557
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 02:18:33	5.9	18.6	22.42182017	114.2285515
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 02:18:34	4	22.7	22.4218335	114.2285362
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 02:19:56	5.9	14.3	22.42222283	114.2278808
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 02:19:57	5.4	19.8	22.42222983	114.227865
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	HH.STN	2018-07-26 01:18:51	2018-07-26 01:20:00	2018-07-26 02:22:27	4.2	12.4	22.42570283	114.239849
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:01:32	6.3	15.3	22.42518267	114.2399905
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:01:33	5.6	20.9	22.42518917	114.2399867
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:01:34	4.3	25.3	22.4252115	114.2399757
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:01:35	4.3	29.7	22.425248	114.239963
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:01:56	5.2	10.4	22.42601167	114.2395048
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:02:46	5	9.5	22.42627033	114.2392492
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:02:47	5.2	14.7	22.42626983	114.239251
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:02:48	5.3	20.1	22.42627183	114.2392412
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:04:12	5	11.7	22.42532517	114.2343763

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:04:13	5.6	17.4	22.42532433	114.234367
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:04:14	5.3	22.7	22.42531883	114.234345
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:04:56	4.7	15.7	22.42435883	114.2314753
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:06:08	5.3	10.7	22.422518	114.2279667
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:06:09	5.8	16.5	22.42251383	114.2279643
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:07:23	4.8	14.9	22.41807533	114.2306592
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:07:24	4.5	19.4	22.41806883	114.230673
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:14:14	5.7	13.1	22.39091033	114.205802
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:14:15	6.8	19.9	22.39090867	114.205801
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:15:58	6.8	12.5	22.38726517	114.20056
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:15:59	6.1	18.6	22.3872645	114.2005545
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:17:13	5.1	10.7	22.38201533	114.1955118
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:17:14	4.2	15	22.38200467	114.1955008
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:17:15	5	20.1	22.3819895	114.1954852
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:17:16	4.5	24.6	22.38196683	114.1954617
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:18:41	5.6	11.9	22.37795467	114.1958982
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:18:42	6.4	18.3	22.37795583	114.195901
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:18:43	4.9	23.3	22.3779455	114.1958878
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:19:11	4.6	9.6	22.37724933	114.1949627
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:19:12	5.3	15	22.37724667	114.1949588
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:19:13	5.9	20.9	22.3772395	114.1949472
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:19:54	4.5	8.9	22.37553217	114.1920783
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:19:55	4.8	13.7	22.37553	114.1920733
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:19:56	5.9	19.7	22.37552533	114.1920613
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:19:57	4.1	23.9	22.37552017	114.1920375
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:20:48	6.1	16.9	22.375171	114.1885542
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:20:49	4.7	21.7	22.37516383	114.1885423
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:23:44	4.5	8.9	22.36789633	114.1745562
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:23:45	5.4	14.3	22.367898	114.1745582
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:23:46	6.3	20.7	22.36789083	114.1745553
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:27:25	5.7	12.5	22.36708833	114.176243
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:27:26	5.9	18.4	22.36709633	114.1762397
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:28:17	5.5	15.6	22.36898367	114.1791405
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:28:18	5.9	21.6	22.3689905	114.1791538
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:29:22	4.9	14	22.36938283	114.1801588
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:35:33	5.6	18.5	22.3402875	114.1794095
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:35:34	4.7	23.2	22.34026633	114.1794058
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:35:35	4.4	27.6	22.3402325	114.1794033
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:36:37	6.4	12	22.33934017	114.1792852
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:36:38	6.2	18.3	22.339337	114.1792853
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:36:39	4.5	22.8	22.33932083	114.1792845
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:36:40	4.2	27.1	22.3392895	114.1792828
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:37:55	6	17.2	22.332738	114.178881
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:37:56	5.1	22.4	22.33272283	114.1788808
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:38:45	5.1	12.4	22.33052067	114.178746
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:38:46	5.7	18.1	22.33050717	114.178745
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:38:47	4.6	22.7	22.3304865	114.1787437
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:41:20	4.8	12.1	22.320816	114.1773505
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:41:21	5.7	17.8	22.32081367	114.1773433
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:41:22	4.6	22.5	22.32079717	114.1773285
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:42:15	5.2	12.4	22.31773617	114.1749958

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:42:16	5.9	18.4	22.31773083	114.174992
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:42:17	5	23.4	22.31771533	114.174981
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:43:02	5.3	14.8	22.31663667	114.1741948
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:43:03	5.5	20.4	22.31662667	114.1741887
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:44:06	5.9	16.6	22.31400767	114.1721758
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:44:07	5.2	21.9	22.313998	114.1721683
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:44:31	5	14	22.31340367	114.171718
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:44:32	5.8	19.8	22.31339467	114.1717102
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:46:05	4.3	14.8	22.30665283	114.1715735
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:46:06	4.6	19.4	22.30663517	114.171574
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:47:12	5.2	14.4	22.30585	114.1715732
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:47:13	5.4	19.9	22.30583967	114.1715742
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:47:51	4.5	10.7	22.3043865	114.1716947
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:47:52	5.1	15.8	22.30437933	114.1716967
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:47:53	4.6	20.5	22.304361	114.1716943
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:48:11	4.6	20.1	22.3035715	114.1717517
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:49:06	6.1	12.2	22.29987067	114.1719743
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:49:07	6.1	18.4	22.299868	114.1719747
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:49:08	5.4	23.8	22.29985267	114.1719755
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:50:28	4.8	9.9	22.296584	114.1722178
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:50:29	5.4	15.4	22.29657867	114.1722137
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:50:31	4.1	25.2	22.296529	114.1721857
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:50:53	4.5	8.9	22.2957185	114.1723387
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:50:54	4.8	13.8	22.295719	114.1723378
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:50:55	5.6	19.4	22.29570967	114.1723318
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:52:13	4.4	24.9	22.29468733	114.1725878
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:53:34	5.3	12.1	22.30021817	114.1760977
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:53:35	5.5	17.7	22.30022483	114.176101
76129	[redacted]	STD	2018-07-26	N281	UW3919	N281	KAMYNG	2018-07-26 02:59:51	2018-07-26 03:00:00	2018-07-26 03:53:36	4.9	22.6	22.30024283	114.1761083
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-26 02:59:51	NULL	2018-07-26 04:06:34	4.5	22.6	22.303713	114.1828302
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-26 02:59:51	NULL	2018-07-26 04:06:35	4	26.6	22.30368083	114.1828488
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-26 02:59:51	NULL	2018-07-26 04:07:22	5	12	22.30217767	114.183717
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-26 02:59:51	NULL	2018-07-26 04:07:23	5	17	22.30217833	114.1837237
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-26 02:59:51	NULL	2018-07-26 04:07:24	4.4	21.4	22.30218333	114.1837498
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-26 02:59:51	NULL	2018-07-26 04:12:40	4.5	14.5	22.33380483	114.1788258
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-26 02:59:51	NULL	2018-07-26 04:12:41	5.2	19.8	22.33382267	114.1788268
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-26 02:59:51	NULL	2018-07-26 04:12:42	4.4	24.2	22.33384967	114.1788275
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-26 02:59:51	NULL	2018-07-26 04:21:42	5.5	16.1	22.37869133	114.2044013
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-26 02:59:51	NULL	2018-07-26 04:21:43	5.6	21.7	22.3787015	114.2044175
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-26 02:59:51	NULL	2018-07-26 04:22:31	4.3	7.7	22.38107267	114.20679
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-26 20:47:09	NULL	2018-07-26 20:51:03	4.9	7.9	22.38331517	114.2100195
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-26 20:47:09	NULL	2018-07-26 20:51:04	5.2	13.1	22.38331783	114.210017
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-26 20:47:09	NULL	2018-07-26 20:51:05	5.5	18.7	22.383317	114.2100228
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-26 20:47:09	NULL	2018-07-26 20:51:06	4	22.8	22.38331067	114.2100422
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-26 20:47:09	NULL	2018-07-26 20:54:58	4.9	9.1	22.38214017	114.2179615
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-26 20:47:09	NULL	2018-07-26 20:54:59	4.5	13.6	22.38212967	114.217958
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 20:55:05	4.8	24.3	22.381977	114.2178707
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 20:55:06	4.6	28.9	22.38195367	114.2178315
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 20:55:07	4.1	33.1	22.38193317	114.2177798
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 20:55:48	4.3	15.1	22.383076	114.2145243
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 20:55:49	4.5	19.7	22.38308433	114.214503

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 20:55:50	4.8	24.5	22.38309617	114.214472
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 20:56:45	6.1	7.5	22.38288733	114.211779
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 20:56:46	5.5	13.1	22.38288717	114.2117788
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 20:56:47	6	19.2	22.3828855	114.211768
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 20:56:48	4.7	24	22.382883	114.2117415
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 20:58:20	6.7	11.3	22.38307567	114.2102508
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 20:58:21	6.4	17.8	22.38308267	114.2102305
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 20:58:22	4.9	22.7	22.383093	114.2102063
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 20:58:51	4.8	7.7	22.38400967	114.2085965
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 20:58:52	5.2	12.9	22.38401167	114.2085925
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 20:58:53	5.9	18.8	22.38401767	114.2085795
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 20:59:43	5.7	9.3	22.38662	114.2056878
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 20:59:44	5.9	15.3	22.3866225	114.2056838
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 20:59:45	5.5	20.9	22.38663317	114.2056703
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:00:21	6.2	12	22.38751183	114.2047155
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:00:22	6.5	18.5	22.38751983	114.204708
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:00:53	4.9	11.1	22.38689167	114.203994
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:00:55	4.9	21.5	22.38686583	114.203975
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:01:55	5.9	12.5	22.38639083	114.2033157
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:01:56	5.5	18.1	22.38638333	114.2033087
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:01:57	4.8	22.9	22.38636533	114.20329
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:03:53	5.1	8.3	22.38180917	114.2025215
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:03:55	5.9	19.9	22.38180633	114.2025245
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:04:17	4.7	20.3	22.380728	114.2033117
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:04:46	5.2	10.7	22.379806	114.2040212
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:04:47	6	16.8	22.37980417	114.2040222
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:04:48	5.2	22	22.37979583	114.2040268
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:05:51	5.4	9.9	22.379242	114.204438
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:05:52	5.3	15.3	22.379242	114.204438
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:05:53	4.1	19.4	22.37924433	114.2044305
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:08:16	5.8	9.9	22.377991	114.1960017
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:08:17	4.6	14.6	22.377991	114.1960017
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:08:19	4.5	23	22.3779735	114.1959798
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:08:42	4.7	6.3	22.37731133	114.1950968
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:08:43	5.1	11.5	22.37731133	114.1950968
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:08:44	5.5	17	22.377311	114.1950965
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:08:45	4.7	21.7	22.377306	114.195087
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:10:14	5.1	9.7	22.37584483	114.1927617
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:10:15	5.5	15.2	22.37584483	114.1927617
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:10:16	4.1	19.4	22.3758425	114.192755
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:10:48	4.2	19.5	22.37610283	114.1916135
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:10:49	4.1	23.7	22.3760915	114.1915832
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:11:09	5	8.8	22.37584767	114.1910793
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:11:10	5.4	14.3	22.37584767	114.1910793
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:11:11	5.5	19.8	22.37584617	114.1910702
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:12:10	4.4	7	22.37591217	114.189935
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:13:18	5.7	6.9	22.37522933	114.1886828
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:13:19	5.3	12.3	22.37522933	114.1886828
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:14:30	5.6	8.8	22.374231	114.1863407
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:14:31	5.2	14	22.374231	114.1863407
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:14:32	5.4	19.5	22.3742315	114.1863412

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:15:14	4.5	11.2	22.3733695	114.1855827
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:15:15	5.2	16.4	22.373365	114.185586
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:15:16	5	21.5	22.37335183	114.1855907
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:16:28	5.2	17.1	22.37016633	114.1855388
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:16:29	4.6	21.8	22.3701825	114.1855448
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:17:03	4.6	14.5	22.37101017	114.1860862
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:17:04	4.9	19.4	22.371019	114.186096
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:17:44	4.4	10.5	22.37003633	114.1878183
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:17:45	5.3	15.8	22.37003383	114.1878153
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:17:46	4.1	19.9	22.37002517	114.1878077
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:18:13	4.2	8.8	22.369494	114.1873785
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:18:14	5.4	14.2	22.36948967	114.187376
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:18:15	5	19.3	22.36948083	114.1873708
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:18:16	4.7	24	22.369464	114.1873612
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:20:11	5	9.2	22.37418467	114.185375
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:20:12	4.7	14	22.37418467	114.185375
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:21:03	5	18.8	22.37330533	114.1818858
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:21:04	4.2	23	22.373292	114.181866
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:21:31	4.6	17.8	22.3721525	114.1801635
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:21:32	4.7	22.6	22.372146	114.1801385
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:22:58	5.5	5.5	22.3696265	114.1802505
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:22:59	5	10.5	22.3696265	114.1802505
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:23:00	5.7	16.2	22.36964283	114.1802415
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:23:01	4	20.2	22.369631	114.1802493
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:24:05	5.3	10	22.368797	114.1789298
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:24:06	5.7	15.8	22.368797	114.1789298
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:24:07	5.3	21.2	22.3687905	114.1789148
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:26:20	5.9	7.1	22.367395	114.1763118
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:26:21	5.7	12.8	22.367395	114.1763118
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:26:22	6.2	19.1	22.3673955	114.176311
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:26:48	5.6	11.3	22.36724383	114.1754528
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:26:49	6	17.3	22.3672455	114.1754507
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:26:50	5	22.4	22.36724917	114.1754388
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:28:03	6.3	6.3	22.3675335	114.1746593
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:28:04	4.9	11.2	22.3675335	114.1746593
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:28:05	5.6	16.8	22.36755583	114.1746708
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:28:06	4.5	21.4	22.3675595	114.1746572
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:28:34	4.4	7.7	22.36878083	114.1750992
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:28:35	5.1	12.8	22.36878083	114.1750992
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:28:36	5.5	18.3	22.36878383	114.1751023
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:28:37	4.8	23.1	22.36879433	114.1751148
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:29:47	5.7	11.5	22.37244667	114.1778855
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:29:48	5.8	17.4	22.37244733	114.1778848
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:29:49	4.4	21.8	22.372456	114.1778767
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:31:09	4.7	8.9	22.37748183	114.1745077
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	WN.TAU	2018-07-26 20:47:09	2018-07-26 20:55:00	2018-07-26 21:31:10	5.4	14.3	22.37748183	114.1745077
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:41:25	5.6	15	22.3758615	114.1755562
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:41:26	4.9	20	22.37585717	114.175559
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:41:59	4.2	7.8	22.37372383	114.1771043
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:42:00	5	12.8	22.37372217	114.1771057
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:42:01	5.5	18.4	22.37371733	114.1771093

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:42:02	4.6	23.1	22.37370417	114.1771208
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:43:33	4.4	8.7	22.36867283	114.1751808
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:43:34	5.2	13.9	22.36867283	114.1751808
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:43:35	5.6	19.5	22.36866817	114.1751773
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:44:57	5.1	6.4	22.367858	114.1746487
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:44:58	4.7	11.1	22.367858	114.1746487
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:45:04	4.4	21.8	22.3677645	114.1745597
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:45:05	4.2	26	22.36772183	114.1745822
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:45:31	4.9	7.2	22.367331	114.1760217
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:45:32	5.2	12.5	22.367331	114.1760217
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:45:33	5.7	18.3	22.36733133	114.1760247
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:45:34	4	22.4	22.3673345	114.176039
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:46:43	5.7	9.2	22.3687205	114.1784763
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:46:44	5.7	15	22.3687205	114.1784763
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:46:45	5.7	20.7	22.36872283	114.178486
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:47:08	4.3	7.8	22.36902983	114.1791665
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:47:31	5.6	7.9	22.369264	114.1798232
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:47:32	4.8	12.7	22.369264	114.1798232
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:47:58	4.7	18	22.370285	114.179642
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:47:59	4.5	22.5	22.3703035	114.1796252
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:48:31	4.8	15.2	22.37105433	114.1789193
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:48:32	4.5	19.8	22.37106317	114.1789073
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:49:23	5.2	9.4	22.37262733	114.180405
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:49:25	5.5	20.7	22.37263233	114.180411
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:50:49	4.5	4.5	22.37444667	114.1851968
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:50:50	4.8	9.3	22.37444667	114.1851968
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:50:51	5.4	14.8	22.37444667	114.1851968
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:50:52	5.3	20.1	22.37444483	114.1852058
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:51:25	4.5	8.3	22.3733805	114.1855308
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:51:26	5.2	13.6	22.3733805	114.1855308
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:51:27	5.7	19.4	22.37337417	114.1855343
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:51:28	4.1	23.6	22.37335683	114.18554
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:52:40	4.4	12.8	22.37013433	114.1854998
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:52:41	5.6	18.4	22.370144	114.1855047
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:52:42	4.3	22.7	22.37016067	114.1855128
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:53:10	5.2	13.5	22.37098833	114.1859617
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:53:11	5.2	18.8	22.37098417	114.1859973
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:53:51	4.7	14.4	22.37001217	114.1877232
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:53:52	4	18.5	22.370003	114.1877133
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:54:15	4.7	10.9	22.36975433	114.1874488
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:54:16	4.9	15.8	22.36975133	114.187446
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:54:17	4.5	20.4	22.36974183	114.1874367
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:56:46	4.7	9.6	22.374181	114.185321
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:56:47	5.7	15.3	22.374181	114.185321
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:56:48	4.7	20	22.37419017	114.185323
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:57:15	5.3	5.3	22.37444367	114.1863748
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:57:16	4.5	9.9	22.37444367	114.1863748
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:57:17	5.4	15.4	22.37444383	114.1863763
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:57:18	5.4	20.9	22.37444367	114.1863868
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:57:48	5.5	10.7	22.37485217	114.1877645
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:57:49	5.6	16.3	22.37485217	114.1877645

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:57:50	5	21.4	22.374858	114.1877725
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:58:48	5	10.4	22.3759555	114.1894373
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:58:49	4.1	14.6	22.37597517	114.1894483
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:59:42	4.6	8	22.37611867	114.1915673
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:59:43	5	13	22.37611867	114.1915673
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:59:44	6	19.1	22.376121	114.1915728
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 21:59:45	4.2	23.4	22.37612683	114.1915898
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:00:25	4.8	15.7	22.3764695	114.1937343
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:01:11	4.7	10.1	22.377282	114.1947717
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:01:12	5	15.1	22.3772825	114.1947758
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:01:13	5	20.2	22.37728933	114.1947863
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:02:14	5.4	9.3	22.37780167	114.195565
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:02:15	5.6	15	22.37780167	114.195565
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:02:16	5.1	20.1	22.3778065	114.195574
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:03:05	4.1	7	22.37873833	114.1977357
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:03:06	5	12	22.37873833	114.1977357
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:03:07	5.6	17.7	22.3787335	114.1977353
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:03:08	4.3	22.1	22.37872217	114.197746
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:04:09	5.4	5.4	22.37840467	114.1990193
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:04:10	5.9	11.4	22.37840467	114.1990193
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:04:11	6.3	17.7	22.37840467	114.1990193
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:04:12	4.6	22.3	22.37840933	114.1990168
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:04:27	4.1	6.2	22.3782385	114.1996945
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:04:28	5.2	11.5	22.378241	114.1996955
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:04:29	5.5	17	22.3782425	114.1996992
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:04:30	5.1	22.1	22.3782395	114.1997117
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:04:55	4.6	7.5	22.37800317	114.2006877
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:04:56	5.1	12.6	22.37800317	114.2006877
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:04:57	5.5	18.1	22.37800117	114.200695
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:04:58	4.4	22.6	22.37799333	114.200713
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:06:25	5.4	6.9	22.37876417	114.204329
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:06:26	5.2	12.1	22.37876417	114.204329
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:06:27	4.1	16.2	22.378768	114.2043367
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:06:32	4.8	25.2	22.37889467	114.2044572
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:07:59	5.4	5.4	22.3813755	114.2026483
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:08:00	5.2	10.6	22.3813755	114.2026483
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:08:01	5.5	16.2	22.38136967	114.2026487
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:08:02	5.2	21.4	22.38137717	114.2026388
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:08:36	4.5	8.2	22.38299917	114.2016792
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:08:37	5.1	13.4	22.38299917	114.2016792
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:08:38	5.7	19.1	22.38300333	114.2016798
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:08:39	4.3	23.5	22.38302067	114.2016812
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:09:36	6.9	6.9	22.38625217	114.2026395
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:09:37	6.4	13.3	22.38625217	114.2026395
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:09:38	6.3	19.7	22.38625467	114.2026422
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:10:01	4.8	9.1	22.386709	114.2030617
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:10:02	5	14.2	22.38670917	114.2030618
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:10:03	5.8	20	22.38671467	114.2030672
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:10:57	6.1	6.1	22.38773467	114.204246
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:10:58	5.2	11.3	22.38773467	114.204246
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:10:59	5.5	16.8	22.38773483	114.2042462

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:11:53	5.3	6.8	22.38709883	114.205403
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:11:55	5.7	17.8	22.38709683	114.2054152
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:11:56	5	22.8	22.3870895	114.2054188
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:13:13	4.8	4.8	22.3859275	114.2066378
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:13:14	5.9	10.8	22.3859275	114.2066378
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:13:15	5.8	16.6	22.3859275	114.2066378
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:13:16	4.8	21.4	22.38592033	114.2066462
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:15:00	5.9	12.4	22.38334517	114.2099007
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:15:01	5.8	18.3	22.383345	114.2099008
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:16:25	4.7	11.7	22.383369	114.2139492
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:16:26	4.9	16.7	22.3833685	114.2139453
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:16:27	4.6	21.4	22.38336667	114.2139577
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:17:00	5.2	14.9	22.382906	114.2149963
76129	[redacted]	STD	2018-07-26	N281	UW3919	82K	MEILAM	2018-07-26 21:38:44	2018-07-26 21:40:00	2018-07-26 22:17:01	4.7	19.7	22.3828975	114.2150038
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-26 21:38:44	NULL	2018-07-26 22:30:05	5.2	19.6	22.38200817	114.2178562
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-26 21:38:44	NULL	2018-07-26 22:30:06	5.5	25.1	22.381992	114.2178372
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-26 21:38:44	NULL	2018-07-26 22:30:07	4.3	29.5	22.38197717	114.2178062
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-26 21:38:44	NULL	2018-07-26 22:31:06	6.1	12.7	22.38306967	114.2145795
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-26 21:38:44	NULL	2018-07-26 22:31:07	5.7	18.5	22.383072	114.2145757
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-26 21:38:44	NULL	2018-07-26 22:31:08	5	23.5	22.3830795	114.2145647
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-26 21:38:44	NULL	2018-07-26 22:31:48	5.7	9.7	22.38293917	114.2117537
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-26 21:38:44	NULL	2018-07-26 22:31:49	5.7	15.4	22.38293917	114.2117537
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-26 21:38:44	NULL	2018-07-26 22:31:50	5.4	20.9	22.38293683	114.2117487
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-26 21:38:44	NULL	2018-07-26 22:31:51	4	25	22.3829325	114.2117285
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-26 21:38:44	NULL	2018-07-26 22:33:23	6.6	11.3	22.383079	114.2102958
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-26 21:38:44	NULL	2018-07-26 22:33:25	4.2	21.7	22.38308133	114.2102923
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-26 21:38:44	NULL	2018-07-26 22:37:57	5.2	23.4	22.41702483	114.2313665
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-26 21:38:44	NULL	2018-07-26 22:38:43	6.3	13.6	22.41957633	114.2322803
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-26 21:38:44	NULL	2018-07-26 22:38:44	6.6	20.2	22.41959083	114.2322818
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-26 21:38:44	NULL	2018-07-26 22:38:45	5	25.2	22.41959083	114.2322818
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-26 21:38:44	NULL	2018-07-26 22:38:46	4.1	29.4	22.41962117	114.2322843
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-26 21:38:44	NULL	2018-07-26 22:40:49	5.5	9.7	22.42399467	114.2374728
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-26 21:38:44	NULL	2018-07-26 22:40:50	5.1	14.8	22.42400133	114.2374737
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-26 23:50:40	5.7	8.7	22.42396417	114.2380653
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-26 23:50:41	5.4	14.2	22.42395983	114.2380763
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-26 23:50:42	5.7	20	22.42395583	114.2380965
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-26 23:50:43	5	25	22.42394917	114.2381313
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-26 23:51:40	7.2	7.2	22.42510317	114.2399663
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-26 23:51:41	6.6	13.9	22.42511167	114.2399645
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-26 23:51:42	5.2	19.2	22.42512267	114.2399623
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-26 23:51:44	4.3	27.5	22.42519117	114.2399415
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-26 23:51:45	4.3	31.8	22.425244	114.2399255
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-26 23:52:17	5	7.2	22.42625217	114.239219
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-26 23:52:18	5	12.3	22.42625733	114.2392182
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-26 23:52:19	5	17.3	22.4262635	114.2392027
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-26 23:52:20	5.1	22.4	22.426269	114.2391727
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-26 23:54:03	6.7	6.7	22.42535167	114.2343258
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-26 23:54:04	5.9	12.6	22.42535117	114.2343232
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-26 23:54:05	6.1	18.8	22.42534983	114.2343125
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-26 23:54:06	4.3	23.1	22.4253455	114.2342837
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-26 23:56:05	6.6	11.7	22.4226255	114.227953

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-26 23:56:06	6	17.7	22.4226185	114.2279485
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-26 23:57:20	4.2	9	22.41803467	114.2307212
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-26 23:57:21	5	14	22.41803117	114.2307282
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-26 23:57:22	4.8	18.8	22.4180225	114.2307455
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-26 23:59:41	5.4	5.4	22.4067185	114.222447
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-26 23:59:42	5.6	11.1	22.40671833	114.222447
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-26 23:59:43	5.9	17.1	22.40671017	114.2224405
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-26 23:59:44	4.3	21.4	22.40668783	114.2224248
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:04:17	4.6	8.7	22.39139667	114.2063097
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:04:18	5.3	14	22.391391	114.206303
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:04:19	5.9	20	22.39137917	114.2062867
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:05:13	4.9	13.4	22.3885195	114.201852
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:05:14	5.4	18.8	22.38850933	114.2018347
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:05:15	4.4	23.3	22.38849267	114.2018105
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:06:42	4.4	6.2	22.38197133	114.1954902
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:06:43	4.9	11.2	22.38197133	114.1954905
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:06:44	5.1	16.4	22.381964	114.1954827
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:06:45	5.2	21.6	22.38194717	114.1954647
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:07:06	4.2	25.1	22.38075967	114.1944823
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:07:37	6	8.5	22.379236	114.1964685
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:07:38	6.2	14.8	22.3792335	114.196475
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:07:39	5.2	20	22.37922483	114.1964903
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:08:18	6	9.4	22.37810533	114.1961038
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:08:19	5.7	15.2	22.37810283	114.1961005
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:08:20	5.1	20.3	22.37809167	114.1960873
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:08:32	4.6	23.9	22.37775917	114.1956458
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:08:48	4.1	7.5	22.377399	114.1951932
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:08:49	5	12.6	22.37739783	114.1951892
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:08:50	5.5	18.2	22.37738883	114.195172
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:10:15	4.7	9	22.37585483	114.1928822
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:10:16	4.9	14	22.3758535	114.1928812
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:10:17	4.1	18.1	22.37584433	114.1928653
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:10:42	4.8	4.8	22.3755315	114.19211
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:10:43	4.2	9	22.37552917	114.1921042
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:10:44	4.9	14	22.3755255	114.1920947
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:10:45	5.6	19.6	22.37552133	114.192073
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:11:15	4.3	25.4	22.37599683	114.189648
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:11:37	4.8	11.8	22.37512417	114.1884658
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:11:38	5.3	17.1	22.37511667	114.1884535
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:11:39	4.7	21.8	22.37510317	114.1884307
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:13:12	4.6	18.3	22.37142983	114.1790917
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:13:13	4.8	23.2	22.37140467	114.1790725
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:14:24	5.7	9.6	22.36807767	114.1746735
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:14:25	6.1	15.8	22.368073	114.174672
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:14:26	4.9	20.7	22.36805717	114.1746613
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:15:29	5	10.9	22.364165	114.17197
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:15:31	4.7	21.1	22.36414417	114.1719403
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:16:26	4	24.4	22.3633565	114.1713705
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:17:07	4.7	12.3	22.3638225	114.17381
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:17:08	5.8	18.2	22.36383033	114.173822
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:17:09	5.2	23.4	22.363846	114.1738455

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:17:44	4.6	6.8	22.365381	114.1752123
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:17:45	5.6	12.4	22.36538383	114.1752137
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:17:46	6	18.5	22.3653915	114.1752257
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:17:47	5.2	23.7	22.36540967	114.1752457
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:18:34	4.1	8.2	22.3662985	114.1763798
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:18:35	4.9	13.2	22.36629783	114.1763827
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:19:24	5.5	10.6	22.36710367	114.1761848
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:19:25	5.4	16	22.36711817	114.1761803
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:20:23	5.1	10	22.36867017	114.1784975
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:20:24	5.5	15.6	22.3686745	114.1785075
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:20:25	5.5	21.1	22.36868333	114.1785287
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:20:56	5.3	5.3	22.36928267	114.1800617
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:20:57	5.4	10.8	22.36928267	114.180062
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:20:58	5.7	16.6	22.3692875	114.1800722
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:20:59	4.7	21.3	22.36929717	114.1800943
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:27:06	8.2	11.2	22.34021933	114.1794388
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:27:07	7.5	18.8	22.34021467	114.1794383
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:27:08	5.1	23.9	22.34019217	114.1794385
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:28:23	4.8	7.2	22.33431983	114.1790195
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:28:24	4.9	12.1	22.33431533	114.179019
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:28:25	5.4	17.6	22.334301	114.1790167
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:28:26	4.9	22.5	22.33427417	114.1790142
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:29:07	7.1	7.1	22.33273233	114.1788718
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:29:08	5.4	12.6	22.33272817	114.1788683
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:29:09	5.8	18.5	22.33271617	114.1788672
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:29:10	4.4	22.9	22.3326885	114.1788663
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:29:59	5.5	10.1	22.33052267	114.178733
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:30:01	5.3	21	22.3304985	114.1787308
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:31:53	4.8	6.2	22.32144733	114.1782883
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:31:54	5.1	11.3	22.32144567	114.178288
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:31:55	5.8	17.2	22.32143417	114.1782855
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:31:56	4.8	22	22.3214115	114.1782758
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:33:05	6	10.1	22.320836	114.1772962
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:33:06	5.8	15.9	22.320833	114.1772888
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:33:07	5.2	21.2	22.320818	114.1772748
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:34:02	4.5	7.5	22.31769567	114.1750132
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:34:03	5	12.5	22.3176925	114.1750108
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:34:04	5.6	18.2	22.31767983	114.1750017
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:34:05	4.9	23.1	22.31765717	114.1749848
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:34:49	5.6	10.4	22.31672133	114.1742132
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:34:50	6.1	16.6	22.31671283	114.174215
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:34:51	5.1	21.7	22.31668933	114.1742142
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:35:55	5.5	10.6	22.31399117	114.1721778
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:35:56	6	16.7	22.3139855	114.1721753
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:35:57	5	21.7	22.31396717	114.1721618
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:36:36	4.9	4.9	22.31298333	114.170891
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:36:37	5.9	10.9	22.31298333	114.170891
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:36:38	5.1	16	22.31298133	114.1708843
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:36:43	4.1	25.6	22.3128445	114.1707508
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:37:09	5.8	7.4	22.3119155	114.1710687
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:37:10	5.5	13	22.31191367	114.1710665

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:37:11	5.8	18.8	22.311901	114.1710588
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:37:12	4.3	23.2	22.31187567	114.1710665
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:38:27	4.9	6.3	22.306784	114.171429
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:38:28	4.9	11.3	22.30678217	114.171433
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:38:29	5.6	17	22.30677017	114.1714343
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:39:25	4.6	4.6	22.3060335	114.1714173
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:39:26	4.4	9	22.3060335	114.1714173
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:39:27	4.8	13.9	22.306026	114.1714168
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:40:09	5.3	6.4	22.3035595	114.1715765
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:40:10	5.3	11.7	22.30355433	114.1715797
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:40:11	5.7	17.5	22.30354033	114.1715798
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:40:12	4.2	21.8	22.3035105	114.1715713
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:41:27	6.6	12.2	22.299878	114.171978
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:41:28	6.6	18.8	22.29986983	114.1719745
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:41:29	4.6	23.5	22.299845	114.1719762
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:42:26	5.4	5.4	22.2981905	114.1721083
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:42:27	6.1	11.6	22.2981905	114.1721083
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:42:28	6.6	18.2	22.29818283	114.1721195
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:42:29	5.2	23.4	22.29815917	114.1721228
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:43:06	5.8	10.6	22.29656417	114.1721325
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:43:07	6.4	17	22.29655417	114.1721272
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:43:08	5.4	22.5	22.29652983	114.1721252
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:45:09	5.4	9.2	22.29920483	114.1756593
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:45:10	6.2	15.4	22.2992055	114.1756668
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:45:11	5.8	21.2	22.2992205	114.1756782
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:45:47	5.4	12.5	22.30002983	114.1759473
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:45:48	5.3	17.8	22.30004433	114.1759567
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:45:49	4.6	22.5	22.30006983	114.175972
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:46:29	5.3	7.8	22.30245233	114.1768125
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:46:31	5.7	19.1	22.3024755	114.1768408
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-26 23:45:19	2018-07-26 23:50:00	2018-07-27 00:46:32	4.3	23.4	22.30250333	114.1768562
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-27 01:19:08	NULL	2018-07-27 01:19:36	4.4	11.2	22.30383483	114.1820342
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-27 01:19:08	NULL	2018-07-27 01:19:37	4.3	15.5	22.3038335	114.182043
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-27 01:19:08	NULL	2018-07-27 01:19:38	4	19.6	22.303832	114.1820627
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-27 01:19:08	NULL	2018-07-27 01:19:56	4.4	18.7	22.3037005	114.1828838
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-27 01:19:08	NULL	2018-07-27 01:19:57	4.4	23.2	22.3036695	114.1828993
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:21:37	7.1	10.9	22.30248267	114.1782992
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:21:38	7.2	18.1	22.30248983	114.178277
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:21:39	4.8	22.9	22.30249983	114.1782485
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:22:31	4.3	20.8	22.2994455	114.175943
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:23:01	5.7	17.5	22.29856817	114.1758155
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:23:02	5.2	22.7	22.29854083	114.1758082
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:23:41	4.8	18.5	22.29564817	114.1752528
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:23:42	4.2	22.8	22.295618	114.175246
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:24:45	4.1	11.7	22.29527533	114.1722972
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:24:46	4.2	16	22.29529067	114.1722983
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:24:47	4.9	21	22.295316	114.1723002
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:25:08	5.2	5.2	22.2962305	114.1723328
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:25:09	5.7	11	22.29623067	114.1723328
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:25:10	4	15	22.29624	114.1723303
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:25:49	4.3	10.6	22.29782333	114.1723757

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:26:10	5.7	13.3	22.29797983	114.172388
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:26:11	5.7	19	22.29799517	114.1723485
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:26:50	4.3	20	22.30041133	114.1720595
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:27:18	4.7	12.9	22.3018385	114.1718747
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:27:19	5.5	18.5	22.30185483	114.1718727
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:27:20	4.7	23.3	22.301883	114.171869
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:28:09	5.4	10.1	22.30299217	114.1717763
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:28:10	5.5	15.6	22.3029965	114.1717693
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:28:11	5	20.7	22.30301583	114.1717683
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:28:42	4.7	6.2	22.3042635	114.1717297
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:28:43	5.4	11.7	22.30426583	114.1717298
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:28:44	5.5	17.2	22.30427717	114.1717328
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:29:20	5.6	10	22.30474217	114.1717837
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:29:21	6.2	16.2	22.30474683	114.1717875
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:29:22	5.8	22.1	22.304766	114.1717897
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:30:03	4.9	23	22.30694417	114.1716052
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:30:26	5.9	8	22.30778633	114.1714835
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:30:27	6	14	22.30779033	114.1714852
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:30:28	5.1	19.1	22.30780517	114.1714835
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:30:59	4.2	8.2	22.309379	114.1712783
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:31:01	4.8	18.1	22.30940183	114.1712658
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:31:14	4.8	6.8	22.30974917	114.1711857
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:31:15	5.3	12.1	22.309754	114.1711842
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:31:16	6	18.1	22.30976917	114.1711813
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:31:17	4.5	22.7	22.309797	114.1711775
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:32:24	5	6.4	22.31418167	114.170609
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:32:25	4.3	10.7	22.31418467	114.170613
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:32:26	4.2	15	22.314196	114.1706118
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:32:27	4.9	19.9	22.31421883	114.170609
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:33:01	4.2	6.5	22.31592117	114.1702038
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:33:02	4.5	11	22.31592333	114.1702035
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:33:03	5.3	16.4	22.315936	114.1702072
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:33:04	4.7	21.1	22.31595883	114.1702042
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:33:44	4.8	11.1	22.31801183	114.1696798
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:33:45	5.5	16.6	22.31802417	114.1696795
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:33:46	4.9	21.5	22.31804717	114.1696742
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:34:43	5.1	7	22.31890183	114.1695103
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:37:17	6.1	6.1	22.32074333	114.1689657
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:37:18	6.1	12.2	22.32074333	114.1689658
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:37:19	6.1	18.4	22.320747	114.1689762
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:37:20	4.3	22.8	22.32075117	114.1690032
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:39:09	6.3	12.1	22.32100233	114.170421
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:39:10	4.8	17	22.321008	114.1704308
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:39:11	4.6	21.7	22.321015	114.1704535
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:40:25	4.6	10.3	22.32013083	114.1738238
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:40:26	5.1	15.4	22.320133	114.1738357
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:40:27	4.2	19.7	22.320142	114.1738577
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:41:58	5.5	5.5	22.3210515	114.1769565
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:41:59	5.6	11.2	22.3210515	114.1769565
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:42:01	4.1	21.3	22.321068	114.176984
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:43:39	4.3	4.3	22.33009517	114.1785768

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:43:40	5.5	9.8	22.33009517	114.1785768
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:43:41	5.5	15.4	22.330113	114.1785575
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:43:42	4.9	20.4	22.33013583	114.1785493
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:44:19	4.8	21.2	22.33238717	114.1787017
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:44:55	5.6	11.6	22.33396533	114.1788025
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:44:56	5.4	17	22.33397183	114.1788022
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:44:57	4.5	21.6	22.33399467	114.1788032
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:45:27	5.1	10.3	22.33590367	114.1788963
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:45:28	5.3	15.6	22.335912	114.1788983
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:45:29	4.1	19.8	22.3359325	114.1789043
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:46:21	5.8	9.4	22.33891383	114.1790705
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:46:22	6.1	15.5	22.33891717	114.1790707
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:46:23	4.9	20.4	22.33893567	114.1790715
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:52:49	4.8	7.1	22.3684765	114.1780947
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:52:50	4.1	11.2	22.3684735	114.1780902
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:52:51	5.2	16.5	22.3684675	114.1780783
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:52:52	4.3	20.8	22.368457	114.1780547
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:53:40	4.9	10.2	22.36751683	114.1765003
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:53:41	4.4	14.6	22.36750983	114.1764933
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:53:52	4.3	18.5	22.367264	114.1762303
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:55:02	5.4	11.8	22.36648	114.1765688
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:55:03	5	16.9	22.36647133	114.1765753
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:55:38	5.1	5.1	22.36544867	114.175373
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:55:39	4.2	9.4	22.3654485	114.175373
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:55:40	4.8	14.2	22.36544333	114.1753658
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:55:41	5.2	19.4	22.36543267	114.1753485
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:56:36	5.9	15.1	22.36288117	114.17247
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:56:37	5.7	20.8	22.3628805	114.1724502
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:56:38	4	24.8	22.36287917	114.1724153
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:57:32	4.3	6.6	22.36336233	114.171377
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:57:33	4.1	10.8	22.36336167	114.1713785
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:57:34	4.4	15.2	22.36336917	114.1713667
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:58:34	5.1	5.1	22.36749733	114.174298
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:58:35	4.7	9.8	22.36749733	114.174298
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:58:36	5.5	15.4	22.36750533	114.1743002
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 01:58:37	4.9	20.3	22.3675245	114.1743072
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:00:15	4.9	6.2	22.37264	114.1804285
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:00:16	4.6	10.9	22.3726455	114.1804353
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:00:17	5.6	16.5	22.3726515	114.1804457
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:00:18	5	21.6	22.37266233	114.180468
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:01:21	4.5	9.7	22.37451967	114.1851295
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:01:22	5	14.8	22.3745185	114.1851372
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:01:23	5.3	20.2	22.374515	114.18516
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:01:52	4.3	6.6	22.37447467	114.1864755
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:01:53	4.7	11.4	22.37447667	114.1864793
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:01:54	4.8	16.2	22.3744775	114.1864918
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:01:55	5.5	21.7	22.37447617	114.1865167
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:02:18	4.7	15.4	22.37496883	114.1879495
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:02:19	5.2	20.7	22.37497933	114.1879708
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:03:20	4.5	7.5	22.37608433	114.1895863
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:03:21	4.7	12.3	22.3760875	114.1895895

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:04:13	4.9	7.9	22.3759375	114.19248
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:04:14	4.4	12.3	22.375934	114.1924815
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:04:49	4.4	7.5	22.37653267	114.1938095
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:04:50	5.4	13	22.37653517	114.193813
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:04:51	5.8	18.9	22.37654433	114.1938258
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:04:52	4.2	23.1	22.37656083	114.1938503
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:05:20	4.1	6.6	22.37761	114.1952448
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:05:21	4.7	11.3	22.37761283	114.19525
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:05:22	5.5	16.9	22.377619	114.1952623
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:05:23	4.6	21.5	22.37763067	114.195285
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:06:33	4.9	9.7	22.38071283	114.1944418
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:06:34	5.7	15.4	22.38072083	114.1944357
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:06:35	4.8	20.3	22.38073633	114.194417
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:07:15	4.3	10.5	22.382506	114.1956842
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:07:16	5.1	15.7	22.38251483	114.1956942
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:07:17	5.3	21	22.38252917	114.195712
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:07:37	6.2	7.5	22.38300817	114.1962038
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:07:38	5.8	13.3	22.3830105	114.196207
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:07:39	6.8	20.2	22.38302	114.196216
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:08:20	4.9	8.6	22.38498633	114.198087
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:08:21	4.6	13.2	22.38499183	114.1980915
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:08:22	6	19.3	22.38500317	114.1981058
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:08:23	4.3	23.6	22.38502	114.1981322
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:09:10	5.4	9.6	22.38693967	114.2000458
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:09:11	6.1	15.7	22.38694417	114.2000507
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:09:12	5.1	20.8	22.386958	114.2000623
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:10:08	5.6	5.6	22.38924117	114.202741
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:10:09	6.2	11.8	22.38924117	114.202741
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:10:10	5.9	17.8	22.3892435	114.2027497
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:10:11	4.8	22.6	22.38925083	114.2027748
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:13:57	4.6	4.6	22.40615967	114.2218972
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:13:58	5	9.6	22.40615967	114.2218972
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:13:59	5.3	14.9	22.4061665	114.2219012
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:15:07	4.3	5.5	22.40641417	114.2220625
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:15:08	5.4	10.9	22.40641383	114.222063
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:15:09	5.4	16.4	22.40642167	114.222068
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:16:05	4.3	7.9	22.40542783	114.2240267
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:16:06	5.1	13	22.40542583	114.2240243
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:16:07	5.2	18.3	22.40541733	114.2240112
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:16:54	4.6	10.2	22.40636517	114.2224522
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:16:55	5.4	15.6	22.40637183	114.2224427
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:16:56	5.4	21.1	22.40638517	114.2224235
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:19:32	4.1	28.7	22.41810033	114.2303462
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:20:57	4.2	8.2	22.42342667	114.2281817
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:20:58	5	13.3	22.423436	114.2281852
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:20:59	5.8	19.2	22.423451	114.2281988
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:22:24	5.7	5.7	22.42417317	114.2292082
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:22:25	7.4	13.2	22.42417317	114.2292082
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:22:26	5.7	18.9	22.42416617	114.2292085
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:22:27	4.7	23.6	22.42417083	114.2292262
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:23:18	5.2	7.3	22.42486283	114.2318115

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:23:19	5.3	12.7	22.4248645	114.2318142
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:23:20	5.8	18.5	22.42486817	114.2318288
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:23:21	4.9	23.5	22.42487433	114.2318572
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:24:03	5.4	5.4	22.42536267	114.2336988
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:24:04	4.8	10.2	22.42536417	114.2337
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:24:05	5.5	15.8	22.42536717	114.23371
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:24:06	4.1	19.9	22.42537617	114.2337325
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:25:25	4.5	14.1	22.42586733	114.239852
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:26:01	4.9	14.7	22.42558133	114.2399942
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	HH.STN	2018-07-27 01:19:08	2018-07-27 01:20:00	2018-07-27 02:26:02	4.5	19.3	22.4255615	114.240004
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-27 01:19:08	NULL	2018-07-27 02:29:40	4	9.4	22.4233375	114.237219
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:00:14	4	10.9	22.4235865	114.2373155
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:01:48	6.6	9.2	22.42519683	114.2399453
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:01:49	6.4	15.7	22.42519883	114.2399445
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:01:50	5.4	21.1	22.42521583	114.2399383
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:01:51	4.6	25.8	22.42524783	114.2399293
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:01:52	4.7	30.5	22.42529367	114.239915
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:03:06	4.3	8.8	22.425322	114.2343453
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:03:08	5.9	18.7	22.425316	114.234317
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:03:09	4.6	23.3	22.42530967	114.2342862
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:03:53	4	10.5	22.42431083	114.2315087
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:03:54	4.7	15.2	22.42430817	114.231496
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:05:03	4.1	7.8	22.4240555	114.2298783
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:05:04	5.1	13	22.424051	114.2298733
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:05:05	5.3	18.3	22.42404033	114.2298573
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:05:06	4.2	22.5	22.42402883	114.2298282
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:06:21	5.7	8.6	22.42251417	114.2279905
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:06:22	5.2	13.9	22.42251083	114.2279885
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:06:27	4.3	25.7	22.42232967	114.227989
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:06:59	4.4	19.2	22.4202235	114.2295902
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:07:46	4.3	11.6	22.4181115	114.2306533
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:07:47	5	16.6	22.4181045	114.2306667
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:10:43	4.8	6.4	22.40669167	114.2224445
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:10:44	5.3	11.8	22.40667933	114.222437
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:10:45	5.3	17.2	22.40666667	114.2224297
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:11:34	4.6	7.1	22.405376	114.2238997
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:11:35	5.1	12.2	22.40537383	114.2238957
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:11:36	5.3	17.6	22.40536617	114.2238833
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:15:06	4.7	4.7	22.3928665	114.207725
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:15:07	6.1	10.9	22.3928665	114.207725
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:15:08	5.5	16.5	22.39286067	114.2077198
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:15:09	5.9	22.4	22.39284483	114.2077057
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:15:57	5.6	7.1	22.390901	114.2058008
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:15:58	6.1	13.2	22.39090117	114.2057963
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:15:59	6	19.3	22.39089367	114.205786
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:16:53	4.5	5.6	22.38850567	114.2018438
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:16:55	5.5	16.2	22.38849983	114.2018337
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:16:56	5	21.2	22.38848933	114.2018142
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:17:27	5.7	11.6	22.38718783	114.2004912
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:17:28	6.1	17.7	22.38718283	114.2004833
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:17:29	4.6	22.3	22.387166	114.200466

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:18:41	4.7	6.7	22.38196917	114.1954675
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:18:42	5.1	11.8	22.38196517	114.1954662
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:18:43	5.6	17.4	22.38195567	114.1954577
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:18:44	4.9	22.4	22.38193783	114.195439
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:19:36	6	10.4	22.379188	114.196484
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:19:37	6.5	17	22.379182	114.1964927
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:20:13	5	8.8	22.37793	114.1958762
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:20:14	6.1	14.9	22.37792783	114.195874
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:20:15	6.1	21	22.37791767	114.1958597
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:20:37	5	11.4	22.3774065	114.1951833
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:20:38	5.6	17	22.37740067	114.1951715
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:20:39	4.9	22	22.37738917	114.195149
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:22:12	6.5	12.1	22.375917	114.1898893
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:22:13	5.5	17.6	22.3759225	114.1898815
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:22:56	5.7	11.7	22.3751565	114.1885417
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:22:57	6.3	18.1	22.37514933	114.1885292
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:22:58	4.4	22.6	22.37513533	114.1885055
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:23:31	4.4	9.7	22.37434833	114.1870963
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:23:32	6.4	16.1	22.374346	114.1870865
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:23:33	4.6	20.7	22.37434133	114.187065
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:24:33	7.2	10.5	22.374258	114.1857697
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:24:34	6.6	17.2	22.3742595	114.1857612
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:24:35	4.5	21.7	22.3742635	114.1857383
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:25:40	4.5	6.8	22.3721375	114.1801433
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:25:41	5.1	11.9	22.37213617	114.1801392
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:25:42	5.8	17.8	22.37213033	114.1801277
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:25:43	5	22.8	22.37212017	114.1801022
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:26:54	4.6	9.7	22.368496	114.1750662
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:26:55	5.4	15.1	22.36848983	114.1750612
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:26:56	5.2	20.3	22.36847383	114.1750485
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:28:38	5.4	12.8	22.36385533	114.1738797
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:28:39	6.2	19.1	22.363866	114.1738918
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:28:40	4.1	23.3	22.363883	114.1739203
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:29:10	4.1	7.3	22.36534933	114.175241
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:29:11	5.2	12.6	22.36535333	114.1752448
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:29:12	5.8	18.4	22.36536433	114.1752545
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:29:13	5.2	23.7	22.36538467	114.1752732
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:29:28	5.6	19.2	22.36628117	114.1763483
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:30:03	6.4	13.2	22.367159	114.1762122
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:30:04	5.8	19	22.3671705	114.1762063
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:30:47	4.6	6.3	22.368695	114.178481
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:30:48	5.1	11.5	22.36869883	114.1784847
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:30:49	5.6	17.1	22.36870517	114.1784962
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:30:50	5.4	22.6	22.3687155	114.1785193
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:31:22	5.3	13	22.36931133	114.1800182
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:31:23	6.1	19.1	22.36931617	114.1800307
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:37:36	8	14.4	22.34019733	114.1794077
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:37:37	6.2	20.7	22.34016867	114.1794002
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:37:38	4.6	25.4	22.34012967	114.1793938
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:38:39	6.5	7.6	22.33931117	114.1793143
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:38:40	5.9	13.5	22.33930867	114.1793143

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:38:41	5.7	19.3	22.33929383	114.1793133
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:38:42	4.7	24.1	22.339264	114.1793113
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:39:37	5.8	5.8	22.3342665	114.178954
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:39:38	5.8	11.7	22.33426633	114.1789538
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:39:39	5.6	17.3	22.3342535	114.1789532
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:39:40	5.1	22.4	22.33422683	114.178952
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:40:23	5.5	9.2	22.332808	114.1789037
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:40:24	4.6	13.8	22.332802	114.178903
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:40:25	5.7	19.6	22.33278367	114.1789032
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:40:56	4.3	7	22.33123533	114.1788215
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:40:57	5.1	12.2	22.3312335	114.1788213
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:40:58	5.4	17.6	22.33122017	114.1788173
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:40:59	4.7	22.3	22.33119433	114.1788092
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:41:13	5.5	5.5	22.33059967	114.1787398
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:41:14	6.5	12	22.33059967	114.1787398
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:41:15	5.9	17.9	22.330592	114.1787388
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:41:16	4.7	22.7	22.33056683	114.1787375
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:42:56	5.1	10.4	22.32177633	114.1781725
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:42:57	5.2	15.6	22.3217685	114.1781762
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:42:58	5	20.7	22.32174733	114.1781858
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:43:28	8.1	8.1	22.32137833	114.1782437
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:43:29	7.7	15.8	22.32137783	114.1782433
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:43:31	4.7	25.7	22.3213445	114.1782058
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:44:46	6.5	6.5	22.320772	114.177334
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:44:47	6.1	12.7	22.320772	114.177334
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:44:48	5.4	18.1	22.320771	114.1773293
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:44:49	4.8	22.9	22.320754	114.1773118
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:45:40	4.8	9.2	22.31767417	114.1749442
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:45:41	5.5	14.8	22.31766917	114.1749373
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:45:42	5.6	20.4	22.317655	114.1749227
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:46:27	5.5	5.5	22.31661533	114.1741263
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:46:28	6.4	11.9	22.31661533	114.1741263
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:46:29	6.3	18.2	22.31660883	114.1741233
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:47:17	4.9	10.1	22.314393	114.1724643
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:47:18	4.2	14.3	22.31438683	114.1724588
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:47:37	5.7	12.3	22.31404417	114.172193
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:47:38	6.2	18.5	22.3140345	114.1721855
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:47:39	4.7	23.3	22.31401283	114.1721702
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:48:02	4.3	7.1	22.31338167	114.1716962
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:48:03	5.1	12.3	22.31337867	114.1716935
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:48:04	5.7	18	22.31336767	114.1716837
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:48:05	4.6	22.6	22.31334667	114.1716667
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:48:48	5.1	5.1	22.31222183	114.1708865
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:48:56	4.5	21.1	22.31207633	114.1709315
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:50:01	4.7	10.9	22.30671317	114.1715948
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:50:02	5.5	16.5	22.3066895	114.1715812
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:50:03	4.4	20.9	22.3066605	114.1715638
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:51:25	5	25.3	22.29961217	114.17202
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:52:07	5.2	10.1	22.296591	114.172175
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:52:08	5.8	16	22.29658233	114.1721713
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:52:09	5.5	21.5	22.29656083	114.1721667

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:54:11	5.6	9.1	22.29914717	114.1756902
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:54:12	5.1	14.2	22.29915233	114.1756943
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:54:13	5.8	20.1	22.29917067	114.1756972
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:54:41	5	10.9	22.300267	114.1760173
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:54:42	5.9	16.9	22.30027883	114.1760222
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:54:43	4.9	21.9	22.30030383	114.1760318
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:55:26	8	9.4	22.30263267	114.1768825
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:55:27	7.2	16.7	22.30263833	114.1768888
76129	[redacted]	STD	2018-07-27	N281	UW3919	N281	KAMYNG	2018-07-27 02:59:44	2018-07-27 03:00:00	2018-07-27 03:55:28	4.4	21.1	22.30265167	114.1769038
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-27 02:59:44	NULL	2018-07-27 04:11:20	4.2	6.6	22.303803	114.1825037
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-27 02:59:44	NULL	2018-07-27 04:12:25	5.6	11.5	22.30209717	114.1836307
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-27 02:59:44	NULL	2018-07-27 04:12:26	5.6	17.2	22.30209567	114.1836417
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-27 02:59:44	NULL	2018-07-27 04:16:39	5.1	10.6	22.3300135	114.1785947
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-27 02:59:44	NULL	2018-07-27 04:16:40	5.1	15.8	22.33002317	114.1785952
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-27 02:59:44	NULL	2018-07-27 04:16:41	4.2	20	22.33005867	114.1785932
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-27 02:59:44	NULL	2018-07-27 04:17:16	5.6	11.3	22.33228533	114.1787305
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-27 02:59:44	NULL	2018-07-27 04:17:17	5.1	16.4	22.3322955	114.178731
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-27 02:59:44	NULL	2018-07-27 04:17:18	5	21.4	22.33231917	114.1787327
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-27 02:59:44	NULL	2018-07-27 04:17:55	4.3	8.3	22.333768	114.1788237
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-27 02:59:44	NULL	2018-07-27 04:17:56	4.4	12.8	22.333776	114.1788242
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-27 02:59:44	NULL	2018-07-27 04:17:57	5.7	18.6	22.3337895	114.1788255
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-27 02:59:44	NULL	2018-07-27 04:17:58	4.5	23.1	22.333816	114.1788265
76129	[redacted]	STD	NULL	NULL	UW3919	NULL	NULL	2018-07-27 02:59:44	NULL	2018-07-27 04:27:08	4.7	20.7	22.38360417	114.2073202
76129	[redacted]	STD	NULL	NULL	UN 592	NULL	NULL	2018-07-27 20:49:10	NULL	2018-07-27 20:51:38	6.1	17.7	22.3839705	114.2082595
76129	[redacted]	STD	NULL	NULL	UN 592	NULL	NULL	2018-07-27 20:49:10	NULL	2018-07-27 20:51:39	4.1	21.9	22.3839935	114.2082852
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 20:56:16	5	19.6	22.3819805	114.217871
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 20:56:17	6	25.6	22.38196167	114.2178442
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 20:56:19	4.3	33.9	22.38192533	114.2177542
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 20:57:08	5.9	8.7	22.382871	114.2148657
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 20:57:09	6.5	15.3	22.382871	114.2148657
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 20:57:10	4.6	19.9	22.38287883	114.2148572
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 20:57:54	6.5	15.9	22.383104	114.2144213
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 20:57:56	4.5	26.5	22.38311967	114.2143797
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 20:57:58	4	34.3	22.3831505	114.214273
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 20:58:39	6.7	13.5	22.3829055	114.2117188
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 20:58:40	6.5	20.1	22.382904	114.2117088
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 20:58:41	5.1	25.2	22.38290083	114.211683
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 20:59:33	5.1	13.1	22.3838285	114.2088508
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 20:59:34	5.4	18.5	22.38383583	114.2088393
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 20:59:35	4.2	22.8	22.383851	114.2088197
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:00:52	5.6	10.2	22.385132	114.2073413
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:00:53	4.4	14.7	22.38513767	114.2073382
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:01:39	5	11.3	22.3861415	114.2061752
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:01:40	4.4	15.7	22.386148	114.2061667
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:01:41	4.4	20.2	22.38616067	114.2061495
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:01:53	4.5	7.1	22.3863275	114.2059763
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:01:54	5	12.2	22.386329	114.2059752
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:01:56	4.1	22.6	22.38635567	114.2059538
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:02:18	4.7	19.9	22.38742717	114.2047973
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:02:19	4.4	24.3	22.3874495	114.2047727
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:02:56	4.3	22.1	22.386905	114.2037907

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:03:28	4.8	9.4	22.386553	114.2033092
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:03:29	5.6	15	22.3865455	114.2032975
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:03:30	4.9	19.9	22.38653417	114.2032857
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:04:26	6.4	12.1	22.383395	114.201807
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:04:27	6.4	18.5	22.38338867	114.2018103
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:05:46	6	10.7	22.3818335	114.2024185
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:05:47	6.9	17.6	22.38183933	114.202408
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:05:48	4.7	22.3	22.381823	114.2024198
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:06:24	6	11.5	22.380651	114.2033087
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:06:58	4.7	9.8	22.37981933	114.2039945
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:06:59	5.4	15.3	22.37981183	114.204
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:07:00	4.7	20	22.379794	114.2040108
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:08:02	5.3	11.1	22.3790615	114.2045063
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:08:03	6.4	17.5	22.37905483	114.2045123
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:08:04	4.3	21.8	22.37903483	114.2045285
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:09:34	5.9	14.1	22.3779375	114.2001657
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:09:35	5	19.2	22.3779345	114.2001568
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:09:36	4.7	24	22.37793883	114.200128
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:10:19	5.4	11	22.37868183	114.197369
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:10:22	4.2	22.1	22.37870617	114.1973083
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:11:19	5.4	14.3	22.37809667	114.1961138
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:11:20	4.2	18.5	22.37808567	114.1961037
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:12:02	4.8	23.3	22.3772505	114.1950242
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:13:20	5.8	8.8	22.37596783	114.1930628
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:13:21	6	14.8	22.37596567	114.1930607
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:13:22	5	19.9	22.37595683	114.1930463
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:13:23	4.4	24.4	22.37594083	114.1930148
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:14:28	5	11.9	22.37558467	114.1905338
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:14:29	4.3	16.3	22.37557817	114.1905245
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:14:31	4.6	24.6	22.375565	114.1904553
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:15:31	6.2	16.5	22.37515117	114.1885337
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:15:32	5.2	21.8	22.37513767	114.1885112
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:15:57	4.5	22.9	22.37424933	114.1867147
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:16:47	6.3	13.1	22.374202	114.1858448
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:16:48	5.3	18.5	22.37420367	114.1858318
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:17:16	4.8	9.5	22.37335183	114.1855778
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:17:17	6.6	16.2	22.37334283	114.1855798
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:17:18	4.8	21	22.37332067	114.1855838
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:18:24	4.8	12.8	22.3701025	114.1855537
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:18:26	4.9	23.8	22.37014817	114.1855772
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:18:58	5.2	10.5	22.37095783	114.1861022
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:18:59	5.9	16.4	22.37097183	114.1861168
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:19:00	5	21.5	22.37099217	114.186144
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:19:36	5.4	12.7	22.3700165	114.1878233
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:19:37	5.9	18.7	22.370004	114.1878125
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:19:49	6	0	22.369465	114.1873985
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:20:05	4.9	7.2	22.36945033	114.1873865
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:20:06	5.7	13	22.3694495	114.1873858
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:20:07	6.9	19.9	22.36943567	114.1873772
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:20:08	4.9	24.8	22.36940667	114.187361
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:22:44	4.2	8.8	22.372152	114.1801962

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:22:45	4.5	13.3	22.37214667	114.1801863
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:22:48	4	24.9	22.372107	114.18009
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:23:13	5.4	13.1	22.3713865	114.1791063
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:23:14	6.1	19.2	22.371369	114.179097
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:23:15	4.2	23.5	22.37133867	114.1790823
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:24:08	6.4	10.8	22.36986883	114.1800535
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:24:09	4.1	14.9	22.36985767	114.1800607
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:25:15	5.7	11.5	22.36888533	114.17917
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:25:16	5.4	16.9	22.36888283	114.1791632
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:25:17	4.5	21.5	22.3688735	114.179139
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:25:49	4.4	6.6	22.3685245	114.1782495
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:25:50	4.7	11.4	22.36852167	114.178244
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:25:51	5	16.4	22.36851383	114.1782258
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:25:52	4.5	20.9	22.36850233	114.178196
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:26:21	4.9	17.2	22.36742233	114.1763322
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:26:22	5	22.2	22.36740583	114.176304
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:26:23	4.3	26.6	22.36738467	114.1762628
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:28:16	4	9.5	22.37328767	114.1771443
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:29:13	5.1	13	22.373945	114.1766697
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:29:14	6.4	19.5	22.37396317	114.1766548
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:29:45	5.2	14.2	22.37530067	114.1757738
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:29:46	5.7	19.9	22.37532217	114.1757622
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:30:21	5.4	6.9	22.37743	114.174519
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:30:22	4.9	11.9	22.377435	114.1745133
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	WN.TAU	2018-07-27 20:49:10	2018-07-27 20:55:00	2018-07-27 21:30:23	4.5	16.4	22.37745183	114.1745018
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 21:40:53	5.1	10.2	22.3777425	114.174818
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 21:41:20	5.4	11	22.37676567	114.1750157
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 21:41:21	7.2	18.3	22.376753	114.1750228
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 21:41:22	4.4	22.7	22.3767275	114.1750373
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 21:41:23	4	26.8	22.37668717	114.1750592
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 21:42:05	4.5	10.2	22.37577317	114.1756417
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 21:42:06	5.9	16.1	22.37575933	114.1756498
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 21:42:07	4.8	20.9	22.37573567	114.175666
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 21:43:16	7.8	15.4	22.37176733	114.178639
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 21:43:17	5.8	21.2	22.37175483	114.1786572
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 21:45:10	5.4	12.2	22.36782017	114.1746147
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 21:45:11	5.1	17.4	22.36780567	114.1746028
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 21:45:16	4.8	28.2	22.367598	114.1746193
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 21:45:37	5.6	11.6	22.36727533	114.1757107
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 21:45:38	6.3	17.9	22.367276	114.175727
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 21:45:39	4.8	22.8	22.367276	114.175727
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 21:46:28	6.2	8.6	22.36865067	114.1783077
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 21:46:29	5.2	13.8	22.368651	114.1783185
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 21:46:57	4.6	10.1	22.36900567	114.1791178
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 21:46:58	6.5	16.6	22.36901083	114.1791332
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 21:46:59	4.9	21.5	22.36901867	114.1791612
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 21:47:15	4.4	15.6	22.3692785	114.1798003
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 21:48:08	7.3	7.3	22.37108267	114.1788742
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 21:48:09	6.5	13.9	22.37108583	114.1788663
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 21:48:10	5.8	19.8	22.3710955	114.1788457
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 21:49:02	5.7	11.6	22.3726185	114.1804577

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 21:49:03	5.9	17.6	22.3726275	114.1804732
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 21:49:04	6	23.6	22.37264217	114.1805027
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 21:50:37	4.6	18.4	22.374437	114.185284
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 21:50:57	5.9	21.1	22.3733265	114.1855833
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 21:52:01	5.1	13.9	22.37015883	114.1855587
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 21:52:02	5.9	19.8	22.3701805	114.1855677
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 21:52:34	5.7	12.9	22.3710005	114.1860903
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 21:52:35	5.6	18.6	22.37101433	114.1861057
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 21:52:36	4.1	22.7	22.37103583	114.186134
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 21:53:26	4.8	15.6	22.37001183	114.1877897
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 21:53:27	4.5	20.1	22.36999233	114.187769
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 21:56:29	5.6	8.6	22.374143	114.1853703
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 21:56:30	5.1	13.8	22.374153	114.1853718
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 21:56:31	6.3	20.1	22.3741765	114.185375
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 21:56:52	5.3	12.9	22.37443317	114.1864333
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 21:56:53	6	19	22.374433	114.1864567
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 21:56:54	4.7	23.7	22.374432	114.1864943
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 21:57:32	7.1	10.9	22.37487033	114.1878303
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 21:57:33	6.7	17.6	22.374875	114.1878427
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 21:57:34	4.9	22.6	22.37489	114.1878697
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 21:58:28	5	9.5	22.376068	114.1895665
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 21:58:29	4.9	14.5	22.37608117	114.189578
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 21:59:29	5	10.3	22.37613217	114.1915895
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 21:59:30	5.9	16.3	22.37613567	114.1916053
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 21:59:31	5.4	21.7	22.376145	114.1916332
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 21:59:49	5	19.1	22.3760225	114.1924283
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 22:00:28	5.5	7.1	22.37635833	114.1936378
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 22:00:29	4.6	11.7	22.376365	114.1936425
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 22:01:11	5.2	12.2	22.37732833	114.1948445
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 22:01:12	5.6	17.9	22.3773405	114.194864
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 22:01:13	4.2	22.2	22.37735983	114.1948948
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 22:02:16	4.3	8	22.37782133	114.1955923
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 22:02:17	5.3	13.4	22.37781567	114.1955855
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 22:02:18	6.1	19.5	22.37782733	114.1956012
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 22:04:00	5.1	26.1	22.37896817	114.204457
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 22:04:57	5.1	20.3	22.3812155	114.2027083
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 22:05:59	6.3	10.8	22.38450433	114.2019433
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 22:06:00	5.5	16.4	22.38451817	114.2019455
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 22:06:01	5.6	22.1	22.3845465	114.2019503
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 22:06:52	5.4	10.3	22.38615417	114.2026935
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 22:06:53	4.8	15.2	22.38615583	114.2027053
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 22:07:29	5.5	10.5	22.38659717	114.2031795
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 22:07:30	5.4	16	22.386607	114.2031907
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 22:07:31	5.5	21.6	22.38662483	114.2032132
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 22:09:13	6.3	15.8	22.3877105	114.2043713
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 22:09:14	4.3	20.1	22.387735	114.2043937
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 22:10:06	6.4	13.1	22.3870545	114.2054848
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 22:10:07	6.4	19.5	22.387041	114.205498
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 22:10:08	4.7	24.3	22.38701467	114.2055245
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 22:11:26	6.1	19.1	22.38581833	114.2067857
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 22:11:27	4.4	23.5	22.3857965	114.2068098

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 22:12:28	5.9	9.6	22.38334217	114.2099073
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 22:12:29	6.3	15.9	22.38333817	114.2099138
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 22:12:30	4.9	20.9	22.38332667	114.2099382
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 22:14:03	4.5	6.8	22.38336383	114.2139592
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 22:14:04	5.8	12.6	22.3833635	114.2139662
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 22:14:05	5.8	18.5	22.38336167	114.2139833
76129	[redacted]	STD	2018-07-27	N281	UN 592	82K	MEILAM	2018-07-27 21:38:14	2018-07-27 21:40:00	2018-07-27 22:14:06	4	22.6	22.3833575	114.2140172
76129	[redacted]	STD	NULL	NULL	UN 592	NULL	NULL	2018-07-27 21:38:14	NULL	2018-07-27 22:21:23	6.2	18.4	22.38198017	114.217816
76129	[redacted]	STD	NULL	NULL	UN 592	NULL	NULL	2018-07-27 21:38:14	NULL	2018-07-27 22:21:24	6.8	25.3	22.381963	114.2177885
76129	[redacted]	STD	NULL	NULL	UN 592	NULL	NULL	2018-07-27 21:38:14	NULL	2018-07-27 22:21:26	4.6	35.6	22.38191383	114.2176833
76129	[redacted]	STD	NULL	NULL	UN 592	NULL	NULL	2018-07-27 21:38:14	NULL	2018-07-27 22:21:27	4.3	39.9	22.38187667	114.2176077
76129	[redacted]	STD	NULL	NULL	UN 592	NULL	NULL	2018-07-27 21:38:14	NULL	2018-07-27 22:22:09	7.3	13	22.38315067	114.2144025
76129	[redacted]	STD	NULL	NULL	UN 592	NULL	NULL	2018-07-27 21:38:14	NULL	2018-07-27 22:22:10	6.2	19.2	22.38315733	114.214387
76129	[redacted]	STD	NULL	NULL	UN 592	NULL	NULL	2018-07-27 21:38:14	NULL	2018-07-27 22:22:11	5.4	24.6	22.3831685	114.2143552
76129	[redacted]	STD	NULL	NULL	UN 592	NULL	NULL	2018-07-27 21:38:14	NULL	2018-07-27 22:22:43	6.8	14	22.3829355	114.2117513
76129	[redacted]	STD	NULL	NULL	UN 592	NULL	NULL	2018-07-27 21:38:14	NULL	2018-07-27 22:22:44	6.4	20.5	22.382931	114.2117292
76129	[redacted]	STD	NULL	NULL	UN 592	NULL	NULL	2018-07-27 21:38:14	NULL	2018-07-27 22:22:45	5.1	25.6	22.38292583	114.2116885
76129	[redacted]	STD	NULL	NULL	UN 592	NULL	NULL	2018-07-27 21:38:14	NULL	2018-07-27 22:29:54	6.4	11.8	22.42149883	114.2324398
76129	[redacted]	STD	NULL	NULL	UN 592	NULL	NULL	2018-07-27 21:38:14	NULL	2018-07-27 22:31:05	4.3	7.7	22.42400067	114.2375795
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-27 23:50:57	4	11	22.42397933	114.2376128
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-27 23:51:59	6.2	12.3	22.42502683	114.2399642
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-27 23:52:00	6.6	18.9	22.4250405	114.2399613
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-27 23:52:01	5.6	24.5	22.42507067	114.2399557
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-27 23:52:02	4	28.6	22.42511683	114.2399483
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-27 23:52:38	5.3	12.4	22.426205	114.2393248
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-27 23:52:39	5.3	17.8	22.42621717	114.2393115
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-27 23:54:22	4.9	9.3	22.4253615	114.2344827
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-27 23:54:23	5.7	15	22.42536	114.2344707
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-27 23:56:22	7.5	11.1	22.422565	114.2280242
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-27 23:56:23	5.6	16.7	22.42255683	114.2280188
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-27 23:56:24	4	20.7	22.42253383	114.2280047
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-27 23:57:31	4.8	15.6	22.41808033	114.2306738
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-27 23:57:32	4.7	20.3	22.418067	114.2306993
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:00:31	6	17.2	22.4053575	114.2238358
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:00:32	4.9	22.1	22.40534883	114.2238085
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:00:45	5.2	21.8	22.405388	114.2230325
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:01:59	6.8	11.4	22.40633017	114.2223605
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:04:05	5.4	11	22.39850933	114.2120682
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:04:06	6	17.1	22.39849783	114.2120575
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:04:07	4.9	22.1	22.3984765	114.2120373
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:05:55	5.7	10.2	22.39139317	114.2063232
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:05:56	4.8	15	22.39138667	114.2063142
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:08:14	5.1	13.5	22.38196617	114.1954852
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:08:15	5.4	19	22.3819505	114.1954698
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:08:16	4.8	23.9	22.381926	114.1954427
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:09:10	6.7	11.7	22.37922683	114.1964608
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:09:11	6.4	18.2	22.3792195	114.196472
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:09:12	4.4	22.6	22.37920217	114.1964987
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:09:48	6.7	15.5	22.377986	114.1959742
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:09:49	5.8	21.3	22.37797383	114.1959555
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:10:24	6	14.8	22.37665833	114.1940733

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:10:25	5.7	20.5	22.37664517	114.1940542
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:11:08	4.5	14.6	22.375465	114.191915
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:11:09	5.9	20.5	22.37545517	114.1918897
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:11:59	5.4	13.6	22.37589333	114.1899187
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:12:43	6.9	18.1	22.37520283	114.1885822
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:12:44	4	22.2	22.37518767	114.1885568
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:14:15	5.8	12.8	22.37213467	114.1801103
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:14:16	6.6	19.5	22.3721265	114.180092
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:14:17	4.1	23.6	22.37211333	114.1800595
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:16:06	5.1	10.6	22.36801933	114.1746418
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:16:07	5.5	16.1	22.36801	114.1746295
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:16:08	4.9	21.1	22.36798817	114.1746117
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:17:08	5	23.6	22.36339683	114.171344
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:17:52	5.1	8	22.3638775	114.1738098
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:17:53	5.8	13.9	22.36388033	114.1738152
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:17:54	6.6	20.5	22.36388983	114.173833
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:18:28	5.5	12.5	22.3653975	114.1751942
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:18:29	6.5	19	22.365409	114.1752093
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:19:26	6.1	11.4	22.36706733	114.1761795
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:19:27	5.6	17.1	22.36707883	114.1761763
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:19:28	4	21.2	22.36710533	114.1761668
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:20:09	6	10.2	22.3686525	114.1783785
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:20:10	6.4	16.7	22.368657	114.178391
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:20:11	4.9	21.6	22.36866783	114.1784175
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:20:33	4.9	9.4	22.368964	114.1790813
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:20:34	5.8	15.2	22.36896567	114.1790952
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:20:35	5.4	20.6	22.36896733	114.1791213
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:20:36	4.5	25.2	22.36897417	114.1791623
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:26:56	5.5	9.7	22.33931567	114.179329
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:26:57	6.2	15.9	22.33930483	114.179329
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:26:58	5.5	21.5	22.3392795	114.1793275
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:26:59	4.3	25.9	22.33923917	114.1793257
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:27:58	4.4	12.7	22.3332395	114.1789417
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:27:59	5	17.7	22.3332195	114.17894
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:29:01	4.3	7.5	22.3312885	114.1788323
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:29:02	4.9	12.5	22.331277	114.178829
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:29:03	5.8	18.3	22.33125533	114.1788238
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:29:04	5	23.4	22.3312215	114.1788145
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:31:31	4.6	18.4	22.32172383	114.1781425
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:32:02	4.9	16.3	22.32138767	114.178155
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:32:03	5.3	21.7	22.321366	114.1781333
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:32:04	4.3	26	22.32133817	114.1780892
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:33:20	6.4	14.1	22.32079617	114.1773235
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:33:21	5.6	19.7	22.32077983	114.177313
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:34:15	5	10.3	22.31770417	114.1750018
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:34:16	6.7	17.1	22.31769333	114.1749938
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:34:17	5.3	22.4	22.3176715	114.1749777
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:35:04	5.5	13.1	22.316709	114.1742673
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:35:05	6.4	19.5	22.31669533	114.1742547
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:35:06	4.1	23.6	22.31667417	114.1742265
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:36:10	5.6	11.1	22.31397467	114.1721855

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:36:11	6.5	17.6	22.31396483	114.1721783
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:36:12	5	22.6	22.31394233	114.1721617
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:36:34	4.8	8	22.31337583	114.1717358
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:36:35	5.5	13.6	22.3133705	114.1717283
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:36:36	5.8	19.4	22.31335483	114.1717148
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:36:37	4.4	23.9	22.31332767	114.1716927
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:37:28	5.4	12.5	22.31300867	114.1709617
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:38:01	5.6	20.8	22.312069	114.1710922
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:39:42	5.3	8.1	22.3034575	114.1718253
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:39:43	7.1	15.3	22.30345	114.1718262
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:39:44	4.9	20.3	22.3034275	114.1718242
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:40:58	7.2	11.7	22.29967333	114.1720057
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:40:59	7.5	19.2	22.29966083	114.1720103
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:41:55	5.5	10.8	22.2967405	114.1722255
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:41:56	4.5	15.4	22.29672633	114.1722242
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:41:57	5.7	21.1	22.29670033	114.1722255
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:41:58	4.5	25.6	22.2966615	114.1722285
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:42:25	5.2	9.3	22.29575717	114.1723455
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:42:26	6.2	15.6	22.29574717	114.1723562
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:42:27	5	20.6	22.295723	114.172353
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:43:31	6	13.5	22.295021	114.1724107
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:43:32	5.1	18.7	22.295001	114.1724135
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:44:42	5.9	12.6	22.2975625	114.175462
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:44:43	5.3	18	22.2975785	114.1754647
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:44:44	5.1	23.1	22.297608	114.1754692
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:45:29	5.1	11.4	22.29989067	114.1758687
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:45:31	5	22.5	22.29993133	114.1758945
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:46:41	6.1	8.7	22.302372	114.1767942
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:46:42	6.5	15.2	22.30237817	114.1767945
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:46:43	4.5	19.8	22.302398	114.1768027
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-27 23:49:49	2018-07-27 23:50:00	2018-07-28 00:46:57	4.1	26.4	22.30295667	114.1772733
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:20:07	4.6	13	22.3038275	114.1820183
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:20:08	4.8	17.9	22.30382583	114.1820402
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:20:09	4.6	22.6	22.30382183	114.1820738
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:21:47	7.7	18.4	22.3024925	114.1782677
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:21:48	5.7	24.2	22.30250117	114.178244
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:22:06	5.1	10.8	22.3027235	114.1775413
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:22:07	5.2	16	22.30272833	114.1775283
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:22:39	4.9	12.8	22.302762	114.1772523
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:22:40	5.8	18.7	22.30275567	114.1772327
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:22:41	4.1	22.8	22.30274333	114.1772005
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:23:10	4.7	8.1	22.30103417	114.1764823
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:23:11	5.4	13.6	22.30102483	114.1764793
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:23:12	5.1	18.7	22.30100533	114.1764702
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:23:25	5.8	12.9	22.300644	114.1763223
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:23:26	6.6	19.5	22.30062783	114.1763148
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:23:27	4.2	23.8	22.3005965	114.1763042
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:24:11	6.2	12.9	22.29949833	114.175965
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:24:12	5.7	18.6	22.299481	114.1759602
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:24:13	5.3	23.9	22.29944933	114.1759505
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:24:45	4.8	11	22.298589	114.1758145

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:24:46	6.2	17.3	22.298577	114.175809
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:24:47	5	22.4	22.29855033	114.1757992
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:25:22	6.3	12.3	22.29739167	114.1755485
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:25:23	6	18.4	22.29737567	114.1755528
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:25:24	4.8	23.2	22.29734633	114.1755475
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:26:09	4.8	25.4	22.29468133	114.1725302
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:26:31	5.3	13.2	22.29536433	114.172258
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:26:32	5.7	19	22.295384	114.1722602
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:26:33	4.3	23.3	22.29541667	114.1722642
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:26:54	5.5	10.6	22.29625067	114.1723198
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:26:55	6.1	16.8	22.29626267	114.1723205
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:26:56	5.2	22	22.296289	114.1723203
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:27:28	4.8	11	22.29781883	114.1724757
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:27:29	6.4	17.4	22.2978335	114.1724772
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:28:22	4.5	9.3	22.301847	114.1721108
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:28:23	6	15.3	22.3018595	114.1721093
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:28:24	5.4	20.8	22.3018815	114.1721055
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:29:12	7	12.6	22.3030765	114.1719513
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:29:13	6.1	18.8	22.30308967	114.171944
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:29:14	4.3	23.1	22.3031195	114.1719387
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:30:36	4.3	12	22.30487567	114.1718545
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:30:37	4.7	16.7	22.30489517	114.1718483
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:30:38	4.1	20.9	22.30492717	114.1718495
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:31:16	5.3	9.8	22.30686217	114.1716478
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:31:17	6	15.8	22.30687167	114.1716485
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:31:18	5.8	21.7	22.30689517	114.171649
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:32:01	5.9	16.6	22.30992217	114.1712667
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:33:11	5.3	14.4	22.31421467	114.1704713
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:33:56	4.5	10	22.3159235	114.1701112
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:33:57	5.6	15.7	22.3159375	114.1701118
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:33:58	5.1	20.8	22.3159635	114.1701103
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:34:45	4.2	8.2	22.318045	114.169794
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:34:46	5.2	13.4	22.318052	114.1697853
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:34:47	5.9	19.4	22.31807083	114.1697825
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:36:07	5.6	11	22.31893883	114.1695985
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:36:08	5.9	16.9	22.318952	114.1695957
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:36:09	4.1	21	22.318979	114.1695925
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:36:38	5.3	13.1	22.31911033	114.1685565
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:36:39	5.8	18.9	22.31910483	114.168535
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:38:54	6	10.3	22.320713	114.1689518
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:38:55	6.7	17	22.320714	114.168962
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:38:56	4.8	21.9	22.32071617	114.16899
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:39:31	5.5	13.4	22.32091233	114.1700962
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:39:32	5.9	19.3	22.32091717	114.1701175
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:43:53	4.7	20.4	22.31975983	114.1719157
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:44:26	5.3	12.1	22.3199055	114.1725332
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:44:27	6.3	18.5	22.31990983	114.1725515
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:44:28	4.2	22.7	22.3199165	114.172584
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:45:08	5.1	12.8	22.3206345	114.1757693
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:45:09	5.5	18.4	22.32063983	114.1757892
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:45:37	4.8	9.1	22.320999	114.1766957

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:45:38	6.2	15.4	22.32100217	114.1767063
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:45:39	4.9	20.3	22.32101067	114.1767297
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:48:03	4.5	11.3	22.33337417	114.1787853
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:50:10	5.8	13.8	22.33975733	114.1791798
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:50:11	5.2	19	22.33977667	114.1791812
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:50:56	4.5	12.8	22.34208583	114.178759
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:55:14	4.9	19.6	22.36568017	114.1806437
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:55:15	4.3	24	22.365718	114.1806382
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:55:58	5.8	10.2	22.36911667	114.1803265
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:56:32	5.2	15.3	22.36883933	114.1790143
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:56:33	4.8	20.2	22.36882817	114.1789888
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:57:05	4.5	8.7	22.368471	114.1780962
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:57:06	5.8	14.6	22.36846633	114.1780853
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:57:07	5.8	20.4	22.36845667	114.178063
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:57:43	6.2	12.3	22.36758833	114.1766097
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:57:44	5.1	17.5	22.36757533	114.176599
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:58:59	5.2	9.5	22.36741583	114.1763273
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:59:52	4.6	10.4	22.3654275	114.1753532
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:59:53	5.9	16.3	22.36541917	114.1753398
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 01:59:54	4.3	20.7	22.36540217	114.1753158
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:00:46	4.8	7.2	22.362876	114.1724323
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:00:47	5.6	12.9	22.3628745	114.1724265
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:00:48	6.4	19.3	22.36287283	114.1724067
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:00:49	4.1	23.4	22.3628695	114.1723718
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:00:50	4.5	27.9	22.36286517	114.17232
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:01:45	4.2	14	22.36336517	114.1713387
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:03:31	5.3	13.1	22.36749783	114.1742887
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:03:32	6.2	19.3	22.36751217	114.1742937
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:04:02	5.7	7	22.36878917	114.1750355
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:04:03	5.9	13	22.36879317	114.175039
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:04:04	6.1	19.2	22.36880617	114.1750522
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:04:05	4.4	23.6	22.36882833	114.1750783
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:04:44	4.6	16.4	22.3713715	114.1783463
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:04:45	4.9	21.4	22.37139483	114.1783662
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:04:46	4	25.5	22.371429	114.1783932
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:05:31	4.7	9.6	22.37266017	114.180462
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:05:32	6.4	16	22.37266767	114.1804727
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:05:33	5.4	21.5	22.3726815	114.1804933
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:05:52	6.7	11.4	22.373126	114.1812228
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:05:53	6.8	18.3	22.37313283	114.1812328
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:05:54	4.6	22.9	22.373149	114.1812585
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:06:51	4.9	11.6	22.37449533	114.1865325
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:06:52	6.1	17.8	22.37449717	114.1865483
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:06:53	4.9	22.7	22.37449967	114.1865792
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:08:09	5.5	12.8	22.3760005	114.1894765
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:08:10	6	18.8	22.37601483	114.1894908
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:09:10	5.1	11	22.376138	114.1915882
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:09:11	6.4	17.5	22.37614317	114.1916037
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:09:12	5	22.5	22.37615417	114.1916317
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:10:17	5.5	10.1	22.37604833	114.1924205
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:10:18	4.4	14.5	22.376032	114.192429

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:10:59	4.3	12.8	22.3764415	114.193719
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:11:40	4.7	11	22.377568	114.195226
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:11:41	5.9	16.9	22.3775745	114.1952408
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:11:42	4.8	21.8	22.37758767	114.195267
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:12:46	6.5	13.3	22.37779717	114.1955708
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:12:47	6.1	19.4	22.37780783	114.1955845
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:14:08	6	13.2	22.38071383	114.1944215
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:14:09	5.3	18.6	22.38072667	114.1944065
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:14:50	4.4	8.6	22.38251317	114.1956813
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:14:51	5.6	14.3	22.38252	114.1956893
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:14:52	5.8	20.1	22.38253317	114.1957075
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:15:12	7.2	12.6	22.383014	114.1962038
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:15:13	6.8	19.5	22.383024	114.1962128
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:15:14	4.3	23.8	22.383047	114.1962348
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:15:15	4	27.8	22.38308217	114.1962687
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:16:08	6.7	11.3	22.38567233	114.1988218
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:16:09	6.8	18.2	22.385681	114.198831
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:16:10	4.8	23	22.38570233	114.1988512
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:16:40	4.2	6	22.386931	114.2000398
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:16:42	5.8	16.2	22.38694717	114.2000532
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:16:43	5.2	21.5	22.38696917	114.20007
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:17:33	5.6	16.2	22.38939933	114.2033813
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:17:34	5.1	21.3	22.38940817	114.2034082
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:18:44	6.3	11.4	22.39074617	114.2054588
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:18:45	6.4	17.9	22.39075717	114.2054682
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:18:46	4.7	22.6	22.39077933	114.2054893
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:19:17	5.7	14.1	22.39174733	114.2063922
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:19:18	5.8	20	22.39176267	114.2064113
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:20:05	6.5	11.1	22.39268067	114.2073585
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:20:06	6.4	17.6	22.39268967	114.2073663
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:20:07	5.4	23	22.39271083	114.2073865
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:23:09	5.8	7.3	22.4061435	114.2218945
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:23:10	5.6	13	22.40615067	114.2218983
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:23:11	6.5	19.6	22.40616783	114.2219087
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:23:12	4.4	24	22.40619667	114.2219285
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:24:48	5.3	10.5	22.40633633	114.2224758
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:24:49	6.5	17.1	22.40634383	114.2224658
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:24:50	5.2	22.3	22.406359	114.2224438
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:25:23	5.2	11.1	22.40710983	114.2214193
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:27:45	5.2	11.9	22.41799383	114.2304405
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:27:46	4.4	16.4	22.41800467	114.2304233
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:28:01	6.2	12.7	22.41820683	114.2300892
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:28:02	6.5	19.3	22.41821483	114.230074
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:28:03	5.5	24.8	22.41823017	114.230044
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:28:04	4	28.8	22.41825333	114.2299982
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:29:21	5.2	9.7	22.42355533	114.2284043
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:29:22	6.1	15.8	22.42356533	114.2284123
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:29:23	5.3	21.2	22.4235825	114.2284322
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:30:56	5.7	9.7	22.4242205	114.2294027
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:30:57	6.2	16	22.42422467	114.2294115
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:30:58	5.8	21.8	22.42423567	114.229429

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:30:59	4.1	26	22.42425683	114.2294645
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:31:37	5.9	11.8	22.42499717	114.2318173
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:31:38	6.2	18.1	22.42500017	114.231834
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:31:39	5.4	23.6	22.4250055	114.231865
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:32:43	6.6	17.5	22.42544467	114.2338718
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	HH.STN	2018-07-28 01:19:12	2018-07-28 01:20:00	2018-07-28 02:32:44	4.9	22.5	22.42545033	114.2339005
76129	[redacted]	STD	NULL	NULL	UN 592	NULL	NULL	2018-07-28 01:19:12	NULL	2018-07-28 02:37:31	4.5	14.1	22.42331117	114.2371755
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:00:09	4.2	9.1	22.42358383	114.2373193
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:00:27	4.2	23	22.4240065	114.2377545
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:01:20	5.2	13.3	22.42605	114.239436
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:01:50	6.1	10.5	22.42627817	114.2391987
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:01:51	5.2	15.7	22.42628083	114.2391867
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:01:52	5.9	21.7	22.4262825	114.2391568
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:03:18	6.1	14.6	22.4253445	114.2343138
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:03:19	5.6	20.3	22.4253375	114.2342918
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:03:20	4.5	24.9	22.42532667	114.2342547
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:04:01	4.3	11.9	22.42430233	114.2314845
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:05:18	5.2	10.4	22.42402333	114.2298563
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:05:19	6.3	16.8	22.42401733	114.2298447
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:05:20	4.8	21.7	22.42400867	114.2298185
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:06:34	5.4	8.3	22.42254817	114.2279788
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:06:35	6	14.4	22.4225655	114.2279645
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:06:36	4.7	19.2	22.42255317	114.2279407
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:07:50	5.4	16.3	22.4180845	114.2306303
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:07:51	4.4	20.7	22.41807017	114.2306572
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:10:25	5.8	15.3	22.406686	114.2224475
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:10:26	4.2	19.5	22.40666533	114.2224348
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:11:21	6.3	11.2	22.405377	114.2231208
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:11:22	6.5	17.8	22.40538017	114.223108
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:11:23	4.1	21.9	22.40540317	114.2230822
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:16:01	5.3	11.2	22.39090533	114.205806
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:16:02	6.2	17.5	22.390893	114.205795
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:16:03	5.4	22.9	22.3908695	114.2057738
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:16:04	4.1	27.1	22.39083433	114.2057405
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:17:31	7.1	10.7	22.3872535	114.2005297
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:17:32	7.3	18	22.38724567	114.2005208
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:17:33	4.3	22.4	22.38722283	114.2004985
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:18:47	4.6	8.6	22.38192033	114.195423
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:18:48	5.5	14.2	22.381913	114.1954158
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:18:49	6.4	20.7	22.3818975	114.1953997
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:19:09	4	25.3	22.38076267	114.1944805
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:19:10	4.2	29.6	22.38072533	114.1945162
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:19:39	5	17	22.37913183	114.196623
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:20:14	6	10	22.3779385	114.1958855
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:20:15	7	17	22.37793333	114.1958785
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:20:16	5.3	22.3	22.377918	114.1958568
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:20:38	5.2	13.2	22.37739533	114.1951685
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:20:39	5.8	19	22.37738583	114.1951505
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:20:40	4.4	23.5	22.37736783	114.1951203
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:21:31	4.8	9.4	22.37552567	114.1920667
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:21:32	5.7	15.1	22.37552283	114.1920568

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:21:33	5.7	20.8	22.3755165	114.1920333
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:22:40	6.8	17.3	22.37514667	114.1885097
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:22:41	4.6	22	22.37513217	114.188486
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:24:13	5.2	10.2	22.37212817	114.1801523
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:24:14	6.1	16.4	22.37212333	114.1801407
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:24:15	5.4	21.8	22.372113	114.1801158
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:25:43	5.1	22.2	22.367838	114.1745587
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:25:44	4.4	26.7	22.36779967	114.1745385
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:27:01	4.8	9.5	22.36354	114.1713647
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:27:08	5	24.9	22.36336133	114.171365
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:28:45	6.4	14	22.367163	114.1762327
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:28:46	5.2	19.3	22.367183	114.1762223
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:29:24	6.3	11.9	22.36872167	114.1784998
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:29:25	6.2	18.1	22.3687265	114.1785103
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:29:26	4.9	23.1	22.36873783	114.178538
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:29:55	5.7	11.4	22.36936567	114.1801272
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:29:56	5.9	17.4	22.36937183	114.1801413
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:29:57	4.1	21.5	22.36938483	114.1801697
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:36:24	5.6	14.2	22.33960017	114.1793333
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:36:25	4.9	19.1	22.3395705	114.1793357
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:36:26	4.1	23.2	22.33953	114.1793363
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:36:51	4	10.7	22.33822983	114.1792853
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:38:32	4.9	7.2	22.33070317	114.178755
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:38:33	5.3	12.5	22.33069233	114.1787547
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:38:34	5.1	17.7	22.3306705	114.1787537
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:40:21	5.5	8.8	22.321392	114.1782525
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:40:22	6.6	15.5	22.32138617	114.1782465
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:40:23	6.4	21.9	22.3213705	114.1782288
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:40:24	4.2	26.2	22.3213415	114.1781903
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:41:38	8	8	22.32077817	114.177315
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:41:39	7.2	15.3	22.32077233	114.1773112
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:41:40	5.8	21.1	22.32075467	114.177295
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:42:08	5.2	10.9	22.31976567	114.176542
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:42:09	5.8	16.7	22.31975567	114.176533
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:42:10	6.1	22.9	22.31973417	114.1765155
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:42:11	4	26.9	22.3197015	114.1764865
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:43:31	6.3	9.2	22.31865567	114.1756095
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:43:32	6.7	16	22.31864117	114.1755978
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:43:33	5.6	21.7	22.31861833	114.1755812
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:43:34	4	25.7	22.31858283	114.1755585
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:44:01	6.1	16.8	22.3177025	114.174928
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:44:02	5.7	22.5	22.31768267	114.1749093
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:45:01	6	13.1	22.3166045	114.1741393
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:45:02	6.2	19.4	22.31659267	114.1741273
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:45:03	4.3	23.7	22.31656533	114.1741083
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:46:10	5.3	11.2	22.31395517	114.1721678
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:46:11	6.3	17.6	22.31394233	114.1721577
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:46:12	5	22.6	22.31391933	114.1721403
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:47:25	5.4	11.1	22.31298167	114.1708882
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:47:26	4.3	15.4	22.31297667	114.1708762
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:47:57	5.4	11.4	22.31195183	114.171146

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:47:58	6.1	17.6	22.31193767	114.1711518
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:47:59	5	22.6	22.31191067	114.1711628
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:49:01	5.9	16.3	22.306666	114.1717443
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:49:02	4.8	21.1	22.3066355	114.1717337
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:49:41	6.7	14	22.30585133	114.171683
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:49:42	5.7	19.7	22.30583417	114.1716837
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:50:16	5.1	11.2	22.30441467	114.171807
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:50:17	5.9	17.1	22.30439867	114.1718055
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:50:18	4.3	21.5	22.3043705	114.1718017
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:51:20	7.5	12.9	22.3005185	114.1719583
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:51:21	6.9	19.9	22.30050483	114.1719588
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:51:22	5	24.9	22.30047167	114.1719627
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:51:23	4	28.9	22.30042183	114.1719653
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:52:04	6.5	17	22.298227	114.1720592
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:52:05	6.1	23.2	22.29820117	114.1720555
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:52:06	4.1	27.4	22.2981575	114.1720508
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:52:26	5	25.9	22.29664517	114.172145
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:54:07	5.8	10	22.2970215	114.1754492
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:54:08	6.7	16.7	22.29703383	114.1754507
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:54:09	5.4	22.2	22.29706033	114.1754558
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:54:51	5.7	7.8	22.29916617	114.1757815
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:54:52	5.9	13.8	22.29917383	114.1757813
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:54:53	6.5	20.3	22.29919183	114.1757828
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:55:21	5.7	10	22.3002975	114.1761252
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:55:22	6.6	16.6	22.30030967	114.17613
76129	[redacted]	STD	2018-07-28	N281	UN 592	N281	KAMYNG	2018-07-28 02:59:23	2018-07-28 03:00:00	2018-07-28 03:55:23	5.3	22	22.3003345	114.17614
76129	[redacted]	STD	NULL	NULL	UN 592	NULL	NULL	2018-07-28 02:59:23	NULL	2018-07-28 04:19:36	6.3	13.4	22.33025933	114.1786005
76129	[redacted]	STD	NULL	NULL	UN 592	NULL	NULL	2018-07-28 02:59:23	NULL	2018-07-28 04:19:37	6.5	20	22.3302745	114.1786005
76129	[redacted]	STD	NULL	NULL	UN 592	NULL	NULL	2018-07-28 02:59:23	NULL	2018-07-28 04:19:38	4	24.1	22.330308	114.1786035
76129	[redacted]	STD	NULL	NULL	UN 592	NULL	NULL	2018-07-28 02:59:23	NULL	2018-07-28 04:20:12	4.7	9.2	22.332454	114.1787397
76129	[redacted]	STD	NULL	NULL	UN 592	NULL	NULL	2018-07-28 02:59:23	NULL	2018-07-28 04:20:13	5.9	15.2	22.3324645	114.1787403
76129	[redacted]	STD	NULL	NULL	UN 592	NULL	NULL	2018-07-28 02:59:23	NULL	2018-07-28 04:20:14	5.6	20.8	22.33248733	114.178742
76129	[redacted]	STD	NULL	NULL	UN 592	NULL	NULL	2018-07-28 02:59:23	NULL	2018-07-28 04:20:15	4.1	25	22.33252433	114.1787447
76129	[redacted]	STD	NULL	NULL	UN 592	NULL	NULL	2018-07-28 02:59:23	NULL	2018-07-28 04:20:53	7.1	7.1	22.333929	114.1788357
76129	[redacted]	STD	NULL	NULL	UN 592	NULL	NULL	2018-07-28 02:59:23	NULL	2018-07-28 04:20:54	6.1	13.2	22.33392983	114.1788362
76129	[redacted]	STD	NULL	NULL	UN 592	NULL	NULL	2018-07-28 02:59:23	NULL	2018-07-28 04:20:55	6.2	19.5	22.33394767	114.1788373
76129	[redacted]	STD	NULL	NULL	UN 592	NULL	NULL	2018-07-28 02:59:23	NULL	2018-07-28 04:20:56	4.5	24	22.3339815	114.1788393
76129	[redacted]	STD	NULL	NULL	UN 592	NULL	NULL	2018-07-28 02:59:23	NULL	2018-07-28 04:29:06	5.3	11.6	22.378689	114.2043343
76129	[redacted]	STD	NULL	NULL	UN 592	NULL	NULL	2018-07-28 02:59:23	NULL	2018-07-28 04:29:07	6	17.7	22.37870083	114.2043532
76129	[redacted]	STD	NULL	NULL	UN 592	NULL	NULL	2018-07-28 02:59:23	NULL	2018-07-28 04:29:08	5.4	23.2	22.37872033	114.204384
76129	[redacted]	STD	NULL	NULL	UN 592	NULL	NULL	2018-07-28 02:59:23	NULL	2018-07-28 04:30:11	5.4	9.5	22.38045617	114.2070105
76129	[redacted]	STD	NULL	NULL	UN 592	NULL	NULL	2018-07-28 02:59:23	NULL	2018-07-28 04:30:12	5.6	15.2	22.38046883	114.2070192
76129	[redacted]	STD	NULL	NULL	UN 592	NULL	NULL	2018-07-28 02:59:23	NULL	2018-07-28 04:30:34	5.2	21	22.38136683	114.2069777
76129	[redacted]	STD	NULL	NULL	UN 592	NULL	NULL	2018-07-28 02:59:23	NULL	2018-07-28 04:30:35	4.9	26	22.381392	114.2070108
76129	[redacted]	STD	NULL	NULL	UN 592	NULL	NULL	2018-07-28 02:59:23	NULL	2018-07-28 04:34:21	4.6	15.1	22.382758	114.2075662
76129	[redacted]	STD	NULL	NULL	UR1625	NULL	NULL	2018-07-28 20:11:04	NULL	2018-07-28 20:13:46	5.8	11.9	22.38402767	114.2082958
76129	[redacted]	STD	NULL	NULL	UR1625	NULL	NULL	2018-07-28 20:11:04	NULL	2018-07-28 20:13:47	5.7	17.6	22.38403367	114.2083077
76129	[redacted]	STD	NULL	NULL	UR1625	NULL	NULL	2018-07-28 20:11:04	NULL	2018-07-28 20:13:48	4.3	21.9	22.38403317	114.2083562
76129	[redacted]	STD	NULL	NULL	UR1625	NULL	NULL	2018-07-28 20:11:04	NULL	2018-07-28 20:15:32	4.6	8.4	22.38346	114.2139735
76129	[redacted]	STD	NULL	NULL	UR1625	NULL	NULL	2018-07-28 20:11:04	NULL	2018-07-28 20:15:33	5.5	13.9	22.3834585	114.2139803
76129	[redacted]	STD	NULL	NULL	UR1625	NULL	NULL	2018-07-28 20:11:04	NULL	2018-07-28 20:15:34	5.4	19.4	22.38345833	114.2139997

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:20:02	4.1	7.5	22.3821605	114.2180472
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:21:01	4.6	7.9	22.38289783	114.214963
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:21:02	5.1	13.1	22.382902	114.2149572
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:21:03	4.2	17.3	22.382914	114.214941
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:22:06	5.3	10.6	22.383116	114.2145093
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:22:07	6.4	17	22.38312017	114.214497
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:22:09	4.6	27.4	22.383147	114.2144293
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:22:45	5.5	10.1	22.38294083	114.21207
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:22:46	6.4	16.5	22.38293817	114.2120582
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:22:47	6.2	22.7	22.38293433	114.2120303
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:22:48	5	27.8	22.382932	114.2119842
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:24:22	6.4	12.5	22.38307233	114.2102815
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:24:23	6.8	19.4	22.38308217	114.2102717
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:24:24	4.6	24	22.38309383	114.210241
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:25:39	6.8	18.8	22.38403183	114.2086233
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:25:40	4.8	23.6	22.3840525	114.208596
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:27:00	7.2	9.8	22.3854355	114.2070557
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:27:01	7.7	17.5	22.38544117	114.2070483
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:27:02	4.6	22.2	22.38546	114.207026
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:27:50	6.6	12.6	22.38665167	114.2056647
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:27:51	6	18.6	22.38666317	114.2056507
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:27:52	4.5	23.1	22.38668667	114.2056238
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:28:28	5.4	7.3	22.3874985	114.204728
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:28:29	4.7	12.1	22.38750317	114.204722
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:29:13	4.1	7.6	22.38690867	114.2038635
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:29:14	5.6	13.2	22.386904	114.2038562
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:29:15	5.8	19.1	22.38689083	114.2038383
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:29:32	4.9	19.2	22.3864315	114.2032585
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:29:33	4.3	23.6	22.38640633	114.203227
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:30:54	7	11.1	22.38184117	114.2024667
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:30:55	7.2	18.4	22.38183083	114.2024757
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:30:56	5.1	23.5	22.38180517	114.2024975
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:31:48	7.9	9.9	22.3806565	114.2033715
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:31:49	7.5	17.5	22.3806565	114.2033715
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:31:50	4.5	22	22.380643	114.2033693
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:32:16	4.6	7.1	22.3798165	114.204026
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:32:17	5.6	12.7	22.37981367	114.204027
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:32:18	6.4	19.2	22.379805	114.2040303
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:33:24	5.4	5.4	22.37910467	114.2045753
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:33:25	5	10.5	22.37910467	114.2045753
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:33:26	5.9	16.4	22.37910333	114.2045817
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:33:27	4.4	20.8	22.379091	114.2045927
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:34:27	5	7.3	22.37788567	114.2003052
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:34:28	5.7	13.1	22.37788567	114.200305
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:34:29	5.9	19	22.37788967	114.200291
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:34:30	4.4	23.5	22.37789683	114.2002662
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:35:44	7.8	7.8	22.37883633	114.1970045
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:35:45	7.8	15.7	22.37883633	114.1970045
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:35:46	5.6	21.3	22.3788365	114.1969993
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:36:45	5	10.9	22.3779845	114.196021
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:36:46	4.9	15.9	22.37798067	114.1960168

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:37:25	5.4	5.4	22.37730483	114.195121
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:37:26	4.7	10.1	22.37730483	114.195121
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:37:27	6	16.2	22.377301	114.1951163
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:37:28	4.8	21.1	22.37729033	114.1951012
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:38:42	6.2	8.3	22.3758145	114.1928515
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:38:43	5.8	14.1	22.3758145	114.1928513
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:38:44	4.8	19	22.37580883	114.1928403
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:39:31	5.1	10.4	22.37584467	114.1910892
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:39:32	6.6	17.1	22.37584167	114.1910773
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:39:33	5	22.1	22.375836	114.191057
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:40:01	7	9.1	22.37557117	114.1905248
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:40:02	5.6	14.8	22.37557	114.1905205
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:40:03	5	19.8	22.37556183	114.190508
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:40:39	4.2	4.2	22.37524383	114.1886952
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:40:40	5.5	9.7	22.37524383	114.1886952
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:40:41	5.7	15.4	22.37524167	114.1886912
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:42:01	4.6	11.2	22.374181	114.1862543
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:42:53	4.4	10.1	22.37347333	114.185546
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:42:54	5.3	15.5	22.37346317	114.1855472
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:42:55	5.2	20.7	22.37344217	114.1855512
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:44:42	4.5	7.9	22.37102617	114.1860813
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:44:43	5.7	13.7	22.37103283	114.1860968
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:44:44	5.5	19.3	22.3710425	114.186108
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:45:41	4.8	14.4	22.37002033	114.187843
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:45:42	4.1	18.5	22.37000483	114.1878287
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:46:15	5.1	5.1	22.36948667	114.1873912
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:46:16	5	10.2	22.36948583	114.18739
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:46:17	6	16.2	22.36947783	114.1873853
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:46:18	5.8	22.1	22.3694595	114.1873748
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:46:19	4.2	26.3	22.36942767	114.187357
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:49:25	5.8	7.8	22.37226517	114.1803158
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:49:26	4.4	12.2	22.37226233	114.180312
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:49:29	4.4	24.4	22.37221067	114.1802473
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:50:28	4.7	4.7	22.36966167	114.180222
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:50:29	5.3	10.1	22.3696615	114.1802222
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:50:30	5.6	15.7	22.3696535	114.1802318
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:50:31	4.5	20.3	22.36963383	114.1802447
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:50:37	4.4	28.7	22.36934767	114.1802535
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:51:34	5.4	5.4	22.36879933	114.1789497
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:51:35	5.1	10.6	22.36879717	114.1789498
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:51:36	5.8	16.4	22.36879267	114.1789398
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:51:37	5	21.4	22.36878267	114.1789152
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:52:21	6	7.2	22.3675145	114.1764655
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:52:22	7.3	14.6	22.3675125	114.1764628
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:54:55	4.6	19.6	22.37138117	114.1783248
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:54:56	4.5	24.2	22.37141	114.1783482
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:56:24	5.1	6.6	22.373996	114.176653
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:56:25	6.2	12.8	22.373996	114.176658
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:56:26	6.1	19	22.37400817	114.1766502
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:56:54	5.8	11.2	22.3753325	114.1757455
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:56:55	6.9	18.1	22.37534183	114.1757398

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:56:56	4.8	23	22.37536533	114.175725
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:57:33	5.4	11.2	22.37750267	114.1744862
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	WN.TAU	2018-07-28 20:11:04	2018-07-28 20:20:00	2018-07-28 20:57:34	5	16.2	22.37751567	114.1744807
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:11:04	4.7	8.3	22.37783867	114.174751
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:11:05	4.5	12.8	22.37784017	114.174742
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:11:33	5.3	5.3	22.37690617	114.1750812
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:11:34	5.1	10.4	22.37690333	114.1750817
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:11:35	5.8	16.2	22.37689233	114.1750892
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:11:36	5.2	21.5	22.37687033	114.175104
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:12:16	7	9.3	22.37594367	114.1756873
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:12:17	6.4	15.7	22.37593817	114.1756905
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:12:18	4.6	20.4	22.37591883	114.1757028
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:13:04	4.4	8.2	22.37373533	114.1770875
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:13:05	5.3	13.6	22.37372817	114.1770927
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:13:06	6.2	19.8	22.37371083	114.1771035
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:13:07	4.1	24	22.373682	114.177122
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:13:47	7.8	14.2	22.37231167	114.178223
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:13:48	5	19.3	22.37229917	114.1782318
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:14:05	4.6	15.3	22.37175	114.1786635
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:14:06	5.5	20.9	22.3717335	114.1786862
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:14:33	5.2	10	22.3706865	114.1778727
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:14:34	5.4	15.5	22.3706815	114.1778627
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:14:35	5.7	21.2	22.37067083	114.1778387
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:15:21	4.9	10.9	22.36868617	114.1751825
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:15:22	6.2	17.1	22.3686755	114.1751732
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:15:23	4.9	22	22.36865483	114.1751552
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:15:48	5.3	24.8	22.36755517	114.1747605
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:16:43	6	8	22.36733483	114.1760908
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:16:44	6.8	14.9	22.3673365	114.176096
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:16:45	5.9	20.8	22.3673425	114.1761165
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:17:35	4.9	8.7	22.368993	114.1792028
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:17:36	5.6	14.4	22.36899633	114.1792102
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:17:37	6.3	20.7	22.36900283	114.17923
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:17:53	4.4	25.4	22.36950167	114.180255
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:17:54	4.4	29.9	22.369558	114.1802503
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:19:53	5	5	22.37247917	114.1801855
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:19:54	5.1	10.2	22.37248583	114.1801912
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:19:55	5.5	15.8	22.3724955	114.1802022
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:19:56	4.6	20.5	22.3725125	114.1802253
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:20:09	4.9	10.5	22.37263267	114.1804083
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:20:10	6.2	16.8	22.3726395	114.1804205
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:20:11	5.3	22.2	22.3726515	114.1804453
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:20:34	6.5	6.5	22.37301133	114.1810238
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:20:35	5.1	11.6	22.37301417	114.1810283
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:20:36	5.3	17	22.373024	114.1810422
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:20:37	4.3	21.3	22.37304	114.1810685
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:22:48	4.2	10.4	22.37009767	114.1855252
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:22:49	5.6	16.1	22.3701105	114.1855328
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:22:50	5.3	21.4	22.370133	114.185546
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:23:19	4.6	9.5	22.37094267	114.18606
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:23:20	5.8	15.3	22.37095467	114.186068

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:23:21	5.4	20.8	22.37097233	114.1860883
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:23:58	4.9	12.9	22.36998333	114.1877872
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:23:59	4.9	17.8	22.36996983	114.187773
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:24:40	5.1	11.6	22.36971333	114.1875222
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:24:41	5.5	17.1	22.36970117	114.187511
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:26:56	5.4	10.3	22.37421133	114.185364
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:26:57	5.9	16.2	22.37422133	114.1853675
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:26:58	4.1	20.4	22.37423033	114.1853645
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:27:27	5.5	6.9	22.37442283	114.1864502
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:27:28	5.4	12.4	22.37442317	114.1864543
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:27:29	6.5	19	22.37442333	114.1864718
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:27:30	4.3	23.3	22.37442217	114.1865047
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:27:57	5.3	7.5	22.37486783	114.1878203
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:27:58	6.5	14.1	22.37486933	114.1878247
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:27:59	5.8	19.9	22.3748785	114.1878428
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:28:56	5.6	10.6	22.37600667	114.1895155
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:28:57	6.1	16.8	22.376016	114.1895247
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:28:58	4.2	21.1	22.376037	114.1895445
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:29:49	4.7	20.1	22.37609617	114.1916218
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:29:50	4.1	24.3	22.37610883	114.1916612
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:30:00	4.8	19.6	22.37621167	114.1921325
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:31:02	4.6	10	22.37721867	114.1947545
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:31:03	5.6	15.7	22.37722567	114.1947643
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:31:04	5.2	21	22.37723983	114.194785
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:32:13	5.6	7.6	22.37775667	114.195556
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:32:14	6.4	14.1	22.37776517	114.1955698
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:32:15	6.1	20.2	22.37778017	114.1955905
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:34:02	5.3	7.6	22.37875383	114.2043113
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:34:03	5.2	12.9	22.37875917	114.2043167
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:34:04	4.2	17.1	22.37877	114.204333
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:34:10	4	27.8	22.37898917	114.2044438
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:34:48	5.2	5.2	22.38113417	114.202735
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:34:49	4.8	10	22.38113633	114.2027353
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:35:02	4.2	4.2	22.381362	114.2026042
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:35:03	5.1	9.4	22.38136317	114.2026033
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:35:04	6	15.4	22.38137167	114.2025967
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:35:05	5.6	21.1	22.38139083	114.2025815
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:35:43	6.6	12.1	22.38333967	114.2016957
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:35:44	6.7	18.9	22.3833535	114.2016963
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:35:45	4.8	23.7	22.38338533	114.201701
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:36:23	5.1	10.6	22.3847745	114.2019933
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:36:24	5.9	16.6	22.38479283	114.2019918
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:36:25	5.3	21.9	22.38481733	114.2019945
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:37:09	4.6	10.8	22.38625433	114.2027798
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:37:40	4.7	9.7	22.38664117	114.203208
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:37:41	6.2	16	22.38664883	114.2032168
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:37:42	5.3	21.3	22.3866645	114.2032367
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:39:05	6.8	8.4	22.38768933	114.204357
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:39:06	6.2	14.7	22.38769333	114.2043597
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:40:00	7.8	7.8	22.38706667	114.2053967
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:40:01	6.9	14.8	22.38709967	114.2053898

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:40:02	5.8	20.6	22.3870975	114.2054092
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:40:24	4.4	9.4	22.3864635	114.206161
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:40:25	5.9	15.4	22.3864555	114.2061697
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:40:26	5.7	21.1	22.38643833	114.2061863
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:41:19	6.2	10.3	22.38594983	114.2066633
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:41:20	6.4	16.8	22.385945	114.2066645
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:41:21	5.3	22.2	22.38592817	114.2066787
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:43:20	5.8	9.8	22.38447333	114.2083042
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:43:21	6.3	16.1	22.38447	114.2083072
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:43:22	4.8	21	22.3844545	114.208325
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:44:13	5.9	10.4	22.38340783	114.2097577
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:44:14	6.1	16.6	22.38340267	114.209766
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:44:15	4.1	20.7	22.3833905	114.2097905
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:45:07	4.1	6.5	22.38339483	114.2137677
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:45:09	5.7	17.5	22.3833885	114.213795
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:45:10	4.4	21.9	22.383381	114.2138292
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:45:45	5.8	13.9	22.382902	114.2150527
76129	[redacted]	STD	2018-07-28	N281	UR1625	82K	MEILAM	2018-07-28 21:09:10	2018-07-28 21:10:00	2018-07-28 21:45:46	5.2	19.2	22.38288617	114.2150682
76129	[redacted]	STD	NULL	NULL	UR1625	NULL	NULL	2018-07-28 21:09:10	NULL	2018-07-28 21:48:46	4.7	10.8	22.38215183	114.2179243
76129	[redacted]	STD	NULL	NULL	UR1625	NULL	NULL	2018-07-28 21:09:10	NULL	2018-07-28 21:49:07	4.8	20	22.38198317	114.2178277
76129	[redacted]	STD	NULL	NULL	UR1625	NULL	NULL	2018-07-28 21:09:10	NULL	2018-07-28 21:49:09	4.5	29.6	22.38194683	114.2177427
76129	[redacted]	STD	NULL	NULL	UR1625	NULL	NULL	2018-07-28 21:09:10	NULL	2018-07-28 21:49:10	4.9	34.6	22.381929	114.2176822
76129	[redacted]	STD	NULL	NULL	UR1625	NULL	NULL	2018-07-28 21:09:10	NULL	2018-07-28 21:50:01	6.6	12.3	22.38302417	114.214677
76129	[redacted]	STD	NULL	NULL	UR1625	NULL	NULL	2018-07-28 21:09:10	NULL	2018-07-28 21:50:02	5.3	17.6	22.38303033	114.2146685
76129	[redacted]	STD	NULL	NULL	UR1625	NULL	NULL	2018-07-28 21:09:10	NULL	2018-07-28 21:50:03	5.4	23.1	22.38304383	114.2146408
76129	[redacted]	STD	NULL	NULL	UR1625	NULL	NULL	2018-07-28 21:09:10	NULL	2018-07-28 21:50:04	4.2	27.4	22.38306533	114.214599
76129	[redacted]	STD	NULL	NULL	UR1625	NULL	NULL	2018-07-28 21:09:10	NULL	2018-07-28 21:51:28	8.8	8.8	22.38306933	114.210379
76129	[redacted]	STD	NULL	NULL	UR1625	NULL	NULL	2018-07-28 21:09:10	NULL	2018-07-28 21:51:29	7.3	16.2	22.38307117	114.21037
76129	[redacted]	STD	NULL	NULL	UR1625	NULL	NULL	2018-07-28 21:09:10	NULL	2018-07-28 21:51:30	6.4	22.6	22.38307383	114.2103503
76129	[redacted]	STD	NULL	NULL	UR1625	NULL	NULL	2018-07-28 21:09:10	NULL	2018-07-28 21:56:37	4.6	23.6	22.41763783	114.2316797
76129	[redacted]	STD	NULL	NULL	UR1625	NULL	NULL	2018-07-28 21:09:10	NULL	2018-07-28 21:57:35	6.5	7.7	22.41912683	114.2322557
76129	[redacted]	STD	NULL	NULL	UR1625	NULL	NULL	2018-07-28 21:09:10	NULL	2018-07-28 21:57:36	5.8	13.5	22.41912933	114.2322563
76129	[redacted]	STD	NULL	NULL	UR1625	NULL	NULL	2018-07-28 21:09:10	NULL	2018-07-28 21:57:37	5.3	18.8	22.41914367	114.2322577
76129	[redacted]	STD	NULL	NULL	UR1625	NULL	NULL	2018-07-28 21:09:10	NULL	2018-07-28 21:57:39	4.7	28.8	22.41921683	114.232264
76129	[redacted]	STD	NULL	NULL	UR1625	NULL	NULL	2018-07-28 21:09:10	NULL	2018-07-28 21:57:40	4.2	33.1	22.41927483	114.2322662
76129	[redacted]	STD	NULL	NULL	UR1625	NULL	NULL	2018-07-28 21:09:10	NULL	2018-07-28 21:58:28	5.8	10.1	22.421306	114.2324198
76129	[redacted]	STD	NULL	NULL	UR1625	NULL	NULL	2018-07-28 21:09:10	NULL	2018-07-28 21:58:29	6.5	16.7	22.421316	114.2324278
76129	[redacted]	STD	NULL	NULL	UR1625	NULL	NULL	2018-07-28 21:09:10	NULL	2018-07-28 21:58:30	5.2	21.9	22.42134167	114.2324367
76129	[redacted]	STD	NULL	NULL	UR1625	NULL	NULL	2018-07-28 21:09:10	NULL	2018-07-28 21:59:55	5.2	8.1	22.42310417	114.2359333
76129	[redacted]	STD	NULL	NULL	UR1625	NULL	NULL	2018-07-28 21:09:10	NULL	2018-07-28 21:59:56	5.8	14	22.42310567	114.2359387
76129	[redacted]	STD	NULL	NULL	UR1625	NULL	NULL	2018-07-28 21:09:10	NULL	2018-07-28 21:59:57	5.5	19.5	22.423119	114.2359557
76129	[redacted]	STD	NULL	NULL	UR1625	NULL	NULL	2018-07-28 21:09:10	NULL	2018-07-28 22:00:17	6.3	2.7	22.42401433	114.2373768
76129	[redacted]	STD	NULL	NULL	UR1625	NULL	NULL	2018-07-28 21:09:10	NULL	2018-07-28 22:00:46	5.3	9.1	22.42402483	114.2375672
76129	[redacted]	STD	NULL	NULL	UR1625	NULL	NULL	2018-07-28 21:09:10	NULL	2018-07-28 22:01:05	4.7	12.5	22.42364467	114.2374658
76129	[redacted]	STD	NULL	NULL	UR1625	NULL	NULL	2018-07-28 21:09:10	NULL	2018-07-28 22:01:06	5.4	17.9	22.42363483	114.2374487
76129	[redacted]	STD	NULL	NULL	UR1625	NULL	NULL	2018-07-28 23:49:09	NULL	2018-07-28 23:49:56	4.5	11.5	22.42366133	114.2374538
76129	[redacted]	STD	NULL	NULL	UR1625	NULL	NULL	2018-07-28 23:49:09	NULL	2018-07-28 23:49:57	4.6	16.2	22.42367217	114.2374702
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-28 23:50:10	5.5	9.6	22.42393267	114.2376208
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-28 23:50:11	5.1	14.8	22.42393933	114.2376217
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-28 23:50:51	6.1	10.2	22.4251755	114.239936
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-28 23:50:52	6.2	16.4	22.42518233	114.2399323

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-28 23:50:53	6.5	23	22.42520433	114.2399238
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-28 23:50:54	4.6	27.7	22.42524167	114.2399105
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-28 23:50:55	4.1	31.9	22.42529583	114.239896
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-28 23:51:13	5.9	5.9	22.425987	114.2394793
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-28 23:51:14	5.8	11.8	22.42599033	114.2394783
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-28 23:51:15	5.9	17.7	22.42600083	114.2394688
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-28 23:51:16	5.1	22.9	22.426023	114.2394492
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-28 23:52:53	6.2	12.4	22.425316	114.2343462
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-28 23:52:54	6.4	18.8	22.42531367	114.2343327
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-28 23:52:55	4.4	23.2	22.42530683	114.2343027
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-28 23:54:42	5.3	6.8	22.42260133	114.2279805
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-28 23:54:43	4.1	11	22.42259783	114.2279777
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-28 23:54:52	5.1	26.1	22.422267	114.2279852
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-28 23:54:53	4.2	30.3	22.42223817	114.2280308
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-28 23:56:36	4.9	13	22.41766583	114.2316052
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-28 23:56:37	5.8	18.9	22.41766417	114.2316267
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-28 23:59:35	5.6	7	22.40670017	114.2224368
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-28 23:59:36	5.5	12.6	22.40669517	114.2224332
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-28 23:59:37	5.3	17.9	22.40668267	114.2224253
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:04:06	7.1	1.9	22.3914195	114.2063382
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:04:16	4.7	6.2	22.391392	114.206312
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:04:17	5.2	11.4	22.391389	114.2063083
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:04:18	6.2	17.7	22.39138083	114.2062967
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:04:19	5	22.7	22.39136667	114.2062725
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:05:18	7.4	7.4	22.390901	114.2058038
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:05:19	6.8	14.2	22.390891	114.2057933
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:05:20	6.3	20.6	22.390878	114.2057792
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:05:21	4.3	24.9	22.390853	114.205755
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:06:13	4.7	11.8	22.38850933	114.201875
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:06:14	6.3	18.1	22.3885	114.2018627
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:06:15	4.6	22.7	22.38848433	114.2018385
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:06:58	7	12	22.38728717	114.2006248
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:06:59	6.9	19	22.38728083	114.2006158
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:08:23	4.3	25.1	22.38075733	114.1944782
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:09:05	4.9	9	22.37923717	114.1964503
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:09:06	4.5	13.6	22.37923417	114.1964588
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:09:44	6.1	7.3	22.37802833	114.1960485
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:09:45	6.6	14	22.3780235	114.1960422
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:09:46	6.1	20.1	22.3780135	114.1960262
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:10:19	6.7	7.8	22.37671267	114.1941778
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:10:20	7.1	14.9	22.37671033	114.1941763
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:10:21	5.5	20.5	22.37669783	114.1941625
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:10:56	4.8	4.8	22.375506	114.1920972
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:10:57	4.4	9.3	22.3755055	114.1920938
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:10:58	5.5	14.9	22.37550133	114.192084
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:10:59	5.3	20.2	22.37549317	114.1920623
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:11:42	5.3	10.6	22.375907	114.1898912
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:12:23	5.1	10	22.37511233	114.1884772
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:12:24	5.9	15.9	22.37510667	114.1884667
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:12:25	5	21	22.37509383	114.1884448
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:14:05	5.6	8	22.37146033	114.1790972

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:14:06	6	14.1	22.37145683	114.1790932
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:14:07	5.1	19.2	22.371442	114.1790812
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:14:45	4.3	13.1	22.37066567	114.1778347
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:14:46	4.7	17.9	22.3706575	114.1778148
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:14:47	5.1	23	22.3706465	114.1777835
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:16:12	5.4	5.4	22.36792133	114.1745675
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:16:13	5.6	11.1	22.36791267	114.1745685
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:16:14	5.9	17	22.3679	114.1745627
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:16:15	5.6	22.6	22.36787817	114.17455
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:17:10	4.8	8.3	22.364197	114.1719968
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:17:11	5.1	13.5	22.364194	114.1719892
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:17:12	6	19.6	22.364182	114.1719745
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:18:26	5	6.7	22.36357	114.1713917
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:18:27	4.2	11	22.363567	114.1713885
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:18:33	5.1	19.9	22.36341983	114.171348
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:18:34	5	25	22.3633885	114.171367
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:19:13	5.1	7.2	22.36384767	114.173799
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:19:14	5.5	12.7	22.36384717	114.1738025
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:19:15	6.3	19	22.36385533	114.173816
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:19:16	4.9	24	22.3638735	114.1738398
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:19:55	5.3	6.8	22.3653885	114.1752017
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:19:56	5.3	12.1	22.36539717	114.1752002
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:19:57	6.1	18.3	22.36540967	114.1752113
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:19:58	5.4	23.7	22.36542767	114.1752357
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:20:48	5.2	7.3	22.36692367	114.1762505
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:20:49	5.6	13	22.36692733	114.1762512
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:20:50	6.3	19.4	22.36694167	114.1762457
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:20:51	4	23.4	22.36697083	114.1762355
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:21:36	5.6	8.3	22.36864983	114.1783098
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:21:37	5.1	13.5	22.368654	114.178316
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:21:38	4.5	18.1	22.36866333	114.1783353
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:22:01	4.9	7	22.3689925	114.1790602
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:22:02	5.2	12.3	22.36899467	114.1790653
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:22:03	6.4	18.8	22.3689985	114.1790808
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:22:04	4.8	23.6	22.36900467	114.1791118
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:23:14	6.9	6.9	22.36624867	114.1807523
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:23:15	6.6	13.6	22.3662475	114.1807513
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:23:16	4.9	18.5	22.36623317	114.1807518
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:28:39	8	11.4	22.34033133	114.1794233
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:28:40	7.3	18.7	22.34032467	114.179425
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:28:41	5.9	24.7	22.34029883	114.1794273
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:28:42	4.4	29.1	22.34025367	114.1794272
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:29:43	6.1	12.7	22.33938183	114.1793643
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:29:44	6	18.8	22.339368	114.1793662
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:29:45	4.9	23.7	22.33933767	114.179367
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:30:40	4.6	24.5	22.3345305	114.1790153
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:31:19	8.3	8.3	22.33313083	114.1789213
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:31:20	5.4	13.7	22.333127	114.1789193
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:32:10	7	13.2	22.33081483	114.17874
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:32:11	6.5	19.7	22.3308005	114.1787385
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:34:24	6.6	7.8	22.3217565	114.1781792

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:34:25	6.6	14.5	22.32175483	114.17818
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:34:26	5.1	19.6	22.3217385	114.1781867
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:34:51	7.6	14.8	22.3213745	114.1782388
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:34:52	6	20.9	22.32136333	114.1782268
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:34:53	4.5	25.4	22.32134033	114.1781983
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:35:19	4.9	7	22.31982783	114.1765647
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:35:20	6.5	13.5	22.3198245	114.1765612
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:35:21	4.8	18.4	22.31981317	114.1765478
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:35:34	6	6	22.31967017	114.176414
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:35:35	6.9	12.9	22.31966883	114.1764143
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:35:36	6.7	19.7	22.31965867	114.1764065
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:35:37	5.2	24.9	22.3196335	114.1763892
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:36:24	7	13.7	22.31864283	114.1756618
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:36:25	6.2	20	22.31863117	114.1756543
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:36:54	5.4	11.2	22.317718	114.174985
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:36:55	6.4	17.7	22.31770717	114.1749768
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:36:56	5.3	23	22.317686	114.17496
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:37:57	6.6	12.5	22.3167085	114.1741875
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:37:58	4.4	17	22.31669683	114.174182
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:37:59	5	22.1	22.31667333	114.174165
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:38:39	4.8	8.5	22.3144225	114.1725093
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:38:40	5.5	14.1	22.31441567	114.1725052
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:38:41	4.5	18.6	22.31439883	114.1724937
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:39:08	5.7	12.6	22.31416617	114.1723243
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:39:09	5.5	18.1	22.31415467	114.172316
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:40:08	4.4	9.8	22.31301783	114.171222
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:40:37	4.5	16.4	22.31201417	114.1709023
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:42:18	6.4	14.3	22.30362583	114.171884
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:42:19	5.7	20	22.30361017	114.171893
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:43:06	4.2	15.9	22.3010475	114.1719417
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:43:27	6.8	12.9	22.30082133	114.1719217
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:43:28	6	19	22.3008075	114.1719232
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:43:29	4.8	23.9	22.3007805	114.1719243
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:44:15	7.5	10.7	22.29983717	114.1719963
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:44:16	6.4	17.1	22.29983167	114.1719943
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:44:17	4.8	21.9	22.29980883	114.172001
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:45:01	5.1	11	22.29681417	114.1722388
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:45:02	6	17	22.2968015	114.1722418
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:45:03	5.3	22.4	22.29677433	114.1722432
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:46:33	6.1	9.1	22.29502433	114.1724022
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:46:34	6.6	15.7	22.2950155	114.1724033
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:46:40	4	26	22.294825	114.1725767
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:48:34	6.1	10.7	22.29933833	114.175516
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:48:35	6.6	17.3	22.29934783	114.1755207
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:48:36	4.9	22.3	22.29937183	114.1755262
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:49:08	4.8	4.8	22.30037867	114.1758762
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:49:09	6.5	11.4	22.30037867	114.1758762
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:49:10	7.2	18.6	22.30038617	114.1758797
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:49:11	5.1	23.7	22.30040983	114.1758813
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:50:07	6.2	10.5	22.302593	114.1768273
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:50:08	5.7	16.3	22.30260217	114.1768413

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-28 23:49:09	2018-07-28 23:50:00	2018-07-29 00:50:09	5	21.3	22.302622	114.1768643
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:21:45	4.7	13.2	22.300619	114.1763608
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:21:46	5.8	19.1	22.3006005	114.1763523
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:21:47	4	23.1	22.3005695	114.1763395
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:22:50	5.3	9.5	22.2995605	114.1760258
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:22:51	5.9	15.4	22.2995465	114.1760195
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:22:52	5.5	21	22.29952317	114.176014
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:23:22	4	5.3	22.29861167	114.1758528
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:23:23	5	10.4	22.29861383	114.1758457
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:23:24	5.8	16.2	22.29860183	114.1758407
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:23:25	5.2	21.5	22.29857867	114.1758322
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:24:26	5.1	9.9	22.29470433	114.1740658
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:24:27	5.9	15.8	22.29470467	114.174056
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:24:28	5.4	21.2	22.294704	114.1740323
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:24:55	4.5	1.5	22.29525733	114.1722412
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:25:01	5.7	12.3	22.295304	114.1722413
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:25:02	5.9	18.3	22.29531717	114.1722435
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:25:03	4.2	22.6	22.2953445	114.1722518
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:25:31	5.4	12.9	22.29631483	114.1722902
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:25:32	5.9	18.9	22.29633117	114.1722883
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:25:33	4.8	23.7	22.29636133	114.1722808
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:26:02	4.2	9.5	22.29773383	114.1722625
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:26:31	5.3	6.9	22.2979405	114.1722663
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:26:32	6.1	13.1	22.29794483	114.1722643
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:26:33	5.7	18.8	22.29795967	114.1722577
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:26:34	4	22.9	22.2979895	114.1722563
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:27:10	5	18.5	22.3003355	114.172023
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:27:11	4.1	22.7	22.3003675	114.1720227
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:27:44	4.2	8.2	22.30181083	114.1718695
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:27:45	5.3	13.6	22.30181917	114.171868
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:27:46	6.2	19.8	22.30183883	114.1718658
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:28:47	4.7	10.5	22.303031	114.1717695
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:28:48	5.6	16.1	22.30304383	114.1717665
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:28:49	5.2	21.4	22.303068	114.171764
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:29:17	4.8	7.7	22.30423383	114.1716723
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:29:18	5.6	13.3	22.30423983	114.1716727
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:29:19	6.1	19.4	22.30425883	114.1716762
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:29:20	4.8	24.3	22.3042915	114.1716777
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:30:02	4.6	7.2	22.30683067	114.1714948
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:30:03	5.6	12.9	22.30683517	114.171495
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:30:04	6.3	19.2	22.30685117	114.1714962
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:30:05	4.4	23.7	22.30688067	114.171494
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:30:36	5	10.3	22.30805933	114.1713417
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:30:37	6.3	16.7	22.30807083	114.1713465
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:30:38	4.4	21.1	22.30809517	114.1713492
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:31:19	4.6	8	22.30937083	114.1712233
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:31:20	4.5	12.6	22.30937867	114.1712197
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:32:37	5.8	8.4	22.31417867	114.1704105
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:32:38	5.3	13.8	22.31418433	114.1704092
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:32:39	5.7	19.6	22.31420367	114.1704068
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:33:13	4.3	9.5	22.31589883	114.1700887

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:33:14	5.4	14.9	22.31591	114.1700902
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:33:15	4.9	19.9	22.3159325	114.1700875
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:34:19	4.3	5.8	22.31800967	114.1696417
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:34:20	4.7	10.6	22.31801283	114.1696428
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:34:21	5.3	15.9	22.31802617	114.1696443
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:34:22	4.9	20.9	22.31805133	114.1696447
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:35:07	4.2	13	22.319211	114.1684735
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:35:08	5.2	18.2	22.319207	114.1684503
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:35:09	4.4	22.6	22.31920083	114.1684165
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:37:10	7	8.5	22.320705	114.1689398
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:37:11	6.9	15.5	22.32070433	114.1689397
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:37:12	5.1	20.6	22.32070467	114.1689572
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:37:46	4	9	22.320831	114.1700488
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:37:47	5.5	14.6	22.320838	114.1700597
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:37:48	5.3	19.9	22.320845	114.1700837
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:38:38	4.6	7.5	22.31980367	114.1724043
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:38:39	4.9	12.4	22.31981167	114.1724105
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:40:13	5.5	9.5	22.3209595	114.1768398
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:40:14	4.3	13.9	22.32096367	114.1768473
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:43:01	5	15.6	22.33318433	114.1787737
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:43:02	4.2	19.8	22.33320967	114.1787758
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:43:43	4.9	10.6	22.3358235	114.178901
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:43:44	5.1	15.8	22.33583533	114.1789023
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:43:45	4.2	20.1	22.33585933	114.1789075
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:45:13	6.1	10.8	22.339704	114.1791763
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:45:14	5.4	16.3	22.33971233	114.179177
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:45:15	4.6	20.9	22.33973733	114.179179
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:52:15	5.2	11.5	22.36876733	114.1788183
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:52:16	5.4	17	22.36875883	114.1787998
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:52:17	4.2	21.3	22.36874767	114.1787742
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:52:48	4.5	9.9	22.36847667	114.1780932
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:52:49	5.2	15.1	22.36847183	114.1780827
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:52:50	5	20.2	22.368462	114.178059
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:53:40	5.5	9.2	22.3674345	114.1763737
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:53:41	4.8	14.1	22.36743183	114.1763688
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:54:39	4.3	9.5	22.3654545	114.1754013
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:54:40	4.9	14.4	22.36544767	114.175391
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:55:37	4.8	6.8	22.36288383	114.1724638
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:55:38	5.7	12.6	22.36288467	114.17246
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:55:39	6	18.6	22.36288267	114.172443
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:55:40	4.7	23.4	22.36287967	114.1724105
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:56:13	6	6	22.3632925	114.1714398
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:56:14	7.1	13.2	22.36329483	114.171437
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:56:15	6.1	19.3	22.36330383	114.1714255
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:57:03	4.5	8.3	22.36556883	114.1730167
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:57:04	5.7	14	22.36557433	114.1730227
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:57:05	6	20.1	22.365587	114.1730392
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:58:18	4.5	19.9	22.37137883	114.1783322
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:59:06	4.5	4.5	22.37262817	114.180405
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:59:07	4.4	8.9	22.3726285	114.1803988
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:59:08	5.4	14.4	22.3726335	114.1804053

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:59:09	5.8	20.3	22.3726435	114.1804258
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:59:31	4.9	9.9	22.37313333	114.181245
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:59:32	5.8	15.8	22.3731395	114.1812537
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 01:59:33	5.2	21	22.373153	114.1812738
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:00:48	6.4	12.4	22.37450067	114.1851998
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:00:49	6	18.4	22.37449733	114.185216
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:00:50	4.2	22.7	22.37449083	114.1852502
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:01:20	4.4	8.2	22.374477	114.1864655
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:01:21	5.6	13.9	22.37447917	114.1864747
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:01:22	5.9	19.8	22.37448	114.1864962
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:01:46	4.5	7.9	22.37494217	114.1879167
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:01:47	4.6	12.6	22.37494867	114.1879248
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:01:48	5.1	17.8	22.37495933	114.1879427
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:01:49	4.4	22.2	22.37497567	114.1879713
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:02:52	4.6	6.8	22.3760805	114.1895745
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:02:53	5.5	12.3	22.37608333	114.1895772
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:02:54	4.2	16.5	22.37609583	114.1895893
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:03:41	4.3	7.1	22.3761635	114.1915918
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:03:42	5.4	12.6	22.376167	114.1915968
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:03:43	6.2	18.8	22.37617217	114.1916137
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:03:44	4.3	23.1	22.37618117	114.191643
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:04:09	4.3	5.4	22.37596183	114.1924832
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:04:10	4.8	10.3	22.37595683	114.1924855
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:04:46	5.3	8.3	22.376535	114.1938182
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:04:47	6.2	14.6	22.37653733	114.1938243
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:04:48	5.3	19.9	22.37654867	114.1938402
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:05:26	4.9	11.5	22.3775985	114.1952287
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:05:27	6.1	17.7	22.377606	114.1952442
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:05:28	4.6	22.4	22.377618	114.195271
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:06:34	5.6	13	22.38071483	114.1944335
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:06:35	4.5	17.6	22.38072583	114.1944213
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:07:15	4.6	12	22.38249467	114.1956827
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:07:16	5.4	17.4	22.382505	114.195692
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:07:17	4.3	21.7	22.38252217	114.1957145
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:07:37	4.7	6.7	22.38301183	114.1962008
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:07:38	4.9	11.7	22.3830155	114.1962048
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:07:39	6.4	18.1	22.38302667	114.1962152
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:07:40	4.4	22.6	22.38304683	114.196235
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:08:23	5.6	11.3	22.38499233	114.1980757
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:08:24	6.2	17.5	22.38499967	114.198085
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:08:25	4.5	22.1	22.38501617	114.1981068
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:09:06	5.2	6.4	22.3869315	114.2000052
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:09:07	4.5	11	22.3869365	114.2000085
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:09:09	5.3	20	22.38696817	114.2000347
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:10:31	4.5	5.8	22.3917365	114.2063572
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:10:32	5.1	10.9	22.391738	114.2063592
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:10:33	5.9	16.8	22.39174617	114.2063702
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:10:34	4.8	21.7	22.39176283	114.2063933
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:11:38	7	8.4	22.39266683	114.2073288
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:11:39	7.1	15.5	22.392668	114.2073303
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:11:40	5.1	20.7	22.39268	114.207342

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:14:41	4.9	8.5	22.40613017	114.221905
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:14:42	5.8	14.4	22.40613717	114.2219085
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:14:43	6	20.4	22.40615433	114.22192
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:14:44	4.3	24.8	22.406183	114.2219407
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:15:44	4.6	10.1	22.40537267	114.2240165
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:15:45	6	16.2	22.40536733	114.2240067
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:16:49	5.2	18.1	22.406293	114.2225035
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:16:50	4.9	23	22.40631217	114.2224783
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:19:15	5.5	6.5	22.417999	114.2304377
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:19:16	5.7	12.3	22.41800183	114.2304335
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:19:17	5.3	17.7	22.41801133	114.230421
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:19:50	6	6	22.41820433	114.2300888
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:19:51	6.5	12.6	22.41820483	114.2300887
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:19:52	5.7	18.3	22.41821083	114.2300775
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:19:53	6	24.4	22.41822483	114.230051
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:19:54	4.1	28.5	22.41824717	114.2300088
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:20:54	4.8	6.3	22.42179467	114.2285445
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:20:55	5.7	12	22.421798	114.2285385
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:20:56	6.2	18.3	22.42180817	114.228526
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:20:57	4.5	22.8	22.421829	114.2285035
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:22:13	7.4	13.4	22.42220817	114.2278597
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:22:14	5.6	19	22.42221383	114.2278468
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:22:48	4.7	7.2	22.42353433	114.2283013
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:22:49	5.3	12.5	22.42353883	114.2283043
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:22:50	6.5	19	22.423548	114.228321
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:22:51	4.3	23.3	22.42356733	114.228346
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:24:26	5.3	9.6	22.42423433	114.2293227
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:24:27	5.7	15.3	22.42423817	114.2293255
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:24:28	6	21.3	22.4242495	114.2293458
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:25:07	5.2	10.4	22.4250265	114.2317428
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:25:08	5.9	16.4	22.42502933	114.231754
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:25:09	5.5	21.9	22.42503333	114.2317777
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:25:46	6	6	22.42549517	114.2336722
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:25:47	6.4	12.4	22.425496	114.2336752
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:25:48	6.4	18.8	22.42549683	114.2336898
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:25:49	4.2	23.1	22.42550183	114.2337208
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:26:40	4.4	20.3	22.4266445	114.2387365
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:27:40	5.2	7.9	22.42582483	114.2398147
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:27:41	5.3	13.3	22.42581817	114.239818
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	HH.STN	2018-07-29 01:19:18	2018-07-29 01:20:00	2018-07-29 02:27:42	4.6	18	22.42580117	114.2398278
76129	[redacted]	STD	NULL	NULL	UR1625	NULL	NULL	2018-07-29 01:19:18	NULL	2018-07-29 02:29:40	4.8	12.9	22.42333517	114.2371862
76129	[redacted]	STD	NULL	NULL	UR1625	NULL	NULL	2018-07-29 01:19:18	NULL	2018-07-29 02:29:41	4.5	17.4	22.42333083	114.2371677
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:00:17	4.2	25.1	22.42398067	114.2377897
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:01:04	6.9	9	22.42517067	114.2399628
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:01:05	6.7	15.7	22.4251865	114.2399685
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:01:06	6.2	21.9	22.42521033	114.2399635
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:01:07	4.6	26.6	22.425245	114.2399507
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:02:01	5.9	16.3	22.42621483	114.2393123
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:02:02	4.6	20.9	22.426227	114.2392918
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:03:25	6.1	7.3	22.4253135	114.234504
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:03:26	6.5	13.8	22.42530983	114.2344973

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:03:27	5.6	19.5	22.42530367	114.2344815
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:03:28	4.3	23.9	22.425296	114.2344487
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:04:11	4.3	7.7	22.42428183	114.2315148
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:04:12	4.6	12.4	22.42428033	114.2315073
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:04:13	4.2	16.6	22.42427667	114.2314883
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:05:28	4.3	8	22.42400317	114.2298645
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:05:29	5.7	13.7	22.42399717	114.2298577
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:06:44	6.4	10.9	22.42243483	114.2279768
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:06:45	4.9	15.9	22.42242667	114.2279735
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:10:40	5.5	10.3	22.4066995	114.2224572
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:10:41	5.7	16	22.4066905	114.222452
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:10:42	4.5	20.5	22.4066685	114.2224383
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:11:58	4.4	6.6	22.40633083	114.2224313
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:11:59	5.4	12.1	22.40633367	114.2224287
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:15:16	5.3	6.4	22.39138533	114.2063135
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:15:17	5.5	11.9	22.3913815	114.2063095
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:15:18	6	18	22.39137167	114.2062963
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:15:19	4.8	22.8	22.39135467	114.206272
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:17:24	4.5	23.6	22.38079917	114.1944717
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:18:03	4.9	9.6	22.3791825	114.1965875
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:18:04	5.5	15.2	22.3791745	114.1965965
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:18:05	4.2	19.4	22.37916067	114.1966172
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:18:41	4.5	4.5	22.377984	114.1959485
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:18:42	7.3	11.9	22.377984	114.1959485
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:18:43	6.8	18.8	22.37797867	114.1959438
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:18:44	4.4	23.3	22.377959	114.1959205
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:19:20	7.5	15.5	22.3767295	114.1941668
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:19:21	5.2	20.8	22.37671833	114.1941487
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:19:57	4.2	7	22.37553867	114.192085
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:19:58	5	12.1	22.37553717	114.192081
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:19:59	6.2	18.3	22.37553217	114.1920657
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:20:28	4.4	9.3	22.375945	114.1898307
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:20:29	4.4	13.7	22.37595317	114.1898222
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:21:10	5.2	8.3	22.37511717	114.1884798
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:21:11	6.2	14.5	22.37511417	114.1884745
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:21:12	5.7	20.3	22.37510433	114.188457
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:24:12	6.5	9.1	22.3679075	114.1745638
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:24:13	6.4	15.6	22.36790883	114.1745642
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:24:14	5.6	21.2	22.36789317	114.1745562
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:25:11	4.3	26.3	22.36339583	114.1713567
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:26:33	6.2	10.1	22.36630517	114.176372
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:26:34	5.7	15.8	22.36630683	114.1763785
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:27:23	5.6	7.5	22.36715483	114.1762078
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:27:24	6.5	14.1	22.367158	114.1762072
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:27:25	5.5	19.7	22.367175	114.176198
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:28:34	5.1	9.9	22.3687185	114.1784838
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:28:35	6	16	22.36872183	114.1784923
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:28:36	5.2	21.2	22.3687305	114.1785142
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:29:08	5.7	10.1	22.3693545	114.1801143
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:29:09	5.6	15.7	22.36935833	114.1801248
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:29:10	5.2	21	22.36936833	114.1801478

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:34:45	7.7	11.6	22.34022167	114.1793468
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:34:46	7.3	18.9	22.340212	114.1793417
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:34:47	5.8	24.8	22.34018333	114.1793353
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:36:05	4.8	4.8	22.33428017	114.1789755
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:36:06	5.6	10.4	22.33428	114.1789755
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:36:07	6.1	16.6	22.334259	114.1789728
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:36:08	5.5	22.1	22.33422867	114.178971
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:36:50	6.1	11.4	22.33273867	114.1788805
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:36:51	6.6	18	22.33272667	114.1788803
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:36:52	5.4	23.5	22.33270083	114.1788803
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:37:41	6.1	10.3	22.33053783	114.178737
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:37:42	6.3	16.7	22.33052883	114.1787365
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:37:43	5.5	22.2	22.3305055	114.178735
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:39:24	5.8	10.1	22.321782	114.1781917
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:39:25	4.8	15	22.32177317	114.1781953
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:39:26	5	20	22.32175117	114.1782047
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:39:50	7.6	9.5	22.32138483	114.1782557
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:39:51	7.4	16.9	22.321382	114.178253
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:39:52	5.6	22.6	22.32136717	114.178237
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:40:36	6.9	12.3	22.31972383	114.1764262
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:40:37	6.8	19.2	22.31971617	114.1764153
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:40:38	4.9	24.1	22.31969283	114.1763935
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:41:25	6.5	6.5	22.31873283	114.1756543
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:41:26	5.7	12.2	22.31872783	114.1756535
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:41:27	6.6	18.9	22.31871633	114.1756452
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:41:28	4.2	23.2	22.31869367	114.1756263
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:42:54	5.2	5.2	22.31662567	114.1741378
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:42:55	6.4	11.6	22.31662567	114.1741378
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:42:56	7	18.7	22.31661783	114.1741323
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:42:57	4.8	23.5	22.31659567	114.174117
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:44:04	6.5	7.9	22.31402933	114.1722078
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:44:05	6.8	14.8	22.314028	114.1722065
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:44:06	5.7	20.5	22.31401333	114.1721967
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:45:18	6.4	10.1	22.31299833	114.170976
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:45:19	6.7	16.9	22.31299917	114.1709658
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:45:25	4.1	23.1	22.31289233	114.170737
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:45:52	4.6	9.6	22.31196283	114.1709713
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:45:53	5.8	15.4	22.31195433	114.1709715
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:45:54	6	21.5	22.311933	114.1709758
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:47:57	8.2	16.1	22.29986317	114.1720258
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:47:58	5.5	21.7	22.29984717	114.1720265
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:49:35	4.4	7.5	22.29502783	114.1723672
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:51:09	6.4	8.4	22.29682433	114.1754775
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:51:10	5.6	14.1	22.2968295	114.1754778
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:51:11	4.8	19	22.29685	114.1754775
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:52:20	5.4	10.3	22.2991435	114.1758083
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:52:21	6	16.4	22.29915417	114.1758072
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:52:22	4.2	20.6	22.29917767	114.1758108
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:52:56	5.9	9.8	22.30019733	114.1761332
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:52:57	6.6	16.5	22.30020567	114.1761335
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:52:58	4.7	21.2	22.30022917	114.1761402

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:53:28	5.3	2.1	22.30276517	114.1770595
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:54:33	5.9	8	22.30279317	114.1770712
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:54:34	6.2	14.2	22.302807	114.1770713
76129	[redacted]	STD	2018-07-29	N281	UR1625	N281	KAMYNG	2018-07-29 02:59:27	2018-07-29 03:00:00	2018-07-29 03:54:35	4	18.3	22.30282267	114.1770758
76129	[redacted]	STD	NULL	NULL	UR1625	NULL	NULL	2018-07-29 02:59:27	NULL	2018-07-29 04:14:12	5.6	8.8	22.30218217	114.183704
76129	[redacted]	STD	NULL	NULL	UR1625	NULL	NULL	2018-07-29 02:59:27	NULL	2018-07-29 04:14:13	5.6	14.5	22.30218267	114.1837137
76129	[redacted]	STD	NULL	NULL	UR1625	NULL	NULL	2018-07-29 02:59:27	NULL	2018-07-29 04:14:14	5.1	19.6	22.30218267	114.1837388
76129	[redacted]	STD	NULL	NULL	UR1625	NULL	NULL	2018-07-29 02:59:27	NULL	2018-07-29 04:18:45	5.8	7.2	22.3334605	114.1788192
76129	[redacted]	STD	NULL	NULL	UR1625	NULL	NULL	2018-07-29 02:59:27	NULL	2018-07-29 04:18:46	6.4	13.7	22.3334655	114.1788173
76129	[redacted]	STD	NULL	NULL	UR1625	NULL	NULL	2018-07-29 02:59:27	NULL	2018-07-29 04:18:47	6.5	20.2	22.33348383	114.1788175
76129	[redacted]	STD	NULL	NULL	UR1625	NULL	NULL	2018-07-29 02:59:27	NULL	2018-07-29 04:27:36	5.2	11.8	22.37874683	114.2044187
76129	[redacted]	STD	NULL	NULL	UR1625	NULL	NULL	2018-07-29 02:59:27	NULL	2018-07-29 04:27:37	6.3	18.1	22.37876083	114.2044395
76129	[redacted]	STD	NULL	NULL	UR1625	NULL	NULL	2018-07-29 02:59:27	NULL	2018-07-29 04:27:38	5.2	23.3	22.3787805	114.2044685
76129	[redacted]	STD	NULL	NULL	UR1625	NULL	NULL	2018-07-29 02:59:27	NULL	2018-07-29 04:33:27	4.2	10.9	22.383901	114.2066573
76129	[redacted]	STD	NULL	NULL	UR2646	NULL	NULL	2018-07-29 20:15:03	NULL	2018-07-29 20:18:12	5.4	11.5	22.38329633	114.2135382
76129	[redacted]	STD	NULL	NULL	UR2646	NULL	NULL	2018-07-29 20:15:03	NULL	2018-07-29 20:18:13	5.2	16.8	22.38329867	114.213548
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:21:39	6.3	16.5	22.383095	114.2145377
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:21:40	5.5	22	22.3831045	114.2145157
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:21:41	4	26.1	22.38312117	114.2144765
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:22:59	5.5	14.2	22.38304233	114.210257
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:23:00	6.2	20.5	22.38305217	114.2102385
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:24:54	5.9	17.8	22.38535533	114.2071432
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:24:55	4.8	22.6	22.38537533	114.2071202
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:25:43	6.1	15.3	22.38654917	114.2057652
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:25:44	5	20.3	22.38656417	114.2057463
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:27:05	5.5	17.2	22.38695333	114.2038262
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:27:06	4	21.3	22.38693267	114.203806
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:28:25	6.3	12.4	22.3850065	114.2021045
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:28:26	6.4	18.8	22.38499067	114.2021032
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:28:27	4.5	23.4	22.38495867	114.2021015
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:29:11	5.3	14.5	22.3819535	114.2022787
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:29:12	4.1	18.7	22.38193417	114.2022922
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:30:25	6.8	16.2	22.380631	114.2032723
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:30:26	5	21.2	22.38064283	114.2033088
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:31:09	5.5	15.4	22.37984733	114.2039492
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:31:10	4.9	20.4	22.37983717	114.2039573
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:32:01	6.1	14	22.37915383	114.2044542
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:32:02	4.9	18.9	22.37914883	114.204465
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:33:18	5.6	14.9	22.37787933	114.2003715
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:33:19	4.9	19.9	22.37788167	114.2003598
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:34:07	5.7	13.4	22.37869283	114.1973107
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:34:08	4.6	18.1	22.37869683	114.1973017
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:35:23	6.9	15.6	22.37794583	114.1959123
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:35:24	5.4	21.1	22.3779445	114.195913
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:35:55	5.6	13.7	22.37731883	114.195095
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:35:56	5.9	19.6	22.3773135	114.1950863
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:35:57	4.1	23.8	22.3773025	114.195065
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:37:22	5.3	18.8	22.37581617	114.1927423
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:38:05	5.2	12	22.37585817	114.1910293
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:38:06	5.8	17.9	22.37585483	114.1910165
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:39:03	4.6	13.2	22.375983	114.1898427

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:39:56	5.8	13.4	22.37513417	114.1884728
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:39:57	5.5	18.9	22.37513	114.1884655
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:40:35	5.5	14.6	22.37425983	114.186793
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:40:36	5.5	20.1	22.37426033	114.1867758
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:41:41	4.6	13.4	22.37424533	114.185786
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:42:18	5.4	15.1	22.3733805	114.1856123
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:42:19	5.4	20.5	22.37336367	114.1856173
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:42:20	4.1	24.6	22.373334	114.1856242
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:43:30	5.4	19	22.37025283	114.1855597
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:44:14	5.6	12.9	22.3710485	114.186116
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:44:15	5.7	18.7	22.371054	114.1861237
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:44:16	4.4	23.1	22.37106667	114.186142
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:44:55	4	18.4	22.37004167	114.1878118
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:45:27	6.2	16.5	22.36949183	114.1874063
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:45:28	5.5	22	22.36947717	114.1873985
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:48:05	5.9	13.3	22.37216083	114.1801317
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:48:06	6	19.4	22.3721555	114.1801222
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:48:07	4.1	23.6	22.37214467	114.1800998
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:48:57	4.8	13	22.36986467	114.1800593
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:48:58	4.1	17.2	22.369854	114.1800652
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:50:25	5.3	12.1	22.368797	114.1788877
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:50:26	4.3	16.4	22.36879533	114.1788847
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:51:46	7.1	16	22.36745433	114.176319
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:51:47	5.6	21.6	22.3674475	114.1763133
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:52:54	4.1	12.6	22.36755217	114.174628
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:55:28	5.7	13.3	22.374015	114.1766427
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:55:29	5.9	19.3	22.37402233	114.176636
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:55:30	4	23.4	22.37404317	114.1766195
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	WN.TAU	2018-07-29 20:15:03	2018-07-29 20:20:00	2018-07-29 20:56:33	4.5	14.1	22.37750917	114.1744912
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:12:06	4.3	13.1	22.37786533	114.174641
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:12:33	6.2	18.2	22.37684917	114.1750307
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:12:34	5.2	23.5	22.37683417	114.1750393
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:13:15	5	12	22.375864	114.1756615
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:13:16	5.8	17.9	22.3758525	114.1756452
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:13:17	4.4	22.3	22.37582883	114.1756498
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:14:38	5.3	9.4	22.37309267	114.1775578
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:14:39	5.7	15.1	22.37308733	114.1775603
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:14:40	6	21.2	22.3730735	114.1775705
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:14:41	4	25.2	22.37305067	114.1775913
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:15:27	6.1	18.5	22.37178583	114.178547
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:15:28	4.3	22.9	22.371773	114.1785648
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:18:12	5.6	13.3	22.36731	114.1758548
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:18:13	6.1	19.4	22.36731083	114.1758633
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:18:14	4.1	23.6	22.3673135	114.175888
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:19:08	5.2	13	22.36901317	114.179165
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:19:09	5.6	18.6	22.36901733	114.1791757
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:19:10	4.7	23.4	22.3690235	114.1792003
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:19:59	4.8	12.2	22.36929817	114.179912
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:20:00	5.5	17.8	22.36930283	114.1799233
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:20:09	4.1	30.6	22.369571	114.1802253
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:21:32	4.4	9.2	22.372619	114.1804077

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:21:33	5.3	14.6	22.3726215	114.1804113
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:21:34	6.4	21	22.37262867	114.1804257
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:21:35	4	25.1	22.37264133	114.1804502
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:22:04	6.5	15.6	22.37314633	114.1812595
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:22:05	5.5	21.2	22.37315333	114.1812715
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:22:06	4.2	25.5	22.37317	114.1812975
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:23:29	5	10	22.37446483	114.18514
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:23:30	5.7	15.7	22.37446267	114.1851517
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:23:31	5.2	21	22.37445967	114.1851688
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:23:59	5.4	11.9	22.37337617	114.1855622
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:24:00	5.9	17.9	22.37336917	114.1855657
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:24:01	4.8	22.7	22.37335	114.1855717
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:25:08	5.8	18.3	22.37016033	114.1855555
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:25:09	4.7	23	22.3701805	114.1855643
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:25:45	5.6	13.7	22.3709785	114.1860858
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:25:46	5.9	19.7	22.37100283	114.1861008
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:26:22	5.3	15.2	22.3700135	114.1877912
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:26:23	4.7	20	22.370003	114.1877793
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:26:48	4.3	12.4	22.369758	114.1875452
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:26:49	5.5	17.9	22.36974967	114.1875368
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:26:50	4.2	22.1	22.3697335	114.187521
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:29:23	5.5	11.8	22.37425067	114.1854175
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:29:24	5.8	17.6	22.37425317	114.1854172
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:29:57	4.9	10.2	22.37447733	114.1864687
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:29:58	5.9	16.2	22.3744765	114.186469
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:29:59	5.8	22.1	22.37447733	114.1864862
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:31:15	6.7	12	22.37495333	114.1879327
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:31:16	6.7	18.8	22.37495467	114.1879393
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:31:17	4.1	23	22.37496333	114.1879562
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:31:18	4	27	22.37498067	114.187989
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:32:19	4.7	15.4	22.37608333	114.189586
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:33:04	6.6	14.1	22.37609117	114.191548
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:33:05	6	20.2	22.37609367	114.191555
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:33:06	4.3	24.5	22.37609933	114.1915777
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:34:20	4.7	14.9	22.3758775	114.1924735
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:34:59	7.2	17.3	22.37648967	114.1937682
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:35:00	5.2	22.5	22.37650083	114.1937808
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:35:41	5.8	17.9	22.37728383	114.1947608
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:35:42	5.3	23.2	22.377296	114.1947818
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:36:52	5.2	21.6	22.37783967	114.1955615
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:37:44	5.2	12.6	22.37876583	114.1976657
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:37:45	5.8	18.4	22.37876017	114.1976735
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:37:46	4.4	22.9	22.37875183	114.1976937
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:39:06	4.2	29.8	22.37896167	114.2044002
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:39:41	6	12.5	22.38013267	114.203467
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:39:42	6.1	18.7	22.38013983	114.2034635
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:39:43	4.5	23.3	22.38015783	114.2034503
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:40:44	5.2	14.3	22.3847635	114.2019478
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:40:45	6	20.3	22.38477567	114.2019485
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:40:46	4.1	24.5	22.38479767	114.2019497
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:41:34	4.7	9.5	22.38630817	114.2028323

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:41:35	4.6	14.1	22.38631317	114.2028428
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:42:05	5.9	11.6	22.38663583	114.2031672
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:42:06	5.3	16.9	22.3866395	114.2031702
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:42:07	5.7	22.7	22.38665167	114.2031823
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:43:20	5.7	11.1	22.38710867	114.205447
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:43:22	5	22.5	22.38709933	114.2054555
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:43:50	5.4	12.1	22.38644833	114.206193
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:43:52	5	23.7	22.38642383	114.2062118
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:44:39	7	17.5	22.3859155	114.2067005
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:44:40	5.2	22.7	22.385909	114.2067075
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:47:11	5.7	15.5	22.384345	114.208434
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:47:12	5.8	21.3	22.38433417	114.2084443
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:47:13	4.1	25.5	22.3843135	114.2084647
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:48:39	5.9	15.6	22.38338883	114.213882
76129	[redacted]	STD	2018-07-29	N281	UR2646	82K	MEILAM	2018-07-29 21:08:56	2018-07-29 21:10:00	2018-07-29 21:48:40	5	20.6	22.38338933	114.2138968
76129	[redacted]	STD	NULL	NULL	UR2646	NULL	NULL	2018-07-29 21:08:56	NULL	2018-07-29 22:03:06	5.7	13.9	22.38309383	114.2144775
76129	[redacted]	STD	NULL	NULL	UR2646	NULL	NULL	2018-07-29 21:08:56	NULL	2018-07-29 22:03:07	5.9	19.9	22.3830965	114.2144687
76129	[redacted]	STD	NULL	NULL	UR2646	NULL	NULL	2018-07-29 21:08:56	NULL	2018-07-29 22:03:08	5.5	25.4	22.38310583	114.2144462
76129	[redacted]	STD	NULL	NULL	UR2646	NULL	NULL	2018-07-29 21:08:56	NULL	2018-07-29 22:04:19	5	12.7	22.383049	114.2103078
76129	[redacted]	STD	NULL	NULL	UR2646	NULL	NULL	2018-07-29 21:08:56	NULL	2018-07-29 22:04:20	5.7	18.5	22.3830565	114.2102948
76129	[redacted]	STD	NULL	NULL	UR2646	NULL	NULL	2018-07-29 21:08:56	NULL	2018-07-29 22:10:17	5.7	13.3	22.419459	114.2323022
76129	[redacted]	STD	NULL	NULL	UR2646	NULL	NULL	2018-07-29 21:08:56	NULL	2018-07-29 22:10:18	5.3	18.6	22.41945733	114.2323023
76129	[redacted]	STD	NULL	NULL	UR2646	NULL	NULL	2018-07-29 21:08:56	NULL	2018-07-29 22:10:19	4.1	22.8	22.41947367	114.232303
76129	[redacted]	STD	NULL	NULL	UR2646	NULL	NULL	2018-07-29 21:08:56	NULL	2018-07-29 22:10:20	4.1	26.9	22.4195075	114.2323058
76129	[redacted]	STD	NULL	NULL	UR2646	NULL	NULL	2018-07-29 21:08:56	NULL	2018-07-29 22:11:22	5.6	20.2	22.42148583	114.2324685
76129	[redacted]	STD	NULL	NULL	UR2646	NULL	NULL	2018-07-29 21:08:56	NULL	2018-07-29 22:11:23	4.3	24.6	22.42151083	114.2324757
76129	[redacted]	STD	NULL	NULL	UR2646	NULL	NULL	2018-07-29 21:08:56	NULL	2018-07-29 22:11:30	4.4	30.7	22.42184617	114.232636
76129	[redacted]	STD	NULL	NULL	UR2646	NULL	NULL	2018-07-29 21:08:56	NULL	2018-07-29 22:12:41	4.2	15	22.422867	114.2356333

emp_no	name	depot_abbr	operating_date	route_no	bus_no	operating_route	departure_from	octopus_tap_time	departure_time	operating_time	ba_value	speed	gps_pos_lat	gps_pos_long
3965	[redacted]	KBD	NULL	NULL	LB6946	NULL	NULL	2018-07-24 06:04:50	NULL	2018-07-24 06:05:45	-9.5	5.8	22.30777217	114.2217785
3965	[redacted]	KBD	2018-07-24	23	LB6946	23	KT.FRY	2018-07-24 06:04:50	2018-07-24 06:10:00	2018-07-24 06:12:55	-8.7	3.4	22.30785817	114.2223472
3965	[redacted]	KBD	2018-07-24	23	LB6946	23	KT.FRY	2018-07-24 06:04:50	2018-07-24 06:10:00	2018-07-24 06:16:24	-8.7	20.7	22.31187283	114.2273412
3965	[redacted]	KBD	2018-07-24	23	LB6946	23	KT.FRY	2018-07-24 06:04:50	2018-07-24 06:10:00	2018-07-24 06:18:41	-8.5	0	22.31646783	114.2263077
3965	[redacted]	KBD	2018-07-24	23	LB6946	23	KT.FRY	2018-07-24 06:04:50	2018-07-24 06:10:00	2018-07-24 06:20:00	-9.5	0	22.31747117	114.2267672
3965	[redacted]	KBD	2018-07-24	23	LB6946	23	KT.FRY	2018-07-24 06:04:50	2018-07-24 06:10:00	2018-07-24 06:30:16	-8.5	14.2	22.33206467	114.2226393
3965	[redacted]	KBD	2018-07-24	23	LB6946	23	KT.FRY	2018-07-24 06:57:41	2018-07-24 07:00:00	2018-07-24 07:08:04	-8.5	0	22.31730517	114.2266008
3965	[redacted]	KBD	2018-07-24	23	LB6946	23	KT.FRY	2018-07-24 06:57:41	2018-07-24 07:00:00	2018-07-24 07:36:21	-8.5	8.8	22.3095135	114.2236983
3965	[redacted]	KBD	2018-07-24	23	LB6946	23	KT.FRY	2018-07-24 08:38:17	2018-07-24 08:40:00	2018-07-24 08:46:43	-8.5	0	22.30962017	114.2288163
3965	[redacted]	KBD	2018-07-24	23	LB6946	23	KT.FRY	2018-07-24 08:38:17	2018-07-24 08:40:00	2018-07-24 09:18:16	-9.2	0	22.32084567	114.2267118
3965	[redacted]	KBD	2018-07-24	23	LB6946	23	KT.FRY	2018-07-24 08:38:17	2018-07-24 08:40:00	2018-07-24 09:25:43	-8.8	9.5	22.31256917	114.2266113
3965	[redacted]	KBD	2018-07-24	23	LB6946	23	KT.FRY	2018-07-24 11:47:21	2018-07-24 11:50:00	2018-07-24 11:51:28	-8.5	11.2	22.3081275	114.2228268
3965	[redacted]	KBD	2018-07-25	23	LF4063	23	KT.FRY	2018-07-25 06:04:29	2018-07-25 06:10:00	2018-07-25 06:12:21	-9.5	22	22.30845	114.2260463
3965	[redacted]	KBD	2018-07-25	23	LF4063	23	KT.FRY	2018-07-25 06:04:29	2018-07-25 06:10:00	2018-07-25 06:12:22	-9.5	12.5	22.30848483	114.2260898
3965	[redacted]	KBD	2018-07-25	23	LF4063	23	KT.FRY	2018-07-25 06:04:29	2018-07-25 06:10:00	2018-07-25 06:12:23	-8.4	4.1	22.30850283	114.2261152
3965	[redacted]	KBD	2018-07-25	23	LF4063	23	KT.FRY	2018-07-25 06:04:29	2018-07-25 06:10:00	2018-07-25 06:14:02	-8.4	18	22.30919533	114.2285147
3965	[redacted]	KBD	2018-07-25	23	LF4063	23	KT.FRY	2018-07-25 06:04:29	2018-07-25 06:10:00	2018-07-25 06:15:04	-8.7	30.2	22.31172233	114.226831
3965	[redacted]	KBD	2018-07-25	23	LF4063	23	KT.FRY	2018-07-25 06:04:29	2018-07-25 06:10:00	2018-07-25 06:20:48	-8.5	6.4	22.321937	114.2260995
3965	[redacted]	KBD	2018-07-25	23	LF4063	23	KT.FRY	2018-07-25 06:04:29	2018-07-25 06:10:00	2018-07-25 06:27:55	-8.5	17.6	22.33155333	114.2263278
3965	[redacted]	KBD	2018-07-25	23	LF4063	23	KT.FRY	2018-07-25 08:38:56	2018-07-25 08:40:00	2018-07-25 08:51:13	-9.5	20.3	22.3170695	114.2265332
3965	[redacted]	KBD	2018-07-25	23	LF4063	23	KT.FRY	2018-07-25 08:38:56	2018-07-25 08:40:00	2018-07-25 09:09:04	-8.8	15.9	22.33203317	114.2226285
3965	[redacted]	KBD	2018-07-25	23	LF4063	23	KT.FRY	2018-07-25 11:41:35	2018-07-25 11:45:00	2018-07-25 11:46:16	-8.7	11.5	22.30855683	114.2226093
3965	[redacted]	KBD	2018-07-25	23	LF4063	23	KT.FRY	2018-07-25 14:44:11	2018-07-25 14:45:00	2018-07-25 15:18:11	-8.4	23.1	22.32422233	114.2257988
3965	[redacted]	KBD	2018-07-25	23	LF4063	23	KT.FRY	2018-07-25 14:44:11	2018-07-25 14:45:00	2018-07-25 15:18:12	-9.2	13.9	22.32419467	114.2258515
3965	[redacted]	KBD	2018-07-25	23	LF4063	23	KT.FRY	2018-07-25 14:44:11	2018-07-25 14:45:00	2018-07-25 15:31:25	-9.2	14.2	22.3088035	114.2229432
3965	[redacted]	KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 06:09:04	2018-07-26 06:10:00	2018-07-26 06:12:22	-8.3	0	22.30853583	114.2261182
3965	[redacted]	KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 06:09:04	2018-07-26 06:10:00	2018-07-26 06:14:29	-9	0.6	22.30934667	114.2285573
3965	[redacted]	KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 06:09:04	2018-07-26 06:10:00	2018-07-26 06:15:58	-8	8	22.311584	114.226521
3965	[redacted]	KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 06:09:04	2018-07-26 06:10:00	2018-07-26 06:19:14	-9	0	22.31709983	114.2262068
3965	[redacted]	KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 06:09:04	2018-07-26 06:10:00	2018-07-26 06:19:50	-9.3	0	22.31749283	114.2264315
3965	[redacted]	KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 06:09:04	2018-07-26 06:10:00	2018-07-26 06:20:15	-8.4	11.6	22.31816283	114.226749
3965	[redacted]	KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 06:09:04	2018-07-26 06:10:00	2018-07-26 06:21:46	-8.7	0	22.32198217	114.2259902
3965	[redacted]	KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 06:09:04	2018-07-26 06:10:00	2018-07-26 06:36:53	-8.7	0	22.31727617	114.226743
3965	[redacted]	KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 06:09:04	2018-07-26 06:10:00	2018-07-26 06:38:39	-8.3	0	22.31310833	114.2264597
3965	[redacted]	KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 06:09:04	2018-07-26 06:10:00	2018-07-26 06:40:02	-9	12.2	22.3113655	114.2259722
3965	[redacted]	KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 06:09:04	2018-07-26 06:10:00	2018-07-26 06:45:15	-8.3	0	22.3078455	114.2218838
3965	[redacted]	KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 06:57:52	2018-07-26 07:00:00	2018-07-26 07:03:32	-8.3	1	22.30932067	114.2285502
3965	[redacted]	KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 06:57:52	2018-07-26 07:00:00	2018-07-26 07:03:42	-8.7	8.7	22.30933233	114.2285545
3965	[redacted]	KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 06:57:52	2018-07-26 07:00:00	2018-07-26 07:07:56	-8.3	0	22.31709333	114.2266438
3965	[redacted]	KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 06:57:52	2018-07-26 07:00:00	2018-07-26 07:09:23	-9	0	22.320053	114.2271163
3965	[redacted]	KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 06:57:52	2018-07-26 07:00:00	2018-07-26 07:11:29	-9.3	0	22.32195233	114.2261327
3965	[redacted]	KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 06:57:52	2018-07-26 07:00:00	2018-07-26 07:13:44	-9.6	0	22.3239535	114.2258645
3965	[redacted]	KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 06:57:52	2018-07-26 07:00:00	2018-07-26 07:20:30	-8	11.2	22.33304433	114.2242433
3965	[redacted]	KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 06:57:52	2018-07-26 07:00:00	2018-07-26 07:25:03	-8.7	0	22.32881867	114.2253647
3965	[redacted]	KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 06:57:52	2018-07-26 07:00:00	2018-07-26 07:38:27	-9.3	12.8	22.309883	114.2240148

3965	[redacted]	KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 06:57:52	2018-07-26 07:00:00	2018-07-26 07:39:07	-9.3	0	22.309737	114.2235477
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 06:57:52	2018-07-26 07:00:00	2018-07-26 07:40:40	-10	0	22.30700583	114.2220938
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 07:45:51	2018-07-26 07:48:00	2018-07-26 07:49:16	-9.6	0	22.307599	114.2233383
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 07:45:51	2018-07-26 07:48:00	2018-07-26 07:52:10	-9.3	0	22.30921283	114.2285327
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 07:45:51	2018-07-26 07:48:00	2018-07-26 07:57:17	-8.3	10.3	22.31999417	114.2271702
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 07:45:51	2018-07-26 07:48:00	2018-07-26 08:15:03	-9.9	13.8	22.3290345	114.2256123
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 07:45:51	2018-07-26 07:48:00	2018-07-26 08:18:43	-11.6	0	22.32185933	114.2264037
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 07:45:51	2018-07-26 07:48:00	2018-07-26 08:19:37	-8.1	11.6	22.320884	114.2268338
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 07:45:51	2018-07-26 07:48:00	2018-07-26 08:30:47	-9.6	0	22.30700167	114.2223413
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 07:45:51	2018-07-26 07:48:00	2018-07-26 08:31:53	-10	0	22.30783983	114.2217833
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 08:38:31	2018-07-26 08:40:00	2018-07-26 08:46:06	-10	10	22.30904817	114.2284308
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 08:38:31	2018-07-26 08:40:00	2018-07-26 08:48:37	-8.2	3.9	22.3116665	114.2269645
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 08:38:31	2018-07-26 08:40:00	2018-07-26 08:48:46	-9	11.9	22.31171417	114.2268833
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 08:38:31	2018-07-26 08:40:00	2018-07-26 08:50:01	-8.3	1.3	22.31190867	114.2264757
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 08:38:31	2018-07-26 08:40:00	2018-07-26 08:55:57	-8.3	1.3	22.32099483	114.226463
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 08:38:31	2018-07-26 08:40:00	2018-07-26 09:03:15	-9.3	0	22.3263995	114.2268085
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 08:38:31	2018-07-26 08:40:00	2018-07-26 09:05:22	-9.6	0	22.32879117	114.2269782
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 08:38:31	2018-07-26 08:40:00	2018-07-26 09:18:14	-8.7	0	22.32121283	114.22658
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 08:38:31	2018-07-26 08:40:00	2018-07-26 09:24:15	-9.3	0	22.31309533	114.2264565
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 08:38:31	2018-07-26 08:40:00	2018-07-26 09:25:35	-9	12.2	22.31121783	114.2256848
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 08:38:31	2018-07-26 08:40:00	2018-07-26 09:27:03	-9.2	12.2	22.30995833	114.2241423
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 08:38:31	2018-07-26 08:40:00	2018-07-26 09:27:29	-9.6	0	22.30967183	114.2238438
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 08:38:31	2018-07-26 08:40:00	2018-07-26 09:31:35	-8.7	0	22.30726633	114.2217668
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 09:44:48	2018-07-26 09:45:00	2018-07-26 09:45:05	-8.7	8.7	22.30783567	114.2218448
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 09:44:48	2018-07-26 09:45:00	2018-07-26 09:45:06	-8.7	0	22.30783667	114.2218467
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 09:44:48	2018-07-26 09:45:00	2018-07-26 09:46:15	-8.3	0	22.30902067	114.2224107
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 09:44:48	2018-07-26 09:45:00	2018-07-26 09:48:48	-9.2	12.2	22.30776817	114.2232335
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 09:44:48	2018-07-26 09:45:00	2018-07-26 09:50:37	-9	1	22.30855717	114.2261983
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 09:44:48	2018-07-26 09:45:00	2018-07-26 10:12:03	-10	0.6	22.331272	114.2222443
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 09:44:48	2018-07-26 09:45:00	2018-07-26 10:14:17	-8	0	22.32943167	114.2258848
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 09:44:48	2018-07-26 09:45:00	2018-07-26 10:18:05	-10	0	22.32233033	114.2260357
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 09:44:48	2018-07-26 09:45:00	2018-07-26 10:19:38	-8	0	22.32222533	114.2260712
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 09:44:48	2018-07-26 09:45:00	2018-07-26 10:30:54	-9	0	22.30978767	114.2240215
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 11:38:03	2018-07-26 11:45:00	2018-07-26 11:47:40	-8.3	0	22.3084965	114.2261622
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 11:38:03	2018-07-26 11:45:00	2018-07-26 11:48:10	-9.6	0	22.30914083	114.2272133
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 11:38:03	2018-07-26 11:45:00	2018-07-26 11:53:54	-9.6	0	22.31463517	114.2256513
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 11:38:03	2018-07-26 11:45:00	2018-07-26 11:55:10	-9	0	22.317237	114.2264592
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 11:38:03	2018-07-26 11:45:00	2018-07-26 12:03:29	-10	0	22.32628067	114.2270172
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 11:38:03	2018-07-26 11:45:00	2018-07-26 12:03:46	-9.3	0	22.32632467	114.226793
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 11:38:03	2018-07-26 11:45:00	2018-07-26 12:05:18	-8.7	3.2	22.32800883	114.2267882
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 11:38:03	2018-07-26 11:45:00	2018-07-26 12:05:42	-10	0	22.32883333	114.2268843
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 11:38:03	2018-07-26 11:45:00	2018-07-26 12:08:27	-9	0	22.33217133	114.2225867
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 11:38:03	2018-07-26 11:45:00	2018-07-26 12:13:53	-8.7	0	22.32156267	114.2264102
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 11:38:03	2018-07-26 11:45:00	2018-07-26 12:14:26	-9.6	0	22.32075817	114.2267837
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 11:38:03	2018-07-26 11:45:00	2018-07-26 12:16:47	-8.7	0	22.3167925	114.2264785
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 12:43:25	2018-07-26 12:45:00	2018-07-26 12:47:13	-8.7	0	22.30849917	114.2262125

3965	[redacted]	KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 12:43:25	2018-07-26 12:45:00	2018-07-26 12:52:36	-10	10.3	22.311893	114.2266272
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 12:43:25	2018-07-26 12:45:00	2018-07-26 12:53:19	-9.3	0	22.31362083	114.2260202
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 12:43:25	2018-07-26 12:45:00	2018-07-26 13:02:35	-10	0	22.32408533	114.2284425
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 12:43:25	2018-07-26 12:45:00	2018-07-26 13:05:44	-8.7	0	22.326372	114.2269372
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 12:43:25	2018-07-26 12:45:00	2018-07-26 13:10:20	-9	0	22.33191817	114.2257997
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 12:43:25	2018-07-26 12:45:00	2018-07-26 13:15:21	-8.2	9	22.32882117	114.2254013
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 12:43:25	2018-07-26 12:45:00	2018-07-26 13:19:39	-9.6	0	22.32074333	114.2267978
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 12:43:25	2018-07-26 12:45:00	2018-07-26 13:21:39	-8.1	11.6	22.3187735	114.2274217
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 12:43:25	2018-07-26 12:45:00	2018-07-26 13:23:06	-9.6	0	22.316789	114.2264753
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 12:43:25	2018-07-26 12:45:00	2018-07-26 13:27:13	-8.7	0	22.3098175	114.2240053
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 12:43:25	2018-07-26 12:45:00	2018-07-26 13:30:20	-8.7	0	22.307874	114.2218998
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 13:43:22	2018-07-26 13:45:00	2018-07-26 13:47:56	-9.3	0	22.3085535	114.2262117
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 13:43:22	2018-07-26 13:45:00	2018-07-26 13:50:31	-8.4	11.6	22.31132317	114.2276398
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 13:43:22	2018-07-26 13:45:00	2018-07-26 13:57:09	-9	0	22.31980667	114.227726
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 13:43:22	2018-07-26 13:45:00	2018-07-26 13:58:45	-9	0	22.32219617	114.2263813
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 13:43:22	2018-07-26 13:45:00	2018-07-26 14:07:31	-8.3	0	22.33191233	114.2257482
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 13:43:22	2018-07-26 13:45:00	2018-07-26 14:12:20	-9	39.5	22.32970067	114.2259343
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 13:43:22	2018-07-26 13:45:00	2018-07-26 14:12:21	-9.2	30.2	22.32960967	114.2259152
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 13:43:22	2018-07-26 13:45:00	2018-07-26 14:12:22	-10	20.2	22.329542	114.2259002
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 13:43:22	2018-07-26 13:45:00	2018-07-26 14:12:23	-9	11.2	22.32949867	114.2258898
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 13:43:22	2018-07-26 13:45:00	2018-07-26 14:14:46	-8.3	0	22.3241665	114.2259448
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 13:43:22	2018-07-26 13:45:00	2018-07-26 14:16:12	-9	0	22.321926	114.2262537
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 13:43:22	2018-07-26 13:45:00	2018-07-26 14:20:45	-9.6	0	22.317247	114.2267348
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 13:43:22	2018-07-26 13:45:00	2018-07-26 14:23:57	-9	0	22.3117845	114.2263682
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 13:43:22	2018-07-26 13:45:00	2018-07-26 14:29:15	-8.3	8.3	22.30938717	114.2235018
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 14:43:48	2018-07-26 14:45:00	2018-07-26 14:45:31	-10	0	22.30833033	114.2218247
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 14:43:48	2018-07-26 14:45:00	2018-07-26 14:46:27	-12.5	0	22.3084695	114.2225082
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 14:43:48	2018-07-26 14:45:00	2018-07-26 14:46:36	-10.3	0	22.30844917	114.2224735
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 14:43:48	2018-07-26 14:45:00	2018-07-26 14:52:16	-11.6	0	22.31064667	114.2283623
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 14:43:48	2018-07-26 14:45:00	2018-07-26 14:54:12	-13.2	0	22.31154717	114.2271208
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 14:43:48	2018-07-26 14:45:00	2018-07-26 15:07:24	-8.3	0	22.32637283	114.2267035
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 14:43:48	2018-07-26 14:45:00	2018-07-26 15:10:22	-9.7	0.3	22.33198767	114.2256932
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 14:43:48	2018-07-26 14:45:00	2018-07-26 15:21:29	-9.3	9.3	22.32069067	114.2267653
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 14:43:48	2018-07-26 14:45:00	2018-07-26 15:27:58	-9	0	22.31245817	114.2269667
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 14:43:48	2018-07-26 14:45:00	2018-07-26 15:31:59	-8.3	0	22.309509	114.2246293
3965		KBD	2018-07-26	23	ME9378	23	KT.FRY	2018-07-26 14:43:48	2018-07-26 14:45:00	2018-07-26 15:33:12	-9	0	22.30897333	114.2240342
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 06:00:54	2018-07-27 06:10:00	2018-07-27 06:12:06	-8.6	14.1	22.308495	114.226123
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 06:00:54	2018-07-27 06:10:00	2018-07-27 06:12:37	-9.6	1	22.3091485	114.227236
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 06:00:54	2018-07-27 06:10:00	2018-07-27 06:18:58	-9.3	0	22.31790467	114.2270205
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 06:00:54	2018-07-27 06:10:00	2018-07-27 06:28:59	-10	0	22.330845	114.2218653
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 06:00:54	2018-07-27 06:10:00	2018-07-27 06:30:43	-9.3	0	22.328847	114.225414
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 06:00:54	2018-07-27 06:10:00	2018-07-27 06:34:39	-9	12.5	22.31682	114.2265147
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 06:00:54	2018-07-27 06:10:00	2018-07-27 06:35:51	-8	12.5	22.31312467	114.2264133
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 06:00:54	2018-07-27 06:10:00	2018-07-27 06:37:15	-9	0	22.309853	114.223992
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 06:00:54	2018-07-27 06:10:00	2018-07-27 06:37:54	-9.4	0.6	22.30946917	114.2234988
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 06:00:54	2018-07-27 06:10:00	2018-07-27 06:40:08	-8.1	11.6	22.30775583	114.2217582

3965	[redacted]	KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 06:58:28	2018-07-27 07:00:00	2018-07-27 07:03:08	-8.7	0	22.308855	114.2283498
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 06:58:28	2018-07-27 07:00:00	2018-07-27 07:03:25	-9.3	0	22.30897683	114.2284233
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 06:58:28	2018-07-27 07:00:00	2018-07-27 07:08:32	-8	12.2	22.31792517	114.2269173
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 06:58:28	2018-07-27 07:00:00	2018-07-27 07:18:31	-9.3	0	22.3329855	114.2242548
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 06:58:28	2018-07-27 07:00:00	2018-07-27 07:25:25	-9.7	13.2	22.32088467	114.2267067
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 07:45:43	2018-07-27 07:48:00	2018-07-27 07:50:11	-9	0	22.3088395	114.2266583
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 07:45:43	2018-07-27 07:48:00	2018-07-27 07:51:37	-10	0	22.309036	114.2284067
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 07:45:43	2018-07-27 07:48:00	2018-07-27 07:55:57	-8.3	0	22.31694267	114.2267712
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 07:45:43	2018-07-27 07:48:00	2018-07-27 08:07:14	-9.6	9.6	22.32867417	114.2269918
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 07:45:43	2018-07-27 07:48:00	2018-07-27 08:11:47	-9	0	22.3329965	114.2242675
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 07:45:43	2018-07-27 07:48:00	2018-07-27 08:16:18	-10	0	22.32893167	114.2255238
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 07:45:43	2018-07-27 07:48:00	2018-07-27 08:19:54	-8.3	0	22.32370017	114.2259063
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 07:45:43	2018-07-27 07:48:00	2018-07-27 08:21:36	-8.7	0	22.32221733	114.2260615
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 07:45:43	2018-07-27 07:48:00	2018-07-27 08:22:25	-8.7	0	22.32186633	114.226226
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 07:45:43	2018-07-27 07:48:00	2018-07-27 08:22:50	-8.3	0	22.32184733	114.2262383
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 07:45:43	2018-07-27 07:48:00	2018-07-27 08:24:08	-8.3	0	22.3207075	114.2267728
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 07:45:43	2018-07-27 07:48:00	2018-07-27 08:28:09	-8.7	0	22.31709333	114.2266395
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 07:45:43	2018-07-27 07:48:00	2018-07-27 08:31:54	-9.3	9.3	22.31098533	114.2251895
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 07:45:43	2018-07-27 07:48:00	2018-07-27 08:36:57	-9.3	0	22.307859	114.2218652
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 08:39:53	2018-07-27 08:42:00	2018-07-27 08:43:39	-8.3	0	22.30896933	114.2222268
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 08:39:53	2018-07-27 08:42:00	2018-07-27 08:44:32	-10	0	22.30814	114.223125
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 08:39:53	2018-07-27 08:42:00	2018-07-27 08:55:46	-8.7	0	22.32194533	114.2261215
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 08:39:53	2018-07-27 08:42:00	2018-07-27 09:05:58	-9	0	22.3330345	114.2242845
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 08:39:53	2018-07-27 08:42:00	2018-07-27 09:10:06	-8.2	12.2	22.3288295	114.2253933
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 08:39:53	2018-07-27 08:42:00	2018-07-27 09:13:21	-9	12.2	22.32173833	114.2262817
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 08:39:53	2018-07-27 08:42:00	2018-07-27 09:13:55	-8.4	11.6	22.32081267	114.2267273
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 08:39:53	2018-07-27 08:42:00	2018-07-27 09:14:56	-8.3	0	22.3185205	114.227241
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 08:39:53	2018-07-27 08:42:00	2018-07-27 09:17:09	-8.7	0	22.31688867	114.22648
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 08:39:53	2018-07-27 08:42:00	2018-07-27 09:23:20	-9.6	0	22.3089135	114.2226507
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 08:39:53	2018-07-27 08:42:00	2018-07-27 09:23:22	-8	8	22.30891117	114.2226475
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 09:44:40	2018-07-27 09:45:00	2018-07-27 09:49:43	-10	0	22.30884033	114.226881
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 09:44:40	2018-07-27 09:45:00	2018-07-27 10:02:07	-8.6	1	22.3223405	114.2259315
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 09:44:40	2018-07-27 09:45:00	2018-07-27 10:07:15	-9.6	0	22.32638017	114.2268018
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 09:44:40	2018-07-27 09:45:00	2018-07-27 10:07:51	-9.6	12.5	22.32649017	114.2265878
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 09:44:40	2018-07-27 09:45:00	2018-07-27 10:08:56	-9	0	22.3288105	114.2269862
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 09:44:40	2018-07-27 09:45:00	2018-07-27 10:11:32	-10.6	0	22.33302983	114.2242653
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 09:44:40	2018-07-27 09:45:00	2018-07-27 10:19:52	-9.3	0	22.32175817	114.2263033
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 09:44:40	2018-07-27 09:45:00	2018-07-27 10:26:04	-8	12.2	22.31254983	114.2266567
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 09:44:40	2018-07-27 09:45:00	2018-07-27 10:28:07	-9.3	0	22.309069	114.222863
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 11:37:17	2018-07-27 11:45:00	2018-07-27 11:50:47	-10	0	22.30934733	114.228492
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 11:37:17	2018-07-27 11:45:00	2018-07-27 11:54:10	-9.5	1.6	22.31172333	114.2270513
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 11:37:17	2018-07-27 11:45:00	2018-07-27 12:06:40	-8.3	0	22.324041	114.2283832
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 11:37:17	2018-07-27 11:45:00	2018-07-27 12:07:31	-10	0	22.32462067	114.2289422
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 11:37:17	2018-07-27 11:45:00	2018-07-27 12:20:31	-8.6	16.7	22.3227845	114.2257867
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 11:37:17	2018-07-27 11:45:00	2018-07-27 12:20:32	-9.6	7.1	22.32275533	114.2258033
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 11:37:17	2018-07-27 11:45:00	2018-07-27 12:23:33	-8.7	0	22.32073267	114.2267677

3965	[redacted]	KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 11:37:17	2018-07-27 11:45:00	2018-07-27 12:28:00	-9	0	22.31252417	114.2266707
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 11:37:17	2018-07-27 11:45:00	2018-07-27 12:29:43	-10	10	22.31009417	114.2244057
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 12:43:42	2018-07-27 12:45:00	2018-07-27 12:54:31	-9.3	0	22.31660567	114.2262058
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 12:43:42	2018-07-27 12:45:00	2018-07-27 12:57:37	-9	13.5	22.3196775	114.2272157
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 12:43:42	2018-07-27 12:45:00	2018-07-27 12:59:36	-8.7	0	22.322014	114.2260972
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 12:43:42	2018-07-27 12:45:00	2018-07-27 13:14:01	-8.3	41.4	22.32434417	114.2256228
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 12:43:42	2018-07-27 12:45:00	2018-07-27 13:15:50	-10	0	22.32089583	114.2267167
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 12:43:42	2018-07-27 12:45:00	2018-07-27 13:19:37	-10	0	22.313107	114.2264637
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 12:43:42	2018-07-27 12:45:00	2018-07-27 13:23:28	-10	0	22.3071165	114.221845
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 12:43:42	2018-07-27 12:45:00	2018-07-27 13:24:05	-9.2	13.2	22.30776117	114.2217463
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 12:43:42	2018-07-27 12:45:00	2018-07-27 13:24:06	-9	4.2	22.3077705	114.2217902
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 13:42:37	2018-07-27 13:45:00	2018-07-27 13:50:35	-10	0	22.30887017	114.2277772
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 13:42:37	2018-07-27 13:45:00	2018-07-27 13:54:03	-10	0	22.31117633	114.2274343
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 13:42:37	2018-07-27 13:45:00	2018-07-27 13:55:48	-9	9	22.31195733	114.2264158
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 13:42:37	2018-07-27 13:45:00	2018-07-27 13:55:49	-9	0	22.31196983	114.2264035
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 13:42:37	2018-07-27 13:45:00	2018-07-27 13:57:27	-8.7	0	22.31481417	114.225432
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 13:42:37	2018-07-27 13:45:00	2018-07-27 14:03:33	-9	0	22.3221535	114.226033
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 13:42:37	2018-07-27 13:45:00	2018-07-27 14:14:46	-9	0	22.33287133	114.224123
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 13:42:37	2018-07-27 13:45:00	2018-07-27 14:21:51	-8.4	1.9	22.32156433	114.2264422
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 13:42:37	2018-07-27 13:45:00	2018-07-27 14:24:50	-9	0	22.31683167	114.2266023
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 13:42:37	2018-07-27 13:45:00	2018-07-27 14:28:15	-9.3	12.5	22.31102367	114.2256018
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 13:42:37	2018-07-27 13:45:00	2018-07-27 14:31:35	-10	14.8	22.30779333	114.2217962
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 14:43:08	2018-07-27 14:45:00	2018-07-27 14:47:29	-8.7	0	22.307449	114.2235027
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 14:43:08	2018-07-27 14:45:00	2018-07-27 14:52:32	-8.1	13.2	22.309498	114.2288555
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 14:43:08	2018-07-27 14:45:00	2018-07-27 14:53:14	-8.3	0	22.31012183	114.229412
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 14:43:08	2018-07-27 14:45:00	2018-07-27 14:55:14	-9.3	0	22.31107	114.227911
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 14:43:08	2018-07-27 14:45:00	2018-07-27 14:56:40	-10	0	22.31137967	114.2269985
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 14:43:08	2018-07-27 14:45:00	2018-07-27 14:58:48	-8.3	0	22.31398083	114.2252138
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 14:43:08	2018-07-27 14:45:00	2018-07-27 15:07:26	-10	0	22.3263625	114.2267622
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 14:43:08	2018-07-27 14:45:00	2018-07-27 15:12:20	-8.7	12.2	22.33222067	114.2227028
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 14:43:08	2018-07-27 14:45:00	2018-07-27 15:12:40	-8.7	0	22.33192817	114.2225402
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 14:43:08	2018-07-27 14:45:00	2018-07-27 15:16:46	-8.7	0	22.32421317	114.225824
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 14:43:08	2018-07-27 14:45:00	2018-07-27 15:20:30	-9.3	9.3	22.31864867	114.2273575
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 14:43:08	2018-07-27 14:45:00	2018-07-27 15:21:30	-9.6	0	22.3167935	114.2264862
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 14:43:08	2018-07-27 14:45:00	2018-07-27 15:25:19	-8.7	0	22.310977	114.2253553
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 14:43:08	2018-07-27 14:45:00	2018-07-27 15:25:35	-8.9	3.9	22.31094133	114.2253123
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 14:43:08	2018-07-27 14:45:00	2018-07-27 15:25:38	-9.3	0	22.310929	114.2252792
3965		KBD	2018-07-27	23	ME9378	23	KT.FRY	2018-07-27 14:43:08	2018-07-27 14:45:00	2018-07-27 15:26:20	-10	0	22.30965933	114.2245148
3965		KBD	NULL	NULL	ME9378	NULL	NULL	2018-07-28 06:01:51	NULL	2018-07-28 06:04:00	-8.7	0	22.30790933	114.2220417
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 06:01:51	2018-07-28 06:10:00	2018-07-28 06:15:01	-8.7	15.7	22.31177367	114.2268702
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 06:01:51	2018-07-28 06:10:00	2018-07-28 06:16:00	-9.6	0	22.31462867	114.2256882
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 06:01:51	2018-07-28 06:10:00	2018-07-28 06:17:17	-9.6	0	22.31640467	114.2263172
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 06:01:51	2018-07-28 06:10:00	2018-07-28 06:19:00	-8.6	12.5	22.318062	114.2270432
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 06:01:51	2018-07-28 06:10:00	2018-07-28 06:20:37	-9	0	22.3223785	114.2258895
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 06:01:51	2018-07-28 06:10:00	2018-07-28 06:26:16	-8.3	0	22.3317265	114.226051
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 06:01:51	2018-07-28 06:10:00	2018-07-28 06:32:42	-8.7	1.9	22.32195783	114.2262015

3965	[redacted]	KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 06:01:51	2018-07-28 06:10:00	2018-07-28 06:34:12	-8.7	0	22.31758433	114.2268357
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 06:58:49	2018-07-28 07:00:00	2018-07-28 07:05:57	-8.2	3.9	22.31468467	114.2256022
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 06:58:49	2018-07-28 07:00:00	2018-07-28 07:07:26	-8.7	0	22.3164325	114.2262603
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 06:58:49	2018-07-28 07:00:00	2018-07-28 07:08:39	-8.3	0	22.31739133	114.2267137
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 06:58:49	2018-07-28 07:00:00	2018-07-28 07:09:50	-14.4	0	22.32004017	114.2270868
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 06:58:49	2018-07-28 07:00:00	2018-07-28 07:11:40	-8	4.2	22.32192367	114.2261125
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 06:58:49	2018-07-28 07:00:00	2018-07-28 07:11:42	-10.6	0	22.32195817	114.2260965
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 06:58:49	2018-07-28 07:00:00	2018-07-28 07:20:24	-8.3	0	22.32874117	114.226986
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 06:58:49	2018-07-28 07:00:00	2018-07-28 07:21:48	-9	0	22.33190367	114.2257183
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 06:58:49	2018-07-28 07:00:00	2018-07-28 07:23:46	-8.4	15.7	22.33208417	114.2225965
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 06:58:49	2018-07-28 07:00:00	2018-07-28 07:26:07	-8.7	0	22.328824	114.225355
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 06:58:49	2018-07-28 07:00:00	2018-07-28 07:28:42	-8.3	0	22.32159733	114.2263848
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 06:58:49	2018-07-28 07:00:00	2018-07-28 07:33:07	-9	0	22.31308883	114.2264037
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 07:59:14	2018-07-28 08:00:00	2018-07-28 08:03:23	-9	24.4	22.30986617	114.2289757
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 07:59:14	2018-07-28 08:00:00	2018-07-28 08:11:41	-8.4	6.7	22.32192067	114.2261473
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 07:59:14	2018-07-28 08:00:00	2018-07-28 08:22:10	-8.3	0	22.33293667	114.2241852
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 07:59:14	2018-07-28 08:00:00	2018-07-28 08:25:26	-8.2	26.7	22.3289405	114.225532
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 07:59:14	2018-07-28 08:00:00	2018-07-28 08:25:28	-9.3	9.3	22.32884717	114.2254532
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 07:59:14	2018-07-28 08:00:00	2018-07-28 08:35:53	-9.3	0	22.310275	114.2238335
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 07:59:14	2018-07-28 08:00:00	2018-07-28 08:37:01	-8.3	0	22.30977383	114.223075
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 07:59:14	2018-07-28 08:00:00	2018-07-28 08:39:59	-8.4	11.9	22.30774783	114.2216093
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 08:58:32	2018-07-28 09:00:00	2018-07-28 09:06:50	-8.3	0	22.3117695	114.2267685
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 08:58:32	2018-07-28 09:00:00	2018-07-28 09:09:48	-8.5	10.3	22.317082	114.2265478
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 08:58:32	2018-07-28 09:00:00	2018-07-28 09:13:49	-9	0	22.3218555	114.2261772
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 08:58:32	2018-07-28 09:00:00	2018-07-28 09:21:37	-9.6	0	22.32882233	114.2269618
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 08:58:32	2018-07-28 09:00:00	2018-07-28 09:30:26	-10	0	22.32195	114.2262333
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 08:58:32	2018-07-28 09:00:00	2018-07-28 09:40:50	-8.7	0	22.309522	114.2235362
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 09:46:37	2018-07-28 09:45:00	2018-07-28 09:48:21	-8.7	0	22.30826367	114.2227038
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 09:46:37	2018-07-28 09:45:00	2018-07-28 09:50:27	-8.4	24.4	22.30845667	114.226069
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 09:46:37	2018-07-28 09:45:00	2018-07-28 09:50:28	-8.2	16.1	22.30854217	114.2261585
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 09:46:37	2018-07-28 09:45:00	2018-07-28 09:50:29	-8.7	7.4	22.30856167	114.226181
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 09:46:37	2018-07-28 09:45:00	2018-07-28 09:52:30	-8.2	6.1	22.30925483	114.2285655
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 09:46:37	2018-07-28 09:45:00	2018-07-28 09:53:22	-8.3	0	22.3097925	114.2288932
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 09:46:37	2018-07-28 09:45:00	2018-07-28 09:57:43	-8.2	11.2	22.31700617	114.2265582
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 09:46:37	2018-07-28 09:45:00	2018-07-28 09:58:09	-9.3	0	22.3171	114.2265982
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 09:46:37	2018-07-28 09:45:00	2018-07-28 10:07:43	-9	1.3	22.32639267	114.226778
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 09:46:37	2018-07-28 09:45:00	2018-07-28 10:16:58	-8.3	0	22.328794	114.2254537
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 09:46:37	2018-07-28 09:45:00	2018-07-28 10:19:24	-8.7	0	22.32190317	114.2262487
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 09:46:37	2018-07-28 09:45:00	2018-07-28 10:19:53	-8.3	0	22.32170633	114.2263408
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 09:46:37	2018-07-28 09:45:00	2018-07-28 10:21:30	-9	0	22.31879817	114.227363
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 11:55:32	2018-07-28 12:00:00	2018-07-28 12:00:39	-8.7	0	22.3089545	114.2224513
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 11:55:32	2018-07-28 12:00:00	2018-07-28 12:09:13	-8.7	0	22.31463383	114.2256152
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 11:55:32	2018-07-28 12:00:00	2018-07-28 12:10:41	-9.3	0	22.31591733	114.2258613
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 11:55:32	2018-07-28 12:00:00	2018-07-28 12:11:09	-8.3	5.8	22.3162255	114.2260178
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 11:55:32	2018-07-28 12:00:00	2018-07-28 12:14:33	-9.6	0	22.32009233	114.2270752
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 11:55:32	2018-07-28 12:00:00	2018-07-28 12:22:43	-10	0	22.32637417	114.2269897

3965	[redacted]	KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 11:55:32	2018-07-28 12:00:00	2018-07-28 12:24:09	-10	0	22.32658133	114.2266192
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 11:55:32	2018-07-28 12:00:00	2018-07-28 12:26:03	-10	0	22.32875317	114.2270065
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 11:55:32	2018-07-28 12:00:00	2018-07-28 12:28:59	-8.7	0	22.33192617	114.2258338
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 11:55:32	2018-07-28 12:00:00	2018-07-28 12:33:25	-9.6	0	22.33194867	114.2226155
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 11:55:32	2018-07-28 12:00:00	2018-07-28 12:40:02	-8.4	11.6	22.32205683	114.2261885
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 11:55:32	2018-07-28 12:00:00	2018-07-28 12:40:40	-8	12.5	22.32179767	114.2263052
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 11:55:32	2018-07-28 12:00:00	2018-07-28 12:41:24	-8.7	1.3	22.32074333	114.226822
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 11:55:32	2018-07-28 12:00:00	2018-07-28 12:43:28	-9.3	0	22.318731	114.227393
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 11:55:32	2018-07-28 12:00:00	2018-07-28 12:44:30	-9	0	22.31723367	114.2267218
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 11:55:32	2018-07-28 12:00:00	2018-07-28 12:46:18	-10	0	22.31396333	114.226072
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 11:55:32	2018-07-28 12:00:00	2018-07-28 12:47:46	-8	8	22.31143183	114.2259533
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 11:55:32	2018-07-28 12:00:00	2018-07-28 12:48:14	-8.7	0	22.3108695	114.2252902
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 11:55:32	2018-07-28 12:00:00	2018-07-28 12:48:18	-9.6	9.6	22.3108685	114.2252892
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 12:58:53	2018-07-28 13:00:00	2018-07-28 13:01:21	-8.3	0	22.307741	114.223385
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 12:58:53	2018-07-28 13:00:00	2018-07-28 13:03:15	-8.7	0	22.3091945	114.2272643
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 12:58:53	2018-07-28 13:00:00	2018-07-28 13:07:03	-9	9	22.31099033	114.228058
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 12:58:53	2018-07-28 13:00:00	2018-07-28 13:15:14	-9	0	22.31978933	114.2273707
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 12:58:53	2018-07-28 13:00:00	2018-07-28 13:22:44	-8.3	0	22.32642283	114.2267973
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 12:58:53	2018-07-28 13:00:00	2018-07-28 13:26:55	-9.3	0	22.3319175	114.2257758
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 12:58:53	2018-07-28 13:00:00	2018-07-28 13:31:14	-10	0	22.33197233	114.2225937
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 12:58:53	2018-07-28 13:00:00	2018-07-28 13:39:16	-8.3	0	22.3188485	114.2274535
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 12:58:53	2018-07-28 13:00:00	2018-07-28 13:40:17	-9.6	0	22.31752917	114.2268285
3965		KBD	2018-07-28	23	ME9378	23	KT.FRY	2018-07-28 12:58:53	2018-07-28 13:00:00	2018-07-28 13:46:53	-9.3	0	22.3079125	114.2218772
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 06:04:13	2018-07-30 06:10:00	2018-07-30 06:19:26	-9.3	0	22.31991183	114.227218
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 06:04:13	2018-07-30 06:10:00	2018-07-30 06:20:02	-9.9	7.4	22.321721	114.226269
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 06:04:13	2018-07-30 06:10:00	2018-07-30 06:28:26	-9.6	0	22.331954	114.2226357
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 06:04:13	2018-07-30 06:10:00	2018-07-30 06:30:51	-8.7	9.3	22.32887233	114.2254753
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 06:04:13	2018-07-30 06:10:00	2018-07-30 06:33:51	-9.3	0	22.32191183	114.2262267
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 06:04:13	2018-07-30 06:10:00	2018-07-30 06:34:27	-9	0	22.32052583	114.2269038
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 06:04:13	2018-07-30 06:10:00	2018-07-30 06:36:12	-9	0	22.316893	114.2265618
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 06:04:13	2018-07-30 06:10:00	2018-07-30 06:37:08	-10	15.1	22.31306817	114.2264713
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 06:04:13	2018-07-30 06:10:00	2018-07-30 06:38:15	-9	9	22.31139	114.2259817
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 06:58:20	2018-07-30 07:00:00	2018-07-30 07:01:49	-8.6	19.6	22.30842667	114.2260445
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 06:58:20	2018-07-30 07:00:00	2018-07-30 07:01:54	-9.3	0	22.30853967	114.226171
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 06:58:20	2018-07-30 07:00:00	2018-07-30 07:03:11	-9.3	0	22.30897117	114.2284237
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 06:58:20	2018-07-30 07:00:00	2018-07-30 07:07:45	-8.7	0	22.317106	114.2265743
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 06:58:20	2018-07-30 07:00:00	2018-07-30 07:09:35	-8.2	7.4	22.32195317	114.2260822
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 06:58:20	2018-07-30 07:00:00	2018-07-30 07:16:48	-10	0	22.328792	114.2269705
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 06:58:20	2018-07-30 07:00:00	2018-07-30 07:18:33	-8.7	8.7	22.33188717	114.2257423
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 06:58:20	2018-07-30 07:00:00	2018-07-30 07:19:10	-8.7	1.3	22.33301967	114.2242013
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 06:58:20	2018-07-30 07:00:00	2018-07-30 07:22:38	-8.7	0	22.32882467	114.2254045
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 06:58:20	2018-07-30 07:00:00	2018-07-30 07:25:48	-8.3	0	22.3221845	114.226113
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 06:58:20	2018-07-30 07:00:00	2018-07-30 07:28:51	-10	0	22.31724817	114.2267477
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 06:58:20	2018-07-30 07:00:00	2018-07-30 07:31:23	-8.3	0	22.31310117	114.2265132
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 06:58:20	2018-07-30 07:00:00	2018-07-30 07:33:17	-9.3	0	22.3098075	114.2240603
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 06:58:20	2018-07-30 07:00:00	2018-07-30 07:34:03	-8.7	0	22.3094705	114.2235688

3965	[redacted]	KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 06:58:20	2018-07-30 07:00:00	2018-07-30 07:35:39	-10	0	22.307115	114.2218905
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 07:46:42	2018-07-30 07:48:00	2018-07-30 07:55:30	-8.7	12.8	22.31707833	114.2265875
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 07:46:42	2018-07-30 07:48:00	2018-07-30 08:09:00	-8	8	22.33193183	114.2257003
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 07:46:42	2018-07-30 07:48:00	2018-07-30 08:16:26	-10.9	0	22.32413483	114.2259028
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 07:46:42	2018-07-30 07:48:00	2018-07-30 08:17:47	-9.3	0	22.3218975	114.2262285
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 07:46:42	2018-07-30 07:48:00	2018-07-30 08:18:17	-8.7	0	22.321593	114.226356
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 07:46:42	2018-07-30 07:48:00	2018-07-30 08:19:20	-8	0	22.320862	114.2266922
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 07:46:42	2018-07-30 07:48:00	2018-07-30 08:21:08	-10.3	0	22.31732467	114.226772
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 07:46:42	2018-07-30 07:48:00	2018-07-30 08:22:06	-9	0	22.317073	114.2266132
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 07:46:42	2018-07-30 07:48:00	2018-07-30 08:24:20	-9	0	22.31268183	114.2265578
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 08:43:49	2018-07-30 08:45:00	2018-07-30 08:51:50	-9	12.2	22.310846	114.228102
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 08:43:49	2018-07-30 08:45:00	2018-07-30 08:54:15	-10	0	22.3114575	114.2274343
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 08:43:49	2018-07-30 08:45:00	2018-07-30 08:58:42	-8.3	0	22.31724833	114.2266205
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 08:43:49	2018-07-30 08:45:00	2018-07-30 09:01:35	-8.4	8	22.321959	114.226162
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 08:43:49	2018-07-30 08:45:00	2018-07-30 09:02:19	-8.3	0	22.32247317	114.2259262
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 08:43:49	2018-07-30 08:45:00	2018-07-30 09:07:03	-8	13.8	22.32619767	114.2271935
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 08:43:49	2018-07-30 08:45:00	2018-07-30 09:13:30	-8.3	0	22.33298817	114.224266
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 08:43:49	2018-07-30 08:45:00	2018-07-30 09:18:30	-10	0	22.328822	114.2254177
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 08:43:49	2018-07-30 08:45:00	2018-07-30 09:24:44	-9.3	0	22.321462	114.2263623
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 08:43:49	2018-07-30 08:45:00	2018-07-30 09:30:08	-8.3	0	22.3170725	114.2266682
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 08:43:49	2018-07-30 08:45:00	2018-07-30 09:30:18	-8.3	8.3	22.31706533	114.226665
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 08:43:49	2018-07-30 08:45:00	2018-07-30 09:30:19	-8.3	0	22.31704767	114.2266565
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 08:43:49	2018-07-30 08:45:00	2018-07-30 09:30:50	-10	0	22.3168145	114.2265207
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 08:43:49	2018-07-30 08:45:00	2018-07-30 09:34:22	-8	9.3	22.31093583	114.2253242
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 09:44:41	2018-07-30 09:45:00	2018-07-30 09:47:58	-9.3	0	22.30822617	114.2227485
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 09:44:41	2018-07-30 09:45:00	2018-07-30 09:48:34	-8.7	1.3	22.3075605	114.2234343
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 09:44:41	2018-07-30 09:45:00	2018-07-30 09:48:36	-8.3	8.3	22.30755017	114.2234467
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 09:44:41	2018-07-30 09:45:00	2018-07-30 09:48:37	-8.3	0	22.3075425	114.2234617
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 09:44:41	2018-07-30 09:45:00	2018-07-30 09:51:28	-8.3	0	22.30929533	114.2285792
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 09:44:41	2018-07-30 09:45:00	2018-07-30 09:53:04	-8.3	12.5	22.31095733	114.227895
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 09:44:41	2018-07-30 09:45:00	2018-07-30 09:54:19	-9.6	9.6	22.31153783	114.2275288
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 09:44:41	2018-07-30 09:45:00	2018-07-30 09:58:16	-9.6	0	22.317138	114.2265873
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 09:44:41	2018-07-30 09:45:00	2018-07-30 10:05:10	-8	12.2	22.32385217	114.2258835
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 09:44:41	2018-07-30 09:45:00	2018-07-30 10:10:47	-9.7	0.3	22.331966	114.2257525
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 09:44:41	2018-07-30 09:45:00	2018-07-30 10:15:18	-8.4	7.7	22.32884933	114.2254265
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 09:44:41	2018-07-30 09:45:00	2018-07-30 10:17:19	-9	12.2	22.32428167	114.2256923
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 09:44:41	2018-07-30 09:45:00	2018-07-30 10:22:04	-8.3	8.3	22.31692433	114.2265197
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 09:44:41	2018-07-30 09:45:00	2018-07-30 10:23:13	-9.6	0	22.31308183	114.2263737
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 09:44:41	2018-07-30 09:45:00	2018-07-30 10:25:45	-9.3	0	22.31020583	114.224319
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 09:44:41	2018-07-30 09:45:00	2018-07-30 10:29:27	-9.3	0	22.30781317	114.2217323
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 11:39:37	2018-07-30 11:45:00	2018-07-30 11:47:03	-8.3	0	22.3085075	114.2262567
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 11:39:37	2018-07-30 11:45:00	2018-07-30 11:48:20	-9.6	0	22.30913933	114.2274913
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 11:39:37	2018-07-30 11:45:00	2018-07-30 11:49:05	-8.7	0	22.309239	114.228664
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 11:39:37	2018-07-30 11:45:00	2018-07-30 11:50:00	-8.3	0	22.310675	114.2285445
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 11:39:37	2018-07-30 11:45:00	2018-07-30 11:58:07	-8.4	16.1	22.3189325	114.2274865
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 11:39:37	2018-07-30 11:45:00	2018-07-30 12:10:11	-8.7	26.3	22.33296633	114.2243055

3965	[redacted]	KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 11:39:37	2018-07-30 11:45:00	2018-07-30 12:11:02	-8.7	6.1	22.332083	114.2225887
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 11:39:37	2018-07-30 11:45:00	2018-07-30 12:15:19	-10	0	22.32210983	114.2261352
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 11:39:37	2018-07-30 11:45:00	2018-07-30 12:21:38	-10	0	22.31129267	114.2257622
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 11:39:37	2018-07-30 11:45:00	2018-07-30 12:21:51	-9.3	12.8	22.31125733	114.2257403
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 12:43:52	2018-07-30 12:45:00	2018-07-30 12:47:06	-9.3	0	22.30854	114.2262207
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 12:43:52	2018-07-30 12:45:00	2018-07-30 12:47:48	-10	0	22.30910867	114.2276357
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 12:43:52	2018-07-30 12:45:00	2018-07-30 12:51:05	-11.2	0	22.31003267	114.2290048
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 12:43:52	2018-07-30 12:45:00	2018-07-30 12:55:30	-10.9	0	22.31369367	114.2258637
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 12:43:52	2018-07-30 12:45:00	2018-07-30 12:57:49	-8.6	10.6	22.3166385	114.2260802
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 12:43:52	2018-07-30 12:45:00	2018-07-30 13:03:23	-9.3	0	22.3237735	114.2257903
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 12:43:52	2018-07-30 12:45:00	2018-07-30 13:04:22	-9	12.5	22.32406	114.2284298
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 12:43:52	2018-07-30 12:45:00	2018-07-30 13:10:44	-8.3	0	22.33303167	114.224244
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 12:43:52	2018-07-30 12:45:00	2018-07-30 13:17:41	-8.1	10.3	22.3209125	114.2267413
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 12:43:52	2018-07-30 12:45:00	2018-07-30 13:23:37	-8.2	12.2	22.309736	114.2240785
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 13:44:36	2018-07-30 13:45:00	2018-07-30 13:48:23	-9.4	0.6	22.30919867	114.22871
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 13:44:36	2018-07-30 13:45:00	2018-07-30 13:50:33	-8.3	0	22.31162617	114.2272643
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 13:44:36	2018-07-30 13:45:00	2018-07-30 13:54:00	-10	0	22.31699317	114.2263755
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 13:44:36	2018-07-30 13:45:00	2018-07-30 13:58:27	-8.2	7.4	22.322009	114.226231
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 13:44:36	2018-07-30 13:45:00	2018-07-30 14:00:20	-9	13.2	22.32393833	114.2259757
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 13:44:36	2018-07-30 13:45:00	2018-07-30 14:03:19	-8.4	4.8	22.32631933	114.2269238
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 13:44:36	2018-07-30 13:45:00	2018-07-30 14:03:24	-8.4	11.6	22.32629617	114.2268438
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 13:44:36	2018-07-30 13:45:00	2018-07-30 14:13:37	-9	9	22.32417683	114.2255865
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 13:44:36	2018-07-30 13:45:00	2018-07-30 14:18:35	-8.3	0	22.31891783	114.2274192
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 14:44:12	2018-07-30 14:45:00	2018-07-30 14:45:42	-10	0	22.308942	114.2223147
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 14:44:12	2018-07-30 14:45:00	2018-07-30 14:45:52	-8.3	8.3	22.30894383	114.2223257
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 14:44:12	2018-07-30 14:45:00	2018-07-30 14:52:56	-9.6	0	22.31464167	114.2255215
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 14:44:12	2018-07-30 14:45:00	2018-07-30 14:59:53	-9.9	1	22.32200367	114.2261295
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 14:44:12	2018-07-30 14:45:00	2018-07-30 15:04:07	-9.3	0	22.32639717	114.226783
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 14:44:12	2018-07-30 14:45:00	2018-07-30 15:09:34	-8.7	8	22.3320265	114.2225347
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 14:44:12	2018-07-30 14:45:00	2018-07-30 15:14:06	-9	0	22.321934	114.2262193
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 14:44:12	2018-07-30 14:45:00	2018-07-30 15:19:30	-8.7	0	22.31720617	114.2267402
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 14:44:12	2018-07-30 14:45:00	2018-07-30 15:21:47	-10	0	22.31310833	114.2263502
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 14:44:12	2018-07-30 14:45:00	2018-07-30 15:26:24	-9.6	0	22.30772467	114.2217927
3965		KBD	2018-07-30	23	ME9378	23	KT.FRY	2018-07-30 14:44:12	2018-07-30 14:45:00	2018-07-30 15:26:44	-8.7	0	22.30778517	114.2218577
63287		STD	2018-07-24	64K	KC6895	64K	TPOSTN	2018-07-24 07:10:09	2018-07-24 07:12:00	2018-07-24 07:14:13	-8.9	2.7	22.44597467	114.1670773
63287		STD	2018-07-24	64K	KC6895	64K	TPOSTN	2018-07-24 07:10:09	2018-07-24 07:12:00	2018-07-24 07:16:08	-9.9	4.1	22.44821783	114.1664193
63287		STD	2018-07-24	64K	KC6895	64K	TPOSTN	2018-07-24 07:10:09	2018-07-24 07:12:00	2018-07-24 07:18:17	-9.2	15	22.45188617	114.1673435
63287		STD	2018-07-24	64K	KC6895	64K	TPOSTN	2018-07-24 07:10:09	2018-07-24 07:12:00	2018-07-24 07:18:18	-9.2	5.8	22.45190833	114.167343
63287		STD	2018-07-24	64K	KC6895	64K	TPOSTN	2018-07-24 07:10:09	2018-07-24 07:12:00	2018-07-24 07:21:50	-9.5	8.9	22.4522425	114.1655607
63287		STD	2018-07-24	64K	KC6895	64K	TPOSTN	2018-07-24 07:10:09	2018-07-24 07:12:00	2018-07-24 07:30:11	-8.5	16.7	22.46148833	114.147877
63287		STD	2018-07-24	64K	KC6895	64K	TPOSTN	2018-07-24 07:10:09	2018-07-24 07:12:00	2018-07-24 07:31:43	-8.5	6.5	22.4573605	114.1442442
63287		STD	2018-07-24	64K	KC6895	64K	TPOSTN	2018-07-24 07:10:09	2018-07-24 07:12:00	2018-07-24 07:34:15	-9.5	7.9	22.45052283	114.1376487
63287		STD	2018-07-24	64K	KC6895	64K	TPOSTN	2018-07-24 07:10:09	2018-07-24 07:12:00	2018-07-24 07:38:21	-8.6	4.4	22.44199533	114.127873
63287		STD	2018-07-24	64K	KC6895	64K	TPOSTN	2018-07-24 07:10:09	2018-07-24 07:12:00	2018-07-24 07:39:12	-9.2	6.8	22.44022283	114.1251635
63287		STD	2018-07-24	64K	KC6895	64K	TPOSTN	2018-07-24 07:10:09	2018-07-24 07:12:00	2018-07-24 07:47:47	-8.5	19.5	22.42991933	114.0944565
63287		STD	2018-07-24	64K	KC6895	64K	TPOSTN	2018-07-24 07:10:09	2018-07-24 07:12:00	2018-07-24 07:47:48	-9.3	10.2	22.42992583	114.0944175

63287	[redacted]	STD	2018-07-24	64K	KC6895	64K	TPOSTN	2018-07-24 07:10:09	2018-07-24 07:12:00	2018-07-24 07:47:49	-8.5	1.7	22.42992767	114.0944055
63287		STD	2018-07-24	64K	KC6895	64K	TPOSTN	2018-07-24 07:10:09	2018-07-24 07:12:00	2018-07-24 07:51:38	-8.5	8.2	22.42746283	114.0823077
63287		STD	2018-07-24	64K	KC6895	64K	TPOSTN	2018-07-24 07:10:09	2018-07-24 07:12:00	2018-07-24 07:53:07	-8.6	12.6	22.4244785	114.0778052
63287		STD	2018-07-24	64K	KC6895	64K	TPOSTN	2018-07-24 07:10:09	2018-07-24 07:12:00	2018-07-24 07:53:08	-8.8	3.8	22.424469	114.077788
63287		STD	2018-07-24	64K	KC6895	64K	TPOSTN	2018-07-24 07:10:09	2018-07-24 07:12:00	2018-07-24 07:58:30	-8.5	5.8	22.4337935	114.070492
63287		STD	2018-07-24	64K	KC6895	64K	ULONGW	2018-07-24 08:39:05	2018-07-24 08:40:00	2018-07-24 08:52:51	-8.5	7.2	22.44431733	114.0437837
63287		STD	2018-07-24	64K	KC6895	64K	ULONGW	2018-07-24 08:39:05	2018-07-24 08:40:00	2018-07-24 08:53:46	-8.6	10.9	22.4444785	114.0474997
63287		STD	2018-07-24	64K	KC6895	64K	ULONGW	2018-07-24 08:39:05	2018-07-24 08:40:00	2018-07-24 09:01:42	-8.5	12	22.43464	114.0643075
63287		STD	2018-07-24	64K	KC6895	64K	ULONGW	2018-07-24 08:39:05	2018-07-24 08:40:00	2018-07-24 09:01:43	-8.9	3.1	22.43465733	114.0642955
63287		STD	2018-07-24	64K	KC6895	64K	ULONGW	2018-07-24 08:39:05	2018-07-24 08:40:00	2018-07-24 09:08:22	-8.9	4.4	22.42522733	114.075121
63287		STD	2018-07-24	64K	KC6895	64K	ULONGW	2018-07-24 08:39:05	2018-07-24 08:40:00	2018-07-24 09:10:49	-8.6	6.1	22.42710883	114.0818398
63287		STD	2018-07-24	64K	KC6895	64K	ULONGW	2018-07-24 08:39:05	2018-07-24 08:40:00	2018-07-24 09:16:00	-8.5	10.6	22.43144233	114.102926
63287		STD	2018-07-24	64K	KC6895	64K	ULONGW	2018-07-24 08:39:05	2018-07-24 08:40:00	2018-07-24 09:18:22	-9.5	10.6	22.43146267	114.108382
63287		STD	2018-07-24	64K	KC6895	64K	ULONGW	2018-07-24 08:39:05	2018-07-24 08:40:00	2018-07-24 09:40:43	-8.5	5.8	22.45213683	114.1653265
63287		STD	2018-07-24	64K	KC6895	64K	TPOSTN	2018-07-24 10:20:21	2018-07-24 10:20:00	2018-07-24 11:14:39	-8.9	9.2	22.43751983	114.0668862
63287		STD	2018-07-24	64K	KC6895	64K	TPOSTN	2018-07-24 10:20:21	2018-07-24 10:20:00	2018-07-24 11:15:27	-8.7	9.6	22.4381575	114.0647522
63287		STD	2018-07-24	64K	KC6895	64K	TPOSTN	2018-07-24 10:20:21	2018-07-24 10:20:00	2018-07-24 11:16:17	-8.6	15	22.43985133	114.061752
63287		STD	2018-07-24	64K	KC6895	64K	TPOSTN	2018-07-24 10:20:21	2018-07-24 10:20:00	2018-07-24 11:16:18	-8.9	6.1	22.43987	114.0617515
63287		STD	2018-07-24	64K	KC6895	64K	ULONGW	2018-07-24 12:15:16	2018-07-24 12:18:00	2018-07-24 12:43:34	-8.5	19.5	22.4265565	114.0737293
63287		STD	2018-07-24	64K	KC6895	64K	ULONGW	2018-07-24 12:15:16	2018-07-24 12:18:00	2018-07-24 12:43:35	-9.6	9.9	22.42653183	114.0737578
63287		STD	2018-07-24	64K	KC6895	64K	ULONGW	2018-07-24 12:15:16	2018-07-24 12:18:00	2018-07-24 12:47:14	-8.8	7.2	22.428326	114.0839692
63287		STD	2018-07-24	64K	KC6895	64K	ULONGW	2018-07-24 12:15:16	2018-07-24 12:18:00	2018-07-24 12:48:00	-8.9	5.8	22.428889	114.0869012
63287		STD	2018-07-24	64K	KC6895	64K	ULONGW	2018-07-24 12:15:16	2018-07-24 12:18:00	2018-07-24 12:51:03	-8.8	5.5	22.43145317	114.1029322
63287		STD	2018-07-24	64K	KC6895	64K	ULONGW	2018-07-24 12:15:16	2018-07-24 12:18:00	2018-07-24 13:02:20	-8.6	4.4	22.45980983	114.1458238
63287		STD	2018-07-24	64K	KC8013	64K	TPOSTN	2018-07-24 16:43:05	2018-07-24 16:44:00	2018-07-24 16:51:40	-8.9	23.9	22.4499365	114.1670987
63287		STD	2018-07-24	64K	KC8013	64K	TPOSTN	2018-07-24 16:43:05	2018-07-24 16:44:00	2018-07-24 16:51:41	-9.5	14.3	22.449984	114.167107
63287		STD	2018-07-24	64K	KC8013	64K	TPOSTN	2018-07-24 16:43:05	2018-07-24 16:44:00	2018-07-24 16:51:42	-9.9	4.4	22.450007	114.1671072
63287		STD	2018-07-24	64K	KC8013	64K	TPOSTN	2018-07-24 16:43:05	2018-07-24 16:44:00	2018-07-24 16:55:06	-9.9	8.2	22.45231483	114.1655725
63287		STD	2018-07-24	64K	KC8013	64K	TPOSTN	2018-07-24 16:43:05	2018-07-24 16:44:00	2018-07-24 16:59:56	-9.6	32.1	22.45366567	114.1567843
63287		STD	2018-07-24	64K	KC8013	64K	TPOSTN	2018-07-24 16:43:05	2018-07-24 16:44:00	2018-07-24 17:03:41	-8.5	10.6	22.45936517	114.1456343
63287		STD	2018-07-24	64K	KC8013	64K	TPOSTN	2018-07-24 16:43:05	2018-07-24 16:44:00	2018-07-24 17:03:42	-8.9	1.7	22.4593515	114.1456292
63287		STD	2018-07-24	64K	KC8013	64K	TPOSTN	2018-07-24 16:43:05	2018-07-24 16:44:00	2018-07-24 17:04:25	-8.5	7.2	22.45739	114.1442043
63287		STD	2018-07-24	64K	KC8013	64K	TPOSTN	2018-07-24 16:43:05	2018-07-24 16:44:00	2018-07-24 17:19:58	-8.5	12	22.4288895	114.0868853
63287		STD	2018-07-24	64K	KC8013	64K	TPOSTN	2018-07-24 16:43:05	2018-07-24 16:44:00	2018-07-24 17:19:59	-8.6	3.4	22.428885	114.0868635
63287		STD	2018-07-24	64K	KC8013	64K	TPOSTN	2018-07-24 16:43:05	2018-07-24 16:44:00	2018-07-24 17:20:42	-8.9	14.3	22.42840383	114.0843
63287		STD	2018-07-24	64K	KC8013	64K	TPOSTN	2018-07-24 16:43:05	2018-07-24 16:44:00	2018-07-24 17:20:43	-9.5	4.8	22.42839883	114.084273
63287		STD	2018-07-24	64K	KC8013	64K	TPOSTN	2018-07-24 16:43:05	2018-07-24 16:44:00	2018-07-24 17:21:49	-8.5	10.6	22.42536833	114.0794035
63287		STD	2018-07-24	64K	KC8013	64K	TPOSTN	2018-07-24 16:43:05	2018-07-24 16:44:00	2018-07-24 17:22:22	-9.5	14.7	22.42448283	114.077831
63287		STD	2018-07-24	64K	KC8013	64K	TPOSTN	2018-07-24 16:43:05	2018-07-24 16:44:00	2018-07-24 17:22:23	-9.6	5.1	22.4244685	114.077806
63287		STD	2018-07-24	64K	KC8013	64K	TPOSTN	2018-07-24 16:43:05	2018-07-24 16:44:00	2018-07-24 17:22:59	-8.9	5.1	22.4246725	114.0755793
63287		STD	2018-07-24	64K	KC8013	64K	TPOSTN	2018-07-24 16:43:05	2018-07-24 16:44:00	2018-07-24 17:24:33	-9.2	2.4	22.42923933	114.0717658
63287		STD	2018-07-24	64K	KC8013	64K	TPOSTN	2018-07-24 16:43:05	2018-07-24 16:44:00	2018-07-24 17:32:39	-8.9	22.2	22.43977367	114.0617437
63287		STD	2018-07-24	64K	KC8013	64K	TPOSTN	2018-07-24 16:43:05	2018-07-24 16:44:00	2018-07-24 17:34:00	-8.9	9.2	22.4401375	114.0563275
63287		STD	2018-07-24	64K	KC8013	64K	TPOSTN	2018-07-24 16:43:05	2018-07-24 16:44:00	2018-07-24 17:40:03	-8.9	6.5	22.444288	114.0360175
63287		STD	2018-07-24	64K	KC8013	64K	ULONGW	2018-07-24 18:09:58	2018-07-24 18:12:00	2018-07-24 18:16:31	-8.5	14	22.4445905	114.0284733
63287		STD	2018-07-24	64K	KC8013	64K	ULONGW	2018-07-24 18:09:58	2018-07-24 18:12:00	2018-07-24 18:17:06	-8.5	12	22.4445485	114.0303863

63287	[redacted]	STD	2018-07-24	64K	KC8013	64K	ULONGW	2018-07-24 18:09:58	2018-07-24 18:12:00	2018-07-24 18:17:07	-10	2	22.44454883	114.0304118
63287		STD	2018-07-24	64K	KC8013	64K	ULONGW	2018-07-24 18:09:58	2018-07-24 18:12:00	2018-07-24 18:25:46	-9.5	25.3	22.44366933	114.049481
63287		STD	2018-07-24	64K	KC8013	64K	ULONGW	2018-07-24 18:09:58	2018-07-24 18:12:00	2018-07-24 18:25:47	-9.9	15.4	22.44363983	114.0495357
63287		STD	2018-07-24	64K	KC8013	64K	ULONGW	2018-07-24 18:09:58	2018-07-24 18:12:00	2018-07-24 18:25:48	-8.5	6.8	22.4436235	114.0495648
63287		STD	2018-07-24	64K	KC8013	64K	ULONGW	2018-07-24 18:09:58	2018-07-24 18:12:00	2018-07-24 18:27:27	-9.5	9.6	22.44033617	114.0562557
63287		STD	2018-07-24	64K	KC8013	64K	ULONGW	2018-07-24 18:09:58	2018-07-24 18:12:00	2018-07-24 18:35:47	-9.5	10.6	22.43439467	114.0647908
63287		STD	2018-07-24	64K	KC8013	64K	ULONGW	2018-07-24 18:09:58	2018-07-24 18:12:00	2018-07-24 18:38:55	-8.9	13	22.43654117	114.0690227
63287		STD	2018-07-24	64K	KC8013	64K	ULONGW	2018-07-24 18:09:58	2018-07-24 18:12:00	2018-07-24 18:39:45	-9.2	6.5	22.43420067	114.0703695
63287		STD	2018-07-24	64K	KC8013	64K	ULONGW	2018-07-24 18:09:58	2018-07-24 18:12:00	2018-07-24 18:40:27	-9.2	4.4	22.4315885	114.0711115
63287		STD	2018-07-24	64K	KC8013	64K	ULONGW	2018-07-24 18:09:58	2018-07-24 18:12:00	2018-07-24 18:41:59	-8.5	16.4	22.42658483	114.0737335
63287		STD	2018-07-24	64K	KC8013	64K	ULONGW	2018-07-24 18:09:58	2018-07-24 18:12:00	2018-07-24 18:42:00	-8.5	7.9	22.42655833	114.073763
63287		STD	2018-07-24	64K	KC8013	64K	ULONGW	2018-07-24 18:09:58	2018-07-24 18:12:00	2018-07-24 18:42:42	-8.8	15.4	22.4253095	114.0750648
63287		STD	2018-07-24	64K	KC8013	64K	ULONGW	2018-07-24 18:09:58	2018-07-24 18:12:00	2018-07-24 18:42:43	-9.5	5.8	22.42528317	114.0750882
63287		STD	2018-07-24	64K	KC8013	64K	ULONGW	2018-07-24 18:09:58	2018-07-24 18:12:00	2018-07-24 18:47:49	-8.6	3.4	22.42975167	114.0915697
63287		STD	2018-07-24	64K	KC8013	64K	ULONGW	2018-07-24 18:09:58	2018-07-24 18:12:00	2018-07-24 18:48:38	-8.6	6.1	22.42981233	114.0951827
63287		STD	2018-07-24	64K	KC8013	64K	ULONGW	2018-07-24 18:09:58	2018-07-24 18:12:00	2018-07-24 18:49:43	-9.2	7.5	22.4305095	114.1002872
63287		STD	2018-07-24	64K	KC8013	64K	ULONGW	2018-07-24 18:09:58	2018-07-24 18:12:00	2018-07-24 18:50:27	-8.5	4.1	22.4314355	114.1029608
63287		STD	2018-07-24	64K	KC8013	64K	ULONGW	2018-07-24 18:09:58	2018-07-24 18:12:00	2018-07-24 18:51:24	-9.2	3.4	22.43154567	114.104955
63287		STD	2018-07-24	64K	KC8013	64K	ULONGW	2018-07-24 18:09:58	2018-07-24 18:12:00	2018-07-24 18:56:32	-8.5	12	22.44196467	114.1278208
63287		STD	2018-07-24	64K	KC8013	64K	ULONGW	2018-07-24 18:09:58	2018-07-24 18:12:00	2018-07-24 18:56:33	-8.6	3.4	22.44198633	114.1278382
63287		STD	2018-07-24	64K	KC8013	64K	ULONGW	2018-07-24 18:09:58	2018-07-24 18:12:00	2018-07-24 18:58:36	-8.5	2.4	22.44905867	114.1352848
63287		STD	2018-07-24	64K	KC8013	64K	ULONGW	2018-07-24 18:09:58	2018-07-24 18:12:00	2018-07-24 19:02:25	-9.1	11.6	22.45978683	114.1457998
63287		STD	2018-07-24	64K	KC8013	64K	ULONGW	2018-07-24 18:09:58	2018-07-24 18:12:00	2018-07-24 19:02:26	-8.5	3.1	22.45981183	114.1458103
63287		STD	2018-07-24	64K	KC8013	64K	ULONGW	2018-07-24 18:09:58	2018-07-24 18:12:00	2018-07-24 19:11:03	-8.4	11.3	22.45213633	114.1653407
63287		STD	2018-07-25	64K	KD 801	64K	TPOSTN	2018-07-25 07:05:36	2018-07-25 07:07:00	2018-07-25 07:11:13	-9.5	15.7	22.4482715	114.166423
63287		STD	2018-07-25	64K	KD 801	64K	TPOSTN	2018-07-25 07:05:36	2018-07-25 07:07:00	2018-07-25 07:11:14	-9.6	6.1	22.44829117	114.1664352
63287		STD	2018-07-25	64K	KD 801	64K	TPOSTN	2018-07-25 07:05:36	2018-07-25 07:07:00	2018-07-25 07:11:35	-8.2	9.9	22.44861633	114.166613
63287		STD	2018-07-25	64K	KD 801	64K	TPOSTN	2018-07-25 07:05:36	2018-07-25 07:07:00	2018-07-25 07:11:36	-9.9	0	22.44861967	114.1666152
63287		STD	2018-07-25	64K	KD 801	64K	TPOSTN	2018-07-25 07:05:36	2018-07-25 07:07:00	2018-07-25 07:12:27	-9.2	7.9	22.4500425	114.1671283
63287		STD	2018-07-25	64K	KD 801	64K	TPOSTN	2018-07-25 07:05:36	2018-07-25 07:07:00	2018-07-25 07:12:56	-8.2	9.9	22.45073	114.1672222
63287		STD	2018-07-25	64K	KD 801	64K	TPOSTN	2018-07-25 07:05:36	2018-07-25 07:07:00	2018-07-25 07:13:57	-8.5	13.7	22.45192267	114.1673228
63287		STD	2018-07-25	64K	KD 801	64K	TPOSTN	2018-07-25 07:05:36	2018-07-25 07:07:00	2018-07-25 07:13:58	-8.9	4.8	22.45194133	114.1673223
63287		STD	2018-07-25	64K	KD 801	64K	TPOSTN	2018-07-25 07:05:36	2018-07-25 07:07:00	2018-07-25 07:18:05	-8.5	7.5	22.452285	114.165574
63287		STD	2018-07-25	64K	KD 801	64K	TPOSTN	2018-07-25 07:05:36	2018-07-25 07:07:00	2018-07-25 07:18:32	-9.9	0	22.452189	114.1654552
63287		STD	2018-07-25	64K	KD 801	64K	TPOSTN	2018-07-25 07:05:36	2018-07-25 07:07:00	2018-07-25 07:18:37	-8.2	8.2	22.45217917	114.1654403
63287		STD	2018-07-25	64K	KD 801	64K	TPOSTN	2018-07-25 07:05:36	2018-07-25 07:07:00	2018-07-25 07:18:40	-9.6	0	22.45213333	114.1653968
63287		STD	2018-07-25	64K	KD 801	64K	TPOSTN	2018-07-25 07:05:36	2018-07-25 07:07:00	2018-07-25 07:20:54	-9.6	0	22.45062917	114.1608315
63287		STD	2018-07-25	64K	KD 801	64K	TPOSTN	2018-07-25 07:05:36	2018-07-25 07:07:00	2018-07-25 07:25:18	-8.5	8.2	22.46063633	114.1485338
63287		STD	2018-07-25	64K	KD 801	64K	TPOSTN	2018-07-25 07:05:36	2018-07-25 07:07:00	2018-07-25 07:26:06	-9.9	18.1	22.460968	114.1469272
63287		STD	2018-07-25	64K	KD 801	64K	TPOSTN	2018-07-25 07:05:36	2018-07-25 07:07:00	2018-07-25 07:31:04	-8.5	7.2	22.4458545	114.1324448
63287		STD	2018-07-25	64K	KD 801	64K	TPOSTN	2018-07-25 07:05:36	2018-07-25 07:07:00	2018-07-25 07:39:08	-9.2	9.9	22.4312475	114.1027062
63287		STD	2018-07-25	64K	KD 801	64K	TPOSTN	2018-07-25 07:05:36	2018-07-25 07:07:00	2018-07-25 07:39:09	-9.9	0	22.43124083	114.1026907
63287		STD	2018-07-25	64K	KD 801	64K	TPOSTN	2018-07-25 07:05:36	2018-07-25 07:07:00	2018-07-25 07:39:54	-8.5	5.5	22.43044433	114.1000617
63287		STD	2018-07-25	64K	KD 801	64K	TPOSTN	2018-07-25 07:05:36	2018-07-25 07:07:00	2018-07-25 07:43:52	-8.5	7.2	22.42838783	114.0843105
63287		STD	2018-07-25	64K	KD 801	64K	TPOSTN	2018-07-25 07:05:36	2018-07-25 07:07:00	2018-07-25 07:44:45	-9.3	0.3	22.427421	114.0822615
63287		STD	2018-07-25	64K	KD 801	64K	TPOSTN	2018-07-25 07:05:36	2018-07-25 07:07:00	2018-07-25 07:46:24	-8.8	11.3	22.42445667	114.077822

63287	[redacted]	STD	2018-07-25	64K	KD 801	64K	TPOSTN	2018-07-25 07:05:36	2018-07-25 07:07:00	2018-07-25 07:46:25	-8.9	2.4	22.42444917	114.077808
63287		STD	2018-07-25	64K	KD 801	64K	TPOSTN	2018-07-25 07:05:36	2018-07-25 07:07:00	2018-07-25 07:47:21	-9.2	4.4	22.4246535	114.0756332
63287		STD	2018-07-25	64K	KD 801	64K	TPOSTN	2018-07-25 07:05:36	2018-07-25 07:07:00	2018-07-25 07:49:50	-8.5	19.8	22.4291895	114.0718083
63287		STD	2018-07-25	64K	KD 801	64K	TPOSTN	2018-07-25 07:05:36	2018-07-25 07:07:00	2018-07-25 07:49:52	-8.6	3.4	22.42924283	114.0717853
63287		STD	2018-07-25	64K	KD 801	64K	TPOSTN	2018-07-25 07:05:36	2018-07-25 07:07:00	2018-07-25 07:49:53	-8.2	11.6	22.42926833	114.0717748
63287		STD	2018-07-25	64K	KD 801	64K	TPOSTN	2018-07-25 07:05:36	2018-07-25 07:07:00	2018-07-25 07:55:14	-8.9	11.3	22.4346135	114.0643863
63287		STD	2018-07-25	64K	KD 801	64K	TPOSTN	2018-07-25 07:05:36	2018-07-25 07:07:00	2018-07-25 07:56:42	-9.9	11.3	22.43441367	114.0647898
63287		STD	2018-07-25	64K	KD 801	64K	TPOSTN	2018-07-25 07:05:36	2018-07-25 07:07:00	2018-07-25 07:57:03	-9.9	0	22.43396767	114.0650138
63287		STD	2018-07-25	64K	KD 801	64K	TPOSTN	2018-07-25 07:05:36	2018-07-25 07:07:00	2018-07-25 07:59:06	-8.9	1	22.43673867	114.068078
63287		STD	2018-07-25	64K	KD 801	64K	TPOSTN	2018-07-25 07:05:36	2018-07-25 07:07:00	2018-07-25 08:01:10	-9.9	0.3	22.4375435	114.0668717
63287		STD	2018-07-25	64K	KD 801	64K	TPOSTN	2018-07-25 07:05:36	2018-07-25 07:07:00	2018-07-25 08:06:38	-9.9	0	22.44421083	114.0427538
63287		STD	2018-07-25	64K	KD 801	64K	TPOSTN	2018-07-25 07:05:36	2018-07-25 07:07:00	2018-07-25 08:07:29	-9.9	0	22.44420983	114.0398978
63287		STD	2018-07-25	64K	KD 801	64K	TPOSTN	2018-07-25 07:05:36	2018-07-25 07:07:00	2018-07-25 08:12:19	-9.9	0.3	22.4442755	114.0306633
63287		STD	2018-07-25	64K	KD 801	64K	TPOSTN	2018-07-25 07:05:36	2018-07-25 07:07:00	2018-07-25 08:15:41	-9.2	0	22.4450745	114.0248108
63287		STD	2018-07-25	64K	KD 801	64K	ULONGW	2018-07-25 08:38:05	2018-07-25 08:40:00	2018-07-25 08:40:08	-9.6	0	22.44559917	114.024866
63287		STD	2018-07-25	64K	KD 801	64K	ULONGW	2018-07-25 08:38:05	2018-07-25 08:40:00	2018-07-25 08:40:22	-9.6	0	22.44563	114.024913
63287		STD	2018-07-25	64K	KD 801	64K	ULONGW	2018-07-25 08:38:05	2018-07-25 08:40:00	2018-07-25 08:42:29	-9.2	9.2	22.44564367	114.024919
63287		STD	2018-07-25	64K	KD 801	64K	ULONGW	2018-07-25 08:38:05	2018-07-25 08:40:00	2018-07-25 08:47:06	-9.2	9.2	22.44448783	114.0305557
63287		STD	2018-07-25	64K	KD 801	64K	ULONGW	2018-07-25 08:38:05	2018-07-25 08:40:00	2018-07-25 08:49:13	-9.6	0	22.44658983	114.0344175
63287		STD	2018-07-25	64K	KD 801	64K	ULONGW	2018-07-25 08:38:05	2018-07-25 08:40:00	2018-07-25 08:51:27	-9.6	0	22.44508033	114.0367445
63287		STD	2018-07-25	64K	KD 801	64K	ULONGW	2018-07-25 08:38:05	2018-07-25 08:40:00	2018-07-25 09:04:47	-9.9	0.3	22.43468217	114.0643352
63287		STD	2018-07-25	64K	KD 801	64K	ULONGW	2018-07-25 08:38:05	2018-07-25 08:40:00	2018-07-25 09:09:19	-8.6	12.6	22.42875667	114.0718935
63287		STD	2018-07-25	64K	KD 801	64K	ULONGW	2018-07-25 08:38:05	2018-07-25 08:40:00	2018-07-25 09:10:09	-9.3	18.4	22.42657883	114.0737177
63287		STD	2018-07-25	64K	KD 801	64K	ULONGW	2018-07-25 08:38:05	2018-07-25 08:40:00	2018-07-25 09:10:49	-9.9	9.2	22.4252375	114.0751138
63287		STD	2018-07-25	64K	KD 801	64K	ULONGW	2018-07-25 08:38:05	2018-07-25 08:40:00	2018-07-25 09:12:38	-9.6	0	22.42551333	114.0796883
63287		STD	2018-07-25	64K	KD 801	64K	ULONGW	2018-07-25 08:38:05	2018-07-25 08:40:00	2018-07-25 09:13:20	-8.9	16.4	22.4270985	114.0818552
63287		STD	2018-07-25	64K	KD 801	64K	ULONGW	2018-07-25 08:38:05	2018-07-25 08:40:00	2018-07-25 09:13:21	-9.9	6.5	22.42712133	114.0818838
63287		STD	2018-07-25	64K	KD 801	64K	ULONGW	2018-07-25 08:38:05	2018-07-25 08:40:00	2018-07-25 09:13:23	-9.6	0	22.42713717	114.0819155
63287		STD	2018-07-25	64K	KD 801	64K	ULONGW	2018-07-25 08:38:05	2018-07-25 08:40:00	2018-07-25 09:14:02	-8.8	5.5	22.42836533	114.0840175
63287		STD	2018-07-25	64K	KD 801	64K	ULONGW	2018-07-25 08:38:05	2018-07-25 08:40:00	2018-07-25 09:14:51	-8.5	5.5	22.428909	114.0869928
63287		STD	2018-07-25	64K	KD 801	64K	ULONGW	2018-07-25 08:38:05	2018-07-25 08:40:00	2018-07-25 09:16:24	-9.2	7.2	22.42981083	114.0951585
63287		STD	2018-07-25	64K	KD 801	64K	ULONGW	2018-07-25 08:38:05	2018-07-25 08:40:00	2018-07-25 09:16:26	-9.9	0	22.42980517	114.0951912
63287		STD	2018-07-25	64K	KD 801	64K	ULONGW	2018-07-25 08:38:05	2018-07-25 08:40:00	2018-07-25 09:18:24	-8.9	4.8	22.43145583	114.1029703
63287		STD	2018-07-25	64K	KD 801	64K	ULONGW	2018-07-25 08:38:05	2018-07-25 08:40:00	2018-07-25 09:19:10	-9.5	5.8	22.43155967	114.1049807
63287		STD	2018-07-25	64K	KD 801	64K	ULONGW	2018-07-25 08:38:05	2018-07-25 08:40:00	2018-07-25 09:19:57	-9.2	7.2	22.43172767	114.1071928
63287		STD	2018-07-25	64K	KD 801	64K	ULONGW	2018-07-25 08:38:05	2018-07-25 08:40:00	2018-07-25 09:26:42	-8.5	0	22.4419995	114.1278408
63287		STD	2018-07-25	64K	KD 801	64K	ULONGW	2018-07-25 08:38:05	2018-07-25 08:40:00	2018-07-25 09:39:16	-9.2	24.2	22.46014167	114.1459387
63287		STD	2018-07-25	64K	KD 801	64K	ULONGW	2018-07-25 08:38:05	2018-07-25 08:40:00	2018-07-25 09:43:50	-9.6	0	22.45524083	114.165432
63287		STD	2018-07-25	64K	KD 801	64K	ULONGW	2018-07-25 08:38:05	2018-07-25 08:40:00	2018-07-25 09:45:37	-8.2	9.6	22.45616183	114.1668907
63287		STD	2018-07-25	64K	KD 801	64K	ULONGW	2018-07-25 08:38:05	2018-07-25 08:40:00	2018-07-25 09:45:38	-9.6	0	22.45616883	114.1669012
63287		STD	NULL	NULL	KD 801	NULL	NULL	2018-07-25 12:16:20	NULL	2018-07-25 12:16:56	-8.5	0	22.44577267	114.0247535
63287		STD	2018-07-25	64K	KD 801	64K	ULONGW	2018-07-25 12:16:20	2018-07-25 12:18:00	2018-07-25 12:20:19	-9.2	0	22.444473	114.0284947
63287		STD	2018-07-25	64K	KD 801	64K	ULONGW	2018-07-25 12:16:20	2018-07-25 12:18:00	2018-07-25 12:20:38	-9.6	0	22.4444725	114.0284973
63287		STD	2018-07-25	64K	KD 801	64K	ULONGW	2018-07-25 12:16:20	2018-07-25 12:18:00	2018-07-25 12:20:39	-9.6	9.6	22.444466	114.0285143
63287		STD	2018-07-25	64K	KD 801	64K	ULONGW	2018-07-25 12:16:20	2018-07-25 12:18:00	2018-07-25 12:22:00	-9.2	0	22.44421067	114.0304637
63287		STD	2018-07-25	64K	KD 801	64K	ULONGW	2018-07-25 12:16:20	2018-07-25 12:18:00	2018-07-25 12:32:12	-9.2	0	22.440105	114.056963

63287	[redacted]	STD	2018-07-25	64K	KD 801	64K	ULONGW	2018-07-25 12:16:20	2018-07-25 12:18:00	2018-07-25 12:33:57	-9.5	4.8	22.43991833	114.0618107
63287		STD	2018-07-25	64K	KD 801	64K	ULONGW	2018-07-25 12:16:20	2018-07-25 12:18:00	2018-07-25 12:33:58	-9.9	14.7	22.4399165	114.06183
63287		STD	2018-07-25	64K	KD 801	64K	ULONGW	2018-07-25 12:16:20	2018-07-25 12:18:00	2018-07-25 12:34:02	-9.6	9.6	22.4399085	114.0619012
63287		STD	2018-07-25	64K	KD 801	64K	ULONGW	2018-07-25 12:16:20	2018-07-25 12:18:00	2018-07-25 12:35:09	-9.5	0.3	22.43798933	114.0657178
63287		STD	2018-07-25	64K	KD 801	64K	ULONGW	2018-07-25 12:16:20	2018-07-25 12:18:00	2018-07-25 12:46:13	-9.5	0.3	22.42548967	114.079642
63287		STD	2018-07-25	64K	KD 801	64K	ULONGW	2018-07-25 12:16:20	2018-07-25 12:18:00	2018-07-25 12:49:43	-8.2	2.7	22.4297425	114.0915885
63287		STD	2018-07-25	64K	KD 801	64K	ULONGW	2018-07-25 12:16:20	2018-07-25 12:18:00	2018-07-25 12:49:45	-10.2	0	22.429746	114.0916112
63287		STD	2018-07-25	64K	KD 801	64K	ULONGW	2018-07-25 12:16:20	2018-07-25 12:18:00	2018-07-25 12:50:37	-9.6	0	22.4297925	114.095231
63287		STD	2018-07-25	64K	KD 801	64K	ULONGW	2018-07-25 12:16:20	2018-07-25 12:18:00	2018-07-25 13:09:52	-9.2	0	22.453852	114.156386
63287		STD	2018-07-25	64K	KD 801	64K	ULONGW	2018-07-25 12:16:20	2018-07-25 12:18:00	2018-07-25 13:19:21	-9.9	0	22.45294067	114.1673662
63287		STD	2018-07-25	64K	KD1456	64K	TPOSTN	2018-07-25 16:38:47	2018-07-25 16:44:00	2018-07-25 16:51:44	-8.6	10.9	22.44999283	114.1670965
63287		STD	2018-07-25	64K	KD1456	64K	TPOSTN	2018-07-25 16:38:47	2018-07-25 16:44:00	2018-07-25 16:53:00	-9.5	6.8	22.45193333	114.167321
63287		STD	2018-07-25	64K	KD1456	64K	TPOSTN	2018-07-25 16:38:47	2018-07-25 16:44:00	2018-07-25 17:05:01	-8.5	10.2	22.45932817	114.1456592
63287		STD	2018-07-25	64K	KD1456	64K	TPOSTN	2018-07-25 16:38:47	2018-07-25 16:44:00	2018-07-25 17:17:16	-8.8	7.9	22.43252483	114.1112682
63287		STD	2018-07-25	64K	KD1456	64K	TPOSTN	2018-07-25 16:38:47	2018-07-25 16:44:00	2018-07-25 17:23:04	-8.4	11.3	22.4289055	114.0869352
63287		STD	2018-07-25	64K	KD1456	64K	TPOSTN	2018-07-25 16:38:47	2018-07-25 16:44:00	2018-07-25 17:24:49	-9.2	7.9	22.425373	114.0793923
63287		STD	2018-07-25	64K	KD1456	64K	TPOSTN	2018-07-25 16:38:47	2018-07-25 16:44:00	2018-07-25 17:26:02	-8.5	18.1	22.42464617	114.07565
63287		STD	2018-07-25	64K	KD1456	64K	TPOSTN	2018-07-25 16:38:47	2018-07-25 16:44:00	2018-07-25 17:26:03	-9.9	8.2	22.42467483	114.0756258
63287		STD	2018-07-25	64K	KD1456	64K	TPOSTN	2018-07-25 16:38:47	2018-07-25 16:44:00	2018-07-25 17:27:48	-9.2	9.2	22.42925733	114.0717682
63287		STD	2018-07-25	64K	KD1456	64K	TPOSTN	2018-07-25 16:38:47	2018-07-25 16:44:00	2018-07-25 17:28:30	-8.9	4.4	22.431836	114.0710303
63287		STD	2018-07-25	64K	KD1456	64K	TPOSTN	2018-07-25 16:38:47	2018-07-25 16:44:00	2018-07-25 17:29:08	-8.5	9.2	22.43376167	114.0704887
63287		STD	2018-07-25	64K	KD1456	64K	TPOSTN	2018-07-25 16:38:47	2018-07-25 16:44:00	2018-07-25 17:36:59	-8.5	10.2	22.43755033	114.0669052
63287		STD	2018-07-25	64K	KD1456	64K	TPOSTN	2018-07-25 16:38:47	2018-07-25 16:44:00	2018-07-25 17:48:50	-9.2	4.4	22.44428317	114.0360265
63287		STD	2018-07-25	64K	KD1456	64K	TPOSTN	2018-07-25 16:38:47	2018-07-25 16:44:00	2018-07-25 17:51:02	-8.9	10.6	22.44447333	114.0307642
63287		STD	2018-07-25	64K	KD1456	64K	ULONGW	2018-07-25 18:08:08	2018-07-25 18:12:00	2018-07-25 18:29:39	-8.9	8.9	22.44242717	114.0515915
63287		STD	2018-07-25	64K	KD1456	64K	ULONGW	2018-07-25 18:08:08	2018-07-25 18:12:00	2018-07-25 18:30:33	-8.9	17.1	22.4403595	114.0561387
63287		STD	2018-07-25	64K	KD1456	64K	ULONGW	2018-07-25 18:08:08	2018-07-25 18:12:00	2018-07-25 18:30:34	-9.9	7.2	22.440345	114.0561792
63287		STD	2018-07-25	64K	KD1456	64K	ULONGW	2018-07-25 18:08:08	2018-07-25 18:12:00	2018-07-25 18:33:10	-8.5	15.4	22.4381025	114.0655385
63287		STD	2018-07-25	64K	KD1456	64K	ULONGW	2018-07-25 18:08:08	2018-07-25 18:12:00	2018-07-25 18:33:11	-8.9	6.5	22.43809567	114.065576
63287		STD	2018-07-25	64K	KD1456	64K	ULONGW	2018-07-25 18:08:08	2018-07-25 18:12:00	2018-07-25 18:41:43	-8.8	11.3	22.43162133	114.0710852
63287		STD	2018-07-25	64K	KD1456	64K	ULONGW	2018-07-25 18:08:08	2018-07-25 18:12:00	2018-07-25 18:44:26	-8.6	8.5	22.42531083	114.0750547
63287		STD	2018-07-25	64K	KD1456	64K	ULONGW	2018-07-25 18:08:08	2018-07-25 18:12:00	2018-07-25 18:45:32	-8.2	6.1	22.42428283	114.0774278
63287		STD	2018-07-25	64K	KD1456	64K	ULONGW	2018-07-25 18:08:08	2018-07-25 18:12:00	2018-07-25 18:47:17	-8.9	8.5	22.427114	114.0818387
63287		STD	2018-07-25	64K	KD1456	64K	ULONGW	2018-07-25 18:08:08	2018-07-25 18:12:00	2018-07-25 18:48:06	-9.2	5.1	22.42833233	114.0839075
63287		STD	2018-07-25	64K	KD1456	64K	ULONGW	2018-07-25 18:08:08	2018-07-25 18:12:00	2018-07-25 18:50:47	-8.5	7.2	22.42982817	114.0951193
63287		STD	2018-07-25	64K	KD1456	64K	ULONGW	2018-07-25 18:08:08	2018-07-25 18:12:00	2018-07-25 18:52:44	-9.2	7.9	22.43145983	114.1029207
63287		STD	2018-07-25	64K	KD1456	64K	ULONGW	2018-07-25 18:08:08	2018-07-25 18:12:00	2018-07-25 18:55:14	-9.9	6.1	22.43172833	114.1071378
63287		STD	2018-07-25	64K	KD1456	64K	ULONGW	2018-07-25 18:08:08	2018-07-25 18:12:00	2018-07-25 19:01:27	-9.6	4.4	22.44200367	114.1278337
63287		STD	2018-07-25	64K	KD1456	64K	ULONGW	2018-07-25 18:08:08	2018-07-25 18:12:00	2018-07-25 19:18:14	-9.2	4.4	22.45193283	114.1673817
63287		STD	2018-07-26	64K	LT6216	64K	TPOSTN	2018-07-26 07:05:41	2018-07-26 07:07:00	2018-07-26 07:14:32	-8.5	4.5	22.4522755	114.1655382
63287		STD	2018-07-26	64K	LT6216	64K	ULONGW	2018-07-26 08:29:57	2018-07-26 08:32:00	2018-07-26 08:33:41	-8.5	19.3	22.444543	114.0262335
63287		STD	2018-07-26	64K	LT6216	64K	ULONGW	2018-07-26 08:29:57	2018-07-26 08:32:00	2018-07-26 08:33:42	-8.9	10.3	22.44454083	114.0262683
63287		STD	2018-07-26	64K	LT6216	64K	ULONGW	2018-07-26 08:29:57	2018-07-26 08:32:00	2018-07-26 08:35:03	-8.9	9	22.44454483	114.028476
63287		STD	2018-07-26	64K	LT6216	64K	ULONGW	2018-07-26 08:29:57	2018-07-26 08:32:00	2018-07-26 08:47:11	-8.5	11.7	22.44013383	114.0592218
63287		STD	2018-07-26	64K	LT6216	64K	ULONGW	2018-07-26 08:29:57	2018-07-26 08:32:00	2018-07-26 09:12:17	-8.5	12.1	22.43175917	114.1071463
63287		STD	2018-07-26	64K	LT6216	64K	ULONGW	2018-07-26 08:29:57	2018-07-26 08:32:00	2018-07-26 09:12:18	-8.5	3.6	22.4317615	114.1071638

63287	[redacted]	STD	2018-07-26	64K	LT6216	64K	TPOSTN	2018-07-26 10:12:59	2018-07-26 10:14:00	2018-07-26 10:20:58	-8.5	16.2	22.449915	114.16709
63287		STD	2018-07-26	64K	LT6216	64K	ULONGW	2018-07-26 12:14:42	2018-07-26 12:18:00	2018-07-26 12:33:11	-8.5	17.1	22.44436817	114.0436803
63287		STD	2018-07-26	64K	KD1456	64K	TPOSTN	2018-07-26 16:38:52	2018-07-26 16:44:00	2018-07-26 17:00:20	-9.2	6.5	22.45741	114.1442453
63287		STD	2018-07-26	64K	KD1456	64K	TPOSTN	2018-07-26 16:38:52	2018-07-26 16:44:00	2018-07-26 17:13:44	-9.5	8.9	22.43045333	114.1000345
63287		STD	2018-07-26	64K	KD1456	64K	TPOSTN	2018-07-26 16:38:52	2018-07-26 16:44:00	2018-07-26 17:15:26	-9.2	6.5	22.429792	114.0917803
63287		STD	2018-07-26	64K	KD1456	64K	TPOSTN	2018-07-26 16:38:52	2018-07-26 16:44:00	2018-07-26 17:19:38	-8.9	10.9	22.42448633	114.077801
63287		STD	2018-07-26	64K	KD1456	64K	TPOSTN	2018-07-26 16:38:52	2018-07-26 16:44:00	2018-07-26 17:23:43	-8.9	4.1	22.431837	114.071033
63287		STD	2018-07-26	64K	KD1456	64K	TPOSTN	2018-07-26 16:38:52	2018-07-26 16:44:00	2018-07-26 17:24:24	-8.9	9.2	22.43380783	114.070489
63287		STD	2018-07-26	64K	KD1456	64K	TPOSTN	2018-07-26 16:38:52	2018-07-26 16:44:00	2018-07-26 17:44:38	-9.1	17.1	22.4446235	114.0321062
63287		STD	2018-07-26	64K	KD1456	64K	TPOSTN	2018-07-26 16:38:52	2018-07-26 16:44:00	2018-07-26 17:44:39	-9.9	7.2	22.4446125	114.0320675
63287		STD	2018-07-26	64K	KD1456	64K	ULONGW	2018-07-26 18:09:00	2018-07-26 18:12:00	2018-07-26 18:21:56	-8.9	12.3	22.4445215	114.038296
63287		STD	2018-07-26	64K	KD1456	64K	ULONGW	2018-07-26 18:09:00	2018-07-26 18:12:00	2018-07-26 18:26:47	-8.9	10.6	22.443654	114.0495138
63287		STD	2018-07-26	64K	KD1456	64K	ULONGW	2018-07-26 18:09:00	2018-07-26 18:12:00	2018-07-26 18:28:12	-8.5	7.5	22.44032333	114.0562515
63287		STD	2018-07-26	64K	KD1456	64K	ULONGW	2018-07-26 18:09:00	2018-07-26 18:12:00	2018-07-26 18:33:25	-9.5	6.8	22.4359465	114.0675858
63287		STD	2018-07-26	64K	KD1456	64K	ULONGW	2018-07-26 18:09:00	2018-07-26 18:12:00	2018-07-26 18:39:37	-8.9	8.2	22.436431	114.0691745
63287		STD	2018-07-26	64K	KD1456	64K	ULONGW	2018-07-26 18:09:00	2018-07-26 18:12:00	2018-07-26 18:41:24	-8.8	3.8	22.428737	114.0719027
63287		STD	2018-07-26	64K	KD1456	64K	ULONGW	2018-07-26 18:09:00	2018-07-26 18:12:00	2018-07-26 18:46:40	-8.5	14.7	22.42832067	114.0839442
63287		STD	2018-07-26	64K	KD1456	64K	ULONGW	2018-07-26 18:09:00	2018-07-26 18:12:00	2018-07-26 18:46:41	-8.9	5.8	22.42832717	114.0839793
63287		STD	2018-07-26	64K	KD1456	64K	ULONGW	2018-07-26 18:09:00	2018-07-26 18:12:00	2018-07-26 18:48:51	-8.5	8.9	22.4297405	114.0915258
63287		STD	2018-07-26	64K	KD1456	64K	ULONGW	2018-07-26 18:09:00	2018-07-26 18:12:00	2018-07-26 18:50:54	-9.1	10.6	22.43052267	114.1002212
63287		STD	2018-07-26	64K	KD1456	64K	ULONGW	2018-07-26 18:09:00	2018-07-26 18:12:00	2018-07-26 18:51:37	-8.9	10.6	22.43143767	114.1028848
63287		STD	2018-07-26	64K	KD1456	64K	ULONGW	2018-07-26 18:09:00	2018-07-26 18:12:00	2018-07-26 18:52:09	-8.9	8.9	22.43174033	114.103215
63287		STD	2018-07-26	64K	KD1456	64K	ULONGW	2018-07-26 18:09:00	2018-07-26 18:12:00	2018-07-26 18:58:40	-8.5	8.9	22.43930267	114.1234515
63287		STD	2018-07-26	64K	KD1456	64K	ULONGW	2018-07-26 18:09:00	2018-07-26 18:12:00	2018-07-26 19:00:40	-8.5	5.5	22.44479217	114.1311778
63287		STD	2018-07-26	64K	KD1456	64K	ULONGW	2018-07-26 18:09:00	2018-07-26 18:12:00	2018-07-26 19:04:59	-8.7	9.6	22.46029217	114.1459798
63287		STD	2018-07-27	64K	KL8537	64K	TPOSTN	2018-07-27 07:06:31	2018-07-27 07:07:00	2018-07-27 07:10:04	-8.9	5.8	22.44816283	114.1663917
63287		STD	2018-07-27	64K	KL8537	64K	TPOSTN	2018-07-27 07:06:31	2018-07-27 07:07:00	2018-07-27 07:14:27	-8.5	10.2	22.45226783	114.165592
63287		STD	2018-07-27	64K	KL8537	64K	TPOSTN	2018-07-27 07:06:31	2018-07-27 07:07:00	2018-07-27 07:37:37	-8.5	7.2	22.43045317	114.1000453
63287		STD	2018-07-27	64K	KL8537	64K	TPOSTN	2018-07-27 07:06:31	2018-07-27 07:07:00	2018-07-27 07:38:46	-8.9	12.3	22.42991733	114.094465
63287		STD	2018-07-27	64K	KL8537	64K	TPOSTN	2018-07-27 07:06:31	2018-07-27 07:07:00	2018-07-27 07:54:00	-8.8	11.3	22.434374	114.0647937
63287		STD	2018-07-27	64K	KL8537	64K	TPOSTN	2018-07-27 07:06:31	2018-07-27 07:07:00	2018-07-27 08:04:34	-8.5	8.9	22.4447055	114.0397458
63287		STD	2018-07-27	64K	KL8537	64K	ULONGW	2018-07-27 08:31:03	2018-07-27 08:32:00	2018-07-27 08:45:39	-8.9	19.1	22.44432233	114.0436642
63287		STD	2018-07-27	64K	KL8537	64K	ULONGW	2018-07-27 08:31:03	2018-07-27 08:32:00	2018-07-27 08:45:40	-9.9	9.2	22.44431933	114.0437013
63287		STD	2018-07-27	64K	KL8537	64K	ULONGW	2018-07-27 08:31:03	2018-07-27 08:32:00	2018-07-27 09:00:53	-8.5	3.8	22.4265445	114.0737513
63287		STD	2018-07-27	64K	KL8537	64K	ULONGW	2018-07-27 08:31:03	2018-07-27 08:32:00	2018-07-27 09:04:11	-8.9	6.8	22.42712617	114.0818558
63287		STD	2018-07-27	64K	KL8537	64K	ULONGW	2018-07-27 08:31:03	2018-07-27 08:32:00	2018-07-27 09:04:56	-8.5	18.8	22.42832967	114.0839132
63287		STD	2018-07-27	64K	KL8537	64K	ULONGW	2018-07-27 08:31:03	2018-07-27 08:32:00	2018-07-27 09:04:57	-9.1	9.6	22.4283355	114.0839513
63287		STD	2018-07-27	64K	KL8537	64K	ULONGW	2018-07-27 08:31:03	2018-07-27 08:32:00	2018-07-27 09:06:58	-8.8	7.9	22.42889717	114.0868908
63287		STD	2018-07-27	64K	KL8537	64K	ULONGW	2018-07-27 08:31:03	2018-07-27 08:32:00	2018-07-27 09:08:48	-8.6	3.4	22.42980817	114.0951392
63287		STD	2018-07-27	64K	KL8537	64K	ULONGW	2018-07-27 08:31:03	2018-07-27 08:32:00	2018-07-27 09:10:00	-9.2	4.4	22.43052467	114.1002483
63287		STD	2018-07-27	64K	KL8537	64K	ULONGW	2018-07-27 08:31:03	2018-07-27 08:32:00	2018-07-27 09:46:05	-9.5	14.3	22.44728417	114.1700015
63287		STD	2018-07-27	64K	KL8537	64K	ULONGW	2018-07-27 08:31:03	2018-07-27 08:32:00	2018-07-27 09:46:06	-9.2	5.1	22.44727383	114.1700272
63287		STD	2018-07-27	64K	KL8537	64K	TPOSTN	2018-07-27 10:12:54	2018-07-27 10:14:00	2018-07-27 10:53:21	-8.7	9.6	22.42992267	114.0944837
63287		STD	2018-07-27	64K	KL8537	64K	TPOSTN	2018-07-27 10:12:54	2018-07-27 10:14:00	2018-07-27 10:57:08	-9.2	10.9	22.42535917	114.079423
63287		STD	2018-07-27	64K	KL8537	64K	TPOSTN	2018-07-27 10:12:54	2018-07-27 10:14:00	2018-07-27 11:12:36	-9.2	6.5	22.44014	114.0562918
63287		STD	2018-07-27	64K	KL8537	64K	ULONGW	2018-07-27 12:15:47	2018-07-27 12:18:00	2018-07-27 12:26:42	-9.2	7.9	22.4444045	114.0388397

63287	[redacted]	STD	2018-07-27	64K	KL8537	64K	ULONGW	2018-07-27 12:15:47	2018-07-27 12:18:00	2018-07-27 12:29:01	-8.9	16.7	22.44435983	114.0436878
63287		STD	2018-07-27	64K	KL8537	64K	ULONGW	2018-07-27 12:15:47	2018-07-27 12:18:00	2018-07-27 12:29:02	-9.5	7.2	22.44435283	114.043732
63287		STD	2018-07-27	64K	KL8537	64K	ULONGW	2018-07-27 12:15:47	2018-07-27 12:18:00	2018-07-27 12:30:18	-8.5	10.2	22.44365383	114.0495065
63287		STD	2018-07-27	64K	KL8537	64K	ULONGW	2018-07-27 12:15:47	2018-07-27 12:18:00	2018-07-27 12:31:39	-8.5	26	22.44011	114.0569272
63287		STD	2018-07-27	64K	KL8537	64K	ULONGW	2018-07-27 12:15:47	2018-07-27 12:18:00	2018-07-27 12:31:40	-9.6	16.4	22.440097	114.0569978
63287		STD	2018-07-27	64K	KL8537	64K	ULONGW	2018-07-27 12:15:47	2018-07-27 12:18:00	2018-07-27 12:31:41	-8.9	7.5	22.44008783	114.0570428
63287		STD	2018-07-27	64K	KL8537	64K	ULONGW	2018-07-27 12:15:47	2018-07-27 12:18:00	2018-07-27 12:34:18	-8.5	17.1	22.4380905	114.0655283
63287		STD	2018-07-27	64K	KL8537	64K	ULONGW	2018-07-27 12:15:47	2018-07-27 12:18:00	2018-07-27 12:36:45	-8.8	15.4	22.43461483	114.0643753
63287		STD	2018-07-27	64K	KL8537	64K	ULONGW	2018-07-27 12:15:47	2018-07-27 12:18:00	2018-07-27 12:40:59	-8.6	20.8	22.43166833	114.0710677
63287		STD	2018-07-27	64K	KL8537	64K	ULONGW	2018-07-27 12:15:47	2018-07-27 12:18:00	2018-07-27 12:41:00	-9.4	11.3	22.43161617	114.0710823
63287		STD	2018-07-27	64K	KL8537	64K	ULONGW	2018-07-27 12:15:47	2018-07-27 12:18:00	2018-07-27 12:41:01	-8.9	2.4	22.43158717	114.0710912
63287		STD	2018-07-27	64K	KL8537	64K	ULONGW	2018-07-27 12:15:47	2018-07-27 12:18:00	2018-07-27 12:41:44	-9.2	16	22.42879767	114.0718863
63287		STD	2018-07-27	64K	KL8537	64K	ULONGW	2018-07-27 12:15:47	2018-07-27 12:18:00	2018-07-27 12:41:45	-9.5	6.5	22.42875767	114.0718983
63287		STD	2018-07-27	64K	KL8537	64K	ULONGW	2018-07-27 12:15:47	2018-07-27 12:18:00	2018-07-27 12:43:00	-8.5	9.6	22.4252915	114.0750662
63287		STD	2018-07-27	64K	KL8537	64K	ULONGW	2018-07-27 12:15:47	2018-07-27 12:18:00	2018-07-27 12:44:33	-9.2	5.8	22.42549383	114.0796108
63287		STD	2018-07-27	64K	KL8537	64K	ULONGW	2018-07-27 12:15:47	2018-07-27 12:18:00	2018-07-27 12:46:00	-8.6	16	22.42831633	114.083937
63287		STD	2018-07-27	64K	KL8537	64K	ULONGW	2018-07-27 12:15:47	2018-07-27 12:18:00	2018-07-27 12:46:01	-9.5	6.5	22.428325	114.0839803
63287		STD	2018-07-27	64K	KL8537	64K	ULONGW	2018-07-27 12:15:47	2018-07-27 12:18:00	2018-07-27 12:46:54	-8.9	8.5	22.42889467	114.0868847
63287		STD	2018-07-27	64K	KL8537	64K	ULONGW	2018-07-27 12:15:47	2018-07-27 12:18:00	2018-07-27 13:03:44	-8.8	11.3	22.45979517	114.1457855
63287		STD	2018-07-27	64K	KL8537	64K	ULONGW	2018-07-27 12:15:47	2018-07-27 12:18:00	2018-07-27 13:03:45	-8.6	2.7	22.45982467	114.1457975
63287		STD	2018-07-27	64K	KL8537	64K	ULONGW	2018-07-27 12:15:47	2018-07-27 12:18:00	2018-07-27 13:13:28	-8.5	9.9	22.45203467	114.165248
63287		STD	2018-07-27	64K	KL8537	64K	ULONGW	2018-07-27 12:15:47	2018-07-27 12:18:00	2018-07-27 13:17:33	-8.9	6.1	22.45191483	114.1673237
63287		STD	2018-07-27	64K	KL8537	64K	ULONGW	2018-07-27 12:15:47	2018-07-27 12:18:00	2018-07-27 13:23:29	-8.9	12.3	22.44672383	114.1718123
63287		STD	2018-07-27	64K	KD1456	64K	TPOSTN	2018-07-27 16:41:29	2018-07-27 16:44:00	2018-07-27 16:52:22	-8.9	12.3	22.45186783	114.1673457
63287		STD	2018-07-27	64K	KD1456	64K	TPOSTN	2018-07-27 16:41:29	2018-07-27 16:44:00	2018-07-27 17:10:04	-8.6	20.8	22.44597117	114.1325278
63287		STD	2018-07-27	64K	KD1456	64K	TPOSTN	2018-07-27 16:41:29	2018-07-27 16:44:00	2018-07-27 17:10:06	-8.6	4.4	22.44588367	114.132461
63287		STD	2018-07-27	64K	KD1456	64K	TPOSTN	2018-07-27 16:41:29	2018-07-27 16:44:00	2018-07-27 17:24:30	-8.6	18.4	22.42844117	114.0844398
63287		STD	2018-07-27	64K	KD1456	64K	TPOSTN	2018-07-27 16:41:29	2018-07-27 16:44:00	2018-07-27 17:24:31	-9.5	8.9	22.4284335	114.0843798
63287		STD	2018-07-27	64K	KD1456	64K	ULONGW	2018-07-27 18:06:19	2018-07-27 18:08:00	2018-07-27 18:22:57	-9.2	4.8	22.44435	114.0437202
63287		STD	2018-07-27	64K	KD1456	64K	ULONGW	2018-07-27 18:06:19	2018-07-27 18:08:00	2018-07-27 18:26:11	-8.8	5.5	22.44033617	114.0561982
63287		STD	2018-07-27	64K	KD1456	64K	ULONGW	2018-07-27 18:06:19	2018-07-27 18:08:00	2018-07-27 18:49:03	-8.6	5.1	22.43050883	114.1002493
63287		STD	2018-07-27	64K	KD1456	64K	ULONGW	2018-07-27 18:06:19	2018-07-27 18:08:00	2018-07-27 18:49:51	-8.5	8.9	22.43142983	114.1029107
63287		STD	2018-07-27	64K	KD1456	64K	ULONGW	2018-07-27 18:06:19	2018-07-27 18:08:00	2018-07-27 18:56:11	-9.2	21.5	22.4409365	114.1270115
63287		STD	2018-07-27	64K	KD1456	64K	ULONGW	2018-07-27 18:06:19	2018-07-27 18:08:00	2018-07-27 18:58:05	-8.5	7.2	22.4490635	114.135271
63287		STD	2018-07-27	64K	KD1456	64K	ULONGW	2018-07-27 18:06:19	2018-07-27 18:08:00	2018-07-27 19:00:34	-8.5	9.9	22.45568767	114.142399
63287		STD	2018-07-27	64K	KD1456	64K	ULONGW	2018-07-27 18:06:19	2018-07-27 18:08:00	2018-07-27 19:09:23	-8.6	20.8	22.45046683	114.163896
63287		STD	2018-07-27	64K	KD1456	64K	ULONGW	2018-07-27 18:06:19	2018-07-27 18:08:00	2018-07-27 19:09:24	-9.4	11.3	22.45047483	114.1639435
63287		STD	2018-07-27	64K	KD1456	64K	ULONGW	2018-07-27 18:06:19	2018-07-27 18:08:00	2018-07-27 19:10:37	-8.8	7.2	22.45081783	114.1646013
63287		STD	2018-07-27	64K	KD1456	64K	ULONGW	2018-07-27 18:06:19	2018-07-27 18:08:00	2018-07-27 19:18:15	-9.2	19.5	22.447363	114.1698563
63287		STD	2018-07-27	64K	KD1456	64K	ULONGW	2018-07-27 18:06:19	2018-07-27 18:08:00	2018-07-27 19:18:16	-9.3	10.2	22.44734183	114.169905
63287		STD	2018-07-29	64K	KC8013	64K	ULONGW	2018-07-29 08:31:06	2018-07-29 08:30:00	2018-07-29 08:36:24	-8.4	11.3	22.44454717	114.028436
63287		STD	2018-07-29	64K	KC8013	64K	ULONGW	2018-07-29 08:31:06	2018-07-29 08:30:00	2018-07-29 08:36:25	-8.9	2.4	22.444543	114.0284735
63287		STD	2018-07-29	64K	KC8013	64K	ULONGW	2018-07-29 08:31:06	2018-07-29 08:30:00	2018-07-29 08:37:36	-8.6	4.4	22.44449667	114.030391
63287		STD	2018-07-29	64K	KC8013	64K	ULONGW	2018-07-29 08:31:06	2018-07-29 08:30:00	2018-07-29 08:46:32	-9.2	12.3	22.44034517	114.0562122
63287		STD	2018-07-29	64K	KC8013	64K	ULONGW	2018-07-29 08:31:06	2018-07-29 08:30:00	2018-07-29 08:46:33	-9.9	2.4	22.44033117	114.05625
63287		STD	2018-07-29	64K	KC8013	64K	ULONGW	2018-07-29 08:31:06	2018-07-29 08:30:00	2018-07-29 08:52:09	-8.6	8.5	22.434649	114.0643548

63287	[redacted]	STD	2018-07-29	64K	KC8013	64K	ULONGW	2018-07-29 08:31:06	2018-07-29 08:30:00	2018-07-29 08:55:25	-8.5	7.5	22.436438	114.0691702
63287		STD	2018-07-29	64K	KC8013	64K	ULONGW	2018-07-29 08:31:06	2018-07-29 08:30:00	2018-07-29 08:58:24	-8.9	5.8	22.42527933	114.0750827
63287		STD	2018-07-29	64K	KC8013	64K	ULONGW	2018-07-29 08:31:06	2018-07-29 08:30:00	2018-07-29 09:02:59	-8.9	6.8	22.42975417	114.0915287
63287		STD	2018-07-29	64K	KC8013	64K	ULONGW	2018-07-29 08:31:06	2018-07-29 08:30:00	2018-07-29 09:05:23	-9.3	2	22.4305335	114.1002428
63287		STD	2018-07-29	64K	KC8013	64K	ULONGW	2018-07-29 08:31:06	2018-07-29 08:30:00	2018-07-29 09:08:00	-9.6	4.4	22.43177217	114.1071513
63287		STD	2018-07-29	64K	KC8013	64K	ULONGW	2018-07-29 08:31:06	2018-07-29 08:30:00	2018-07-29 09:14:00	-8.5	10.6	22.44098917	114.1270077
63287		STD	2018-07-29	64K	KC8013	64K	ULONGW	2018-07-29 08:31:06	2018-07-29 08:30:00	2018-07-29 09:14:30	-8.9	14.7	22.4419615	114.1277808
63287		STD	2018-07-29	64K	KC8013	64K	ULONGW	2018-07-29 08:31:06	2018-07-29 08:30:00	2018-07-29 09:14:31	-8.9	5.8	22.44199867	114.127809
63287		STD	2018-07-29	64K	KC8013	64K	ULONGW	2018-07-29 08:31:06	2018-07-29 08:30:00	2018-07-29 09:36:13	-8.5	7.2	22.44734533	114.1699698
63287		STD	2018-07-29	64K	RU4123	64K	ULONGW	2018-07-29 11:30:29	2018-07-29 11:34:00	2018-07-29 12:03:12	-8.9	4.6	22.42536288	114.0748858
63287		STD	2018-07-29	64K	KD3024	64K	TPOSTN	2018-07-29 14:46:44	2018-07-29 14:51:00	2018-07-29 15:15:08	-8.5	3.1	22.45563267	114.1424708
63287		STD	2018-07-29	64K	KD3024	64K	TPOSTN	2018-07-29 14:46:44	2018-07-29 14:51:00	2018-07-29 15:29:47	-8.5	14	22.42993633	114.0944873
63287		STD	2018-07-29	64K	KD3024	64K	TPOSTN	2018-07-29 14:46:44	2018-07-29 14:51:00	2018-07-29 15:29:48	-9.2	4.8	22.429939	114.0944695
63287		STD	2018-07-29	64K	KD3024	64K	TPOSTN	2018-07-29 14:46:44	2018-07-29 14:51:00	2018-07-29 15:32:10	-8.9	10.2	22.4283925	114.0843327
63287		STD	2018-07-29	64K	KD3024	64K	TPOSTN	2018-07-29 14:46:44	2018-07-29 14:51:00	2018-07-29 15:32:54	-8.9	7.5	22.42745317	114.0823098
63287		STD	2018-07-29	64K	KD3024	64K	TPOSTN	2018-07-29 14:46:44	2018-07-29 14:51:00	2018-07-29 15:35:12	-8.5	8.9	22.42465117	114.0756115
63287		STD	2018-07-29	64K	KD3024	64K	TPOSTN	2018-07-29 14:46:44	2018-07-29 14:51:00	2018-07-29 15:45:29	-8.9	2.4	22.43752967	114.0668645
63287		STD	2018-07-29	64K	KD3024	64K	TPOSTN	2018-07-29 14:46:44	2018-07-29 14:51:00	2018-07-29 15:46:40	-8.9	18.1	22.438146	114.0647972
63287		STD	2018-07-29	64K	KD3024	64K	TPOSTN	2018-07-29 14:46:44	2018-07-29 14:51:00	2018-07-29 15:50:25	-9.9	2.4	22.44179683	114.052739
63287		STD	2018-07-29	64K	KD3024	64K	TPOSTN	2018-07-29 14:46:44	2018-07-29 14:51:00	2018-07-29 15:58:16	-8.5	3.1	22.44437833	114.0306735
63287		STD	2018-07-30	64K	KD 801	64K	TPOSTN	2018-07-30 07:09:30	2018-07-30 07:12:00	2018-07-30 07:13:27	-9.2	0	22.44410283	114.1676403
63287		STD	2018-07-30	64K	KD 801	64K	TPOSTN	2018-07-30 07:09:30	2018-07-30 07:12:00	2018-07-30 07:16:09	-9.9	0	22.44816717	114.1663757
63287		STD	2018-07-30	64K	KD 801	64K	TPOSTN	2018-07-30 07:09:30	2018-07-30 07:12:00	2018-07-30 07:16:50	-9.9	0	22.44992583	114.1671027
63287		STD	2018-07-30	64K	KD 801	64K	TPOSTN	2018-07-30 07:09:30	2018-07-30 07:12:00	2018-07-30 07:16:58	-9.9	9.9	22.44994167	114.1671057
63287		STD	2018-07-30	64K	KD 801	64K	TPOSTN	2018-07-30 07:09:30	2018-07-30 07:12:00	2018-07-30 07:17:22	-12.3	12.3	22.45071333	114.1672328
63287		STD	2018-07-30	64K	KD 801	64K	TPOSTN	2018-07-30 07:09:30	2018-07-30 07:12:00	2018-07-30 07:18:18	-9.6	0	22.45195783	114.167301
63287		STD	2018-07-30	64K	KD 801	64K	TPOSTN	2018-07-30 07:09:30	2018-07-30 07:12:00	2018-07-30 07:20:42	-9.9	0	22.45295133	114.1659648
63287		STD	2018-07-30	64K	KD 801	64K	TPOSTN	2018-07-30 07:09:30	2018-07-30 07:12:00	2018-07-30 07:21:53	-9.6	0	22.452297	114.1655528
63287		STD	2018-07-30	64K	KD 801	64K	TPOSTN	2018-07-30 07:09:30	2018-07-30 07:12:00	2018-07-30 07:31:48	-9.9	0	22.45737333	114.1442075
63287		STD	2018-07-30	64K	KD 801	64K	TPOSTN	2018-07-30 07:09:30	2018-07-30 07:12:00	2018-07-30 07:34:13	-8.2	12	22.45056917	114.1376585
63287		STD	2018-07-30	64K	KD 801	64K	TPOSTN	2018-07-30 07:09:30	2018-07-30 07:12:00	2018-07-30 07:36:40	-8.9	6.5	22.44587633	114.1324267
63287		STD	2018-07-30	64K	KD 801	64K	TPOSTN	2018-07-30 07:09:30	2018-07-30 07:12:00	2018-07-30 07:36:42	-9.9	0.3	22.44585033	114.1324095
63287		STD	2018-07-30	64K	KD 801	64K	TPOSTN	2018-07-30 07:09:30	2018-07-30 07:12:00	2018-07-30 07:44:46	-9.3	18.4	22.43152633	114.1046958
63287		STD	2018-07-30	64K	KD 801	64K	TPOSTN	2018-07-30 07:09:30	2018-07-30 07:12:00	2018-07-30 07:46:18	-8.5	3.8	22.430447	114.1000525
63287		STD	2018-07-30	64K	KD 801	64K	TPOSTN	2018-07-30 07:09:30	2018-07-30 07:12:00	2018-07-30 07:46:20	-9.9	0	22.43043367	114.1000142
63287		STD	2018-07-30	64K	KD 801	64K	TPOSTN	2018-07-30 07:09:30	2018-07-30 07:12:00	2018-07-30 07:47:24	-8.6	20.1	22.42992017	114.0945405
63287		STD	2018-07-30	64K	KD 801	64K	TPOSTN	2018-07-30 07:09:30	2018-07-30 07:12:00	2018-07-30 07:49:21	-9.9	0	22.42893033	114.0871985
63287		STD	2018-07-30	64K	KD 801	64K	TPOSTN	2018-07-30 07:09:30	2018-07-30 07:12:00	2018-07-30 07:50:52	-8.5	0.3	22.428365	114.084143
63287		STD	2018-07-30	64K	KD 801	64K	TPOSTN	2018-07-30 07:09:30	2018-07-30 07:12:00	2018-07-30 07:56:27	-9.9	0	22.42716067	114.0730692
63287		STD	2018-07-30	64K	KD 801	64K	TPOSTN	2018-07-30 07:09:30	2018-07-30 07:12:00	2018-07-30 08:01:04	-11	0.3	22.43453317	114.0644437
63287		STD	2018-07-30	64K	KD 801	64K	TPOSTN	2018-07-30 07:09:30	2018-07-30 07:12:00	2018-07-30 08:09:51	-10.6	0	22.44313717	114.050111
63287		STD	2018-07-30	64K	KD 801	64K	TPOSTN	2018-07-30 07:09:30	2018-07-30 07:12:00	2018-07-30 08:14:02	-11.3	0	22.444783	114.0397457
63287		STD	2018-07-30	64K	KD 801	64K	ULONGW	2018-07-30 08:37:53	2018-07-30 08:40:00	2018-07-30 08:44:44	-8.2	10.6	22.44462833	114.0286358
63287		STD	2018-07-30	64K	KD 801	64K	ULONGW	2018-07-30 08:37:53	2018-07-30 08:40:00	2018-07-30 08:47:14	-9.2	10.2	22.446591	114.0346638
63287		STD	2018-07-30	64K	KD 801	64K	ULONGW	2018-07-30 08:37:53	2018-07-30 08:40:00	2018-07-30 08:52:56	-8.5	21.2	22.44437433	114.0437148
63287		STD	2018-07-30	64K	KD 801	64K	ULONGW	2018-07-30 08:37:53	2018-07-30 08:40:00	2018-07-30 08:52:57	-9.2	12	22.44437017	114.0437493

63287	[redacted]	STD	2018-07-30	64K	KD 801	64K	ULONGW	2018-07-30 08:37:53	2018-07-30 08:40:00	2018-07-30 08:55:46	-9.6	0	22.44031067	114.0563268
63287		STD	2018-07-30	64K	KD 801	64K	ULONGW	2018-07-30 08:37:53	2018-07-30 08:40:00	2018-07-30 08:56:05	-9.6	0	22.44026033	114.0564033
63287		STD	2018-07-30	64K	KD 801	64K	ULONGW	2018-07-30 08:37:53	2018-07-30 08:40:00	2018-07-30 08:56:18	-9.6	9.6	22.44025383	114.0564315
63287		STD	2018-07-30	64K	KD 801	64K	ULONGW	2018-07-30 08:37:53	2018-07-30 08:40:00	2018-07-30 09:12:59	-9.9	0	22.4289005	114.0869598
63287		STD	2018-07-30	64K	KD 801	64K	ULONGW	2018-07-30 08:37:53	2018-07-30 08:40:00	2018-07-30 09:14:31	-8.5	5.8	22.42981783	114.0951693
63287		STD	2018-07-30	64K	KD 801	64K	ULONGW	2018-07-30 08:37:53	2018-07-30 08:40:00	2018-07-30 09:14:33	-9.2	0	22.429814	114.0951908
63287		STD	2018-07-30	64K	KD 801	64K	ULONGW	2018-07-30 08:37:53	2018-07-30 08:40:00	2018-07-30 09:16:26	-8.6	18.4	22.43141367	114.1029258
63287		STD	2018-07-30	64K	KD 801	64K	ULONGW	2018-07-30 08:37:53	2018-07-30 08:40:00	2018-07-30 09:16:27	-9.5	8.9	22.43143067	114.1029487
63287		STD	2018-07-30	64K	KD 801	64K	ULONGW	2018-07-30 08:37:53	2018-07-30 08:40:00	2018-07-30 09:16:54	-8.9	0	22.43179217	114.103291
63287		STD	2018-07-30	64K	KD 801	64K	ULONGW	2018-07-30 08:37:53	2018-07-30 08:40:00	2018-07-30 09:17:56	-8.2	9.6	22.43151467	114.1051592
63287		STD	2018-07-30	64K	KD 801	64K	ULONGW	2018-07-30 08:37:53	2018-07-30 08:40:00	2018-07-30 09:17:57	-9.6	0	22.431514	114.1051632
63287		STD	2018-07-30	64K	KD 801	64K	ULONGW	2018-07-30 08:37:53	2018-07-30 08:40:00	2018-07-30 09:25:31	-9.6	0	22.4410815	114.1271382
63287		STD	2018-07-30	64K	KD 801	64K	ULONGW	2018-07-30 08:37:53	2018-07-30 08:40:00	2018-07-30 09:26:13	-8.5	8.2	22.44203033	114.127875
63287		STD	2018-07-30	64K	KD 801	64K	ULONGW	2018-07-30 08:37:53	2018-07-30 08:40:00	2018-07-30 09:32:33	-9.6	9.6	22.45572383	114.1424553
63287		STD	2018-07-30	64K	KD 801	64K	ULONGW	2018-07-30 08:37:53	2018-07-30 08:40:00	2018-07-30 09:33:14	-8.9	0	22.45742933	114.1441988
63287		STD	2018-07-30	64K	KD 801	64K	ULONGW	2018-07-30 08:37:53	2018-07-30 08:40:00	2018-07-30 09:42:07	-9.2	0	22.45035233	114.1640325
63287		STD	2018-07-30	64K	KD 801	64K	ULONGW	2018-07-30 08:37:53	2018-07-30 08:40:00	2018-07-30 09:47:53	-8.9	0	22.45021533	114.1672587
63287		STD	2018-07-30	64K	KD 801	64K	TPOSTN	2018-07-30 10:15:38	2018-07-30 10:16:00	2018-07-30 10:21:08	-9.6	0	22.44818283	114.1664607
63287		STD	2018-07-30	64K	KD 801	64K	TPOSTN	2018-07-30 10:15:38	2018-07-30 10:16:00	2018-07-30 10:41:58	-8.5	0	22.44196933	114.1278845
63287		STD	2018-07-30	64K	KD 801	64K	TPOSTN	2018-07-30 10:15:38	2018-07-30 10:16:00	2018-07-30 10:42:54	-8.9	0	22.4402515	114.1251135
63287		STD	2018-07-30	64K	KD 801	64K	TPOSTN	2018-07-30 10:15:38	2018-07-30 10:16:00	2018-07-30 10:53:42	-9.6	0	22.42979267	114.0918172
63287		STD	2018-07-30	64K	KD 801	64K	TPOSTN	2018-07-30 10:15:38	2018-07-30 10:16:00	2018-07-30 10:54:56	-8.9	9.9	22.428882	114.0869027
63287		STD	2018-07-30	64K	KD 801	64K	TPOSTN	2018-07-30 10:15:38	2018-07-30 10:16:00	2018-07-30 10:56:53	-8.5	0	22.42747967	114.0823272
63287		STD	2018-07-30	64K	KD 801	64K	TPOSTN	2018-07-30 10:15:38	2018-07-30 10:16:00	2018-07-30 11:03:59	-9.9	0.3	22.4337345	114.0704775
63287		STD	2018-07-30	64K	KD 801	64K	TPOSTN	2018-07-30 10:15:38	2018-07-30 10:16:00	2018-07-30 11:12:25	-8.2	9.6	22.43752767	114.0668637
63287		STD	2018-07-30	64K	KD 801	64K	TPOSTN	2018-07-30 10:15:38	2018-07-30 10:16:00	2018-07-30 11:15:53	-8.9	0.3	22.44014317	114.0562862
63287		STD	2018-07-30	64K	KD 801	64K	TPOSTN	2018-07-30 10:15:38	2018-07-30 10:16:00	2018-07-30 11:18:20	-8.9	0	22.443894	114.0458952
63287		STD	2018-07-30	64K	KD 801	64K	TPOSTN	2018-07-30 10:15:38	2018-07-30 10:16:00	2018-07-30 11:19:59	-9.9	0	22.44421483	114.040007
63287		STD	2018-07-30	64K	KD 801	64K	TPOSTN	2018-07-30 10:15:38	2018-07-30 10:16:00	2018-07-30 11:26:14	-9.6	0	22.44443867	114.0301617
63287		STD	NULL	NULL	KD 801	NULL	NULL	2018-07-30 12:15:32	NULL	2018-07-30 12:16:03	-8.5	0	22.44543717	114.024818
63287		STD	NULL	NULL	KD 801	NULL	NULL	2018-07-30 12:15:32	NULL	2018-07-30 12:16:22	-9.6	0	22.445614	114.0248373
63287		STD	NULL	NULL	KD 801	NULL	NULL	2018-07-30 12:15:32	NULL	2018-07-30 12:16:24	-8.2	8.2	22.445619	114.0248375
63287		STD	2018-07-30	64K	KD 801	64K	ULONGW	2018-07-30 12:15:32	2018-07-30 12:18:00	2018-07-30 12:22:26	-9.9	9.9	22.44457783	114.0285327
63287		STD	2018-07-30	64K	KD 801	64K	ULONGW	2018-07-30 12:15:32	2018-07-30 12:18:00	2018-07-30 12:23:50	-9.9	0	22.44432683	114.0304812
63287		STD	2018-07-30	64K	KD 801	64K	ULONGW	2018-07-30 12:15:32	2018-07-30 12:18:00	2018-07-30 12:24:45	-9.6	0	22.44421817	114.0319035
63287		STD	2018-07-30	64K	KD 801	64K	ULONGW	2018-07-30 12:15:32	2018-07-30 12:18:00	2018-07-30 12:27:34	-8.9	0	22.44663233	114.0349563
63287		STD	2018-07-30	64K	KD 801	64K	ULONGW	2018-07-30 12:15:32	2018-07-30 12:18:00	2018-07-30 12:28:57	-8.5	0	22.44510933	114.0366732
63287		STD	2018-07-30	64K	KD 801	64K	ULONGW	2018-07-30 12:15:32	2018-07-30 12:18:00	2018-07-30 12:29:25	-9.2	0	22.44483217	114.036282
63287		STD	2018-07-30	64K	KD 801	64K	ULONGW	2018-07-30 12:15:32	2018-07-30 12:18:00	2018-07-30 12:29:39	-9.2	0	22.44482533	114.036217
63287		STD	2018-07-30	64K	KD 801	64K	ULONGW	2018-07-30 12:15:32	2018-07-30 12:18:00	2018-07-30 12:37:12	-8.5	0	22.4400285	114.0614342
63287		STD	2018-07-30	64K	KD 801	64K	ULONGW	2018-07-30 12:15:32	2018-07-30 12:18:00	2018-07-30 12:39:24	-9.2	0	22.43697	114.0681078
63287		STD	2018-07-30	64K	KD 801	64K	ULONGW	2018-07-30 12:15:32	2018-07-30 12:18:00	2018-07-30 12:50:02	-9.9	10.2	22.42714467	114.0819265
63287		STD	2018-07-30	64K	KD 801	64K	ULONGW	2018-07-30 12:15:32	2018-07-30 12:18:00	2018-07-30 12:53:00	-9.2	6.1	22.42977017	114.0916757
63287		STD	2018-07-30	64K	KD 801	64K	ULONGW	2018-07-30 12:15:32	2018-07-30 12:18:00	2018-07-30 13:03:55	-8.5	0	22.443657	114.1294615
63287		STD	2018-07-30	64K	KD 801	64K	ULONGW	2018-07-30 12:15:32	2018-07-30 12:18:00	2018-07-30 13:07:34	-8.9	0	22.45415817	114.1409897
63287		STD	2018-07-30	64K	KD 801	64K	ULONGW	2018-07-30 12:15:32	2018-07-30 12:18:00	2018-07-30 13:10:25	-8.5	10.2	22.45982467	114.1458073

63287	[redacted]	STD	2018-07-30	64K	KD 801	64K	ULONGW	2018-07-30 12:15:32	2018-07-30 12:18:00	2018-07-30 13:10:51	-9.6	0	22.46038767	114.1460157
63287	[redacted]	STD	2018-07-30	64K	KD 801	64K	ULONGW	2018-07-30 12:15:32	2018-07-30 12:18:00	2018-07-30 13:12:03	-9.2	0	22.46103833	114.1485545
63287	[redacted]	STD	2018-07-30	64K	KD 801	64K	ULONGW	2018-07-30 12:15:32	2018-07-30 12:18:00	2018-07-30 13:15:53	-9.9	11.6	22.4523175	114.158739
63287	[redacted]	STD	2018-07-30	64K	KD 801	64K	ULONGW	2018-07-30 12:15:32	2018-07-30 12:18:00	2018-07-30 13:19:14	-8.9	0	22.45130333	114.164984
63287	[redacted]	STD	2018-07-30	64K	KD 801	64K	ULONGW	2018-07-30 12:15:32	2018-07-30 12:18:00	2018-07-30 13:21:11	-9.6	0	22.45294667	114.1664002
63287	[redacted]	STD	2018-07-30	64K	KD 801	64K	ULONGW	2018-07-30 12:15:32	2018-07-30 12:18:00	2018-07-30 13:25:24	-8.9	0	22.450413	114.1672967
63287	[redacted]	STD	2018-07-30	64K	KD 801	64K	ULONGW	2018-07-30 12:15:32	2018-07-30 12:18:00	2018-07-30 13:25:28	-8.5	9.9	22.45040383	114.1672948
63287	[redacted]	STD	2018-07-30	64K	KD 801	64K	ULONGW	2018-07-30 12:15:32	2018-07-30 12:18:00	2018-07-30 13:25:29	-9.9	0	22.45037433	114.1672985
63287	[redacted]	STD	2018-07-30	64K	KD 801	64K	ULONGW	2018-07-30 12:15:32	2018-07-30 12:18:00	2018-07-30 13:26:10	-9.6	9.6	22.45033533	114.1673218
63287	[redacted]	STD	2018-07-30	64K	KD 801	64K	ULONGW	2018-07-30 12:15:32	2018-07-30 12:18:00	2018-07-30 13:26:11	-8.6	1	22.45034317	114.1673218
63287	[redacted]	STD	2018-07-30	64K	KD 801	64K	ULONGW	2018-07-30 12:15:32	2018-07-30 12:18:00	2018-07-30 13:26:48	-8.9	0	22.44892733	114.166817
63287	[redacted]	STD	2018-07-30	64K	KA8625	64K	TPOSTN	2018-07-30 16:42:34	2018-07-30 16:44:00	2018-07-30 17:03:59	-8.6	7.6	22.4573915	114.1442407
63287	[redacted]	STD	2018-07-30	64K	KA8625	64K	TPOSTN	2018-07-30 16:42:34	2018-07-30 16:44:00	2018-07-30 17:22:58	-8.5	7.2	22.428448	114.0844105
63287	[redacted]	STD	2018-07-30	64K	KA8625	64K	TPOSTN	2018-07-30 16:42:34	2018-07-30 16:44:00	2018-07-30 17:39:05	-8.5	8.1	22.44179883	114.0527738
63287	[redacted]	STD	2018-07-30	64K	KA8625	64K	ULONGW	2018-07-30 18:06:14	2018-07-30 18:10:00	2018-07-30 19:06:58	-9	4	22.45982533	114.145797

emp_no	name	depot_abbr	operating_date	route_no	run_no	bus_no	operating_route	departure_from	departure_time	operating_time	duration	max_speed	gps_pos_lat	gps_pos_long	speed_limit
4820	[redacted]	TMD	30/8/2018	269C	S10	SJ7884	268B	紅磡碼頭	30/08/2018 19:00:00	30/08/2018 19:08:47	23	72	22.29976287	114.183259	50
66259	[redacted]	LCD	30/8/2018	49X	31	KU5892	49X	廣源	30/08/2018 18:52:00	30/08/2018 19:29:25	20	75	22.37763917	114.1264437	80
66477	[redacted]	KBD	30/8/2018	11	S03	LB6564	11	九龍站	30/08/2018 17:20:00	30/08/2018 17:22:15	19	68	22.30263683	114.162713	50
80972	[redacted]	TMD	30/8/2018	76K	01	SG9076	76K	朗屏	30/08/2018 15:45:00	30/08/2018 16:03:58	46	60	22.44455657	114.0474957	50
80972	[redacted]	TMD	30/8/2018	76K	01	MU6285	76K	清河	30/08/2018 21:00:00	30/08/2018 21:09:46	34	62	22.50171217	114.1040198	50
80972	[redacted]	TMD	30/8/2018	76K	01	MU6285	76K	清河	30/08/2018 21:00:00	30/08/2018 21:19:48	45	63	22.49535183	114.0739558	50
80972	[redacted]	TMD	30/8/2018	76K	01	MU6285	76K	清河	30/08/2018 21:00:00	30/08/2018 21:22:13	31	61	22.48979233	114.0611012	50
80972	[redacted]	TMD	30/8/2018	76K	01	MU6285	76K	清河	30/08/2018 21:00:00	30/08/2018 21:22:48	50	63	22.48550383	114.0587927	50
80972	[redacted]	TMD	30/8/2018	76K	01	MU6285	76K	朗屏	30/08/2018 22:30:00	30/08/2018 22:47:06	36	61	22.445104	114.0481058	50
80972	[redacted]	TMD	30/8/2018	76K	01	MU6285	76K	朗屏	30/08/2018 22:30:00	30/08/2018 22:56:13	30	62	22.48847233	114.0591845	50
80972	[redacted]	TMD	30/8/2018	76K	01	MU6285	76K	朗屏	30/08/2018 22:30:00	30/08/2018 23:05:50	44	59	22.50333517	114.1044208	50
80972	[redacted]	TMD	30/8/2018	76K	01	MU6285	76K	清河	30/08/2018 23:30:00	30/08/2018 23:37:06	33	60	22.502533	114.112685	50
80972	[redacted]	TMD	30/8/2018	76K	01	MU6285	76K	清河	30/08/2018 23:30:00	30/08/2018 23:38:20	54	63	22.50198483	114.1051528	50
80972	[redacted]	TMD	30/8/2018	76K	01	MU6285	76K	清河	30/08/2018 23:30:00	30/08/2018 23:40:28	33	62	22.5031395	114.0865055	50
80972	[redacted]	TMD	30/8/2018	76K	01	MU6285	76K	清河	30/08/2018 23:30:00	30/08/2018 23:47:40	46	62	22.4977395	114.0766883	50
80972	[redacted]	TMD	30/8/2018	76K	01	MU6285	76K	清河	30/08/2018 23:30:00	30/08/2018 23:50:39	119	64	22.4898545	114.0612697	50
80972	[redacted]	TMD	30/8/2018	76K	01	MU6285	76K	清河	30/08/2018 23:30:00	30/08/2018 23:53:31	30	61	22.46827717	114.0549445	50
54797	[redacted]	STD	30/8/2018	286X	02	MW4225	46X	美孚	31/08/2018 00:20:00	31/08/2018 00:30:46	23	71	22.363343	114.1321898	50
90105	[redacted]	OCD	30/8/2018	A41	30	UD1791	A41	地面運輸中心	30/08/2018 06:20:00	30/08/2018 06:44:44	39	65	22.36330983	114.1182835	50
90105	[redacted]	OCD	30/8/2018	A41	30	UD3393	A41	愉翠苑	30/08/2018 11:45:00	30/08/2018 12:15:00	35	65	22.36562517	114.1212438	50
90105	[redacted]	OCD	30/8/2018	A41	30	UD3393	A41	地面運輸中心	30/08/2018 13:00:00	30/08/2018 13:23:17	30	62	22.36662117	114.1212702	50
91037	[redacted]	OCD	30/8/2018	N42	01	SJ9997	A41P	烏溪沙站	30/08/2018 20:10:00	30/08/2018 20:53:57	35	70	22.36302202	114.1177044	50
91060	[redacted]	OCD	30/8/2018	A41P	03	SJ9997	A41P	烏溪沙站	30/08/2018 16:40:00	30/08/2018 17:31:00	19	69	22.36172982	114.1150244	50
92159	[redacted]	OCD	30/8/2018	S 1	02	TJ5721	S 1	東涌鐵路站	30/08/2018 22:40:00	30/08/2018 23:00:37	32	59	22.31228633	113.9405027	50
92335	[redacted]	OCD	30/8/2018	A41	03	UD6659	A41	愉翠苑	30/08/2018 19:25:00	30/08/2018 19:59:36	20	68	22.362861	114.1171562	50
92454	[redacted]	OCD	30/8/2018	A41	03	UD6659	A41	愉翠苑	30/08/2018 08:45:00	30/08/2018 09:19:14	20	70	22.36296433	114.117418	50
92570	[redacted]	OCD	30/8/2018	S 1	S01	TS1334	S 1	東涌鐵路站	30/08/2018 19:30:00	30/08/2018 19:36:47	21	70	22.30958717	113.9387048	50
92570	[redacted]	OCD	30/8/2018	S 1	S01	TS1334	S 1	東涌鐵路站	30/08/2018 19:30:00	30/08/2018 19:47:04	23	70	22.31225383	113.9404715	50
92570	[redacted]	OCD	30/8/2018	S 1	S01	TS1334	S 1	東涌鐵路站	30/08/2018 19:30:00	30/08/2018 19:49:48	31	71	22.30185783	113.9362462	50
92745	[redacted]	OCD	30/8/2018	A41P	S02	SP6096	A41P	烏溪沙站	30/08/2018 17:10:00	30/08/2018 18:06:19	21	70	22.36195378	114.1154878	50
92746	[redacted]	OCD	30/8/2018	A41	05	UL2861	A41	愉翠苑	30/08/2018 23:00:00	30/08/2018 23:24:35	18	70	22.361804	114.1153557	50
99531	[redacted]	OCD	30/8/2018	S 1	02	TJ5721	S 1	東涌鐵路站	30/08/2018 06:00:00	30/08/2018 06:20:18	33	63	22.31232217	113.9405268	50
99531	[redacted]	OCD	30/8/2018	S 1	02	TJ5721	S 1	東涌鐵路站	30/08/2018 06:40:00	30/08/2018 07:00:45	34	63	22.3123745	113.940571	50
99531	[redacted]	OCD	30/8/2018	S 1	02	TJ5721	S 1	東涌鐵路站	30/08/2018 08:07:00	30/08/2018 08:30:16	31	60	22.3121695	113.9403942	50
99531	[redacted]	OCD	30/8/2018	S 1	02	TJ5721	S 1	東涌鐵路站	30/08/2018 08:52:00	30/08/2018 09:15:36	34	61	22.31241083	113.9405785	50
99531	[redacted]	OCD	30/8/2018	S 1	02	TJ5721	S 1	東涌鐵路站	30/08/2018 09:37:00	30/08/2018 09:57:24	33	64	22.31241	113.9405998	50
99531	[redacted]	OCD	30/8/2018	S 1	02	TS1334	S 1	東涌鐵路站	30/08/2018 15:45:00	30/08/2018 16:03:23	34	62	22.31264083	113.9407797	50
99733	[redacted]	OCD	30/8/2018	A41P	01	UD1269	A41P	烏溪沙站	30/08/2018 16:10:00	30/08/2018 16:57:13	23	70	22.3624625	114.1163238	50
65129	[redacted]	KBD	30/8/2018	290	10	TV8166	290	彩明	30/08/2018 12:50:00	30/08/2018 13:24:00	15	70	22.32380817	114.2272092	50

emp_no	name	depot_abbr	operating_date	route_no	run_no	bus_no	operating_route	departure_from	departure_time	operating_time	duration	max_speed	gps_pos_lat	gps_pos_long	speed_limit
5208	[redacted]	STD	2/9/2018	73X	06	UF6574	73X	荃灣如心廣場	02/09/2018 12:56:00	02/09/2018 13:19:31	5	83	22.38164767	114.1755357	80
5592	[redacted]	TMD	2/9/2018	68A	08	UE5650	68A	朗屏	02/09/2018 23:20:00	02/09/2018 23:26:01	23	70	22.44379967	114.0164498	50
56758	[redacted]	TMD	2/9/2018	261	90	VG4730	261	天平	02/09/2018 11:50:00	02/09/2018 12:21:01	2	80	22.41539933	113.9864975	80
56895	[redacted]	STD	2/9/2018	47X	P21	UR9070	47X	葵盛東	02/09/2018 14:10:00	02/09/2018 14:38:37	6	82	22.38102583	114.1762305	80
56895	[redacted]	STD	2/9/2018	47X	P21	UR9070	47X	葵盛東	02/09/2018 14:10:00	02/09/2018 14:38:44	2	80	22.38002667	114.1773172	80
56895	[redacted]	STD	2/9/2018	47X	P21	UR9070	47X	葵盛東	02/09/2018 18:39:00	02/09/2018 19:03:05	10	82	22.38136183	114.1759077	80
56895	[redacted]	STD	2/9/2018	47X	P21	UR9070	47X	葵盛東	02/09/2018 21:24:00	02/09/2018 21:49:45	8	83	22.37921367	114.17816	80
61089	[redacted]	STD	2/9/2018	87D	08	VR4634	87D	錦英苑	02/09/2018 05:45:00	02/09/2018 05:58:56	52	63	22.40430317	114.2199263	50
61089	[redacted]	STD	2/9/2018	87D	08	VR4634	87D	紅磡站	02/09/2018 07:00:00	02/09/2018 07:39:16	56	64	22.40011617	114.2134247	50
63695	[redacted]	TMD	2/9/2018	63X	03	VC5313	63X	佐敦渡華路	02/09/2018 22:00:00	02/09/2018 22:34:25	2	80	22.35592767	114.028387	80
63695	[redacted]	TMD	2/9/2018	63X	03	VC5313	63X	佐敦渡華路	02/09/2018 22:00:00	02/09/2018 22:34:30	6	80	22.35582633	114.0273177	80
64911	[redacted]	TMD	2/9/2018	77K	30	JY8490	77K	上水	02/09/2018 17:35:00	02/09/2018 17:54:50	49	70	22.465998	114.0543168	50
64911	[redacted]	TMD	2/9/2018	77K	30	JY8490	77K	上水	02/09/2018 17:35:00	02/09/2018 17:55:42	24	69	22.45722667	114.0523238	50
64911	[redacted]	TMD	2/9/2018	77K	30	JY8490	77K	元朗鳳翔路	02/09/2018 18:40:00	02/09/2018 19:14:10	18	70	22.44589583	114.0487792	50
64911	[redacted]	TMD	2/9/2018	77K	30	KA9153	77K	上水	02/09/2018 23:25:00	02/09/2018 23:43:29	33	63	22.44444283	114.041087	50
66640	[redacted]	STD	2/9/2018	280X	03	MG9003	280X	尖東(麼地道)	02/09/2018 12:20:00	02/09/2018 12:49:21	2	80	22.3798385	114.1858525	80
68336	[redacted]	TMD	2/9/2018	58M	05	UF4701	58M	良景	02/09/2018 11:30:00	02/09/2018 12:11:17	18	70	22.361221	114.1314887	50
73230	[redacted]	TMD	2/9/2018	64K	06	RW4436	64K	元朗(西)	02/09/2018 06:40:00	02/09/2018 07:23:27	41	65	22.4586211	114.1505536	50
73230	[redacted]	TMD	2/9/2018	64K	06	RW4436	64K	大埔墟站	02/09/2018 07:51:00	02/09/2018 08:07:23	41	65	22.45451195	114.1546421	50
73230	[redacted]	TMD	2/9/2018	64K	06	RT6816	64K	元朗(西)	02/09/2018 13:02:00	02/09/2018 13:57:11	39	64	22.45819157	114.1508551	50
85316	[redacted]	TMD	2/9/2018	251A	03	SG4825	251A	錦上路站	02/09/2018 07:05:00	02/09/2018 07:13:29	31	61	22.42125802	114.068016	50
85316	[redacted]	TMD	2/9/2018	251A	03	LN6140	251A	錦上路站	02/09/2018 12:50:00	02/09/2018 12:59:03	31	60	22.4212705	114.0679735	50
85316	[redacted]	TMD	2/9/2018	251A	03	LN6140	251A	錦上路站	02/09/2018 14:50:00	02/09/2018 14:56:25	41	61	22.42123817	114.0679235	50
90001	[redacted]	OCD	2/9/2018	A31	11	UL1733	A31P	愉景新城	02/09/2018 19:45:00	02/09/2018 20:38:22	17	71	22.3174765	113.935447	50
90094	[redacted]	OCD	2/9/2018	A41	30	UF4989	A41	愉翠苑	02/09/2018 09:05:00	02/09/2018 09:37:17	31	59	22.36308433	114.1176357	50
92055	[redacted]	OCD	2/9/2018	E32	02	SS7413	E32	葵芳站	02/09/2018 05:35:00	02/09/2018 05:36:30	19	71	22.36159783	114.1315398	50
92154	[redacted]	OCD	2/9/2018	E34B	03	VN4766	E34B	媽橫路山水樓	02/09/2018 13:20:00	02/09/2018 14:15:57	31	61	22.29777417	113.9349645	50
92158	[redacted]	OCD	2/9/2018	A47X	L21	UE9578	A47X	地面運輸中心	02/09/2018 22:05:00	02/09/2018 22:29:53	11	81	22.32474967	114.1348045	80
92176	[redacted]	OCD	2/9/2018	A41P	S01	TA1413	A41P	烏溪沙站	02/09/2018 12:19:00	02/09/2018 13:05:44	57	64	22.3630985	114.118177	50
92178	[redacted]	OCD	2/9/2018	E34B	06	SL3599	E34B	媽橫路山水樓	03/09/2018 00:00:00	03/09/2018 00:40:14	27	71	22.29778097	113.9350231	50
92362	[redacted]	OCD	2/9/2018	E34A	01	SV2935	E34A	天水圍市中心	02/09/2018 14:15:00	02/09/2018 15:23:45	19	70	22.29907917	113.9347103	50
92368	[redacted]	OCD	2/9/2018	E34B	S31	SM9420	E34B	媽橫路山水樓	02/09/2018 06:24:00	02/09/2018 07:14:50	39	65	22.29699608	113.9347372	50
92368	[redacted]	OCD	2/9/2018	E34B	S31	SM9420	E34B	媽橫路山水樓	02/09/2018 14:29:00	02/09/2018 15:31:26	30	61	22.31899142	113.9377328	50
92564	[redacted]	OCD	2/9/2018	N31	02	TJ9247	N31	地面運輸中心	02/09/2018 03:15:00	02/09/2018 03:29:31	16	70	22.2922265	113.927509	50
92645	[redacted]	OCD	2/9/2018	E34B	30	PV7003	E34B	媽橫路山水樓	02/09/2018 11:30:00	02/09/2018 12:13:04	36	69	22.29227583	113.9274667	50
92645	[redacted]	OCD	2/9/2018	E34B	30	PV7003	E34B	地面運輸中心	02/09/2018 13:20:00	02/09/2018 13:30:29	15	69	22.291992	113.9282645	50
92694	[redacted]	OCD	2/9/2018	E34B	04	RJ5802	E34B	媽橫路山水樓	02/09/2018 14:50:00	02/09/2018 15:31:18	15	71	22.29167433	113.9294682	50
92694	[redacted]	OCD	2/9/2018	E34B	04	RJ5802	E34B	媽橫路山水樓	02/09/2018 14:50:00	02/09/2018 15:36:16	20	71	22.29829567	113.9348775	50
92694	[redacted]	OCD	2/9/2018	E34B	04	RJ5802	E34B	媽橫路山水樓	02/09/2018 17:35:00	02/09/2018 18:18:42	17	71	22.29170983	113.9295903	50
92694	[redacted]	OCD	2/9/2018	E34B	04	RJ5802	E34B	媽橫路山水樓	02/09/2018 17:35:00	02/09/2018 18:31:07	16	71	22.31799367	113.9362523	50
92694	[redacted]	OCD	2/9/2018	E34B	04	RJ5802	E34B	媽橫路山水樓	02/09/2018 21:15:00	02/09/2018 22:07:26	20	71	22.29806583	113.9348673	50
92694	[redacted]	OCD	2/9/2018	E34B	04	RJ5802	E34B	媽橫路山水樓	02/09/2018 21:15:00	02/09/2018 22:13:19	21	71	22.31774367	113.9362313	50
92761	[redacted]	OCD	2/9/2018	N31	04	UD 566	E32	機場博覽館	02/09/2018 21:35:00	02/09/2018 21:48:36	17	70	22.29226683	113.9274535	50
92769	[redacted]	OCD	2/9/2018	E34A	01	SR9881	E34A	天水圍市中心	02/09/2018 11:00:00	02/09/2018 12:02:19	15	69	22.29163683	113.929709	50
92779	[redacted]	OCD	2/9/2018	E34B	04	RJ5802	E34B	地面運輸中心	02/09/2018 13:30:00	02/09/2018 13:41:43	39	61	22.29250183	113.9268295	50
99566	[redacted]	OCD	2/9/2018	E34A	07	PF1592	E34B	地面運輸中心	02/09/2018 23:27:00	02/09/2018 23:30:07	67	66	22.29729767	113.9357752	50
99577	[redacted]	OCD	2/9/2018	A41	30	UC9062	A41	愉翠苑	02/09/2018 21:05:00	02/09/2018 21:39:01	37	62	22.36313933	114.1175738	50
99577	[redacted]	OCD	2/9/2018	A41	30	UC9062	A41	愉翠苑	02/09/2018 23:30:00	02/09/2018 23:54:49	33	65	22.36338533	114.1182755	50
99607	[redacted]	OCD	2/9/2018	N42	01	ST6063	N42	東涌鐵路站	02/09/2018 00:20:00	02/09/2018 00:20:54	26	69	22.29139633	113.9308967	50

emp_no	name	depot_abbr	operating_date	route_no	run_no	bus_no	operating_route	departure_from	departure_time	operating_time	duration	max_speed	gps_pos_lat	gps_pos_long	speed_limit
1490	[redacted]	LCD	6/9/2018	31B	05	TR6812	67M	葵芳站	06/09/2018 06:10:00	06/09/2018 06:32:11	4	81	22.35889567	114.0342057	80
61628	[redacted]	LCD	6/9/2018	72	08	KS6835	72	太和	06/09/2018 11:35:00	06/09/2018 12:04:58	10	83	22.3969625	114.2010768	80
62256	[redacted]	STD	6/9/2018	N281	30	UR5632	N281	紅磡站	06/09/2018 03:40:00	06/09/2018 04:01:21	23	71	22.327369	114.1785095	50
66311	[redacted]	STD	6/9/2018	N73	01	TC7791	N73	沙田市中心	06/09/2018 01:00:00	06/09/2018 01:23:50	15	68	22.45670433	114.151965	50
66311	[redacted]	STD	6/9/2018	N73	01	TC7791	N73	落馬洲	06/09/2018 02:10:00	06/09/2018 02:37:17	17	69	22.45849017	114.1506875	50
66311	[redacted]	STD	6/9/2018	N73	01	TC7791	N73	落馬洲	06/09/2018 05:40:00	06/09/2018 06:08:24	25	70	22.45818783	114.1508478	50
73634	[redacted]	STD	6/9/2018	89C	S03	KU9771	89C	恒安	06/09/2018 15:30:00	06/09/2018 15:50:54	24	70	22.4043495	114.2199583	50
5964	[redacted]	KBD	6/9/2018	115	01	UY3949	61X	屯門市中心	06/09/2018 06:37:00	06/09/2018 06:47:56	4	80	22.377376	113.9867863	80