

**INDEPENDENT REVIEW COMMITTEE ON HONG KONG'S
FRANCHISED BUS SERVICE**

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Testimonies from depot colleagues

The following input is from ex depot colleagues including Assistant Operations Managers of various depots and Depot General Manager.

Since 2015, it has been many changes in the company structure and policies that showed the lack of leadership and safety awareness of KMB's senior management. These changes also increased the workload of Operations staff and some functions after the restructure were vanished which affects both safety and daily operations.

Functions re-shuffled from other departments to Operations section

1. The responsibility of accidents investigation and the bus captain's (BC) safety verdict determination are reshuffled from Safety and Service Quality (SSQ) Department and Insurance Department to Operations section (Ops) for headcount reduction and cost savings. The BC's safety verdict of the damage from \$750 to \$7,500 was waived so that fewer bus captains would be liable to the accident. This will gradually weaken the safety awareness among bus captains.
2. Ops colleagues are responsible in drafting replies to District Council members that were previously handled by External Affairs Section that does not exist today since the resignation of Corporate Affairs Director.
3. Ops colleagues are responsible for BC recruitment with Human Resources Department at bus terminus. Such assignment is a misallocation of resources because it draws away precious manpower required for BC administration, concern and support work.
4. Since the cancellation of patrol car driver positions, inspectors have to drive themselves. They are more prone to accidents since they have not received any formal training. The number of traffic accidents involved in patrol car has increased dramatically.

Low staff morality due to inconsistent policy and frequent change of depot/ position

1. By the end of 2016, the experienced Duty Dispatch Officers / Senior Duty Dispatch Assistants who have worked for KMB for over 30 years were forced to transfer to other depots (轉廠) e.g. Kowloon Bay Depot to Tuen Mun depot or vice versa regardless of the long travelling hours in the early morning. Those long serving loyal staffs that did not accept the new arrangement were forced to leave. How can the senior management neglect the intricate and professional knowledge required for duty dispatch? Their irrational decision greatly increased the chances of mistakes in dispatching the wrong BC to a route they are not familiar with and affected the smoothness of bus operation. Here is a ridiculous scenario: an experienced duty dispatch officer was recently dismissed after the depot transfer because it was difficult for him to perform as flawlessly as his previous assigned depot.
2. In January 2017, 10 management zones were expanded to 15 zones in KMB Ops namely
 - 1 (HK & South Kowloon),
 - 2 (Central Kowloon + Mei Foo / Tsing Yi),
 - 3 (Kwai Tsing / Tsuen Wan),
 - 4 (Wong Tai Sin & Tsz Wan Shan),
 - 5A (Upper Kwun Tong),
 - 5B (Lower Kwun Tong),
 - 6A (South Tuen Mun),
 - 6B (North Tuen Mun),
 - 6C (Tin Shu Wai),
 - 6D (Yuen Long),
 - 7A (Tai Po),
 - 7B (Fanling & Sheung Shui),
 - 8A (Shatin),
 - 8B (Ma On Shan + Siu Lek Yuen) &
 - 9 (Tseng Kwun O)

Nine months later, the above zones were merged again and restored to 10 in September 2017. How can the senior management make

such a poorly thought out decision without any long-term planning or leadership skill?

Here is another typical example of frequent position changes:

An operations manager was forced to work for four different positions in three separate companies i.e. KMB, Long Win Bus Co. & Sun Bus Co. over the past 6 months. Even an Ops “genius” cannot deliver safe and reliable bus services to passengers under such an unstable structure with frequent inconsistent policies.

3. Due to low staff morale, there is an acute shortage of BCs in the company. All internal staff who possess valid driving license are advised by their supervisor to receive bus driving training during office hours. Senior management underestimated the professionalism required of bus captain duties. This misallocated human resource is supposed to supervise and monitor the bus maintenance service for frontline staff. This is another typical example of poor leadership.

Why is the senior management not enhancing the BC's performance but merely force the internal staff to fill up the service gaps unprofessionally? We do not think this is an efficient or effective measure. It just shows management addresses the issue the wrong way.

4. Senior management exploited staff benefit by demotion regardless of their performance. A manager was demoted to assistant manager position and a senior officer was demoted to officer rank. They have no choice but choose to accept the rank and salary adjustment. We do not think an ethical company should treat their long serving loyal staff this way.
5. Under senior management instructions, a large rest kiosk and a chemical toilet are placed at the Lok Wah bus terminus and Allway Garden bus terminus in 2017 without any consent from the Housing Department or approval from the Transport Department. The senior management ignored the general application procedures and it has ruined the relationship between KMB and the HKSAR government.

On one hand, it aroused public awareness to the new SAR government's feedback and on the other hand has caused discontent at KMB's reckless decision. How can a responsible senior management ignore regulations and tactically threatened the authority with public pressure?

6. Senior staff in Ops is replaced by retired police officers. These officers are not familiar with daily real bus operation. They disrupted the well-established and transparent mechanism such as staff promotion.

There is a lot of criticism in the latest staff promotion. The staff under this retired police officer in-charge was promoted while other depot staff was excluded.

7. Senior management ignored the importance of technology in safety enhancement. A typical example is the abolishment of ROM (實時車務管理系統) which was still under development in 2015. ROM is intended to capture real time operation data of the buses on road including location, speed and even tilting. It is a worldwide trend of using real time data to enhance operation management and safety monitoring so that imminent risk can be identified and prompt remedial action can be taken. It is a typical example of lack of professional knowledge on bus operations and safety awareness and how short sighted the senior management is. It was not surprised that the senior management failed to respond to the question raised by Mr. Charles Peter Mok 莫乃光, JP in the LegCo if the company will adopt the developed technology and real time data to ensure the smooth and safe bus operations as they neglected and suspended this critical project.

香港專營巴士服務
獨立檢討委員會

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Independent Review Committee on
Hong Kong's Franchised Bus Service

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21 May 2018

Ms Alice LUK

(Email: [REDACTED])

BY EMAIL

Dear Ms LUK,

**Invitation for Written Submissions for Consideration by the
Independent Review Committee on Hong Kong's Franchised Bus Service**

On 29 March 2018, the Secretariat of the Independent Review Committee ("the Committee") was provided with a copy of a "report" on KMB sent by Mr Eric LEE to the Secretary of the Transport and Housing Bureau on 12 March 2018, which contained what was described as "testimonials from different insiders". Attached to the report was a document headed "Testimony from Alice LUK, ex-Head of Insurance Department".

We attach a copy of that one page document and invite you to confirm, if it is the case, that it is your statement and that it is true to the best of your knowledge and belief.

If so, we would invite you to assist the Committee by providing information to the Committee by way of answers, to the best of your knowledge and belief, to the following questions:

Employment by KMB

1. Over what period and in what positions and departments were you were employed by KMB? What were your responsibilities for each position you held as set out in the documents of appointment? What were your responsibilities as Head of the Insurance Department?

Statement

2. In your statement you assert:

"It is ridiculous that in recent 2-3 months, office staff with bus driving license are all encouraged to sign to agree working as part-time BC the supervisor has to accommodate the additional working hours."

- a. Do you have personal knowledge of what is asserted in that statement, i.e. office staff with bus driving license being asked or encouraged to sign to agree to work as part-time bus drivers? If so, please describe the circumstances in which you came to know of those matters.
- b. Please provide the following information regarding the statement:
 - i. Please identify the time period described as “in recent 2-3 months”.
 - ii. In what ways were “office staff” with a bus driving license “encouraged” to agree to work as part-time bus captains? Was the encouragement given orally and/or in writing and, if the latter, identify the document?
 - iii. Was the encouragement related to the Bus Captain Referral Programme that has been mentioned in the annual reports of Transport International Holding Ltd (i.e. parent company of KMB) at least for the years from 2012 to 2014? Attached is a copy of page 58 of the 2014 Annual Report. If the encouragement was given in the context of the abovementioned programme, have there been any changes to the details of the programme or the way it is implemented in practice during your employment with KMB? If so, what are the details of these changes?
 - iv. By whom and when was the encouragement given? Regarding the statement the “supervisor has to accommodate the additional working hours”, how were the supervisors asked or otherwise encouraged to accommodate?
- c. Do you have personal knowledge of whether the office staff of KMB were actually assigned part-time driving duties after signing the agreement? What is the basis for your expression of apparent disbelief that a part-time bus captain “would have sufficient energy to drive after working full-time”? What are the working hours of office staff at KMB?
- d. Do you know what, if any, measures are taken to ensure that a part-time bus captain employed in those circumstances is not fatigued?

We would be grateful if your response could reach the Secretariat of the Committee by **25 May 2018**. Please send the submission by soft copies to *peter_chan@irc-bus.gov.hk* or *yt_to@irc-bus.gov.hk*.

In addition to providing answers to the above questions, you may also provide information on other bus-safety related issues. In doing so, we would invite you to focus on issues where you have personal knowledge on as compared to other issues that you may have picked up but does not have first hand knowledge.

Furthermore, please be advised that the information provided in your response will be considered by the Committee in reviewing the matters it is directed to consider under the terms of reference of the Committee and in drawing up its recommendations. If necessary, the Committee may invite you to provide supplementary written and/or oral submissions. All submissions (including any annexes, appendices and attachments contained therein) will be treated as public information and, at the discretion of the Committee, may be published on the Committee's website.

Yours sincerely,



(CHAN Ping-fai, Peter)
Secretary, Independent Review Committee on
Hong Kong's Franchised Bus Service

Encl

Testimony from Alice Luk ex-Head of Insurance Department

It is ridiculous that in recent 2-3 months, office staff with bus driving license are all encouraged to sign to agree working as part-time BC and the supervisor has to accommodate the additional working hours.

Can you imagine if those “part-time BC” will still have sufficient energy to drive after working full time? This is still the existing policy. Office staff is still working as part-time BC. This is factual.

If the existing system was to continue, there might be more accidents coming.

The operation officers will allow those ‘part-time BC’ to choose their favourite route with favourite bus type.

Another issue is the assessment of liability- safety bonus of BC are now handled by Depot Operation and not Insurance staff who are more experienced and well trained with sufficient monitoring. The frequent wrong assessment (qualified) has given misconception on the professional driving standard built up before the change. See the detailed analysis by Clara Leung, my successor as Head of Insurance.

Care for Employees

KMB is committed to developing our workforce which delivers the highest service quality. Comprehensive training and various recognition programmes have been established to incentivise staff.

Rewarding service excellence



HUMAN RESOURCES POLICY

KMB maintains a safe and harmonious workplace by adopting a set of comprehensive human resources policies promoting gender equality, offering protection against sexual harassment, preventing bribery and protecting personal privacy. These and other policies are published on the staff website. We observe Hong Kong's labour and anti-discrimination laws and ensure that all our suppliers respect labour rights with regard to employment and freedom of association, and prohibit child labour and forced labour in all aspects relating to our business.

RECRUITMENT

To maintain sufficient manpower to support the delivery of quality bus services, in 2014, we continued to adopt various recruitment channels to attract bus captain applicants. These include the **Bus Captain Referral Programme**, whereby staff are given incentives to encourage qualified candidates to apply for the post of bus captain, bus body advertisements, radio advertisements and recruitment teams at bus termini and joint recruitment days with non-government organisations.

A central aspect of the upgrade of our service quality is staff development, with training and development courses being arranged to hone the skills of managerial and frontline staff.

Dear Mr. Chan,

In response to your letter dated 21 May 2018, I confirm that the "Testimony from Alice Luk" enclosed in your letter was a statement made by me and that the content is true and correct to the best of my knowledge and belief.

I had been working in KMB for over 30 years and was in charge of the Insurance Department (previously the Accident & Insurance Section under the Accounts Department) for almost 30 years until I left KMB on 16 June 2011. For my positions and job responsibilities during my service in KMB, please refer to the appended Annex 1.

Regarding my assertion, I would like to provide the following further information:

- My statement was made in mid-February.
- It was a fact known to all office staff who had gone through bus driver training and obtained a bus driver licence or those already possessing a bus driver licence. There were memo/email from Human Resources Dept. and/or Head of Training & Quality Assurance Dept addressed to related department heads requiring office staff to participate in part-time driving after they had obtained the bus driver licence. These you can obtain from KMB to verify the facts. The staff who wished to learn to drive a bus were verbally encouraged to agree to work as part-time bus captains and that they were expected to sign a brief report or undertaking indicating their willingness to work as part-time driver.
- The Company should have a record of those office staff who had received bus driving training and who had 'initially' agreed to work as part-time bus captain and those who had subsequently not taken up part time driving. You can also verify it by inspecting the 'attendance record' kept by KMB showing those office staff who had signed the agreement and driven buses on a part-time basis after their 'full time' work and their respective duty hours.
- The Bus Captain Referral Programme stated in the 2014 Annual Report was different and unrelated to the office staff taking up part-time driving after bus training as mentioned in the preceding two paragraphs. Although I was no longer with KMB in 2014, it was well known to all staff and knowledge in the public domain that a cash incentive would be given to any staff who had successfully referred a bus driver to join KMB as a fulltime bus captain.
- In 1984, I became the first female in Hong Kong holding a double decker bus driving licence after training and road test. I then encouraged all the staff in my department to obtain a bus driver licence so that we could all be empathetic to bus captains and have first-hand knowledge on the skills and common faults in handling double decker buses. I did not expect them to be part time bus captains, but I realized that knowing how to drive a double deck bus would be conducive to a better handling of accident investigation and assessment. Since I had driven a double decker bus, although fortunately not on full shift, I know it is a strenuous

job requiring not only physical energy but also full concentration to ensure safety to bus passengers and other road users.

- I have no knowledge if any measures have been taken to ensure that part-time bus captains are not fatigued after finishing their full-time duties whether it's indoor or outdoor.
- I did have great concern on driving part-time after working full-time. Office staff will usually work for 9 or 9 ½ hours subject to shifts/ roster etc. I only hope that those devising and approving this programme have also learnt and driven a double decker bus.
- However, I understand that the arrangement of 'office staff driving part-time after full time work' has been modified to limit the total working hours after the "report" on KMB referred to in the first paragraph of your letter was disclosed.

For other bus-safety related tasks being done by Insurance Department before my departure from KMB in 2011 June, I have appended Annex 2 for your information. With the big changes in company policies and business objectives resulting in the disintegration of the Insurance Department, I hope that the proactive accident prevention steps undertaken and maintained by the collaborative efforts of Insurance Department together with the Traffic, Service and Operation Departments to ensure the safety of passengers and other road users are still regarded to be of paramount importance in KMB. The core value of safety and culture of high standard of driving responsibility had been built up in decades by a justifiable scheme of safe driving bonus. Such award was meant only for those bus captains without traffic accident or being held 'not liable' for which the assessment of liability was on common law basis. I hope this has not been compromised by treating the 'bonus' as part of their guaranteed salary package to please or appease the demands of the bus captains.

In closing, I would like to point out that it is a bit unreasonable for you to expect a response from me within 4 days. However, I must also state that as a loyal KMB ex-employee who had chosen to enjoy an early retirement in 2011, I only have love and concern for but no grudge against KMB when I made that statement and when I wrote this letter.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Alice', with a long, sweeping horizontal stroke extending to the right.

Alice Luk Sai Lam

Position: Head of Insurance Department
Date Joined: 1 April 1981
Dates of Appointment to Posts: Appointed as Asst. Accident & Insurance Officer on 1/4/1981.
 Promoted as Accident & Insurance Manager on 1/10/1981.
 Redesignated as Insurance Manager on 1/12/1989.
 Redesignated as Head of Insurance Department on 1/4/2001.
 Retired from KMB on 16 June 2011.

Job descriptions as Head of Insurance Department:

Identifying and containing the risks of the Company's operations and activities (including Long Win Bus Co Ltd. and Sun Bus Ltd.) by recommending and effecting appropriate insurance coverage with best possible offer and terms

Ensuring all insurance related matters are compliant with the relevant Ordinance/statutory requirements and the conditions in the insurance policies are being complied with by giving recommendations to related departments

Studying and recommending ways to lower the costs on insurance related matters

Administering an equitable system of **Safe Driving Bonus Scheme, Annual Safety Bonus Scheme and the Accident Enquiry Board by monitoring the investigation and assessment of traffic accidents**

Contributing to reduce the traffic accident rates and to avoid potential hazard by:

- locating traffic accident blackspots and giving proposals for eradicating the blackspots
- drawing the attention of the Service/Engineering Department to potential hazard inside bus compartment or mechanical defects
- drawing attention of the Human Resources Department to accident-prone bus captains for special monitoring and retraining
- examining the causes of accidents/ incidents and recommending mitigation measures
- providing counselling service to bus captains after accident
- tracking counselled bus captains for recurrence of accident within 1 year

Monitoring the settlement of insurance claims for and against the Company efficiently and professionally to minimize the Company's exposure to potential losses and legal costs

Reducing the number of employee's injury cases by recommending preventive measures for potential/existing hazards

Monitoring the annual/monthly departmental budgets

Allocating departmental resources to achieve optimal work efficiency and cost effectiveness under the Company's ISO9000 quality system

Safety related tasks done by Insurance Department for
1 November 2009- 31 October 2010:

- Contributed in the continuous reduction of accident rate by motivating the conduct of risk prevention inspection on depots/ termini/ bus stops (1,257 site visits done) and the bus interior design for passengers' safety (167 bus inspections done)
- Participated in '**Safety Enhancement Task Force**' to improve KMB accident rate further to 2.68 per million-km run (TD figure)
- Submitted accident prevention proposals for remedial measures to reduce the identified risks (149 reports issued)
- Identified network-wide 'Potential Risk Spots' (not black spots) for Depots' briefing and HR's training to increase Bus Captains' awareness on safety (10 spots were submitted)
- Provided 'preventive' counseling for high risk KMB Bus Captains (BC) below age 35 & less than 4 years' experience (an average of 78% of the counseled BC of KMB is accident-free within 3 months after counseling) and general counseling to BC after accident (over 78% of bus captain are liability-free within one year after counseling)
- Attended regular meetings conducted by Transport Department together with other franchised bus operators to review the accident rates and resolve risks preventive proposals for bus safety

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Independent Review Committee on
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18 May 2018

Ms Lelia WONG

(Email: [REDACTED])

BY EMAIL

Dear Ms WONG,

**Invitation for Written Submissions for Consideration by the
Independent Review Committee on Hong Kong's Franchised Bus Service**

On 29 March 2018, the Secretariat of the Independent Review Committee ("the Committee") was provided with a copy of a "report" on KMB sent by Mr Eric LEE to the Secretary of the Transport and Housing Bureau on 12 March 2018, which contained what was described as "testimonials from different insiders". Attached to the report was a document headed "Testimony from Lelia WONG, ex-Assistant Manager, Procurement Administration, Procurement Department".

We attach a copy of the first page only of the latter document, which addresses the issue of "Safety impact by eliminating use of bus simulators", and invite you to confirm, if it is the case, that it is your statement and that it is true to the best of your knowledge and belief.

If so, we would invite you to assist the Committee by providing information to the Committee by way of answers, to the best of your knowledge and belief, to the following questions:

Employment by KMB

1. Over what period and in what positions and departments were you employed by KMB? What were your responsibilities for each position you held as set out in the documents of appointment? What were your responsibilities as Assistant Manager of the Procurement Department, in particular in respect of bus safety?

Bus simulators

2. Do you know of and are familiar with the procurement, use, maintenance or discontinuation of the use of bus simulators by KMB? If so, please describe the circumstances in which you obtained that knowledge.

The procurement of bus simulators

3. When and from whom were bus simulators first procured by KMB for the training of their bus drivers? Did the management of KMB give any explanation for their procurement and use? If so, when and what was that explanation and by whom was it given? For your information, the Legislative Council Panel on Transport was informed in a paper dated January 2008 that:

“...KMB has launched in January 2008 new computer-based driving simulators to enhance bus captains’ training. The new training simulators will enhance bus captains’ driving skills and help sharpen bus captains’ reactions when facing different driving situations.”

4. Were other bus simulators procured subsequently? If so, when and how many bus simulators were procured?

The use of bus simulators

5. Do you know of and are familiar with what use was made of the bus simulators to train bus captains during the time that they were deployed by KMB? If so, please describe briefly the use of the bus simulators? Were they used as part of general training of bus captains? Were all bus captains trained on the bus simulators?
6. Had there been any assessment made by KMB on the effectiveness of the bus simulators? If so, please describe briefly the assessments.

The maintenance of bus simulators

7. Do you know of and are familiar with the programme of maintenance of the bus simulators during the time that they were deployed by KMB? If so, please describe that programme.

The discontinuation of the use of bus simulators

8. Do you know of and are familiar with the circumstances in which KMB discontinued the use of the bus simulators? When did that occur? Did the management give any explanation for the discontinuation? If so, what was the explanation and by whom was it given?

We would be grateful if your response could reach the Secretariat of the Committee by **25 May 2018**. Please send the submission by soft copies to peter_chan@irc-bus.gov.hk or yt_to@irc-bus.gov.hk.

In addition to providing answers to the above questions, you may also provide information on other bus-safety related issues. In doing so, we would invite you to focus on matters of which you have personal knowledge but not on matters of which you do not have first hand knowledge.

Furthermore, please be advised that the information provided in your response will be considered by the Committee in reviewing the matters it is directed to consider under the terms of reference of the Committee and in drawing up its recommendations. If necessary, the Committee may invite you to provide supplementary written submissions and/or to give oral evidence. All written submissions (including any annexes, appendices and attachments contained therein) and oral evidence will be treated as public information and, at the discretion of the Committee, may be published on the Committee's website.

Yours sincerely,



(CHAN Ping-fai, Peter)
Secretary, Independent Review Committee on
Hong Kong's Franchised Bus Service

Encl

**Testimony from Lelia Wong ex-Assistant Manager, Procurement Administration,
Procurement Department**



Safety impact by eliminating the use of bus simulators

The simulators were used to train bus captains how to react in case of potential road incidents that could not be trained in real driving training like:

1. Sudden braking from the car in front or sudden change of lanes,
2. Wet road skidding,
3. Pedestrians dashing out to the road,
4. Pets suddenly appearing,
5. Strong side winds like on a bridge,
6. Recreating past accident events.

(The above could not be simulated in real driving training, as it would cause danger to real persons or other road users)

These four bus simulators were scrapped purposely because Roger Lee did not approve the renewal of the maintenance for them. Human Resources colleague confirmed the discontinuation of the four bus simulators in July 2015. That was a decision made by Roger Lee. It was believed that it was to "save cost and free up the space for other purposes" but I think it was a wrong move and the impact was disastrous.

Our former Commercial Director - James Louey, who was forced to leave, was supposed to visit bus simulator manufacturers in Salt Lake City and Los Angeles scheduled for 25th – 26th February 2015, but it was cancelled because Roger Lee did not approve the trip.

Care for Employees

KMB is committed to developing our workforce which delivers the highest service quality. Comprehensive training and various recognition programmes have been established to incentivise staff.

Rewarding service excellence



HUMAN RESOURCES POLICY

KMB maintains a safe and harmonious workplace by adopting a set of comprehensive human resources policies promoting gender equality, offering protection against sexual harassment, preventing bribery and protecting personal privacy. These and other policies are published on the staff website. We observe Hong Kong's labour and anti-discrimination laws and ensure that all our suppliers respect labour rights with regard to employment and freedom of association, and prohibit child labour and forced labour in all aspects relating to our business.

RECRUITMENT

To maintain sufficient manpower to support the delivery of quality bus services, in 2014, we continued to adopt various recruitment channels to attract bus captain applicants. These include the **Bus Captain Referral Programme**, whereby staff are given incentives to encourage qualified candidates to apply for the post of bus captain, bus body advertisements, radio advertisements and recruitment teams at bus termini and joint recruitment days with non-government organisations.

A central aspect of the upgrade of our service quality is staff development, with training and development courses being arranged to hone the skills of managerial and frontline staff.

Independent Review Committee on
Hong Kong's Franchised Bus Service
21/F, Queensway Government Offices,
66 Queensway, Hong Kong

By Email:

peter_chan@irc-bus.gov.hk
yt_to@irc-bus.gov.hk

25th May 2018

Dear Mr. Chan,

Re: Invitation for Written Submissions for Consideration by the
Independent Review Committee ("IRC") on Hong Kong's Franchised Bus Service

Thank you for your letter dated 18th May 2018 sent via email regarding the captioned invitation. As per your request, below please find my answers to your questions which are furnished in the best of my knowledge. Should there be any discrepancy on my provided information, in particular, figures or date of event, etc. compared with your actual finding, please pardon such discrepancy as all information furnished below is from my memory.

Answer to Question 1

I was under the employment of The Kowloon Motor Bus Company (1933) Limited ("KMB") during 22nd February 1993 – 1st July 2017 at the following capacity in Purchasing Department.

Period	Position
Jan 1998 – Jul 2017	Assistant Manager, Procurement Administration
Mar 1995 – Dec 1997	Purchasing Officer
Feb 1994 – Feb 1995	Purchasing Officer II
Feb 1993 – Jan 1994	Executive Officer II

Purchasing Department was renamed to Purchasing Section in March 2016 and Procurement Department since May 2017.

My core duties during my tenure with KMB include:

- Sourcing and procurement for bus spare parts and other categories comprising of bus tyres, retread materials and retreading services, advertising service, etc.
- Quality audit compliance for new buses
- Contract and project management
- Vendor management
- Departmental administration
- Staff recruitment / training and appraisal
- Asset Control and Departmental Budget
- Claims management
- Quality Audit

Since I worked at KMB Purchasing in February 1993, the departmental mission and emphasis are to strive for the best deal for the company – procure the right product / service according to specifications at the right time and competitive price.

For safety critical products such as spare parts for brake system, it is both engineering and procurement's effort and consistency to procure products which must be fully complied with specifications without sacrificing on safety. Moreover, the department's core focus is on Total cost of Ownership ("TCO") but not only cost evaluation. In addition, trial exercise will be conducted to ascertain product's on-the-road performance. Products such as battery, tyres and retread materials are typical examples which trial exercise must be proceeded before inviting potential supplier to participate in a tender.

From what I observed since Mr. Roger Lee took over the leadership of KMB since January 2015, the concept of TCO and safety aspect seems no longer exist. My testimony citing bus purchase and tyre purchase reflected my observation.

Answer to Question 2

I was not involved in the procurement of the 4 bus simulators or their maintenance service. They were respectively handled by my ex. colleagues, Mr. Lo and Mr. Chan who are still working at KMB. Without their consent, I could not provide the IRC their contact details for furnishing further information on the aforesaid procurement duties. However, I could assist in contacting my ex. colleagues to render assistance to the IRC provided that both Mr. Lo and Mr. Chan will not be threatened by KMB for harming their current employment by voicing out their testimonies as supportive information. Could the IRC by any means protect them in terms of their job security at KMB?

As for the use and maintenance of the 4 bus simulators, the end-user was in fact Human Resources Department and the colleague who handled maintenance service requirement, Mr. Lee was forced to resign in October 2017. I have the contact details of Mr. Lee and could assist the IRC to contact him for providing further information on the bus simulators' maintenance, even though I am uncertain whether Mr. Lee would be willing to assist.

In respect of the discontinuation of the use of 4 bus simulators, my ex. colleague, Mr. Chan asked for my advice on the renewal of maintenance service contract for the 4 bus simulators dated back in May 2015. The last maintenance service contract for the 4 bus simulators was issued to a supplier namely L3 in May 2014 with an annual maintenance fee of USD20,000. A requisition for the purchase of the aforesaid maintenance service was raised by Human Resources Department with approval from Head of Human Resources, Ms. Susanna Wong. Since the annual service maintenance fee was over HKD100,000, additional approval on the said purchase must be obtained from its divisional director, in the case of Human Resources Department, Managing Director is its divisional director (according to Authorisation Guideline of Procurement of Products / Services). However, Mr. Roger Lee, Managing Director did not approve to purchase the said annual maintenance service.

Even though without annual maintenance service, it was of my opinion that the 4 bus simulators could still be in use as part of the bus captain driving training program as long as they are not mal-functioned. However, the discontinuation and scrapping of the 4 bus simulators was informed by Human Resources Department in end July 2015. It is KMB's practice that scrapping of any used company's equipment, obsolete spare parts and retired buses must be handled via scrap sale which is also a duty at Procurement Department. My ex. colleague, Mr. Lau who is still working at KMB was responsible for scrap sales tender.

However, the 4 bus simulators could not be disposed-off via scrap sales but must be diminished within a very short period of time. I noted that all KMB logos of the 4 bus simulators were stripped off with an aim to hide its identity. The contractor was instructed to destroy the 4 bus simulators at Training School, Shatin Depot on a Saturday and dispose-off all bits and pieces in a dumping site similar to treatment of garbage.

<Question 3 to 6>

For the subsequent questions from Q3 to Q6, I was not involved in the procurement duty of the 4 bus simulator and Mr. James Louey, my ex-Commercial Director was in charge of the said project. Mr. Louey has rendered his assistance in providing the following clarification.

Answer to Question 3

The bus driving simulator was first proposed by the Commercial Director, Mr James Louey dated back in 2006. He proposed the plan of purchasing the 4 bus simulators from L3 Training and Simulation, a US company specialises in customising simulators from fire engines to ambulances. It was approved by the Managing Director then Mr. John Chan.

Mr. Louey, the Head of Human Resources prior to his appointment as Commercial Director was in charge of Bus Captain Training for over 15 years. He tried to introduce an exceptional circumstances driving training to the bus captain driving school because he saw the need for existing bus captains and bus captain trainees to be trained to deal with extraordinary driving situations like wheels skidding, sudden blown tyre, person or pets rushing onto the street, sudden side wind gusts that may occur in places like the Tsing Ma Bridge, etc. It was too expensive or impossible to set up these kinds of training in a real driving situation because of the risk of endangering training staff. It was noted that bus simulators were not purchased to replace on-road based training. It was used to complement the existing driver training programme.

Flight simulators and train driving simulators have been around for decades. The price of bus driving simulator has become reasonable enough to consider. Mr. Louey went over to Salt Lake City, USA to test the simulator. The results were promising. After benchmarking with other suppliers and negotiation with L3, which L3's offer was the most cost effective and their simulators were the most applicable one for KMB's needs, he proceeded to order 4 units for KMB in 2007. The engineers of L3 came over to study the street conditions and the main landmarks to put inside the simulator. Historical accidents were also programmed into the system, so instructors can teach bus captains how to react under similar circumstances.

Answer to Question 4

KMB has not purchased other simulators apart from these 4 units from the supplier namely L3.

Answer to Question 5

As far as we know, the simulators were managed by the Bus Captain Training School under Human Resources Department. They use it for both new bus captain training and refresher training. Prior to them being scrapped, every bus captain would have been trained at least once a year using these simulators. It was well advertised in KMB's in-house magazine and annual report.

Answer to Question 6

There were no formal assessment made on the simulators as such because it was an integrated part of new bus captain training and refresher training. Common sense tells us that it is also better to train more and prepare our bus captains more than to prepare them less. If we

benchmark other industries, pilots are required by law to be trained for no less than 76 hours before they can walk aboard a plane. Quote by Tim Hibbetts, Naval Aviator, Airline Pilot, Aerospace Eng Maj. <https://www.quora.com/How-many-hours-of-simulation-training-does-a-pilot-have-to-go-through-before-flying-an-airliner>

A bus captain has to drive as many as 150 passengers in 1 bus and deploy more than 10 such trips a day. He is ultimately responsible for thousands of passenger lives each day and numerous other road users lives too. We can only imagine KMB should consider adding more effective training tools like simulator.

<Question 7 and 8 are jointly answered by Ms. Lelia Wong and Mr. James Louey>

Answer to Question 7

Mr. James Louey:

The simulators had an annual maintenance agreement with L3 to ensure the equipment was in operational condition.

Ms. Lelia Wong:

As I have clarified in Question 2, my ex. colleague, Mr. Chan who handled the purchase of maintenance service could provide official document for IRC to comprehend the annual maintenance service scope. From my memory, during the validity of maintenance service contract, a hotline was available for end-user to troubleshoot any problems encountered.

Answer to Question 8

Mr. James Louey:

The simulators were used for almost 10 years. The supplier, L3 did mention that they were unable to continue to provide annual maintenance service because the hardware PC equipment and Operating System were no longer the current edition and therefore they would not be able to source parts for KMB. We were told that the newer version of the simulator was much more powerful in terms of functional capability and better screen resolution to address those who felt dizzy watching the screens.

Ms. Lelia Wong:

Mr. Louey was due to make a business visit to the supplier, L3 in June 2015. However, the business trip was cancelled since Mr. Roger Lee did not approve it.

For details of the discontinuation and scrapping of the 4 bus simulators, clarification is furnished in my answer to Question 2 above.

With regard to other bus-safety related issues, I would like to inform the IRC that my ex. colleague, Mr. Raymond Cheng, ex-Senior Manager, Safety and Service Quality Department has furnished his testimony for reporting to the IRC. His testimony will be submitted by my ex. colleague, Mr. Eric Lee, ex-Head of Purchasing Department in due course.

I sincerely hope that the above information is of useful to you in your investigation further. Thank you.

Yours sincerely,
Lelia Wong
(Lelia Wong)

香港專營巴士服務
獨立檢討委員會

香港金鐘道 66 號
金鐘道政府合署 21 樓



Independent Review Committee on
Hong Kong's Franchised Bus Service

21/F, Queensway Government Offices,
66 Queensway, Hong Kong

本函檔號 Our Ref.: CSO/IRC-BUS/CR/7-45/9

來函檔號 Your Ref.:

電話號碼 Tel No.: (852) 2867 5324

傳真號碼 Fax No.: (852) 3104 0254

18 May 2018

Ms Clara LEUNG

(Email: [REDACTED])

BY EMAIL

Dear Ms LEUNG,

**Invitation for Written Submissions for Consideration by the
Independent Review Committee on Hong Kong's Franchised Bus Service**

On 29 March 2018, the Secretariat of the Independent Review Committee ("the Committee") was provided with a copy of a "report" on KMB sent by Mr Eric LEE to the Secretary of the Transport and Housing Bureau on 12 March 2018, which contained what was described as "testimonials from different insiders". Attached to the report was a document headed "Testimony from Clara LEUNG, ex-Head of Insurance Department".

We attach a copy of that document and invite you to confirm, if it is the case, that it is your statement and that it is true to the best of your knowledge and belief.

If so, we would invite you to assist the Committee by providing information to the Committee by way of answers, to the best of your knowledge and belief, to the following questions:

Employment by KMB

1. Over what period and in what positions and departments were you were employed by KMB? What were your responsibilities for each position you held as set out in the documents of appointment? What were your responsibilities as Head of the Insurance Department, in particular in respect of bus safety?

Statement

2. In your statement you said that the assessment of the "Safe Driving Bonus" for bus captains was transferred from the Insurance Department to the Operation Staff of the respective depots on 1 April 2016. Of that, you assert:

“Depots are not so experienced or well-trained for the SB Assessment as INS staff doing the same (after detailed investigation) according to the consistent standard of assessment with sufficient monitoring by a senior INS employee (with years of experience in SB assessment) as final approval of each SB Verdict.”

- a. Do you know of and are familiar with the assessments of the “Safe Driving Bonus” for bus captains made by the Insurance Department and the Operation Staff of a depot? If so, on what basis do you assert in your statement that “more elements of personal judgment of depots are taken into account”?
- b. Overall, is the assessment of the Safe Driving Bonus less rigorous than when conducted by the Insurance Department?

We would be grateful if your response could reach the Secretariat of the Committee by **25 May 2018**. Please send the submission by soft copies to *peter_chan@irc-bus.gov.hk* or *yt_to@irc-bus.gov.hk*.

In addition to providing answers to the above questions, you may also provide information on other bus-safety related issues. In doing so, we would invite you to focus on matters of which you have personal knowledge but not on matters of which you do not have first hand knowledge.

Furthermore, please be advised that the information provided in your response will be considered by the Committee in reviewing the matters it is directed to consider under the terms of reference of the Committee and in drawing up its recommendations. If necessary, the Committee may invite you to provide supplementary written submissions and/or to give oral evidence. All written submissions (including any annexes, appendices and attachments contained therein) and oral evidence will be treated as public information and, at the discretion of the Committee, may be published on the Committee’s website.

Yours sincerely,



(CHAN Ping-fai, Peter)
Secretary, Independent Review Committee on
Hong Kong’s Franchised Bus Service

Encl

Testimony from Clara Leung ex-Head of Insurance Department

A. Transfer of Safe Driving Bonus (“SB”) Assessment from Insurance Department (“INS”) to respective Depots’ Operations since 1 April 2016

1. Inexperienced Depots’ Operations Staff (“Depots”) taking over the task

Depots are not so experienced or well trained for the SB Assessment as INS staff doing the same (after detailed investigation) according to the consistent standard of assessment with sufficient monitoring by a senior INS employee (with years of experience in SB Assessment) as final approver of each SB Verdict.

2. Relaxation of Criteria of SB Verdict – Part I

It can be seen in the table below for SB Verdict regarding ‘Damage on own* bus only in accident’, aiming to give more leniency to Bus Captain (“BC”) as SB has been regarded by BC as monthly income:

SB Verdict	Degree of Seriousness		
	Not Serious	Mild	Serious
before 1 Dec 2016	Warning: Repair Cost < or = \$750	Deduction of half-month bonus: Repair Cost > \$750 but < or = \$6,500	Deduction of one-month bonus: Repair Cost > \$6,500
on or after 1 Dec 2016	Warning: Repair Cost < \$7,500	Deduction of half-month bonus: Repair Cost > or = \$7,500	Deduction of one-month bonus: Class 1 case#

*Own: it refers to the bus driven by the BC himself or herself only

#Class 1 case: see Appendix 1 (pasted below)

Categorization of Traffic Accidents for Notification Purpose

Class 1 Accident

A traffic accident is categorized as Class 1 accident if **ANY** of the following occurs:

1. The accident involves a fatal or critical injury that requires intensive care.
- 2.** The bus loses control or mounts the pavement which as a result causes extensive damage to properties or injuries to passenger / pedestrian who needs to be sent to hospital.
3. The bus topples over or overturns any vehicles (except motor cycles).
4. The number of injured passengers is over 10 with 5 or more of those injured need to be sent to hospital.
5. A passenger or pedestrian is driven over, hit or dragged by the bus and who needs to be sent to hospital.
6. Bus goes ablaze in tunnels or with passengers injured in fire.

Class 2 Accident

A traffic accident is categorized as Class 2 accident if it does not fall into Class 1 or Class 3 category.

Class 3 Accident

A traffic accident is categorized as Class 3 accident if it involves **ALL** of the following:

1. No or slight injury of KMB staff and/or passengers and/or third party.
2. No or temporary service disruption.
3. No or minor damage of KMB property and/or property of other party.
4. No need for information flow with any authority or the media or the public.

The Crisis Management Director shall decide whether the accident / incident is a crisis situation according to the following criteria:

- Bus topple over
- Injuries over 30

Supplementary information for Point 2 of Class 1 Accident:
set in the amount of HKD 500K (including damages to bus(es), other road vehicles, public properties, etc. in a single traffic accident)

3. Complication to Criteria of SB Verdict

Each traffic accident is not assessed according to the merits of each case itself since the Criteria have included a new element of considering 'BC's past frequency of liable accidents within 6 months from accident date' in the decision of final SB Verdict for a case.

The period above has changed to 3 months since 1 December 2016

4. Relaxation of Criteria of SB Verdict – Part II

Before 1 April 2016, deduction of one-month bonus was imposed if BC was liable for the traffic accident with serious nature as listed below (which is not exhaustive):

- Fatality
- Hitting Pedestrian
- Injury to Bus Passenger with medical treatment
- Junction Collision with traffic light control / bus facing give-way sign
- Roundabout Collision with bus facing give-way sign
- 5 Injuries or above
- Head-on Collision
- Overturn

After 1 April 2016, the complete list of serious accident nature (subject to deduction of one-month bonus) was reduced to 6 groups of serious accident nature. Aiming to give further leniency to BC, deduction of one-month bonus is only applicable to Class 1 cases since 1 December 2016.

5. Lack of Objective Judgment

Completely objective judgment during the assessment is lacked because more elements of personal judgment of Depots are taken into account (e.g. Safety Mindset / Driving Attitude / Driving Skill / Interview Performance of BC are factors for consideration of BC's liability).

6. Existence of discrepancy in liability assessment between Depots and INS

It is pointless for INS to notify Depots of any discrepancy in liability assessment between Depots and INS since the standard between the two parties are totally different as listed below:

- a) Basis for INS's liability assessment: Hong Kong Criminal Law and Civil Claims Jurisdiction;
- b) Basis for Depots' and liability assessment:
 - Findings identified in Radio / Inspector / BOM Report / Face to Face or Phone-Call Interview;

- Concluding SB Assessment according to the new Criteria (with highlights as stated above) within a short period of time from accident date (i.e. ranging from a few days to a week or 2 weeks, wishing to let BC know his/her liability and educating BC shortly after accident) without waiting for INS's detailed investigation or watching CCTV footages

7. More leniency granted by the New Appeal Committee

It is noted that the New Appeal Committee members are more lenient and sympathetic towards BC while considering the appeal cases.

B. Continuous Cut in ORSO Staff vs. Continuous Recruitment of Retired Police Force: Defeating slogan of saving staff cost

1. One Assessor separated from KMB upon reaching his normal retirement age of 65 in September 2017 and two Assessors (aged 40 – 50) were asked to leave KMB in October 2017. The saving in salary of these 3 Assessors might be completely offset by recruitment of 2 retired Police Senior Inspectors and 1 retired Police Station Sergeant, who have reported duty on 18 December 2017.
2. No significant added value to accident investigation can be seen after continuous recruitment of retired police force to the re-named section 'Accident Investigation and Prevention' under Legal Department.
3. At the end of January 2018, another INS employee (Accident Investigator) left KMB out of his own accord at the age of 58. A retired Police Sergeant will soon replace his post.

C. Observations in Depots' Matters

1. Frequent Change of Depot to which the Operations Officers / Managerial Staff are assigned

It is difficult to maintain a good working relationship with relevant District Councilors or focus on the identified issues of a certain region due to frequent changes of Depots.

2. Active Encouragement to Office Staff to Learn Bus Driving and act as Part-Time BC during Peak Hours

The objectives for Office Staff to learn bus driving has been altered completely as shown below:

- a) Past: To be familiar with bus driving and understand BC's situation and difficulties on the road without demanding learners to act as part-time BC;
- b) Current: Learner's promise to act as part-time BC is a prerequisite for approval given to interested Office Staff to learn bus driving

Your Ref.: CSO/IRC-BUS/CR/7-45/9

25 May 2018

BY EMAIL

Mr. Peter CHAN Ping Fai
(Email: peter_chan@irc-bus.gov.hk)

Dear Mr. Chan,

Invitation for Written Submissions for Consideration by the Independent Review Committee on Hong Kong's Franchised Bus Service

In response to your letter of 18 May 2018, I would like to confirm that the document headed "Testimony from Clara LEUNG, ex-Head of Insurance Department" is my statement and that it is true to the best of my knowledge and belief.

I was employed by The Kowloon Motor Bus Company (1933) Limited ("KMB") to work in the Insurance Department for the period from 3 September 1990 to 19 November 2017 with details shown in the table below:

Date	Position	Remarks
3 September 1990	Insurance Officer	New Appointment
1 September 1992	Senior Insurance Officer	Promotion
1 June 1994	Chief Insurance Officer	Promotion
1 August 1996	Assistant Insurance Manager (Motor)	Promotion
1 April 2001	Senior Manager, Motor Insurance	Re-designation
1 October 2010	Senior Manager, Insurance	Promotion
16 June 2011	Head of Insurance Department	Promotion

My past job responsibilities for each position I held in KMB* are appended in the following table:

- * Extended to serve Long Win Bus Co Ltd (another franchised bus operations of Transport International Holdings Ltd ("TIH") since 1 July 1997 and Sun Bus Ltd (non-franchised bus operations of TIH) since 1 January 1998

Period	Position	Job Responsibilities
1990 Sep 3 To 1996 Jul 31	Insurance Officer ("IO") Senior IO on 1992 Sep 1 Chief IO on 1994 Jun 1	1) Handled motor third party claims (within substantial amount of self-retention limit) & recovery of own losses 2) Administered and renewed different insurance policies: Motor, Medical & Dental, Personal Accident & Travel 3) Assessed Bus Captain's monthly entitlement to Safe Driving Bonus with reference to the standard of civil claims and criminal law 4) Assisted Head of Insurance Department in carrying out special projects
1996 Aug 1 To 2010 Sep 30	Assistant Insurance Manager (Motor) re-designated as Senior Manager, Motor Insurance on 2001 Apr 1	1) Approved motor third party claims & recovery of own losses up to a certain limit 2) Supervised Motor property and personal injury claims (including legal claims), proper handling of serious/tragic traffic accidents 3) Supervised the administration & renewal of Motor, Directors & Officers Liability and Employee Benefits Insurance, namely Medical & Dental, Personal Accident & Travel, Voluntary Private Car & Householders 4) Supervised the renewal of whole programme of General Insurance Policies together with Senior Manager (Non-Motor) 5) Assessed Bus Captain's monthly entitlement to Safe Driving Bonus with reference to the standard of civil claims and criminal law until December 2009; Since September 2001, supervised the handling of appeal cases by submitting papers to the Safe Driving Bonus Scheme Committee for consideration and the smooth administration of Safe Driving Bonus Scheme 6) Assumed the role of Writer of applicable Quality Instructions for KMB quality functions (Version: ISO 9000; ISO 9001: 1994 / 2000) 7) Assisted Head of Insurance Department in carrying out special projects
2010 Oct 1 To	Senior Manager, Insurance	1) Approved motor third party claims & recovery of own losses up to a higher limit 2) Supervised Motor property and personal injury claims (including legal claims), proper handling of serious/tragic traffic accidents

2011 Jun 15		<ul style="list-style-type: none"> 3) Handled complicated Employees' Compensation claims by taking proactive monitoring actions to speed up settlement of cases 4) Overseen the administration & renewal of the following: <ul style="list-style-type: none"> a) Monthly declaration policies of General Insurance, namely Fire insurance for Bus / Departmental Vehicle / Spare Parts, Marine Cargo b) Non-monthly declaration policies of General Insurance, namely Motor, Employees' Compensation, Public Liability, Fire insurance for Contents / Depot & Building / Terminal Canteen & Shelter, Money, Fidelity Guarantee c) Employee Benefits Insurance, namely Medical & Dental, Personal Accident & Travel, Voluntary Private Car & Householders d) Directors & Officers Liability Insurance 5) Supervised the handling of appeal cases by submitting papers to the Safe Driving Bonus Scheme Committee for consideration and the smooth administration of Safe Driving Bonus Scheme 6) Assumed the role of Writer of applicable Quality Instructions for KMB quality functions (Version: ISO 9001: 2008) 7) Assisted Head of Insurance Department in carrying out special projects
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2011 Jun 16 To 2017 Nov 19	Head of Insurance Department	<ul style="list-style-type: none"> 1) Approved motor third party claims & recovery of own losses up to the highest limit authorized by top management 2) Overseen Motor property and personal injury claims (including legal claims) and Employees' Compensation claims with prompt settlement 3) Overseen the administration & renewal of the following: <ul style="list-style-type: none"> a) Monthly declaration policies of General Insurance, namely Fire insurance for Bus / Departmental Vehicle / Spare Parts, Marine Cargo b) Non-monthly declaration policies of General Insurance, namely Motor, Employees' Compensation, Public Liability, Fire insurance for Contents / Depot & Building / Terminal Canteen & Shelter, Money, Fidelity Guarantee c) Employee Benefits Insurance, namely Medical & Dental, Personal Accident & Travel, Voluntary Private Car & Householders d) Directors & Officers Liability Insurance
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		<ul style="list-style-type: none"> e) Aviation-Airside Vehicle Liability Insurance 4) Launched the ‘CCTV on bus’ project since January 2012 by providing comprehensive cost and benefit analysis and supervising all legal matters in compliance with the Personal Data (Privacy) Ordinance and was directly involved in the introduction of the proactive Employees’ Compensation Claims Management since July 2012 5) Overseen two sections of staff in the investigation work for the following: <ul style="list-style-type: none"> a) Assessment of Safe Driving Bonus of bus captains (including the handling of appeal cases by submitting papers to the Safe Driving Bonus Scheme Committee for consideration) and civil liability of Traffic Accidents until 31 March 2016 (bus safety related); b) Traffic Accidents of KMB and its fellow subsidiaries until 24 September 2017 (bus safety related); c) Work Injury Incidents, Fire and Other Incidents of KMB and its fellow subsidiaries in connection with Public Liability.
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I was familiar with the assessment of the “Safe Driving Bonus” for bus captains made by the Insurance Department as revealed in the above table (i.e. I started to do the assessment since my new appointment in September 1990 until December 2009, a total of 19 years). A mechanism for bus captain to lodge an appeal against the verdict of the said Bonus was in place and I joined the Safe Driving Bonus Scheme Committee since September 2001 for consideration of the appeal cases. Therefore, I was familiar with the scheme rules and procedures.

I was also familiar with the assessment of the “Safe Driving Bonus” for bus captains made by the Operations Staff of Depots as I had been directly involved in numerous discussions with the ex-General Manager (Kowloon Bay Depot), who was in charge of the project of transfer of assessment, about the revised Criteria of Safe Driving Bonus Verdict. It would be relied on by the Operations Staff of Depots in doing the assessment of the “Safe Driving Bonus” since 1 April 2016.

According to my memory, the Successful Appeal Ratio for appeal cases after 1 April 2016 is higher than that before the transfer of assessment to Depots. It reveals that the verdict of more cases handled by Depots had been reversed after consideration by the Appeal Board (a new committee replacing the Safe Driving Bonus Scheme Committee since April 2017).

The basis I assert in my statement that “more elements of personal judgment of depots are taken into account” is as follows:

- 1) If the answer to any one of the 4 additional questions below is “no”, Operations Staff of Depots can rule that the accident is caused by negligence of bus captain:
 - a) Safety Mindset: Has bus captain tried utmost to avoid occurrence of accident?
 - b) Driving Attitude: Has bus captain abided by traffic regulation, advice or internal guidelines?
 - c) Driving Skill: Has bus captain adopted proper judgment or driving behavior to enhance the safety of passengers and other road users?
 - d) Interview Performance: Has bus captain disclosed the course of accident honestly?It is very likely that personal judgment of Operations Staff would exist in the consideration of factor (a), (c) and (d). It is noted that Operations Staff know the bus captain in person.
- 2) Before the transfer of assessment of the “Safe Driving Bonus” on 1 April 2016, Insurance Department assessed all cases based on finding of facts for each case only (not knowing the bus captain in person) and the standard of Hong Kong Criminal Law and Civil Claims.

Overall, the assessment of the “Safe Driving Bonus” since 1 April 2016 is less rigorous than when conducted by the Insurance Department (please see item no. 2, 4, 7 of my statement for details). It took years to build up a high safety standard of bus driving, which had become the important culture of KMB for many years. Yet, this culture has been ruined in the recent few years.

Yours faithfully,



Clara Leung

香港專營巴士服務
獨立檢討委員會

香港金鐘道66號
金鐘道政府合署21樓



Independent Review Committee on
Hong Kong's Franchised Bus Service

21/F, Queensway Government Offices,
66 Queensway, Hong Kong

本函檔號 Our Ref.: CSO/IRC-BUS/CR/7-45/9

來函檔號 Your Ref.:

電話號碼 Tel No.: (852) 2867 5324

傳真號碼 Fax No.: (852) 3104 0254

18 May 2018

Mr Alok JAIN

(Email: [REDACTED])

BY EMAIL

Dear Mr JAIN,

**Invitation for Written Submissions for Consideration by the
Independent Review Committee on Hong Kong's Franchised Bus Service**

On 29 March 2018, the Secretariat of the Independent Review Committee ("the Committee") was provided with a copy of a "report" on KMB sent by Mr Eric LEE to the Secretary of the Transport and Housing Bureau on 12 March 2018, which contained what was described as "testimonials from different insiders". Attached to the report was a document headed "Testimony from Alok JAIN, ex-Deputy Operations Director".

We attach a copy of that one page document and invite you to confirm, if it is the case, that it is your statement and that it is true to the best of your knowledge and belief.

If so, we would invite you to assist the Committee by providing information to the Committee by way of answers, to the best of your knowledge and belief, to the following questions:

Employment by KMB

1. Over what period and in what positions and departments were you employed by KMB? What were your responsibilities for each position you held as set out in the documents of appointment? What were your responsibilities as Deputy Operations Director, in particular in respect of bus safety?

Statement

2. In your statement you assert that:

“Starting 2013, KMB started installing telematics equipment on the bus fleet with a premise to migrate onto a Real-Time Operations Management (ROM) system. If fully functional, this would not only give KMB the capability to monitor vehicle health, location and driver behaviour almost on a real-time basis but would have allowed a two-way communication with driver to alert him/her in case of any wayward execution of services.”

Your statement goes on to assert that:

“Although the installation of telematics was completed (resulting in provision of provision of ETA in KMB app), the ROM project was scrapped in 2015.”

- a. Were you involved in the discussions in which the deployment of the ROM project was considered and the decision taken to implement the project? If so, what reasons, if any, did the management of KMB give for the decision to implement the project? When and by whom was the decision taken to implement the project?
 - b. When the decision was made to implement the ROM project, were there any discussions on the types of vehicle performance that were to be the subject of real-time monitoring of driver behaviour? Are those types of vehicle performance monitored through other means, albeit not in real-time, after the scrapping of the ROM project?
 - c. In broad terms, what were the cost implications to KMB of the implementation of the project, both in terms of capital and maintenance and operation?
3. Do you know of any other bus company, whether in Hong Kong or not, that has installed and used the ROM system (or a system with similar functionalities)? If so, please identify those bus companies, indicating, if known, when the system was deployed.
4. Were you involved in the discussions which led up to the decision to “scrap” the ROM project? If so, did the management of KMB give any reasons for the decision to scrap the ROM project? If so, what were those reasons and when and by whom they given?

We would be grateful if your response could reach the Secretariat of the Committee by **25 May 2018**. Please send the submission by soft copies to peter_chan@irc-bus.gov.hk or yt_to@irc-bus.gov.hk.

In addition to providing answers to the above questions, you may also provide information on other bus-safety related issues. In doing so, we would invite you to focus on matters of which you have personal knowledge but not on matters of which you do not have first hand knowledge.

Furthermore, please be advised that the information provided in your response will be considered by the Committee in reviewing the matters it is directed to consider under the terms of reference of the Committee and in drawing up its recommendations. If necessary, the Committee may invite you to provide supplementary written submissions and/or to give oral evidence. All written submissions (including any annexes, appendices and attachments contained therein) and oral evidence will be treated as public information and, at the discretion of the Committee, may be published on the Committee's website.

Yours sincerely,



(CHAN Ping-fai, Peter)

Secretary, Independent Review Committee on
Hong Kong's Franchised Bus Service

Encl

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Alok Jain

alok@transconsultasia.com

Your Ref: CSO/IRC-BUS/CR/7-45/9 dated 18 May 2018

25 May 2018

Mr. Peter Chan,
Secretary, Independent Review Committee on Hong Kong's Franchised Bus Service
21/F Queensway Government Offices,
66 Queensway, Hong Kong

Dear Mr. Chan,

**Written Submission for Consideration by the
Independent Review Committee on Hong Kong's Franchised Bus Service**

I refer to your letter dated 18 May 2018 by email, requesting for information with respect to the Independent Review of Hong Kong's Franchised Bus Service.

Before I get down to answering specific questions in your letter, I would like you to note that my statement attached to your letter was written for a purpose and context different from the current objective which covers a much wider remit. Having said that, it is indeed true to the best of my knowledge and belief.

My answers to your specific questions are provided below in the same order as in your letter –

1. My employment at KMB commenced on 10 June 2013 as **Head of Planning and Development Department**. The document of appointment was not specific in defining the role and responsibility of this position, but I and my department were responsible for the route planning, business development, financial assessments, marketing research, promotions, ticketing, fare/revenue management, technological applications in relation to our activities and data management. I held this role until 31 December 2015. Starting 1 January 2016, I was promoted to the position of **Deputy Operations Director**. The document of promotion also did not specify exact role and responsibility but I was given to understand that my role in due course would cover in addition to the responsibilities of Planning and Development Department, the responsibilities of Commercial Deployment Department, which included operations planning, scheduling, and rostering. Even though I did not have any direct role in bus safety, as an integral part of safety management system (until the time it was struck off from the Safety Management Manual) of the organisation, I was responsible to ensure that all planning activities under my direct report were conducted to uphold operational safety of buses. As the person responsible for coordinating, preparing and submitting 5-Year Forward Planning Programme including the Route Development Plan (a statutory requirement under PBSO) to Commissioner of Transport, one of my

roles was to vet the coherence of our safety related plans with rest of the operational plans.

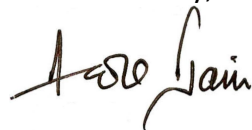
2. Real-time Operational Management (ROM) System was a byproduct of installation of telematics devices on board the buses, which has been ongoing by the time I joined the organisation.
 - a. I was involved in many meetings and discussions about the technical specifications, features, technology selection and so on in relation to ROM right after I joined the company. I was not involved in discussions related to funding, tendering and project management. I also cannot remember when exactly the decision to implement was undertaken but was aware that project implementation was in progress. The primary reasons to implement the project were –
 - i. Improve Safety – through real-time alerts and feedbacks to Bus Captains;
 - ii. Improve fuel efficiency – through enhanced driving behaviour and performance management; and
 - iii. Deliver reliable bus services – through active management of deployment and incident / disruption management.
 - b. There were extensive discussions on type of vehicle and driver performance parameters that will be monitored through this ROM system including their potential benefits. As the telematics data was still available even after the scrapping of the project, there was some level of monitoring but the real value of ROM system was “Real-time” and that capability was sacrificed. This was analogous to a post-mortem after a cardiac arrest instead of positive intervention at a time of heart attack which could potentially save a life.
 - c. I was not much involved in the discussions pertaining to exact cost implications of the project but through meetings and discussions, was under the impression that the project was planned to deliver a positive ROI.
3. Many, if not the most, of the bus companies in the developed world today deploy same or similar functionalities as KMB had envisioned in ROM system. Even at the time when KMB was drawing up the plans, we were drawing heavily on the experiences from Seoul, Singapore, London and Munich. Media reports or company announcements from other cities have shown clear benefits of such systems in terms of safety, fuel efficiency and driver behaviour. In New Zealand (source: greenroad.com), bus companies achieved 4% reduction in fuel consumptions and 81% reduction in speeding infringements. Tower Transit in Singapore achieved more than 7% fuel savings, and halving of “incidents” of poor driving behaviour. Accidents from collisions fell by half, while accidents caused by bus drivers plunged by 70%.
4. I was not involved in the discussions leading up to the decision to “scrap” the project but was indeed informed of the scrapping through various management meetings. One of the fundamental changes in management after 2015 was that instructions and decisions were seldom documented and often reversed arbitrarily without discussion or consultation with other internal stakeholders. It was only after the designated OCC

which was the core of ROM project started getting occupied as an office space, could one surmise with enough justification that the project was really scrapped.

Due to the specific nature of questions above my answers are specific to KMB, but a lot of what is happening in the franchised bus industry in Hong Kong is also a direct result of systematic problems such as outdated regulatory framework, lack of open competition, lack of adoption of technology, lack of transparency and a hand-in-glove relationship between the regulator and the franchisee. It is almost comical how service punctuality and reliability is measured in Hong Kong. Lost trips reporting system has gaping holes which allow a very high degree of manipulation. Some of these violations are so rampant that there is a lexicon among bus-fans to refer to them.

Personally, I consider myself to be a public transport person and post-KMB, I have been very closely associated with International Association of Public Transport (UITP). My involvement with UITP takes me around the world and presents me with the opportunity to interact with authorities, regulators and operators from many cities, countries and geographies. It is no doubt that Hong Kong operated one of the best public transport system until a few years ago but we are now becoming a victim of our own success. While the panel has taken a commendable task of reforming the franchise bus industry, I would presume that this review is not just an inward looking review to find what is wrong but could also cover an outlook of the opportunities presented by reformed institutions that can leverage modern methods of management and innovative technology.

Yours Sincerely,

A handwritten signature in black ink, appearing to read 'Alok Jain', with a stylized flourish at the end.

Alok Jain

香港專營巴士服務
獨立檢討委員會

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Independent Review Committee on
Hong Kong's Franchised Bus Service

21/F, Queensway Government Offices,
66 Queensway, Hong Kong

本函檔號 Our Ref.: CSO/IRC-BUS/CR/7-45/9

來函檔號 Your Ref.:

電話號碼 Tel No.: (852) 2867 5324

傳真號碼 Fax No.: (852) 3104 0254

5 June 2018

Mr Alok JAIN

(Email: [REDACTED])

BY EMAIL

Dear Mr JAIN,

**Invitation for Written Submissions for Consideration by the
Independent Review Committee on Hong Kong's Franchised Bus Service**

The Committee thanks you for your reply, dated 25 May 2018, providing information in response to the specific questions posed in our letter, dated 18 May 2018, and for the more general statements that you made in the final two paragraphs of your letter. It is in respect of those statements that the Committee invites you to provide further information, and to do so by addressing the question set out in the **Annex** attached to this letter by **13 June 2018**. In addition, the Committee invites you to provide whatever other information you consider relevant to the Committee.

As mentioned in our letter of 18 May 2018, please be advised that the information provided in your response will be considered by the Committee in reviewing the matters it is directed to consider under the terms of reference of the Committee and in drawing up its recommendations. If necessary, the Committee may invite you to provide further supplementary written submissions and/or to give oral evidence. All written submissions (including any annexes, appendices and attachments contained therein) and oral evidence will be treated as public information and, at the discretion of the Committee, may be published on the Committee's website.

Yours sincerely,

(CHAN Ping-fai, Peter)

Secretary, Independent Review Committee on
Hong Kong's Franchised Bus Service

Encl

1. In the final paragraph of your letter you state:

“I consider myself to be a public transport person and post-KMB, I have been very closely associated with International Association of Public Transport (UTIP). My involvement with UTIP takes me around the world and presents me with the opportunity to interact with authorities, regulators and operators from many cities, countries and geographies.”

2. Please describe in more detail your curriculum vitae, which has led you to describe yourself as a “public transport person”. Similarly, please describe in more detail the role that you perform in relation to UTIP, providing illustrations of that role by reference to papers of which you are the author, together with conferences and/or meetings that you have attended.
3. Further, in the penultimate paragraph of your letter, you stipulate your opinions as to systemic problems in the franchised bus industry in Hong Kong, namely:
 - outdated regulatory framework;
 - lack of open competition;
 - lack of adoption of technology;
 - lack of transparency; and
 - a hand-in-glove relationship between the regulator and the franchisee.
4. Of that, you conclude:

“It is almost comical how service punctuality and reliability is measured in Hong Kong. Lost trips reporting system has gaping holes which allow a very high degree of manipulation. Some of these violations are so rampant that there is a lexicon among bus-fans to refer to them.”

5. (a) Please describe in detail, by reference to the bullet-point headings set out above what, in your opinion, are the shortfalls of the current regulatory and monitoring regime in respect of franchised buses, particularly those aspects which may impact on bus safety.
- (b) Further, please describe in detail what, in your opinion, are the shortfalls of the measurement of “service punctuality and reliability” and “lost trips reporting” of the franchised buses in Hong Kong, and the extent to which they would affect the evaluation of whether a proper and efficient public bus service is maintained.

- End -

Alok Jain

Your Ref: CSO/IRC-BUS/CR/7-45/9 dated 5 June 2018

18 June 2018

Mr. Peter Chan,
Secretary, Independent Review Committee on Hong Kong's Franchised Bus Service
21/F Queensway Government Offices,
66 Queensway, Hong Kong

Dear Mr. Chan,

**Written Submission for Consideration by the
Independent Review Committee on Hong Kong's Franchised Bus Service**

I refer to your letter dated 5 June 2018 by email, requesting for further information with respect to the Independent Review of Hong Kong's Franchised Bus Service.

As per your request in item 2 of Annex, I am attaching my detailed Curriculum Vitae with this letter for your reference.

Item 5(a) and 5(b) is a wide-ranging subject and a comprehensive answer would require a detailed benchmarking study. Some of the shortcomings I had already mentioned in my previous letter.

- Hong Kong lacks a Central Traffic Command Centre which then can monitor the real-time operations of all public transport operators. There are ample examples of this all around the world. Most of the large Chinese cities (Shenzhen, Beijing, Shanghai) have adopted this already. Singapore, Seoul, London and most other European cities have similar framework in place. This allows regulator to monitor and ensure –
 - Delivery of public transport services is in accordance with the conditions of the franchise
 - The services are operated as per the approved schedules and routes
 - The resources are managed in an optimal manner
 - Road safety, vehicle safety and passenger safety are actively managed
 - In case of an incident or an accident, the emergency response can be timely, comprehensive and well-coordinated.
- Though theoretically franchises in Hong Kong are operated by private entities with prudent commercial principles, in practice, it's a closed market where franchises are renewed with closed door negotiations leaving no scope for new entrants to even express interest. This, on one hand, stifles competition and discourages introduction of innovative practices, while on the other, has created oligopolies in the market. Today, effectively 3 companies control all the 6 franchises. Even the new route packages are awarded to incumbent operators without any open bidding or disclosure


of bids by incumbents. Entire process lacks transparency and hence susceptible to regulatory biases. As mentioned in my previous letter, opening up of operating markets in Singapore effectively incentivised the operators to innovate and bring in best practices which has led to significant enhancement on safety performance.

- Current regulatory model in Hong Kong where there is a cap on profit without a cap on losses is designed to suit continuity of incumbent operators. The profit cap model which is linked to Average Net Fixed Assets, which worked quite well as a part of earlier profit guarantee scheme, is now incongruent with the current model. Any new investment which could enhance safety needs to pass through regulatory approval which is lengthy and subject to political dynamics (whether higher investments are a excuse to increase fares?). From an operator perspective, there is no incentive at all to make such safety related investments either which without a guarantee of corresponding commercial return becomes commercially risky. Today, with the pervasive power of sensors and assistive driving, the operators and regulators can have “eyes” in and around the vehicle at all given times boosting safety features manifold. However, these are practically non-existent. One of such companies providing proximity sensing on buses is Mobileye.
- Every operator makes their own service schedules which though approved by Transport Department are not made available in public domain. The scheduling softwares used by individual franchises are different from each other and Transport Department lacks any means to check how vehicles are actually being scheduled. One can imagine amount of discretion that can be applied to the detriment of passengers. Transport Department still relies on manual surveys which are subject to high degree of manual errors and where discrepancies are noted, there is no effective mechanism to enforce the adherence.
- Current reporting and monitoring system is archaic and was designed in an era when technology to monitor buses and drivers did not exist. A small part of trip (short-working) can be counted exactly the same as a full trip. There is no reporting of missing miles. So, even when the operators report 100% delivery of services, the customer at some of the bus stop may not even get 80% of services. Similarly, lost trips during peaks are aggregated over a 3 hour period which means an operator can cancel trips during peakest time period and run extra trips on the shoulders of the peak and still comply to standards. Obviously, the customer gets short-charged in the process. Most countries are now imposing EWT (excess waiting time) at stop by stop level and monitor punctuality of each trip end-to-end (telematics and real-time operations management systems makes this possible)

I hope the foregoing is helpful in setting a background to the recommendations the panel might be looking at. If Hong Kong wishes to maintain its glorious position of highly efficient public transport system, the Government has to also look beyond the bus operators and address traffic issues, illegal encroachment into bus stops, bus priority measures and so on. Bringing the technological aspects in the bus industry closer to good urban and transport planning is a must.

I shall be happy to provide any further information or clarification.

Yours Sincerely,

A handwritten signature in black ink, appearing to read 'Alok Jain'. The signature is fluid and cursive, with the first name 'Alok' and the last name 'Jain' clearly distinguishable.

Alok Jain

ALOK JAIN

Phone: [REDACTED]

Email: [REDACTED]

Alok is Managing Director of Trans-consult Asia, a management consulting firm, specializing in Traffic and Transport advisory, new technology, data analytics and clean fuel technologies. He is a regular international trainer for [International Association of Public Transport](#) (UITP) and a Fellow of [Civic Exchange](#), a Hong Kong based non-profit independent think tank.

During 2013 to 2016, Alok worked as Deputy Operations Director in [The Kowloon Motor Bus Co. \(1933\) Ltd., \(KMB\)](#), and led the strategy and planning for improving efficiency, instilling process management, and restructuring the network. His portfolio also included all the ticketing and fare related aspects. He spearheaded the R&D work on the implementation of new technology, data analytics and SMART mobility.

Prior to joining KMB in 2013, he was Director of Trans-consult Asia Ltd., Hong Kong, and [MVA Asia Ltd.](#), Hong Kong, and led the design and planning of many large-scale transport infrastructure projects in South-Asian region.

Alok earlier worked for [MTR Corporation](#) / KCR Corporation, Hong Kong for 12 years. In his last position as General Manager-Marketing, he was heading the Marketing Department, accountable for meeting revenue targets and developing business strategies for pricing, ticketing, railway service planning, advertising, promotion and passenger communications. He has also worked in the areas of railway/metro project planning and management, operations planning, testing and commissioning of new lines, revenue management, financial appraisals, and strategic planning, and been part of many metro benchmarking studies as a part of his involvement with UITP and COMET/NOVA.

Alok played an active role in a number of other business organizations and worked in many countries in a career spanning over 25 years. With several publications to his credit, he is a regular speaker on multi-modal integration, public transport operations & management, SMART mobility, and clean vehicle technologies. He is an Assistant Professor (part-time) at University of Hong Kong, serves as a Member in Transport Policy Committee of the Chartered Institute of Logistics and Transport in Hong Kong and a Fellow of Civic Exchange.

RECENT PROFESSIONAL POSITIONS SERVED:

2017-Present: Managing Director, Trans-consult Asia Ltd., Hong Kong

2018-present: International expert trainer for [UITP](#)

2017-Present: Fellow, Civic Exchange, Hong Kong

2008-Present: Member; Transport Policy Committee; Chartered Institute of Logistics & Transport in Hong Kong

2015-2016: Deputy Operations Director, The Kowloon Motor Bus Co., Hong Kong

2013-2015: Head of Planning & Development, The Kowloon Motor Bus Co., Hong Kong

2010-2013: Director, MVA Asia Ltd., Hong Kong

2006-2008: General Manager – Marketing, Kowloon Canton Railway Corp., Hong Kong

2005-2008: Director, Octopus Rewards Ltd., Hong Kong

2006-2008: Alternate Director, [Octopus Holdings Ltd.](#), Hong Kong

2006-2008: Alternate Director, Octopus Cards Ltd., Hong Kong

2004-2008: Member, Finance and Commerce Sub-Committee, Metro Division of International Association of Public Transport (UITP) (www.uitp.com)

EMPLOYMENT HISTORY:**Trans-consult Asia Ltd., Hong Kong**

January 2017 onwards: Managing Director

Tasked with the development of overall business of this management consulting firm with a core specialization in Traffic and Transport Advisory, new technology and environmental issues. Alok is the founding director of the company, which was established in 2008 and served on its board until taking up this position.

Consulting Projects

Artificial Intelligence in Public Transport – In partnership with Centre of Transport Excellence, UITP Asia Pacific, leading the captioned study.

Future Ready Public Transport Authority – Engaged by BCG, Singapore to provide expert advice on benchmarking and organizational development.

Big Data Analytics Development - Engaged by [Fuzzy Logix, USA](#), a market leader in embedded analytics to develop domain expertise in transport and Greater China market.

Clean Transport Policy Study – Engaged by Civic Exchange to develop a Clean Transport policy framework for Hong Kong.

Use of LNG as Marine Fuel – Engaged by Civic Exchange to lead the technical and policy framework in Hong Kong to study the feasibility of using Liquefied Natural Gas as a possible fuel for Marine Transport.

Yangon Urban Transport Project, Pyay Road Bus Priority Feasibility Study – Consulting work on this study funded by Cities Development Initiative for Asia (CDIA).

(2017) Smart City Framework Development – Engaged by Civic Exchange to make a submission to Hong Kong Government on the Smart City development framework.

Training and speaking engagements

Sustainable Transport Forum; Hong Kong – Keynote speaker. (May '18)

Increasing ridership and revenue for Public Transport; Kuala Lumpur, Malaysia – UITP training for Prasarana, operator for RapidKL and RapidBus. (May '18)

UITP-MENA Transport Congress; Dubai, UAE – Speaker: *Using data and Technology to provide exemplary services with less resources.* (Apr '18)

Planning and Scheduling of Bus Operations; Hamburg, Germany – Lead trainer for an international training for UITP hosted by Hamburg Hochbahn. (Apr '18)

IT-TRANS International Conference and Exhibition on Intelligent Urban Transport Systems; Karlsruhe, Germany – Speaker and roundtable lead in sessions on digitalization of transport system and use of Artificial Intelligence. (Mar '18)

Rail Engineering Enhancement Program; Kuala Lumpur, Malaysia – UITP training for SPAD (Land Public Transport Commission) officials. (Feb '18)

Volvo Public Transport Forum; Hong Kong – Panelist. *The role of technology for smart and sustainable public transport in Hong Kong.* (Jan '18)

Data and Business Intelligence; Kuala Lumpur, Malaysia – International training for UITP hosted by Prasarana. (Dec '17)

Bus Transport Planning and Operations; Singapore – International training hosted by Land Transport Authority (LTA) and UITP Centre for Transport Excellence. (Dec '17)

GMS Rail Expansion Summit; Hanoi – Conference chair and presenter. *Critical Operations Planning Parameters in Commissioning of New Railway Lines.* (Dec '17)

Asian Logistics and Maritime Conference; Hong Kong – Moderator and panelist in the conference organized by HK Trade Development Council. (Nov '17)

Public Transport Development and Capacity Building Programme; Addis Ababa, Ethiopia – UITP training hosted by World Bank. (Oct '17)

Bus Planning and Operations; Cape Town, South Africa – UITP Training for Transport and Development Authority (TDA). (Oct '17)

Data and Business Intelligence; Istanbul, Turkey – UITP training for IETT officials. (Oct '17)

UITP-Busworld International Bus Conference; Kortrijk, Belgium – Keynote speaker and session chair (Electric Buses in China). (Oct '17)

Data and Business Intelligence; Stockholm, Sweden – International training for UITP at Stockholm Transport Authority. (Oct '17)

Shared Value Summit; Hong Kong – Panelist in the summit organized by The Social Innovation and Entrepreneurship Development Fund of Hong Kong Government. (Sep '17)

Bus Safety and Accident Prevention; Dubai UAE – Conducted a 2-day International training under the aegis of UITP-MENA and RTA Dubai in Dubai, UAE. (Sep '17)

Bus Operations Planning; Istanbul, Turkey – Bus operations and management training for senior executives of IETT, Istanbul for UITP. (Aug '17)

Training Program on Electric Buses; Pune, India – UITP training for Indian bus operators, bus manufacturers, Government policy makers and funding agencies on key mechanism of introducing Electric Bus operation in India. (Jul '17)

Service Quality Management and Excellence; Tokyo, Japan – International training on behalf of UITP for public transport operators hosted by Tokyo Metro. (Jul '17)

Tendering and Contracting of Bus Services; Johannesburg, South Africa – UITP training workshop for Transport and Municipal officials from Gauteng Region. (Jul '17)

Funding, Financing and PPPs in Public Transport; Cape Town, South Africa – Training workshop for senior executives of Transport and Development Authority. (Jul '17)

Marketing & Communication in Public Transport; Rome, Italy – Training workshop by UITP-ASSTRA for representatives of public transport operators/authorities. (Jun '17)

Electric Bus Operations in China; Shenzhen, China - International training in Shenzhen and study tour in Zhengzhou for UITP (Feb '17)

Fare and Ticketing; Hong Kong - Conducted an international training module for Fare and Ticketing masterclass at MTR Academy. (Mar '17)

NetApp Executive Dialogue; Hong Kong – Keynote speaker. *Disruptive Innovations in Public Transport: Devil is in the Data*. (Mar '17)

Asia-Pacific Rail 2017; Hong Kong - Speaker and Chair for sessions on payment collection technologies. (Mar '17)

The Kowloon Motor Bus Co. (1933) Ltd., Hong Kong (www.kmb.hk)

January 2016-December 2016: Deputy Operations Director

June 2013-December 2015: Head of Planning & Development

Led the strategy and planning aspects of over HK\$6 billion/annum bus operation of close to 4,000 buses. Alok was responsible for network planning, marketing, revenue management, fleet modernization and, performance and efficiency management. A once profitable bus operation had become a loss-making business by 2012 recording almost HK\$120 million loss. There was a continuous ridership decline of 18% over a period between 2002 and 2012.

Hired to lead the rapid turnaround of the company in 2013, Alok started a major network reorganisation effort, combined with operational efficiency improvements and application of new technologies. Over 10-million kilometers of operating mileage was reduced while gaining passenger market share. Within one year of his joining, KMB reported a profit in 2014. Between 2013 and 2016, KMB recorded a 5% increase in ridership and only public transport company in Hong Kong to increase the market share. In 2016, KMB reported a profit of over HK\$750 million.

Alok was a nominated Council Member of the Business Environment Council and member of The Education University of Hong Kong (EdUHK) Foundation.

MVA Asia Ltd., Hong Kong (www.mvaasia.com)

Jan 2010-May 2013:

Director

(2013) Technical Due Diligence of Hyderabad Metro Rail Project: Team Leader for carrying out a detailed technical and financial evaluation study for international investors.

(2013) Preparation of Access Plan for BRT System by Pedestrian & Non-Motorised Modes: Team Leader cum NMT specialist for a study conducted by Pimpri - Chinchwad Municipal Corporation (PCMC) funded by Ministry of Urban Development under a grant from the Global Environment Fund (GEF).

(2012) Ho Chi Minh Metro Line 1 Station Study: Expert advisor on carrying out stations layout design, development of operational scenarios, and handling of contingencies and emergencies.

(2012) Pre-feasibility Study of Airport Express Railway between Bandarnayake Airport and Fort Station in Colombo, Sri Lanka: Project Director and Technical Lead for the project formulation, system selection, preliminary engineering assessment, developing preliminary operations and maintenance framework, and costing models.

(2011) Mumbai Metro Line 3: Advisor to the Project Team on train operation and planning aspects for a forecasting study for Mumbai Metropolitan Regional Development Authority (MMRDA).

(2011) Feasibility study for extension of Delhi Metro Airport Express to Gurgaon: Project Director for carrying out feasibility study for Delhi Airport Metro Express Pvt. Ltd.

(2011) Mumbai Metro Line 1 Update: Carried out a review of past forecasts, operating assets deployments and pre-operating readiness.

(2011) Feasibility of BRTs in Indian Cities: Study conducted on behalf of Daimler-Benz to look at potential for BRT operation in Pune, Mysore, Bangalore and Rajkot.

(2011) Feasibility Study of Monorail in Goa: *Project Director* of the study to propose a monorail alignment and conduct its feasibility study in Goa.

(2010-2011) Traffic and Transport Master plan of Chattrapati Shivaji International Airport, Mumbai: *Expert Advisor* to the study on multi-modal integration, public transport planning and general circulation arrangements.

(2010) Transport Demand Forecast Study and Development of an Integrated Multi-modal Public Transport Network-cum-Road Network for NCT of Delhi: Technical direction on evaluation of alternatives, and formulation of transport strategy for preparing a masterplan for development of Metro, Light Rail and BRT in Delhi.

Trans-Consult Asia Pvt. Ltd., Hong Kong

2008 – 2013:

Director

Revenue maximizing study in particular for non-fare box revenues with affordability study (Feb 2013-Dec 2013): In partnership with PwC India, formulated strategy for maximisation of non-fare revenue for Mumbai Urban Transport Project-2A (MUTP 2A) led by Mumbai Rail Vikas Corporation (MRVC).

Strategic Public Transport Model Study (Aug 2012-May 2013): Engaged by BCG, Singapore to provide expert advice on transport policy, metro operation and management, benchmarking, and international best practices for a strategic study for Temasek Holdings.

Delhi Airport Metro Express (Jun 2008–May 2013): Engaged by MTRC, Hong Kong, appointed EPC Consultants and Operation & Management Consultant for the project, for resource management and organisational support.

Automatic Fare Collection Projects (Smartcard Based Ticketing) (Mar 2012-Mar 2013): Retained consultant by ICICI bank for advising on bidding and deployment strategies, technical deployment and development of business plan.

Organisation Structure Design and HR Setup for Hyderabad Metro (Sep 2011-Jul 2012): Engaged by Aon Hewitt India as a Subject Matter Expert for developing an optimal organization for L&T Metro Rail (Hyderabad) for the execution, operation and maintenance of 73-km Hyderabad Metro Rail project.

Independent Assessment of Bangkok Mass Transit System (Aug-Sep 2009): Expert consulting for Cartesian Capital Group, LLC

Roads & Transport Authority (RTA) Dubai (April 2009-July 2009): Engaged by Hewitt Associates as a Subject Matter Expert for an organizational study for Dubai Metro.

MTR Corporation / Kowloon Canton Railway Corporation, Hong Kong

2006 – 2008: General Manager – Marketing, Transport Division

Led the marketing team for one of the very few profitable public transport operators in the world - operating Metro services, Light Rail Transit system, Feeder Buses and Intercity/Freight train services between Mainland China and Hong Kong.

Responsible for achieving revenue targets of HK\$5.5 billion (2008) with functional responsibility for revenue generation, transport planning, branding, advertising, market research, pricing, ticketing, customer satisfaction management and promotions.

Merger of the Railway Systems: Successfully led the passenger/customer oriented aspects for the biggest successful public transport mergers of Hong Kong creating an entity with Fixed Assets of over HK\$300 billion under its control. Scope included customer service, passenger information, fare integration, service rationalisation / integration, interchange planning and implementation phasing.

Revenue operation of Lok Ma Chau Spur Line: Operation and management planning for opening of HK\$10 billion railway providing the second boundary crossing point with Mainland China.

Fare Adjustment Mechanism: *Project Director* for a study to develop a fair and transparent mechanism for the adjustment of public transport fares. Scope included an international benchmarking of public transport industry, lessons from other non-transport utility companies and preparing recommendations for Government.

Octopus Holdings Ltd. / Octopus Cards Ltd.: Nominated to the board of directors to provide the strategic direction to the world most successful city-wide transport-based smartcard payment system. Chalked out a strategic plan to double the company turnover in 5 years time by exploring new revenue streams leveraging on core business expansion.

Finance and Commerce Sub-committee, Metro Division, International Association of Public Transport (UITP): *Member* representing Hong Kong for various public transport benchmarking studies and financial implications of various ticketing technologies.

COMET/NOVA Topical Studies and Benchmarking Studies: Key resource for benchmarking studies and topical studies conducted by RTSC at Imperial College, London on behalf of COMET/NOVA group of metro companies around the world.

Public Display and Information Dissemination Working Group: *Chairman* of the WG, directing all audio/visual communication and display in the public domain.

Revenue Tender Board: *Member* involved in negotiation and selection of all revenue generating concessions and contracts.

Automatic Revenue Collection system: *Project Leader* for development of the business rules for a primarily smartcard based payment system.

Multi-modal partnerships with franchised buses, mini-buses and taxi operators: Developed more than 40 partnerships involving operational and ticketing coordination.

Rationalisation of Light Rail and Feeder Bus routes: *Project Leader* for extensive rationalisation of the LR and bus system against a strong political opposition resulting in a patronage and revenue increase of over 25% while cutting the operating costs by about 10%, bringing an unprofitable operation to a revenue positive position.

Procurement of 53 double-decker buses: *Team Leader* for the negotiation team for procuring 53 double-decker high capacity buses through an international tender.

Development of a real-time Passenger information Display System: Led the conceptualisation to the implementation of a real-time broadcasting system creating a new revenue source of over HK\$50 million/annum (Winner in Best Ubiquitous Networking Category and in Best Lifestyle Category, and recognised as Outstanding WiFi Solution in Hong Kong ICT Awards 2007).

2004 – 2006: Marketing Manager – Research & Analysis, Transport Division

Development of Simulation and Forecasting Model: *Project Lead* for the establishment of a data-mining system used for simulation and development of tactical insights into passenger travelling behaviour and forecasting of public transport usage.

Development of West Rail marketing plan: *Project Lead* for the development of a marketing plan for a newly opened 30-km new railway line including a 68-km LR feeder system and 10 bus routes. This plan was identified as “best case” by NOVA, a benchmarking agency in the study of “Initiatives for Increasing Primary Revenue”.

Octopus Rewards: *Founding Director* of a customer loyalty program leveraging on Octopus smartcards. Within 1 year the program had more than 1 million enrollees.

Market Share Monitoring: Project Manager for conducting quarterly market monitoring surveys to gauge travel behaviour, origin-destination, trip-chaining and general attitude towards public transport services.

2001 to 2004: Senior Revenue Manager-Transport, Finance Division

Responsible for devising pricing strategies, monitor revenue growth, lead revenue enhancement initiatives, develop strategies to minimise fare evasion and devise revenue allocation methods for measuring segmental performance. Also responsible for evaluating new investment initiatives and assisting in making financing decisions.

Study on Coordination of Other Public Transport Services with New Railways (SCOPTS): Member of the steering group for a study to reduce wasteful duplication of services while maintaining choices for the travelling public.

Contract DB-1650 for Design, Supply, Installation, Testing and Commissioning of the Automatic Revenue Collection System: Steering group member of HK\$329 million contract for ARC system for all new railway lines. Responsible for developing business rules and carrying out UAT.

Fare Setting of West Rail: Developed a new methodology for pricing public transport services using econometric modelling tools.

West Rail Operational Readiness (2003): Steering group member of the WROR Working group covering all aspects of revenue operation.

Freight Strategy Study (2001): Project Manager for strategic freight business study which included investment in the Pinghu Freight Distribution Centre adjacent to the largest marshalling hub in South-China and a dedicated railway line to Hong Kong container port.

1999 to 2001: Senior Transport Planner, Capital Projects Division

1997 to 1999: Transport Planner

Bid for Shatin to Central Link (2000-2001): Led the transport planning discipline in the winning bidding for one of the most prestigious and large-scale project around that period.

Planning & Development Study for Northwest New Territories (PDSNWNT) and Northeast New Territories (PDSNENT): Steering group member for identifying and planning railway-centric new towns for future population growth.

Development of a Patronage Forecasting Model (2000): Project manager for development of a Hong Kong wide patronage forecasting model. Later, also responsible for undertaking forecasts for engineering design and financial assessments.

Railway Development Study (1999-2000): Represented KCRC in Government led strategy study of railway development in next 10 years in Hong Kong.

Preliminary Project Feasibility Study for Lok Ma Chau Spur Line (1999-2001): An 8-km branch line (Cost: HK\$9 bn) to a new boundary crossing with Mainland China through an environmentally sensitive area. Also appeared as expert witness in court proceedings.

East Tsim Sha Tsui Extension (1998-2001): A 4-km underground extension of East Rail line (Project cost: HK\$4 billion) to one of the most dense areas of Hong Kong.

Technical Proposal for Ma On Shan Rail (1998-1999): Planning and design of 11 km elevated branch line with 9 stations (Project Cost: HK\$10 billion).

LRT Development Study (1997-1998): Expansion of Light Rail network and route rationalization to develop it as a feeder to West Rail.

Operations & Maintenance Manual: Part of the team developing O&M Plan for West Rail. Primary roles in evacuation planning, contingency operations & degraded operations.

Technical Study TS-1150 (1997): Involved in planning of 1.1 million TEU capacity container freight yard and a port rail terminal (PRT) serving container terminals 1 to 9.

Technical Studies TS-100, TS-200 and TS-600 for West Rail (1997-1998): Part of station and facility design team in three contracts for Northern half of West Rail alignment with 5 stations and 1 depot. Member of Station Transportation Integration Committee and Station Safety Coordination Committee.

Technical Proposal for Phase I of West Rail (1997): Strategy reports on travel trends, study of alternatives for railway alignments and station locations; design of station facilities and station sizing; transport planning and traffic impact assessments.

Pacific Bechtel Corporation, Hong Kong1996 to 1997: Senior Engineer

West Rail Project - As part of the design team, provided inputs in the areas of operations planning, accessibility design and station design to ensure a safe and sound railway system for West Rail, a HK\$60 billion, 38-km urban metro system with 11 stations.

SPB Hong Kong Limited1995 to 1996: Transportation Engineer**Span Company Limited, Bangkok**1994 to 1995: Technical Advisor**Asian Institute Of Technology, Bangkok**1994: Research Associate**Irrigation Department under UN Development Programme / Nepal**1991 to 1992: Apprentice Engineer**ACADEMIC QUALIFICATIONS AND PROFESSIONAL TRAINING:**

2005 - Integrated Management Course for Senior Executives, Richard Ivey School of Business

1994 - M.Eng. (Transportation Engg.) from Asian Institute of Technology, Thailand

1990 - B.E. (Civil) from Indian Institute of Technology - Roorkee, India

AFFILIATIONS:

1996 to present: Chartered Member, Chartered Institute of Logistics & Transport (CMILT)

1995-1997: Member, Institute of Highways and Transportation

SELECTED PAPERS, PUBLICATIONS AND PRESENTATIONS:

Contributed four chapters - *"Marketing – KCRC's Approach to its Customers"*, *"Octopus – the first City-wide Smartcard"*, *"Commercial Pricing"* and *"A Profitable Railway"* in a book titled *"Managing Railway Operations & Maintenance"* published jointly by University of Birmingham Press and A&N Harris and edited by R. Hirsch (2007)

"Railways - A Catalyst for Urban Development in Hong Kong"; Public Transport International (September 2007 issue).

"A fair rail transit fare policy for the quasi-regulated transport market of Hong Kong"; 8th Hong Kong Society of Transport Studies Conference (2003), Hong Kong.

"Multi-modal Transport Integration on West Rail – A win-win situation for all"; Asian Urban Rail Summit (2002), Bangkok.

"Financing Urban Transport Infrastructure"; presented at a training course organized by Canadian Universities Consortium in Bangkok, Thailand (2001).

ACADEMIC ENGAGEMENTS

Jan. '07 to Present: *Part-time Assistant Professor*, Department of Urban Planning, Hong Kong University

Jan. '04 - Jan '06: *Part-time Lecturer*, Centre of Urban Planning and Environmental Management, Hong Kong University

Sep. '05 – Nov. '05: *Guest Lecturer*, Transport Marketing, Department of Social and Public Administration, City University of Hong Kong

香港專營巴士服務
獨立檢討委員會

香港金鐘道66號
金鐘道政府合署21樓



Independent Review Committee on
Hong Kong's Franchised Bus Service

21/F, Queensway Government Offices,
66 Queensway, Hong Kong

本函檔號 Our Ref.: CSO/IRC-BUS/CR/7-45/9

來函檔號 Your Ref.:

電話號碼 Tel No.: (852) 2867 5324

傳真號碼 Fax No.: (852) 3104 0254

30 August 2018

Mr Alok JAIN

(Email: [REDACTED])

BY EMAIL

Dear Mr JAIN,

**Invitation for Further Written Submissions for Consideration by the
Independent Review Committee on Hong Kong's Franchised Bus Service**

The Committee thanks you for your written submissions dated 25 May and 18 June 2018 and for the oral evidence provided at the hearing on 17 July 2018. The Committee wishes to seek further information from you on the project of the Kowloon Motor Bus Co. (1933) Ltd ("KMB") for developing a Real-Time Operations Management System ("ROM").

2. In your submission dated 25 May 2018, the response provided in paragraph 2 states that "Real-time Operational Management (ROM) System was a by-product of installation of telematics devices on board the buses, which has been on-going by the time I joined the organization". Paragraph 2(a) of the response further states that "I was involved in many meetings and discussions about the technical specifications, features, technology selection and so on in relation to ROM right after I joined the company" and that "the primary reasons to implement" the ROM project were to "improve safety – through real-time alerts and feedbacks to Bus Captains", "improve fuel efficiency – through enhanced driving behaviour and performance management", and "deliver reliable bus services – through active management of deployment and incident / disruption management" (*FE-1 bundle¹, page 40*) (**Annex 1**).

3. You may also recall that at the hearing on 17 July 2018, the Committee learnt from your oral evidence that the original plan in the development of ROM involved three stages, where the first stage "was to establish the static, what is real, what is happening on ground" for "management information purposes, as well as for

¹ This refers to the bundle entitled "Former and Serving Employees (Submissions and Annexes)", which is available at: www.irc-bus.gov.hk/bundles/Bundle%20FE%2020180806.pdf. A copy of the relevant page is provided at **Annex 1**. For the other document bundles compiled by the Committee, they are available at: www.irc-bus.gov.hk/eng/bundles.html.

any investigations, reporting, so on and so forth” (*Transcript bundle for Day 08²; page 85 line 10 to page 86 line 8*). The second stage was described as where KMB would go into a “real-time operations management system...to monitor the whole operation on a real-time basis using...an exception management, where anything that goes beyond the threshold of normal operation you start to actively manage it” with the intent that the “alert raised by a parameter being breached would occur real-time” (*Transcript bundle for Day 08; page 86 line 9 to page 87 line 10*). The third stage was described as where KMB would “take it into a predictive level, where we could apply statistical tools and do some forward projections” (*Transcript bundle for Day 08; page 85 lines 17 to 19*) (**Annex 2**).

4. At the hearing of the Committee with KMB on 10 August 2018, representatives of KMB were invited to provide oral evidence on the development of the ROM project, in which Mr LEUNG Kin-wang, the current Operations Director of KMB, stated that the ROM system was “about bus operations management” and had “nothing to do with driving safety” (*Transcript bundle for Day 13³; page 41 lines 15 to 16*). Mr LEUNG was then invited to consider some of the evidence detailed in paragraphs 2 and 3 above, and he responded that according to his understanding, ROM was about a “real-time operation management system” where “by using the black box and the availability of real-time location information”, KMB could be “more efficient in bus deployment” (*Transcript bundle for Day 13; page 47 lines 7 to 11*). Furthermore, he confirmed that his understanding of the ROM project was “totally at odds” with the evidence you provided (*Transcript bundle for Day 13; page 59 lines 17 to page 60 line 8*) (**Annex 3**).

5. Since the representatives of KMB agreed at the hearing on 10 August 2018 to provide records of presentations, emails, and so on, regarding the ROM project, the Committee issued a letter to KMB to request for, amongst other things, further information regarding the ROM project after the hearing. In response, KMB provided a further submission on 23 August 2018 (“KMB’s latest submission”) containing the documents attached as **Annex 4** to this letter.

6. In the light of the above, the Committee would like to invite you to provide a further written submission, **by 6 September 2018**, on the ROM project having regard to KMB’s latest submission and the differences in understanding of the purpose of the ROM project between you and the current KMB management. The very short time in which your response is requested is made necessary by the fact that the information that the Committee is seeking from you is highly relevant to the evidence that the Committee will receive from representatives of KMB at its next hearing schedule to be held before mid-September 2018. In preparing your submission, your attention is also drawn to the following statements in KMB’s latest submission:

² This refers to the transcript prepared for the hearing on 17 July 2018, which is available at: www.irc-bus.gov.hk/eng/pdf/transcript20180717.pdf. A copy of the pages containing the discussion on the ROM project from pages 82 (line 10) to 113 (line 11) is provided at **Annex 2**. For the transcripts for the other hearings conducted by the Committee, they are available at www.irc-bus.gov.hk/eng/transcripts.html.

³ This refers to the transcript prepared for the hearing on 10 August 2018, which is available at: www.irc-bus.gov.hk/eng/pdf/transcript20180810.pdf. A copy of the pages containing the discussion on the ROM project from pages 37 (line 24) to 67 (line 11) is provided at **Annex 3**.

- (a) in paragraph 2 on page 1 of the covering submission of Annex 3 to KMB's latest submission, it is stated that "Andrew Kwan (ST) and Terry Lo (TR), who served the taskforce, confirmed that, to the best of their knowledge, the emails and documents are substantially all the relevant records relating to the ROM project and that Mr Alok Jain was not involved in the project. His name is not mentioned in the records of the ROM project";
- (b) on page 5 of the document described as "Memo of Chung Lim Chan (IT) with System Requirements Specification" and denoted as Annex 3.11, paragraph 2.1.5.1 sets out the following:
- "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:
- ...
- 2.1.5.1.2 Mapping system of Planning & Development Department (MAP)";
- (c) on pages 17 and 18 of the document described as "Memo of Chung Lim Chan (IT) with System Proposal" and denoted as Annex 3.12, paragraph 1.4.5 sets out the following:
- "1.4.5 Reporting
- ...
- 1.4.5.1.3 Prompt list of BCs with abnormal driving behaviour
- 1.4.5.1.3.1 Selection Criteria
- ...
- 1.4.5.1.3.1.2 Limit exceed
- ...
- 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)
- ...
- 1.4.5.1.3.3 Remarks
- 1.4.5.1.3.3.1 System will report various abnormality according to use 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 routing, etc.
- ..."

However, there is no indication as to whether the reports will be generated real time, and the only description provided is on page 10 of the same document, where it is stated under the heading "Reporting" that "System provides many reports for monitoring, audit trail, analyses and management purposes". The list of abnormalities listed above also does not include

various parameters on driving behaviour captured by black boxes on KMB's buses, such as acceleration and deceleration;

- (d) on pages 8 and 12 of the document described as "Memo of Chung Lim Chan (IT) with System Proposal" and denoted as Annex 3.12, reference is made to the fact that the ROM was supposed to "generate incidents onto the Incident Board which require dispatcher's attention" (paragraph b.1.1 on page 8) and a section on "Real-time Bus Monitoring" (paragraph 1.4.2 on page 12). However, there appears to be no references to parameters on driving behaviour captured by black boxes on KMB's buses, such as speeding, acceleration and deceleration in these parts of KMB's latest submission. It is noted that page 8 of the document described as "ROM System Specifications" and denoted as Annex 3.2 also contained a similar list of "rules that needs dispatcher's attention" in paragraph 1.2.2(c); and
- (e) in the document described as "Email correspondence between Chung Lim Chan (IT) and Louisa Lam (ODD)" dated 3 and 25 February 2016 and denoted as Annex 3.16, it was stated that "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". The Committee is not aware of any details provided in KMB's latest submission on the details of this change of scope and what main functions of ROM as originally conceived and set out in paragraph 1.4 of Part II of Annex 3.2 have been retained.

7. Please be advised that the information provided in your response will be considered by the Committee in reviewing the matters it is directed to consider under the terms of reference of the Committee and in drawing up its recommendations. If necessary, the Committee may invite you to provide further supplementary written submissions and/or to give oral evidence. All written submissions (including any annexes, appendices and attachments contained therein) and oral evidence will be treated as public information and, at the discretion of the Committee, may be published on the Committee's website.

Yours sincerely,



(CHAN Ping-fai, Peter)
Secretary, Independent Review Committee on
Hong Kong's Franchised Bus Service

Encl

roles was to vet the coherence of our safety related plans with rest of the operational plans.

2. Real-time Operational Management (ROM) System was a byproduct of installation of telematics devices on board the buses, which has been ongoing by the time I joined the organisation.
 - a. I was involved in many meetings and discussions about the technical specifications, features, technology selection and so on in relation to ROM right after I joined the company. I was not involved in discussions related to funding, tendering and project management. I also cannot remember when exactly the decision to implement was undertaken but was aware that project implementation was in progress. The primary reasons to implement the project were –
 - i. Improve Safety – through real-time alerts and feedbacks to Bus Captains;
 - ii. Improve fuel efficiency – through enhanced driving behaviour and performance management; and
 - iii. Deliver reliable bus services – through active management of deployment and incident / disruption management.
 - b. There were extensive discussions on type of vehicle and driver performance parameters that will be monitored through this ROM system including their potential benefits. As the telematics data was still available even after the scrapping of the project, there was some level of monitoring but the real value of ROM system was “Real-time” and that capability was sacrificed. This was analogous to a post-mortem after a cardiac arrest instead of positive intervention at a time of heart attack which could potentially save a life.
 - c. I was not much involved in the discussions pertaining to exact cost implications of the project but through meetings and discussions, was under the impression that the project was planned to deliver a positive ROI.
3. Many, if not the most, of the bus companies in the developed world today deploy same or similar functionalities as KMB had envisioned in ROM system. Even at the time when KMB was drawing up the plans, we were drawing heavily on the experiences from Seoul, Singapore, London and Munich. Media reports or company announcements from other cities have shown clear benefits of such systems in terms of safety, fuel efficiency and driver behaviour. In New Zealand (source: greenroad.com), bus companies achieved 4% reduction in fuel consumptions and 81% reduction in speeding infringements. Tower Transit in Singapore achieved more than 7% fuel savings, and halving of “incidents” of poor driving behaviour. Accidents from collisions fell by half, while accidents caused by bus drivers plunged by 70%.
4. I was not involved in the discussions leading up to the decision to “scrap” the project but was indeed informed of the scrapping through various management meetings. One of the fundamental changes in management after 2015 was that instructions and decisions were seldom documented and often reversed arbitrarily without discussion or consultation with other internal stakeholders. It was only after the designated OCC

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<p>1 Kong University, from January 2007, to present.</p> <p>2 MR JAIN: That's what I just mentioned.</p> <p>3 MS MAGGIE WONG: The earlier reference, Mr Chairman, is at</p> <p>4 page 46-1. At paragraph 2. The last line:</p> <p>5 "He spearheaded the R&D work on the implementation</p> <p>6 of new technology, data analytics and SMART mobility."</p> <p>7 CHAIRMAN: Before you move on, what is "SMART mobility"?</p> <p>8 MR JAIN: Primarily use of technology in transport</p> <p>9 operations.</p> <p>10 CHAIRMAN: Is this in the period 2013 to 2016?</p> <p>11 MR JAIN: That's correct. Primarily up to 2015. Yes.</p> <p>12 MS MAGGIE WONG: Can you explain a little bit more on the</p> <p>13 use of technology in transport operations? What does it</p> <p>14 cover?</p> <p>15 MR JAIN: So I was involved in the early discussions for</p> <p>16 real-time operation management system, the telematics,</p> <p>17 I also led a contract, which never completed, which was</p> <p>18 about putting this data analytics platform within KMB.</p> <p>19 SAP was our consultant at that time, and we were putting</p> <p>20 the whole data into one platform, creating a data</p> <p>21 warehouse and data extraction system.</p> <p>22 MS MAGGIE WONG: Yes. I believe you are currently</p> <p>23 a consultant for the Land Transport Authority or</p> <p>24 undertaking consultancy studies for the Singapore Land</p> <p>25 Transport Authority; is that correct?</p>	<p>1 perspective.</p> <p>2 CHAIRMAN: What was the hardware? What was that?</p> <p>3 MR JAIN: The hardware was supplied by Openmatics. This was</p> <p>4 a telematics device which was being installed on the</p> <p>5 buses. And then at the back end, the ROM system, which</p> <p>6 was the software aspects of data extraction from this</p> <p>7 telematics device, and putting that into a real-time</p> <p>8 operations management system, and the third part was how</p> <p>9 to analyse this data and then extract intelligence and</p> <p>10 knowledge out of it.</p> <p>11 CHAIRMAN: Let's deal with them one at a time.</p> <p>12 Hardware, Openmatics, what was the equipment? Take</p> <p>13 it slowly.</p> <p>14 MR JAIN: Well, it is commonly referred to as a black box in</p> <p>15 common parlance. This is --</p> <p>16 CHAIRMAN: What was its technical name?</p> <p>17 MR JAIN: It is a CAN bus system which is something, as far</p> <p>18 as I understand, which sits on the engine, connects to</p> <p>19 the engine, collects all the operational information</p> <p>20 about the bus, vehicle performance.</p> <p>21 CHAIRMAN: What kind of data?</p> <p>22 MR JAIN: It has speed-related information, acceleration,</p> <p>23 deceleration, braking, tilting, fuel consumption,</p> <p>24 location.</p> <p>25 CHAIRMAN: What was the name of the model?</p>
Page 82	Page 84
<p>1 MR JAIN: I have not been directly engaged by Land Transport</p> <p>2 Authority but I'm working with a consulting firm</p> <p>3 advising LTA.</p> <p>4 MS MAGGIE WONG: Yes, and what is the scope of the advice?</p> <p>5 MR JAIN: I'm bound by confidentiality rules there,</p> <p>6 unfortunately. But it relates to public transport</p> <p>7 operation and management.</p> <p>8 MS MAGGIE WONG: It relates to public transport operation?</p> <p>9 MR JAIN: Yes.</p> <p>10 MS MAGGIE WONG: And Mr Jain, may I now go to your</p> <p>11 submissions. Your first submission dated in May 2018,</p> <p>12 dated 25 May 2018, in FE-1, page 39.</p> <p>13 Mr Jain, in your first submission at paragraph 2 --</p> <p>14 you started at page 39 explaining your involvement in</p> <p>15 KMB as head of planning and development department, and</p> <p>16 the scope of your work. I can see that it includes</p> <p>17 "technological applications in relation to our</p> <p>18 activities and data management".</p> <p>19 That would include the telematics and real-time</p> <p>20 monitoring system you referred to.</p> <p>21 MR JAIN: Not precisely. Telematics and real-time</p> <p>22 operations management system had two aspects, one was</p> <p>23 the hardware part of the services -- three aspects,</p> <p>24 hardware part, software part and the data handling part.</p> <p>25 And I was primarily involved from the data handling</p>	<p>1 MR JAIN: I can't recall the name of the model.</p> <p>2 CHAIRMAN: Software. What was the software?</p> <p>3 MR JAIN: The software at that time, the intent was to</p> <p>4 develop it in house and it was termed as real-time</p> <p>5 operations management system. ROM for short.</p> <p>6 CHAIRMAN: How was it to work?</p> <p>7 MR JAIN: So telematics device was supposed to transmit data</p> <p>8 on a near real-time basis to back end OCC, operation</p> <p>9 control centre, and this ROM system was supposed to</p> <p>10 translate this data into understandable or</p> <p>11 comprehensible format, and then there was a platform for</p> <p>12 data analytics which will then allow us to analyse all</p> <p>13 this data and create, put it into our planning</p> <p>14 parameters when we were doing the bus route planning,</p> <p>15 scheduling, rostering, and all those things.</p> <p>16 CHAIRMAN: Where was the operation control centre?</p> <p>17 MR JAIN: The intent was to incorporate it into Lai Chi Kok</p> <p>18 Centre.</p> <p>19 CHAIRMAN: How was the data to be transferred from the</p> <p>20 telematics to the operation control centre?</p> <p>21 MR JAIN: It was over a GSM network using the mobile</p> <p>22 technology basically, 3G technology.</p> <p>23 CHAIRMAN: That's the system that mobile telephones used?</p> <p>24 MR JAIN: That's correct, yes.</p> <p>25 CHAIRMAN: So that is the software side of things. And then</p>

<p style="text-align: right;">Page 85</p> <p>1 finally, what was to be the data analysis?</p> <p>2 MR JAIN: So until then, a lot of data in KMB was residing</p> <p>3 in silos in individual departments. They were</p> <p>4 collecting -- for example, engineering information was</p> <p>5 available in engineering, operational information was</p> <p>6 available in the operations department, and they were</p> <p>7 all in different systems. The plan was to put this all</p> <p>8 into a single data warehouse and create a single version</p> <p>9 of truth.</p> <p>10 CHAIRMAN: What use was to be made of the data contained in</p> <p>11 this single data warehouse?</p> <p>12 MR JAIN: So there were three stages. The first stage was</p> <p>13 to establish the static, what is real, what is happening</p> <p>14 on ground. The second stage was to put into some level</p> <p>15 of modeling, where we could use it for planning</p> <p>16 purposes, in short term. And the third objective,</p> <p>17 eventually, was to take it into a predictive level,</p> <p>18 where we could apply statistical tools and do some</p> <p>19 forward projections.</p> <p>20 CHAIRMAN: What use was to be made of the first step, the</p> <p>21 real time?</p> <p>22 MR JAIN: That was primarily for management information</p> <p>23 purposes, as well as for any investigations, reporting,</p> <p>24 so on and so forth.</p> <p>25 CHAIRMAN: Investigations into what?</p>	<p style="text-align: right;">Page 87</p> <p>1 companies, or examples that I have seen around the</p> <p>2 world, they use this green, amber, red approach. So</p> <p>3 green is normal operation, anything that goes on the</p> <p>4 outlines of threshold boundaries it starts to raise the</p> <p>5 alert as an amber, and then of course once it crosses,</p> <p>6 it is a red alert. So at that time some intervention is</p> <p>7 necessary.</p> <p>8 CHAIRMAN: Was it envisaged that this alert raised by</p> <p>9 a parameter being breached would occur real-time?</p> <p>10 MR JAIN: The intent certainly at that time was that.</p> <p>11 CHAIRMAN: When did discussions about the use of telematics</p> <p>12 in this way first begin in which you were involved?</p> <p>13 MR JAIN: The discussion regarding this started most likely</p> <p>14 before I joined. But when I joined the company in 2013</p> <p>15 in my early part of the involvement we were already</p> <p>16 discussing this. So I can't remember the exact date</p> <p>17 when it started.</p> <p>18 CHAIRMAN: Who was involved in such discussions?</p> <p>19 MR JAIN: At that time -- the senior management was</p> <p>20 involved, my immediate superior was the transport</p> <p>21 development director, he was involved. IT department</p> <p>22 was involved, operation department was involved.</p> <p>23 It was done across the company, multiple departments</p> <p>24 were involved into that discussion.</p> <p>25 CHAIRMAN: Thank you, Ms Wong.</p>
<p style="text-align: right;">Page 86</p> <p>1 MR JAIN: For example we used to receive a lot of passenger</p> <p>2 complaints about services, we could go back and look</p> <p>3 into the data and verify that information.</p> <p>4 CHAIRMAN: So if the complaint had been made that the bus</p> <p>5 had been driven at an excessive speed and braked</p> <p>6 harshly, could that be investigated by analysing the</p> <p>7 data that had been put into this single data warehouse?</p> <p>8 MR JAIN: Potentially, yes.</p> <p>9 CHAIRMAN: That's a response to a complaint. Was there any</p> <p>10 plan to use the data proactively?</p> <p>11 MR JAIN: So the second stage was where we went into</p> <p>12 real-time operations management system, because once we</p> <p>13 built the data models on the historic data we could</p> <p>14 translate the similar level of information and analyse</p> <p>15 on a real-time basis, and the idea was of course to</p> <p>16 monitor the whole operation on a real-time basis using</p> <p>17 what we normally call an exception management, where</p> <p>18 anything that goes beyond the threshold of normal</p> <p>19 operation you start to actively manage it.</p> <p>20 CHAIRMAN: How was it envisaged, if it was, that this</p> <p>21 approach could address the manner in which a bus was</p> <p>22 doing driven?</p> <p>23 MR JAIN: For example, if any bus that was being driven</p> <p>24 beyond the parameters that were set as normal operation,</p> <p>25 then it would raise an alert, and normally the</p>	<p style="text-align: right;">Page 88</p> <p>1 MS MAGGIE WONG: You said a lot of people were involved.</p> <p>2 Can you give us an estimate of how many people?</p> <p>3 MR JAIN: I think every different meeting had different</p> <p>4 number of people. It is not like a constant, but as</p> <p>5 I said, the departmental representations were -- these</p> <p>6 were the key departments who were involved in these</p> <p>7 discussions. There were quite a few, sizeable amount.</p> <p>8 Sometimes it used to be, depending on the issue, it</p> <p>9 could have been three or four people, or it could have</p> <p>10 been 20 people.</p> <p>11 MS MAGGIE WONG: In any event, as you said in evidence, it</p> <p>12 was intended that the Lai Chi Kok Centre to put in all</p> <p>13 this data to be analysed by different departments'</p> <p>14 personnel; is that the idea?</p> <p>15 MR JAIN: The idea was Lai Chi Kok would be the real-time</p> <p>16 operation management centre, the operation control</p> <p>17 centre, the data analysis was not necessarily at Lai Chi</p> <p>18 Kok Centre, it would be company wide.</p> <p>19 MS MAGGIE WONG: So it is simply a centre to keep the</p> <p>20 information, or do you mean the real-time monitoring</p> <p>21 would be carried out in the Lai Chi Kok Centre?</p> <p>22 MR JAIN: Yes, real-time to be carried out at Lai Chi Kok --</p> <p>23 so this was more of screens and visualisations of where</p> <p>24 the buses are on a real-time basis, and of course data</p> <p>25 is processed through different servers and different</p>

<p style="text-align: right;">Page 89</p> <p>1 processes within the organisations so data was meant to 2 be available to a lot more people within the company. 3 MS MAGGIE WONG: If I can go to page 40, FE-1 bundle, 4 paragraph 2. You mentioned in paragraph 2(a) about this 5 real-time operational management system. And in (a) you 6 mentioned you were: 7 "... involved in many meetings and discussions about 8 the technical specifications, features, technology 9 selection and so on in relation to ROM right after I 10 joined the company." 11 But you were not involved in discussions related to 12 funding, tendering and project management. 13 MR JAIN: Correct. 14 MS MAGGIE WONG: Is it the case that throughout the time you 15 joined the company until the time you left, you were 16 involved in this ROM project? 17 MR JAIN: I wouldn't say until the time I left, but during 18 that period when it was being discussed as a part of 19 implementation process, yes, I was involved in the 20 project very actively. 21 MS MAGGIE WONG: And I notice in (i) of that paragraph (a) 22 you stated that the primary reasons to implement the 23 project were to improve safety through real-time alerts 24 and feedbacks to bus captains. 25 The feedbacks to bus captains, can you tell us</p>	<p style="text-align: right;">Page 91</p> <p>1 CHAIRMAN: On the second intervention, that is the 2 supervisor in the OCC, how would he communicate his 3 intervention to the driver? 4 MR JAIN: So we had many options being discussed at the 5 time. We were talking about just a display system. The 6 second was we were also talking about an audio system. 7 CHAIRMAN: So there were two possibilities. One was through 8 the display system or otherwise by audio? 9 MR JAIN: Well, display was almost there, and audio was 10 considered as an additional possibility. 11 CHAIRMAN: Was audio going to be by radio or by some other 12 means? 13 MR JAIN: Primarily by radio, or even 3G communication. We 14 had not gone that far, I think, at that time. 15 MS MAGGIE WONG: You mentioned there were many meetings or 16 discussions about this ROM features. Can you recall if 17 there are minutes or documents recording what was 18 discussed? 19 MR JAIN: There were a lot of presentations, if I recall, 20 and there were e-mails post meeting summarising what was 21 discussed, the key agenda, or key tasks to be done by 22 respective people. But as formal minutes, as we know 23 them, I cannot recall if they were prepared. 24 MS MAGGIE WONG: Yes. 25 CHAIRMAN: These presentations of which you say there were</p>
<p style="text-align: right;">Page 90</p> <p>1 whether it is intended to be real-time feedback or a 2 reactive feedback to bus captains after the complaint 3 has been received. 4 MR JAIN: There were two things that happened. The idea was 5 to develop a two-way communication system between the 6 bus itself and the operation control centre, and the bus 7 drivers were supposed to have what we call a DDU, driver 8 display unit, and through this DDU there are two ways to 9 intervene with a driver. One is done at the bus level 10 where the bus, you can pre-programme the parameters that 11 bus -- any time transcends, it creates an alert for the 12 driver. 13 The second level of alert could be triggered by 14 somebody sitting in the operation control centre. Let's 15 say, for example, if a bus is running too fast, but 16 still within the speed limit, and the on-board device 17 does not detect any anomaly. However, at the OCC, 18 a supervisor detects that on a particular section the 19 bus driver, probably because of weather conditions or 20 because of any accident or road conditions, they should 21 be driving slower, then a supervisor can technically 22 intervene and alert the driver or remind the driver to 23 go slow in that section. 24 So there are two levels of interventions that can be 25 done.</p>	<p style="text-align: right;">Page 92</p> <p>1 lots, were they in writing? 2 MR JAIN: These were PowerPoint presentations. 3 CHAIRMAN: On computers? 4 MR JAIN: Yes. 5 CHAIRMAN: Not on paper. 6 MR JAIN: Primarily on computer, PowerPoint presentations. 7 CHAIRMAN: Who made the presentations? 8 MR JAIN: Sometimes IT department, sometimes operations 9 department. 10 MS MAGGIE WONG: Can you tell us who in the operations 11 department would be responsible for compiling these 12 presentations or materials? 13 MR JAIN: Who in the operations? 14 MS MAGGIE WONG: Or -- 15 CHAIRMAN: If you can't remember say so, but if you do, tell 16 us. 17 MR JAIN: There was a dedicated team of people in operations 18 who were working on this. They left the company. 19 I can't recall the name immediately. But there was 20 a central team in the operations department, traffic 21 department, which was looking at it. 22 MS MAGGIE WONG: It is called the traffic department? 23 MR JAIN: It was called the traffic section. 24 MS MAGGIE WONG: Traffic section in the operations 25 department?</p>

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<p>1 MR JAIN: Yes.</p> <p>2 MS MAGGIE WONG: You mentioned in paragraph (b) in line 3</p> <p>3 " ... the telematics data was still available even</p> <p>4 after the scrapping of the project, there was some level</p> <p>5 of monitoring but the real value of ROM system was</p> <p>6 'real-time' and that capability was sacrificed."</p> <p>7 Now I would like to ask you this. What do you mean</p> <p>8 by "some level of monitoring" here?</p> <p>9 CHAIRMAN: Before we get to it not being implemented, can</p> <p>10 you tell us how it came about that all this planning</p> <p>11 stopped? What happened?</p> <p>12 MR JAIN: I was not involved in those discussions about</p> <p>13 scrapping this. But I do understand that ROM, because</p> <p>14 it was being developed in-house, it was running behind</p> <p>15 schedule.</p> <p>16 CHAIRMAN: Yes.</p> <p>17 MR JAIN: And that had caused some level of -- I'm looking</p> <p>18 for the right word -- some level of frustration within</p> <p>19 the company why we are not keeping up to the schedule,</p> <p>20 and then it was later announced that we are not going</p> <p>21 ahead with it anymore.</p> <p>22 CHAIRMAN: Was this technology in any way linked to anything</p> <p>23 else that was being developed or used on the buses at</p> <p>24 that time?</p> <p>25 MR JAIN: We were talking about a number of things that</p>	<p>1 conveyed the decision that the project would be</p> <p>2 scrapped?</p> <p>3 MR JAIN: Nobody announced, as such. But when we knew, as</p> <p>4 I said in my letter, when Lai Chi Kok, the OCC, the</p> <p>5 facility was converted into office space, then it was</p> <p>6 kind of -- the message was clear. There was no formal</p> <p>7 announcement as such.</p> <p>8 MS MAGGIE WONG: Okay.</p> <p>9 MR JAIN: I cannot recall any formal announcement.</p> <p>10 MS MAGGIE WONG: Thank you. About this real-time system,</p> <p>11 was it part of the function to monitor the driver's</p> <p>12 behaviour in their performance?</p> <p>13 MR JAIN: Among other things, yes.</p> <p>14 MS MAGGIE WONG: The reason I mentioned this is you</p> <p>15 mentioned GreenRoad, about different scorecard system.</p> <p>16 When you were thinking about this ROM system, or in your</p> <p>17 discussions, was this one of the ideas that your company</p> <p>18 at that time initially wanted to implement?</p> <p>19 MR JAIN: That was certainly one of the intents.</p> <p>20 Sir, in fact, when I mentioned improved fuel</p> <p>21 efficiency, this was directly linked to what we call</p> <p>22 eco-driving, green driving. There were a number of</p> <p>23 names you could call it, it is the same thing.</p> <p>24 The idea was you could somehow nudge the drivers to</p> <p>25 drive in a better way on the road by creating some kind</p>
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<p>1 could happen on the buses. We were talking about having</p> <p>2 real-time transmission of fare collection information.</p> <p>3 We were talking about automatic people counters on board</p> <p>4 the buses, we ran some trials with some university</p> <p>5 professors on WiFi detection. Ultimately the idea was</p> <p>6 we could detect how many people were on board the bus,</p> <p>7 where they were on the bus, and then we could provide</p> <p>8 this information in advance to the passengers, so they</p> <p>9 knew whether they could get on the bus, or whether they</p> <p>10 can get a seat on the bus or not.</p> <p>11 CHAIRMAN: Was there a system developed perhaps prior to</p> <p>12 when you arrived, of giving estimated time of arrival of</p> <p>13 buses?</p> <p>14 MR JAIN: That capability was developed during my time.</p> <p>15 Actually the trial was launched in, if I recall</p> <p>16 correctly, 2014, last quarter, and then eventually it</p> <p>17 was rolled out in early 2015.</p> <p>18 CHAIRMAN: And the equipment that was necessary to develop</p> <p>19 that system, was it in any way relevant to the ROM</p> <p>20 system?</p> <p>21 MR JAIN: It is actually the same equipment.</p> <p>22 CHAIRMAN: Yes. So it was another use of the data that was</p> <p>23 obtained?</p> <p>24 MR JAIN: Correct.</p> <p>25 MS MAGGIE WONG: Can you recall who announced or who</p>	<p>1 of a system where we could give them the feedback about</p> <p>2 how they are driving and whether they are outliers or</p> <p>3 whether they are falling within the normal pattern, or</p> <p>4 whether it's good behaviour or bad behaviour, and you</p> <p>5 could nudge their behaviour in a specific way without</p> <p>6 penalising them, and that would eventually yield some</p> <p>7 kind of fuel efficiency, because fuel efficiency is</p> <p>8 directly linked to acceleration and deceleration.</p> <p>9 MS MAGGIE WONG: Yes. You mentioned about penalising them.</p> <p>10 What about rewarding them?</p> <p>11 MR JAIN: At that time we didn't really go into details of</p> <p>12 this. The idea was not to penalise, that was certainly</p> <p>13 clear. And that was the kind of conversations we were</p> <p>14 having, but we were trying to generate the data how we</p> <p>15 were going to reward or whether we want to monitor.</p> <p>16 Those mechanisms we had not gotten around to.</p> <p>17 MS MAGGIE WONG: Yes, but that idea was certainly conveyed</p> <p>18 during one of the meetings?</p> <p>19 MR JAIN: Yes, we discussed those ideas, we discussed</p> <p>20 actually many possibilities at that time.</p> <p>21 MS MAGGIE WONG: Yes --</p> <p>22 CHAIRMAN: Did you discuss what parameters to stipulate?</p> <p>23 MR JAIN: Basically we were looking at London as one of the</p> <p>24 examples at that time, and the way London does it is</p> <p>25 they basically look at all the -- they call it</p>

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<p>1 incidents, and anything that goes into the outliers of</p> <p>2 those thresholds, which is behavioural response such as</p> <p>3 acceleration, deceleration, braking, tilting, then the</p> <p>4 driver would get an incident on their record. And the</p> <p>5 less incidents they had, the better performance it would</p> <p>6 be considered for the driver.</p> <p>7 CHAIRMAN: But did you consider stipulating excessive speeds</p> <p>8 at a certain level, or excessive braking or acceleration</p> <p>9 at certain levels? Did you condescend to that detail?</p> <p>10 MR JAIN: We didn't put in the numbers, but we were trying</p> <p>11 to do a bit of statistical analysis, and at that time it</p> <p>12 was still being debated what kind of threshold or</p> <p>13 parameters or standard deviations we needed to look at.</p> <p>14 Some discussions that did happen was about whether</p> <p>15 we should have a general blanket rule around the whole</p> <p>16 network, or whether we should define them on</p> <p>17 a route-specific, road-specific manner. Again, we were</p> <p>18 having those kinds of discussions.</p> <p>19 MS MAGGIE WONG: You mentioned about route-specific manner</p> <p>20 How do you pick the routes?</p> <p>21 MR JAIN: Every route has different characteristics, whether</p> <p>22 they pass through traffic junctions, whether they pass</p> <p>23 through TST urban area, whether they are on highways, so</p> <p>24 the behavioural responses are different on different</p> <p>25 type of routes. So there are more chances for a driver</p>	<p>1 MR JAIN: So data is available real time, but nobody is</p> <p>2 analysing this data in real time or reacting to this</p> <p>3 data in real time or quasi real time.</p> <p>4 MS MAGGIE WONG: Yes.</p> <p>5 MR JAIN: It is the kind of -- whether you can have</p> <p>6 a 20-second response or a 24-hour response.</p> <p>7 MS MAGGIE WONG: In paragraph 3, starting from line 2, you</p> <p>8 refer to:</p> <p>9 "Even at the time when KMB was drawing up the plans,</p> <p>10 we were drawing heavily on the experiences from Seoul,</p> <p>11 Singapore, London ..."</p> <p>12 And just on this, what experiences are you drawing</p> <p>13 from these countries?</p> <p>14 MR JAIN: So just before I joined, I understand that KMB</p> <p>15 senior management went on a study tour and they visited</p> <p>16 all these cities, they looked at the systems, and when</p> <p>17 we were designing -- we were having these meetings, we</p> <p>18 were extensively talking about what Seoul is doing, what</p> <p>19 London is doing, the best practices, and how we can</p> <p>20 adopt this best practices to bring to Hong Kong.</p> <p>21 MS MAGGIE WONG: Can you quote an example? Like what</p> <p>22 experience are you deriving from Seoul or Singapore?</p> <p>23 MR JAIN: For example, Seoul had done this central traffic</p> <p>24 management centre, TMC, and that was something that</p> <p>25 was -- our idea of doing at the OCC level, operation</p>
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<p>1 to brake hard on a stop-and-go kind of environment where</p> <p>2 they are pulling in and out of lay-bys quite often and</p> <p>3 they have to watch out for other traffic, whereas on</p> <p>4 a highway those incidents are much less.</p> <p>5 We were discussing at that time what is the best</p> <p>6 equitable way to define these parameters which could</p> <p>7 meet the expectations of the management as well as</p> <p>8 deliver real value in the end without upsetting the</p> <p>9 drivers.</p> <p>10 MS MAGGIE WONG: May I go back to your paragraph (b) about</p> <p>11 there being some level of monitoring even after</p> <p>12 scrapping the project. What level of monitoring are we</p> <p>13 referring to?</p> <p>14 MR JAIN: As I understand, telematics data are still being</p> <p>15 used but they are being used most as a post-event, or T</p> <p>16 plus 1, on the next day, or after the event has</p> <p>17 occurred.</p> <p>18 MS MAGGIE WONG: So reactive rather than proactive?</p> <p>19 MR JAIN: You can say that.</p> <p>20 MS MAGGIE WONG: It also mentioned that the real value of</p> <p>21 the system is real time but that capability was</p> <p>22 sacrificed. So is what you are talking about reactive</p> <p>23 to the complaint rather than proactive --</p> <p>24 MR JAIN: Yes.</p> <p>25 MS MAGGIE WONG: -- in that sense?</p>	<p>1 control centre level. Transport for London were</p> <p>2 actively managing their drivers' behaviour using</p> <p>3 telematics advice. That was something we wanted to</p> <p>4 bring over. So we were looking at different examples</p> <p>5 and how they could translate for our environment.</p> <p>6 MS MAGGIE WONG: Yes. And when you discussed or when you</p> <p>7 had all these meetings, can you recall if it involved</p> <p>8 any participation of the Transport Department? Or did</p> <p>9 you relay the message that you are planning to do this</p> <p>10 with the Transport Department?</p> <p>11 MR JAIN: I cannot recall exactly whether Transport</p> <p>12 Department was involved in any of this discussions, but</p> <p>13 I do feel that they were aware of what we were planning</p> <p>14 to do, because we made in those days a lot of public</p> <p>15 presentations to various chambers of commerces and all</p> <p>16 that, and we were talking about the future direction of</p> <p>17 KMB on how technology is going to transform the company.</p> <p>18 MS MAGGIE WONG: You made a lot of public presentations?</p> <p>19 MR JAIN: Me as well as other senior management of the</p> <p>20 company made on lot of presentations and we talked about</p> <p>21 these things.</p> <p>22 MS MAGGIE WONG: "These things" is the ROM system?</p> <p>23 MR JAIN: ROM was one of them. Estimated time of arrival,</p> <p>24 we were talking about, which was all centred around</p> <p>25 telematics device.</p>

<p style="text-align: right;">Page 101</p> <p>1 MS MAGGIE WONG: So in all these public presentations, you 2 are saying some Transport Department people were 3 present? 4 MR JAIN: I can't answer that authoritatively, but I would 5 say this was public knowledge in a way, because we were 6 not really trying to keep it under closed doors, so we 7 were making public presentations. 8 CHAIRMAN: What you are saying was this was being 9 disseminated widely and you would expect Transport 10 Department might have heard about it? 11 MR JAIN: Correct. 12 MS MAGGIE WONG: Before I move on, because you made some 13 references to this centralised management system, can 14 I take to you a document. It is SEC-2 bundle. It is 15 page 822. 16 CHAIRMAN: Ms Wong, I'm going to ask that we take a short 17 adjournment, I would like to see if we can address the 18 sound system, because we are getting a very muffled 19 sound from Ms Wong, I see Mr Jain has the same 20 difficulty. It may be the location of the speaker or we 21 may need to swap the microphone. 22 May I ask that we address it and take five minutes. 23 Feel free to leave the room if you want to, Mr Jain, but 24 we will take five minutes. Thank you. 25 (3.15 pm)</p>	<p style="text-align: right;">Page 103</p> <p>1 adjust the number of buses travelling on any given 2 route, communicate with bus drivers, and provide 3 real-time information to passengers waiting at bus stops 4 or checking bus schedules on the Internet." 5 Mr Jain, is this the system that you were referring 6 to earlier on? 7 MR JAIN: It was a similar system, but if I may correct some 8 of the things here. GPS terminals can't on their own 9 allow all those things that are mentioned here. 10 GPS is just a location-based system. 11 MS MAGGIE WONG: Yes. 12 MR JAIN: So it has to be more than GPS, which usually is 13 telematics. So I'm not sure whether they are referring 14 to telematics there, but ... 15 CHAIRMAN: So GPS tells you where you are? 16 MR JAIN: Just the location. 17 CHAIRMAN: Then you need telematics to tell you speed or 18 deceleration, acceleration? 19 MR JAIN: That's correct. The actual vehicle-related 20 performance comes from an on-board device which is 21 usually a telematics system. And telematics systems 22 range from very simple type of devices to complex 23 devices. Openmatics, the one that we are referring to 24 here is quite a sophisticated one. But you can get 25 a much simpler cheaper version of that device which can</p>
<p style="text-align: right;">Page 102</p> <p>1 (A short break) 2 (3.22 pm) 3 MS MAGGIE WONG: Mr Jain, I'm going to refer you to the 4 Information Note by the LegCo. It is "Franchised Bus 5 Services in Seoul and Singapore", and it is in the SEC-2 6 bundle at page 822. It starts at page 822. 7 If we go to page 823, that's the start of the Seoul 8 system. And over the page at page 825, paragraph 2.8 -- 9 CHAIRMAN: Before we get there, what is the date of this 10 document? 11 MS MAGGIE WONG: This document was made between 2014 and 12 2015, although it does not actually bear a date. It is 13 a research paper done by the LegCo Secretariat. But you 14 can see the IN05/14-15. 15 MR JAIN: At the back it is dated 3 February 2015. 16 CHAIRMAN: Thank you very much. 17 Yes. 18 MS MAGGIE WONG: If we look at page 825 it talks about the 19 establishment of the bus management system at 2.8: 20 "To coordinate bus services on a comprehensive and 21 system-wide basis, the Seoul Metropolitan Government has 22 established a new bus management system ... using 23 advanced intelligent transport system technology ... GPS 24 terminals installed in every bus allow a central bus 25 control centre to monitor all bus locations and speeds,</p>	<p style="text-align: right;">Page 104</p> <p>1 just give you basic information about the vehicles. 2 There are a lot of those available in the market too. 3 CHAIRMAN: Does the Openmatics model Mozart mean anything to 4 you? Openmatics model, telematics, called Mozart? 5 MR JAIN: The only Mozart I know relates to music. I have 6 not heard of that, Chairman. 7 CHAIRMAN: What about Bach? He is also a musician. Does 8 that mean anything to you in terms of Openmatics? 9 MR JAIN: No. At that time we only referred to as 10 Openmatics or telematics. 11 CHAIRMAN: Have you been invited to read the evidence that 12 we received from the ZF engineer? 13 MR JAIN: I received it, Chairman, but that was late at 14 night yesterday, and I didn't get much time to go 15 through that. 16 CHAIRMAN: We have been told about two models that they 17 produce, in the wrong chronological order. The first 18 one was called Mozart, and then the second one was 19 called Bach. In musical terms that is the wrong way 20 around, isn't it? 21 MR JAIN: I can think of quite analogy to those things. The 22 data they produced looked a lot like musical notes! 23 CHAIRMAN: Yes, Ms Wong. 24 MS MAGGIE WONG: Mr Jain, since we are on this Mozart and 25 Bach business, can we go to BM-1, page 64.</p>

<p style="text-align: right;">Page 105</p> <p>1 This is a letter by a law firm acting for ZF, and</p> <p>2 Openmatics, to this Committee. It is a submission. The</p> <p>3 submission starts --</p> <p>4 CHAIRMAN: Just give Mr Jain a moment so that the document</p> <p>5 can be put before him in paper form.</p> <p>6 MS MAGGIE WONG: Mr Jain, if you would turn to page 65.</p> <p>7 This is a reply by Openmatics to the questions raised by</p> <p>8 this Committee, and black is the question, the answers</p> <p>9 in blue are the answers provided by ZF and Openmatics.</p> <p>10 If you look at the second paragraph it made</p> <p>11 reference to the fact that:</p> <p>12 "Openmatics entered into a supply contract to</p> <p>13 deliver telematics systems, dated 16th of April 2013</p> <p>14 with Kowloon Bus Company ... and Long Win Bus ..."</p> <p>15 So we can see the date there is April 2013.</p> <p>16 I believe that's prior to the time you arrived.</p> <p>17 MR JAIN: That's right. I joined in June 2013.</p> <p>18 MS MAGGIE WONG: Yes, and they continue by stating that:</p> <p>19 "Openmatics starting offering telematics services by</p> <p>20 using the first black box system called the 'Mozart</p> <p>21 Box'. Later on ... replaced ... by a successor platform</p> <p>22 black box called the 'Bach Box'. However, clients can</p> <p>23 use both systems in parallel as KMB does."</p> <p>24 Mr Jain, I know you don't know much about the name</p> <p>25 of the black box system, but have you seen, during the</p>	<p style="text-align: right;">Page 107</p> <p>1 CHAIRMAN: So it is intended not to give any alarm?</p> <p>2 MR JAIN: Possibly.</p> <p>3 CHAIRMAN: You set a position that is beyond purpose.</p> <p>4 MR JAIN: That's correct, yes.</p> <p>5 MS MAGGIE WONG: What about the deceleration rates?</p> <p>6 MR JAIN: Is this a global parameter or is this route</p> <p>7 specific?</p> <p>8 CHAIRMAN: I think we are to assume it is global.</p> <p>9 MR JAIN: I would assume that 2.3 in a sloping situation</p> <p>10 would be considered acceptable because that is sometimes</p> <p>11 needed in Hong Kong. On a flat road possibly this would</p> <p>12 be too much.</p> <p>13 MS MAGGIE WONG: Thank you. And if we go to page 68, right</p> <p>14 above paragraph 4, there is a reference to the</p> <p>15 Openmatics -- what the Openmatics system installed at</p> <p>16 KMB can identify. It states that it can identify</p> <p>17 records of speeding recorded every second and stored</p> <p>18 together with the related GPS data. Malpractice of</p> <p>19 harsh braking --</p> <p>20 MR JAIN: I'm sorry, I cannot locate where you are reading.</p> <p>21 MS MAGGIE WONG: Page 68 -- I'm sorry about that, Mr Jain,</p> <p>22 the blue section, if you see the third paragraph:</p> <p>23 "The Openmatics telematics system installed at</p> <p>24 KMB ..."</p> <p>25 Do you see that?</p>
<p style="text-align: right;">Page 106</p> <p>1 time in one of your discussions, one of the black boxes?</p> <p>2 Was that shown to you? The actual physical black box?</p> <p>3 Was that shown to you?</p> <p>4 MR JAIN: I can't recall, no.</p> <p>5 MS MAGGIE WONG: Yes. So would it help if I showed you the</p> <p>6 photo? Would it remind you --</p> <p>7 MR JAIN: But having said, I have seen black boxes. I have</p> <p>8 seen the device.</p> <p>9 MS MAGGIE WONG: Yes.</p> <p>10 MR JAIN: Not exactly by Openmatics in KMB context, but I've</p> <p>11 seen the device.</p> <p>12 MS MAGGIE WONG: You have seen one, yes. And if we go to</p> <p>13 the next page at 66, it made reference to a driver</p> <p>14 feedback system, and the thresholds set by KMB for that</p> <p>15 vehicle, and it set out certain acceleration rates,</p> <p>16 deceleration rates and tilting angle and certain</p> <p>17 configuration of speed and speeding areas.</p> <p>18 Do you know much about thresholds in this telematics</p> <p>19 system, Mr Jain, or setting up of thresholds?</p> <p>20 MR JAIN: Well, one thing that stands out to me is tilting</p> <p>21 angle here.</p> <p>22 MS MAGGIE WONG: Yes, why?</p> <p>23 MR JAIN: That it is an outlier.</p> <p>24 CHAIRMAN: The bus is already falling down, isn't it?</p> <p>25 MR JAIN: That's right. 44 degrees is beyond control.</p>	<p style="text-align: right;">Page 108</p> <p>1 MR JAIN: Yes, I have read it.</p> <p>2 MS MAGGIE WONG: Thank you. It says:</p> <p>3 " ... can identify:</p> <p>4 Records of speeding; recorded every second and</p> <p>5 stored together with the related GPS data;</p> <p>6 'malpractice' of harsh braking;</p> <p>7 Abrupt acceleration;</p> <p>8 The corresponding bus registration numbers with the</p> <p>9 assistance of other systems</p> <p>10 The Openmatics telematics system installed at KMB</p> <p>11 cannot identify:</p> <p>12 Route numbers of certain buses.</p> <p>13 The data are collected as defined by the system.</p> <p>14 Every second, the system collects the defined data and</p> <p>15 sends that data every 30 seconds -- if connected to</p> <p>16 Wi-Fi or to ... the defined FDP server. The information</p> <p>17 is also stored locally on the telemetry unit (black box)</p> <p>18 for 30 days."</p> <p>19 I would like to ask a few questions about this</p> <p>20 system installed at KMB being able to identify the four</p> <p>21 matters.</p> <p>22 Are these the four matters that in one of your</p> <p>23 discussions that you have explored as part of your</p> <p>24 real-time monitoring of the drivers' behaviour?</p> <p>25 MR JAIN: As far as I understand, the telematics device</p>

<p style="text-align: right;">Page 109</p> <p>1 gives you the speeding -- not speeding data, but the 2 speed data.</p> <p>3 Also it gives you the braking performance, which you 4 can define as harsh or non-harsh. But what you define 5 them as are configurable parameters, whereas the data 6 generated are the exact data from the device that are 7 performance-related data.</p> <p>8 Similarly, acceleration is given by them, but what 9 is abrupt or what is non-abrupt are configurable 10 parameters.</p> <p>11 This is my understanding of their device.</p> <p>12 CHAIRMAN: Yes, and we have seen that illustrated on 13 a previous page where we see the data parameters that 14 have been put into the machine, including that 15 non-performing tilt angle.</p> <p>16 MS MAGGIE WONG: So the clients can choose the parameters?</p> <p>17 MR JAIN: So technically, these parameters can be 18 route-specific, can be location-specific, and also you 19 can design your thresholds based on specificity of 20 a particular route or a particular road section, rather 21 than having a global parameter.</p> <p>22 MS MAGGIE WONG: Yes.</p> <p>23 CHAIRMAN: Yes, so you could define your threshold depending 24 on where the bus is?</p> <p>25 MR JAIN: Correct.</p>	<p style="text-align: right;">Page 111</p> <p>1 can have a constant stream of data, or you can do every 2 10 seconds, every 30 seconds, or you can even not have 3 that transmitted.</p> <p>4 CHAIRMAN: Yes, that was the effect of Mr Kulis' evidence, 5 which you have yet to read. But that was what he said, 6 that you can configure this as you can the other things.</p> <p>7 MS MAGGIE WONG: That's what you earlier said, that's the 8 benefit of the real-time capability that was sacrificed.</p> <p>9 If I may go back to your submissions at FE-1, 10 page 40. And we were on to these countries that your 11 company at that time was deriving experiences from.</p> <p>12 You also made reference to New Zealand, the 13 GreenRoad.com where reference was made to bus companies 14 having the advantages or benefit of the system and, in 15 particular, halving of incidents of poor driving 16 behaviour. And it also states that the accidents from 17 collisions fell by half, while accidents caused by bus 18 drivers plunged by 70 per cent.</p> <p>19 At that time was this matter or this GreenRoad 20 system discussed in one of the group meetings?</p> <p>21 MR JAIN: Not exactly. This information is something that 22 came to my knowledge only I think last year.</p> <p>23 MS MAGGIE WONG: Last year?</p> <p>24 MR JAIN: And I have quoted it here.</p> <p>25 MS MAGGIE WONG: If I may show you an article about</p>
<p style="text-align: right;">Page 110</p> <p>1 CHAIRMAN: In other words, you know where its latitude and 2 longitude is, you know that puts it in a 50-kilometre 3 per hour zone, and you put a threshold at whatever you 4 might decide, perhaps 55, but when it goes into a 70 5 zone, you put another value, 75, perhaps.</p> <p>6 MR JAIN: Absolutely, Chairman.</p> <p>7 MS MAGGIE WONG: So in all these meetings you were 8 discussing about these parameters and the capability of 9 what the black box can do?</p> <p>10 MR JAIN: That's correct, yes. What we were discussing at 11 that time is how best to utilise this information to 12 improve safety and improve the operation the 13 performance.</p> <p>14 CHAIRMAN: As you said, this had a monetary incentive 15 because if you drive in a better fashion, you don't 16 indulge in unnecessary acceleration, you don't brake, 17 you come to a stop gently, then you use less fuel.</p> <p>18 MR JAIN: Absolutely, Chairman.</p> <p>19 MS MAGGIE WONG: And the second matter I would like to ask 20 is this 30 seconds. According to this information, the 21 data can be collected every second, but in here, the 22 system only collects data every 30 seconds.</p> <p>23 So this is also --</p> <p>24 CHAIRMAN: No, it transmits data every 30 seconds.</p> <p>25 MR JAIN: But that is also a configurable parameter. You</p>	<p style="text-align: right;">Page 112</p> <p>1 GreenRoad.</p> <p>2 It is the article dated 12 July 2012, making 3 reference to GreenRoad as "a leader in driver 4 performance and safety management".</p> <p>5 And in the second paragraph it states that: 6 "GreenRoad has already --"</p> <p>7 CHAIRMAN: What is the date of this document?</p> <p>8 MS MAGGIE WONG: 12 July 2012.</p> <p>9 CHAIRMAN: Thank you.</p> <p>10 MS MAGGIE WONG: In the second paragraph it states: 11 "GreenRoad has already reduced driving risk 12 60 per cent for the 70 buses in London where it has been 13 in use by 110 drivers since 2010."</p> <p>14 And then jump to the next paragraph: 15 "Using mobile and cloud technology, GreenRoad helps 16 drivers self-improve. It provides drivers with instant 17 feedback about their manoeuvres using the traffic light 18 LEDs on the dashboard as well as detailed analysis and 19 recommendations for drivers and depot managers."</p> <p>20 This system was set out in your paper, but at that 21 time was this -- because I see the article is dated 2012 22 but wasn't explored, was it, in one of your meetings?</p> <p>23 MR JAIN: Not exactly this company, but I think the concept 24 that is mentioned in this article, we are certainly 25 aligned with these concepts.</p>

<p style="text-align: right;">Page 113</p> <p>1 MS MAGGIE WONG: If we go back to your submission, FE-1, 2 page 40, paragraph 4. It made reference to the 3 scrapping of the project. And you also stated that: 4 "One of the fundamental changes in management after 5 2015 was that instructions and decisions were seldom 6 documented and often reversed arbitrarily without 7 discussion or consultation with other internal 8 stakeholders." 9 Internal stakeholders, who do you mean? 10 MR JAIN: I mean people working in various other 11 departments. 12 MS MAGGIE WONG: Yes. Over the page, page 41. You 13 mentioned at paragraph 2: 14 "Due to the specific nature of questions ... are 15 specific to KMB, but a lot of what is happening in the 16 franchised bus industry in Hong Kong is also a direct 17 result of systematic problems such as outdated 18 regulatory framework, lack of open competition, lack of 19 adoption of technology, lack of transparency, and a ... 20 [the] relationship between the regulator and the 21 franchisee." 22 So you have identified five problems here. 23 CHAIRMAN: Before you get involved in the details, you used 24 the word "systematic", but in fact do you mean 25 "systemic"?</p>	<p style="text-align: right;">Page 115</p> <p>1 reformed their regulatory systems to adopt open data 2 framework, they have reformed to allow for autonomous 3 test trials, e-bus, electric bus, solar buses -- 4 CHAIRMAN: Just dealing with autonomous vehicles, is the 5 point you are making this, that in Hong Kong you are 6 required to have a person in a vehicle, and it can't be 7 driven by a computer; is that the point? 8 MR JAIN: That's one. Second is if you want to put any kind 9 of vehicle on road in Hong Kong it has to go through 10 a type approval process, and the type approval process 11 itself does not allow anything beyond, I would say, 12 post-war specifications. 13 MS MAGGIE WONG: It is more concerned about the nature of 14 the bus. In terms of regulatory framework, what about 15 the black box system? Do you know much about how one or 16 whether one knows anything about what can be installed 17 in the black box system for buses? I think in Hong Kong 18 it is completely lacking. What about, in your 19 experience, in other countries? 20 MR JAIN: I think it is more of a norm these days, rather 21 than exception. If we go to any of the developed 22 cities, they are very widely adopting a telematics 23 system, places like even Turkey, I was there and Turkey 24 has these things in place. European cities, they all 25 have telematics devices on board. Again, going back to</p>
<p style="text-align: right;">Page 114</p> <p>1 MR JAIN: Yes, that's correct. Thank you, Chairman. 2 MS MAGGIE WONG: The first one is the outdated regulatory 3 framework. Can you elaborate on why you consider the 4 current regulatory framework outdated? 5 MR JAIN: The regulatory framework that is prevalent in Hong 6 Kong at the moment, I think that was adopted decades 7 ago. At that time, the technology for monitoring 8 various things didn't exist. Now, we have obviously 9 gone to a much different level of data that is available 10 from operations. We are talking about artificial 11 intelligence, autonomous buses and all those things. 12 The current regulatory framework in Hong Kong does not 13 really allow for anything that is something that fits 14 into the norm of 20/30 years ago. 15 For example, autonomous vehicles is a classic 16 example. If any bus company in Hong Kong would like to 17 introduce autonomous buses, the regulatory framework or 18 the legal framework does not even exist, whereas other 19 cities have gone ahead and adopted or they have modified 20 their systems or regulatory frameworks, to allow for 21 these innovative new ideas or innovative practices. 22 Hong Kong still lacks those things. 23 MS MAGGIE WONG: Which cities are we talking about? 24 MR JAIN: We are talking about China, Singapore, Dubai, Abu 25 Dhabi, a lot of cities around the world have adopted or</p>	<p style="text-align: right;">Page 116</p> <p>1 Singapore, Dubai, Seoul, Tokyo, all these cities which 2 are very comparable to Hong Kong, high public transport 3 usage, they are adopting telematics devices and it has 4 yielded significant benefits in terms of operational 5 performance and efficiency. 6 MS MAGGIE WONG: Yes, and we have touched on regulatory 7 framework. 8 The second complaint is about lack of open 9 competition. 10 Can you elaborate on that? 11 MR JAIN: For example I would look at Singapore, and quote 12 that example. In Singapore they were running their bus 13 system almost in an identical manner to the way we do in 14 Hong Kong until 2012, 2013, when they started looking at 15 reforming the bus operation in Singapore based on the 16 changing environment of public transport. 17 And at that time they looked at it and they realised 18 the bus operation in its present form in Singapore was 19 unsustainable, and they completely changed the model and 20 adopted a new regulatory framework, which has now 21 brought in much better services, much better 22 performance, a lot of innovation, and they have, I would 23 say, assumed leadership in bus operation at least in 24 this region at the moment. 25 That is the kind of thing that has happened because</p>

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<p>1 So that's the context in which I want to explore</p> <p>2 this matter a little further with you, if I may. I want</p> <p>3 to take it further firstly by referring you to KMB-4, at</p> <p>4 page 1202. This is an extract from the 2013 annual</p> <p>5 report. We have seen one of these before.</p> <p>6 CHAIRMAN: Of KMB?</p> <p>7 MR PETER DUNCAN: I think the holding company, first of all.</p> <p>8 CHAIRMAN: Yes.</p> <p>9 MR PETER DUNCAN: And then Kowloon Motor Bus Company and in</p> <p>10 fact a number of other subsidiaries also of the listed</p> <p>11 company.</p> <p>12 CHAIRMAN: Thank you.</p> <p>13 MR PETER DUNCAN: So if we look down the list of key</p> <p>14 corporate executives in the Kowloon Motor Bus Company,</p> <p>15 you will find the name of one Alok Jain, head of</p> <p>16 planning and development department. Is that a name</p> <p>17 which is known to some of you?</p> <p>18 MR LEUNG KIN WANG: Yes.</p> <p>19 MR PETER DUNCAN: We can see the position that he held at</p> <p>20 that time.</p> <p>21 Are you aware that Mr Jain has provided evidence to</p> <p>22 the committee?</p> <p>23 MR LEUNG KIN WANG: Yes.</p> <p>24 MR PETER DUNCAN: In that respect, I'm going to ask you to</p> <p>25 turn up, please, bundle FE-1 at page 40. In fact, the</p>	<p>1 (i) Improve safety -- through real-time alerts and</p> <p>2 feedbacks to bus captains;</p> <p>3 (ii) Improve fuel efficiency -- through enhanced</p> <p>4 driving behaviour and performance management; and</p> <p>5 (iii) Deliver reliable bus services -- through</p> <p>6 active management of deployment and incident/disruption</p> <p>7 management.</p> <p>8 b. There were extensive discussions on type of</p> <p>9 vehicle and driver performance parameters that will be</p> <p>10 monitored through this ROM system including their</p> <p>11 potential benefits. As the telematics data was still</p> <p>12 available even after the scrapping of the project, there</p> <p>13 was some level of monitoring but the real value of ROM</p> <p>14 system was 'real-time' and this capability was</p> <p>15 sacrificed. This was analogous to a port mortem ..."</p> <p>16 I will leave out that sentence.</p> <p>17 Then item (c):</p> <p>18 "I was not much involved in the discussions</p> <p>19 pertaining to exact cost implications of the project but</p> <p>20 through meetings and discussions, was under the</p> <p>21 impression that the project was planned to deliver</p> <p>22 a positive ROI.</p> <p>23 3. Many, if not the most, of the bus companies in</p> <p>24 the developed world today deploy same or similar</p> <p>25 functionalities as [Kowloon Motor Bus] had envisioned in</p>
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<p>1 document I wish to show you commences at page 39 of that</p> <p>2 bundle, and it's a submission that the committee has</p> <p>3 received from Mr Jain.</p> <p>4 Have you had the opportunity of reading this</p> <p>5 submission?</p> <p>6 MR LEUNG KIN WANG: Briefly, yes.</p> <p>7 MR PETER DUNCAN: Thank you.</p> <p>8 If you have read it just briefly, perhaps I could</p> <p>9 bring your attention, please, to page 40, paragraphs 2</p> <p>10 and 3. Perhaps for the benefit of others than you and</p> <p>11 me, I will read those paragraphs out.</p> <p>12 Mr Jain says in paragraph 2:</p> <p>13 "Real-time Operational Management (ROM) System was</p> <p>14 a by-product of installation and telematics devices on</p> <p>15 board the buses, which has been ongoing by the time</p> <p>16 I joined the organisation.</p> <p>17 a. I was involved in many meetings and discussions</p> <p>18 about the technical specifications, features, technology</p> <p>19 selection and so on in relation to ROM right after</p> <p>20 I joined the company. I was not involved in discussions</p> <p>21 related to funding, tendering and project management.</p> <p>22 I also cannot remember when exactly the decision to</p> <p>23 implement was undertaken but was aware that project</p> <p>24 implementation was in progress. The primary reasons to</p> <p>25 implement the project were --</p>	<p>1 the ROM system. Even at the time when KMB was drawing</p> <p>2 up the plans, we were drawing heavily on the experiences</p> <p>3 from Seoul, Singapore, London and Munich. Media reports</p> <p>4 or company announcements from other cities have shown</p> <p>5 clear benefits of such systems in terms of safety, fuel</p> <p>6 efficiency and driver behaviour. In New Zealand [and</p> <p>7 the source is the GreenRoad.com website] bus companies</p> <p>8 achieved 4 per cent reduction in fuel consumptions and</p> <p>9 81 per cent reduction in speeding infringements. Tower</p> <p>10 Transit in Singapore achieved more than 7 per cent fuel</p> <p>11 savings, and halving of 'incidents' of poor driving</p> <p>12 behaviour. Accidents from collisions fell by half,</p> <p>13 while accidents caused by bus drivers plunged by</p> <p>14 70 per cent."</p> <p>15 So that's the information that Mr Jain provided in</p> <p>16 writing to the committee. Mr Jain has also given</p> <p>17 evidence to the committee -- I will simply give you the</p> <p>18 reference in the bundles; it's transcript bundle 8, and</p> <p>19 on this topic --</p> <p>20 CHAIRMAN: I think it's bundle 3, is it not?</p> <p>21 MR PETER DUNCAN: I see. It's Day 8 -- bundle 3, I beg your</p> <p>22 pardon -- and it runs for some pages, 81 to 98.</p> <p>23 By the way, have you had the opportunity of reading</p> <p>24 that evidence, Mr Leung?</p> <p>25 MR LEUNG KIN WANG: Yes, in Chinese.</p>

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<p>1 MR PETER DUNCAN: Thank you. So I won't take you through</p> <p>2 it, but it amplifies what Mr Jain had said in this</p> <p>3 submission, which was to the effect that the company had</p> <p>4 considered a project which would involve real-time</p> <p>5 monitoring, but according to Mr Jain, that project was</p> <p>6 scrapped.</p> <p>7 So what I would like to ask first of all is: do any</p> <p>8 of you recall discussions pertaining to the possibility</p> <p>9 of real-time monitoring?</p> <p>10 MR LEUNG KIN WANG: (Via interpreter) ROM means real-time</p> <p>11 operations management system. It's not a real-time</p> <p>12 monitoring system.</p> <p>13 MR PETER DUNCAN: So it doesn't live up to its name?</p> <p>14 MR LEUNG KIN WANG: (Via interpreter) It is an operations</p> <p>15 real-time management system. It is about bus operations</p> <p>16 management. It has nothing to do with driving safety.</p> <p>17 MR PETER DUNCAN: First of all, was there a real-time</p> <p>18 monitoring system considered by the Kowloon Motor Bus</p> <p>19 Company at some point, referred to by Mr Jain?</p> <p>20 MR LEUNG KIN WANG: (Via interpreter) This is what we have</p> <p>21 now. This is the on-board driver's alert and driver's</p> <p>22 feedback. On board buses, there is a real-time alert to</p> <p>23 bus captains.</p> <p>24 (In English) Speeding, when he applies brakes</p> <p>25 suddenly or with sudden acceleration.</p>	<p>1 saying in his letter and his evidence, what is your</p> <p>2 understanding of what he was referring to?</p> <p>3 MR LEUNG KIN WANG: (Via interpreter) I believe he was</p> <p>4 talking about our real-time operations management</p> <p>5 system.</p> <p>6 MR PETER DUNCAN: I think, in that case, I will have to</p> <p>7 refer you to some of Mr Jain's evidence explicitly.</p> <p>8 Could I refer you, please, to Day 8, bundle 3 of the</p> <p>9 transcripts, at page 86.</p> <p>10 Can I bring your attention, please, to line 9 of</p> <p>11 page 86.</p> <p>12 CHAIRMAN: May I suggest that we begin at the top of the</p> <p>13 page, because this might explain the marriage between</p> <p>14 the two, the bus grouping and another use that might be</p> <p>15 made of the data.</p> <p>16 MR PETER DUNCAN: Certainly, Mr Chairman. So we go to</p> <p>17 line -- is Mr Chairman referring to page 85 or page 86?</p> <p>18 CHAIRMAN: You might begin at page 85. I think that puts it</p> <p>19 into context.</p> <p>20 MR PETER DUNCAN: Yes.</p> <p>21 So line 2, Mr Leung, at page 85, Mr Jain says this:</p> <p>22 "So until then, a lot of data in [Kowloon Motor Bus]</p> <p>23 was residing in silos in individual departments. They</p> <p>24 were collecting -- for example, engineering information</p> <p>25 was available in engineering, operational information</p>
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<p>1 MR PETER DUNCAN: Right. Are you aware that the company at</p> <p>2 one stage considered the type of system that Mr Kulis</p> <p>3 referred to in his evidence?</p> <p>4 MR LEUNG KIN WANG: (Via interpreter) I had knowledge that</p> <p>5 there was this intention. I knew about it and I also</p> <p>6 asked ZF that we should have real-time alert to bus</p> <p>7 captains, that there should be a two-directional</p> <p>8 communication in order to have real-time alerts sent to</p> <p>9 bus captains about their behaviour. But at that time,</p> <p>10 the starting point is not about safety but about keeping</p> <p>11 distances between vehicles. This is just really for bus</p> <p>12 operation.</p> <p>13 MR PETER DUNCAN: So you can see what Mr Kulis has referred</p> <p>14 to, and that's the concept of somebody receiving</p> <p>15 information, seeing that a driver is speeding or seeing</p> <p>16 that he's braking sharply or that he's accelerating, and</p> <p>17 then making instant communication to the driver as to</p> <p>18 his driving behaviour. That's what Mr Kulis is</p> <p>19 referring to.</p> <p>20 Has the company had a project to consider that sort</p> <p>21 of facility?</p> <p>22 MR LEUNG KIN WANG: (Via interpreter) No.</p> <p>23 MR PETER DUNCAN: Never?</p> <p>24 MR LEUNG KIN WANG: Never.</p> <p>25 MR PETER DUNCAN: So your understanding of what Mr Jain was</p>	<p>1 was available in the operations department, and they</p> <p>2 were all in different systems. The plan was to put this</p> <p>3 all into a single data warehouse and create a single</p> <p>4 version of truth.</p> <p>5 Chairman: What use was to be made of the data</p> <p>6 contained in this single data warehouse?</p> <p>7 Mr Jain: So there were three stages. The first</p> <p>8 stage was to establish the static, what is real, what is</p> <p>9 happening on ground. The second stage was to put into</p> <p>10 some level of modeling, where we could use it for</p> <p>11 planning purposes, in short term. And the third</p> <p>12 objective, eventually, was to take it into a predictive</p> <p>13 level, where we could apply statistical tools and do</p> <p>14 some forward projections.</p> <p>15 Chairman: What use was to be made of the first</p> <p>16 step, the real-time?</p> <p>17 Mr Jain: That was primarily for management</p> <p>18 information purposes, as well as for any investigations,</p> <p>19 reporting, so on and so forth.</p> <p>20 Chairman: Investigations into what?</p> <p>21 Mr Jain: For example we used to receive a lot of</p> <p>22 passenger complaints about services, we could go back</p> <p>23 and look into the data and verify that information.</p> <p>24 Chairman: So if the complaint had been made that</p> <p>25 the bus had been driven at an excessive speed and braked</p>

<p style="text-align: right;">Page 45</p> <p>1 harshly, could that be investigated by analysing the</p> <p>2 data that had been put into this single data warehouse?</p> <p>3 Mr Jain: Potentially, yes.</p> <p>4 Chairman: That's a response to a complaint. Was</p> <p>5 there any plan to use the data proactively?</p> <p>6 Mr Jain: So the second stage was where we went into</p> <p>7 real-time operations management system, because once we</p> <p>8 built the data models on the historic data we could</p> <p>9 translate the similar level of information and analyse</p> <p>10 on a real-time basis, and the idea was of course to</p> <p>11 monitor the whole operation on a real-time basis using</p> <p>12 what we normally call an exception management, where</p> <p>13 anything that goes beyond the threshold of normal</p> <p>14 operation you start to actively manage it.</p> <p>15 Chairman: How was it envisaged, if it was, that</p> <p>16 this approach could address the manner in which a bus</p> <p>17 was [being] driven?</p> <p>18 Mr Jain: For example, if any bus that was being</p> <p>19 driven beyond the parameters that were set as normal</p> <p>20 operation, then it would raise an alert, and normally</p> <p>21 the companies, or examples that I have seen around the</p> <p>22 world, they use this green, amber, red approach. So</p> <p>23 green is normal operation, anything that goes on the</p> <p>24 outlines of threshold boundaries it starts to raise the</p> <p>25 alert [is] an amber, and then of course once it crosses,</p>	<p style="text-align: right;">Page 47</p> <p>1 started but then being scrapped?</p> <p>2 MR LEUNG KIN WANG: (Via interpreter) It was never scrapped.</p> <p>3 This project started in October 2014. It has never been</p> <p>4 terminated. It's ongoing.</p> <p>5 MR PETER DUNCAN: In that context, just to be absolutely</p> <p>6 clear, what do you say "this project" is?</p> <p>7 MR LEUNG KIN WANG: (Via interpreter) This is about the</p> <p>8 real-time operation management system by using the black</p> <p>9 box and the availability of real-time location</p> <p>10 information, so that we can be more efficient in bus</p> <p>11 deployment.</p> <p>12 CHAIRMAN: In what way?</p> <p>13 MR LEUNG KIN WANG: (Via interpreter) For every route, the</p> <p>14 buses at different locations, frontline people,</p> <p>15 including the regulator, the officers, will know the</p> <p>16 locations of the buses at any time. When there's</p> <p>17 traffic congestion, some of the buses might be stuck in</p> <p>18 certain location. Such information will allow us to do</p> <p>19 a better deployment, because we would know that some of</p> <p>20 the buses might not be able to return very quickly, so</p> <p>21 deployment can be arranged in a more efficient manner.</p> <p>22 That's the core of the facility of this real-time</p> <p>23 management system which would facilitate the work of our</p> <p>24 officers.</p> <p>25 MR PETER DUNCAN: Just before we take a break, if I could</p>
<p style="text-align: right;">Page 46</p> <p>1 it is a red alert. So at that time some intervention is</p> <p>2 necessary.</p> <p>3 Chairman: Was it envisaged that this alert raised</p> <p>4 by a parameter being breached could occur real-time?</p> <p>5 Mr Jain: The intent certainly at that time was</p> <p>6 that."</p> <p>7 Now, that's the passage that I was referring to.</p> <p>8 What sort of system do you understand Mr Jain to be</p> <p>9 referring to in that respect?</p> <p>10 MR LEUNG KIN WANG: (Via interpreter) This is not in our</p> <p>11 present system.</p> <p>12 MR PETER DUNCAN: Is that something which you understand to</p> <p>13 be the equivalent of the real-time monitoring system</p> <p>14 that Mr Kulis was referring to?</p> <p>15 MR LEUNG KIN WANG: No.</p> <p>16 MR PETER DUNCAN: What's the difference?</p> <p>17 MR LEUNG KIN WANG: (Via interpreter) ROM is real-time</p> <p>18 operations management. It is about deployment of buses.</p> <p>19 This has nothing to do with driving safety of bus</p> <p>20 captains.</p> <p>21 MR PETER DUNCAN: It would seem that Mr Jain understood it</p> <p>22 differently. Is that correct?</p> <p>23 MR LEUNG KIN WANG: (Via interpreter) I agree.</p> <p>24 MR PETER DUNCAN: When he says that the project, as he</p> <p>25 understood, was scrapped, do you recall a project being</p>	<p style="text-align: right;">Page 48</p> <p>1 return to Mr Kulis and what he was referring to in the</p> <p>2 earlier passages to which I brought your attention.</p> <p>3 That's Day 6, page 158, the same bundle 3.</p> <p>4 Are you there, at page 158?</p> <p>5 MR LEUNG KIN WANG: Yes.</p> <p>6 MR PETER DUNCAN: I brought this to your attention earlier,</p> <p>7 but at line 25, Mr Chan is asking him questions about</p> <p>8 this situation:</p> <p>9 "So as a supervisor ... [sitting in his office</p> <p>10 monitoring the driver real-time] ..."</p> <p>11 And implicitly in that, if he sees a problem,</p> <p>12 communicating with the driver, he says, "You need to</p> <p>13 change the manner in which you're your driving", that</p> <p>14 sort of system.</p> <p>15 First of all, that sort of system is quite</p> <p>16 different, is it not, to what you had just been</p> <p>17 adverting to?</p> <p>18 MR LEUNG KIN WANG: (Via interpreter) Correct.</p> <p>19 MR PETER DUNCAN: I don't want to confuse terms. If I could</p> <p>20 refer to that as "real-time driver monitoring".</p> <p>21 Mr Kulis has referred to the fact that this is quite</p> <p>22 commonly used in other parts of the world. Have you</p> <p>23 seen that in his evidence?</p> <p>24 MR LEUNG KIN WANG: Yes.</p> <p>25 MR PETER DUNCAN: Is this something which Kowloon Motor Bus</p>

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<p>1 has given consideration to?</p> <p>2 MR LEUNG KIN WANG: Yes.</p> <p>3 MR PETER DUNCAN: What is its position with regard to this?</p> <p>4 Because obviously Kowloon Motor Bus does not apply this</p> <p>5 system at the moment. What is the company's position?</p> <p>6 MR LEUNG KIN WANG: Not practical.</p> <p>7 MR PETER DUNCAN: So you have considered it and decided</p> <p>8 against it; is that the position?</p> <p>9 MR LEUNG KIN WANG: Correct.</p> <p>10 MR PETER DUNCAN: Could you explain to the committee why it</p> <p>11 is not practical?</p> <p>12 MR LEUNG KIN WANG: (Via interpreter) It would mean a lot of</p> <p>13 pressure for bus captains, and we may not have a system</p> <p>14 that can deal with so many bus captains at the same</p> <p>15 time. We have also consulted ZF and Openmatics, and the</p> <p>16 conclusion was that it was not practicable.</p> <p>17 CHAIRMAN: When were these consultations?</p> <p>18 MR LEUNG KIN WANG: (Via interpreter) They were some time</p> <p>19 ago.</p> <p>20 CHAIRMAN: Try and help us a bit more than that. When?</p> <p>21 MR LEUNG KIN WANG: (Via interpreter) It is not very formal</p> <p>22 discussion. We did talk to them, especially to</p> <p>23 Openmatics.</p> <p>24 CHAIRMAN: When?</p> <p>25 MR LEUNG KIN WANG: (Via interpreter) It is not by me. My</p>	<p>1 watch over 4,000 bus captains.</p> <p>2 CHAIRMAN: What did you talk to ZF about?</p> <p>3 MR LEUNG KIN WANG: (Via interpreter) Our design with ZF was</p> <p>4 how to transmit the real-time data to our company and</p> <p>5 how our company's data can produce real-time maps of</p> <p>6 where our bus captains are at any time so that we can</p> <p>7 have more efficient real-time operations management.</p> <p>8 That is the objective of designing the ROM at that time.</p> <p>9 MR ROGER LEE: (Chinese words not interpreted).</p> <p>10 CHAIRMAN: When were these discussions?</p> <p>11 MR LEUNG KIN WANG: (Via interpreter) It was in 2013. When</p> <p>12 we started to install black boxes, we were aware of how</p> <p>13 these black boxes would function.</p> <p>14 MR ROGER LEE: (Via interpreter) I would like to supplement</p> <p>15 here to what the operations director has said. There</p> <p>16 are two views on how to manage the fleet real-time. One</p> <p>17 is that there would be a central management system</p> <p>18 knowing how the vehicles are doing on the roads and then</p> <p>19 a central control room can communicate with the bus</p> <p>20 captains so that the buses would be at a suitable</p> <p>21 distance from one another to ensure smooth operation.</p> <p>22 But there is a big problem here. The real situation</p> <p>23 on the ground, unless you have very accurate information</p> <p>24 about the road conditions with a lot of CCTV monitoring</p> <p>25 the journey, because we are not a railway company, and</p>
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<p>1 colleagues discussed the matter with them. We were</p> <p>2 aware of that.</p> <p>3 CHAIRMAN: Who?</p> <p>4 MR LEUNG KIN WANG: I can't recall now.</p> <p>5 CHAIRMAN: Let me give you some time to recall while we take</p> <p>6 a break.</p> <p>7 MR LEUNG KIN WANG: Okay.</p> <p>8 CHAIRMAN: We will take a break for 20 minutes.</p> <p>9 (11.36 am)</p> <p>10 (A short adjournment)</p> <p>11 (11.58 am)</p> <p>12 CHAIRMAN: Yes, Mr Duncan.</p> <p>13 MR PETER DUNCAN: Thank you, Mr Chairman.</p> <p>14 Mr Leung, do you have any further information for us</p> <p>15 as to who it was who spoke to Openmatics on this issue</p> <p>16 and when that was?</p> <p>17 MR LEUNG KIN WANG: (Via interpreter) I asked my colleagues</p> <p>18 to try to understand the situation. It was proposed</p> <p>19 that a supervisor could use a software to monitor the</p> <p>20 performance of each bus captain. We found that it was</p> <p>21 not practical. We will not take this further. We</p> <p>22 talked to ZF about another thing. In other words,</p> <p>23 having one supervisor watching over bus captains, we</p> <p>24 think that is not practicable because we have 4,000 bus</p> <p>25 captains. We cannot have that number of supervisors to</p>	<p>1 the communication with the bus captain would be</p> <p>2 a problem because they are already facing a lot of</p> <p>3 pressure on the road. So that's a worry.</p> <p>4 Now we have the data, and then at the back end we</p> <p>5 have the TER system, involving the regulators, the</p> <p>6 frontline staff at the bus termini. These people know</p> <p>7 the road conditions on the ground. When the bus captain</p> <p>8 reaches the terminus, of course the staff there know to</p> <p>9 what extent there has been a delay, then maybe something</p> <p>10 has to be done to catch up. It's more people-oriented</p> <p>11 as a management approach.</p> <p>12 Bus is different from railway. It would be</p> <p>13 difficult to have a central control system to manage</p> <p>14 4,000 bus captains on the roads. But the data provided</p> <p>15 by Openmatics can facilitate the work of the back-end</p> <p>16 operation, but it is not about a system of managing</p> <p>17 4,000 bus captains.</p> <p>18 CHAIRMAN: Yes. I think we've got that point; you have made</p> <p>19 it about three times.</p> <p>20 Thank you, Mr Duncan.</p> <p>21 MR PETER DUNCAN: Thank you, Chairman.</p> <p>22 Mr Lee, I am sorry, but I had the impression before</p> <p>23 the break that with regard to the real-time driver</p> <p>24 monitoring system that Mr Kulis was talking about --</p> <p>25 I had the impression from you that somebody in the</p>

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<p>1 company had spoken to Openmatics about that. Are you</p> <p>2 saying that that has actually not happened?</p> <p>3 MR LEUNG KIN WANG: (Via interpreter) We did discuss with</p> <p>4 Openmatics about their black box. As regards the</p> <p>5 software that would enable a supervisor to manage the</p> <p>6 fleet, that was not discussed and we will not consider</p> <p>7 doing that.</p> <p>8 MR PETER DUNCAN: So you have decided against a real-time</p> <p>9 driver monitoring system because it is not practical?</p> <p>10 MR LEUNG KIN WANG: (Via interpreter) If we have a system</p> <p>11 whereby a supervisor would be monitoring the bus</p> <p>12 captains, we are of the view that it is not practicable.</p> <p>13 If you take a look at ZF's reference to Western</p> <p>14 countries, and then also for safety or commercial</p> <p>15 reasons some of them have done this. We have had some</p> <p>16 internal discussions. It's about whether we can</p> <p>17 retrofit some vehicles to do the same, for example</p> <p>18 vehicles to transport the coins or fueled vehicles, we</p> <p>19 will consider whether those can be refitted to do the</p> <p>20 same.</p> <p>21 But we are not talking about buses, and he was also</p> <p>22 talking about much smaller bus companies, not the bigger</p> <p>23 ones like us.</p> <p>24 CHAIRMAN: Who is "he"?</p> <p>25 MR LEUNG KIN WANG: (Via interpreter) It's in the evidence,</p>	<p>1 some of the presentations and I knew about the concepts</p> <p>2 behind and how real-time information could be made use</p> <p>3 of to facilitate operations.</p> <p>4 After I took over as operations director, I knew the</p> <p>5 relevant programme in much more detail, and in 2016,</p> <p>6 when I formally took over as head of operations, I knew</p> <p>7 that there was a real-time operation management system</p> <p>8 which was ongoing. I realised at that time that there</p> <p>9 were real-time maps to show the locations of buses which</p> <p>10 would facilitate the deployment of our fleet. It was in</p> <p>11 January 2016 when I took over as head of operations.</p> <p>12 At the same time, I realised that the project would</p> <p>13 involve another function, that is a substitute for TER,</p> <p>14 a substitute of the function of the TER system. The TER</p> <p>15 is about the operations at the bus termini. When a bus</p> <p>16 captain arrives, he would report for duty and start the</p> <p>17 driving duty and then when he returns he also reports to</p> <p>18 the terminus and we will know the time of arrival and</p> <p>19 then the regulator can do the deployment duties based on</p> <p>20 the information collected.</p> <p>21 One of the proposed ROM functions was to replace the</p> <p>22 TER, in that there will be a central control room to</p> <p>23 remotely deploy bus captains and assign duties to</p> <p>24 different routes and to adjust the headways, the</p> <p>25 frequency of service, and also to receive reports from</p>
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<p>1 the representative of Openmatics.</p> <p>2 CHAIRMAN: I see. You are referring to Mr Kulis, are you?</p> <p>3 MR LEUNG KIN WANG: Correct.</p> <p>4 CHAIRMAN: Thank you.</p> <p>5 MR PETER DUNCAN: I'm sorry to have to go back to Mr Jain's</p> <p>6 evidence, Mr Leung, but with regard to the project that</p> <p>7 he described and in respect of which you seem to have</p> <p>8 a different understanding from Mr Jain, were you</p> <p>9 involved in that project to which he refers?</p> <p>10 MR LEUNG KIN WANG: Yes.</p> <p>11 MR PETER DUNCAN: I need, I think, to take you to another</p> <p>12 part of his evidence, at Day 8, which will be in</p> <p>13 bundle 3, and this time at page 89.</p> <p>14 Before I take you to the evidence, perhaps you could</p> <p>15 just describe to members of the committee what your</p> <p>16 involvement in this project was.</p> <p>17 MR LEUNG KIN WANG: (Via interpreter) This project was</p> <p>18 considered in 2013. I was responsible for bus</p> <p>19 maintenance at that time. I participated in some of the</p> <p>20 presentations. It's because of the availability of</p> <p>21 black box as a technology to help the company to develop</p> <p>22 the bus operations. At that time, the company also</p> <p>23 engaged a consultancy firm, and some recommendations</p> <p>24 were made to KMB. I was responsible for managing people</p> <p>25 in maintenance and repair, but I was also involved in</p>	<p>1 bus captains regarding breakdowns, accidents, and</p> <p>2 matters relating to passengers. Under the proposed</p> <p>3 design, it would be centrally managed.</p> <p>4 MR PETER DUNCAN: Thank you, Mr Leung.</p> <p>5 I want to bring to your attention, please --</p> <p>6 CHAIRMAN: Before you do that, Mr Duncan, before you pose</p> <p>7 that question -- Mr Leung, in the course of your answer,</p> <p>8 you said that the issue of the availability of black box</p> <p>9 data was considered and consultants had been engaged.</p> <p>10 What were they asked to do?</p> <p>11 MR LEUNG KIN WANG: (Via interpreter) He was asked to look</p> <p>12 into service delivery and service enhancement and to</p> <p>13 make recommendations.</p> <p>14 CHAIRMAN: Would that include avoiding, for example,</p> <p>15 bunching up of buses? Is that what he was engaged for?</p> <p>16 MR LEUNG KIN WANG: It's consultant services for operations</p> <p>17 transformation.</p> <p>18 CHAIRMAN: But dealing with service issues like bunching up</p> <p>19 of buses?</p> <p>20 MR LEUNG KIN WANG: Yes.</p> <p>21 CHAIRMAN: Thank you.</p> <p>22 Yes, Mr Duncan.</p> <p>23 MR PETER DUNCAN: Thank you, Chairman.</p> <p>24 The portion of Mr Jain's evidence to which I wish to</p> <p>25 bring your attention, Mr Leung, is at page 89 of the</p>

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<p>1 transcript, Day 8. I think you have that in front of</p> <p>2 you.</p> <p>3 At line 14, Ms Wong, counsel for the committee, asks</p> <p>4 this question of Mr Jain:</p> <p>5 "Is it the case that throughout the time you joined</p> <p>6 the company until the time you left, you were involved</p> <p>7 in this ROM project?</p> <p>8 Mr Jain: I wouldn't say until the time I left, but</p> <p>9 during that period when it was being discussed as a part</p> <p>10 of implementation process, yes, I was involved in the</p> <p>11 project very actively.</p> <p>12 Ms Wong: And I notice in (i) of that paragraph (a)</p> <p>13 you stated that the primary reasons to implement the</p> <p>14 project were to improve safety through real-time alerts</p> <p>15 and feedbacks to bus captains.</p> <p>16 The feedbacks to bus captains, can you tell us</p> <p>17 whether it is intended to be real-time feedback or a</p> <p>18 reactive feedback to bus captains after the complaint</p> <p>19 has been received.</p> <p>20 Mr Jain: There were two things that happened. The</p> <p>21 idea was to develop a two-way communication system</p> <p>22 between the bus itself and the operation control centre,</p> <p>23 and the bus drivers were supposed to have what we call</p> <p>24 a DDU, driver display unit, and through this DDU there</p> <p>25 are two ways to intervene with a driver. One is done at</p>	<p>1 Mr Jain: Well, display was almost there, and audio</p> <p>2 was considered as an additional possibility.</p> <p>3 Chairman: Was audio going to be by radio or by some</p> <p>4 other means?</p> <p>5 Mr Jain: Primarily by radio, or even 3G</p> <p>6 communication. We had not gone that far, I think, at</p> <p>7 that time.</p> <p>8 Ms Maggie Wong: You mentioned there were many</p> <p>9 meetings or discussions about this ROM features. Can</p> <p>10 you recall if there are minutes or documents recording</p> <p>11 what was discussed?</p> <p>12 Mr Jain: There were a lot of presentations, if I</p> <p>13 recall, and there were e-mails post meeting summarising</p> <p>14 what was discussed, the key agenda, or key tasks to be</p> <p>15 [borne] by respective people. But as formal minutes, as</p> <p>16 we know them, I cannot recall if they were prepared."</p> <p>17 Now, you see that evidence, Mr Leung. It would</p> <p>18 appear that Mr Jain's description of the project is</p> <p>19 totally at odds with your understanding of the project.</p> <p>20 Is that correct?</p> <p>21 MR LEUNG KIN WANG: Correct.</p> <p>22 MR PETER DUNCAN: Do you have any idea of any project that</p> <p>23 was being undertaken in the company with regard to the</p> <p>24 type of response to the drivers to which Mr Jain was</p> <p>25 referring?</p>
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<p>1 the bus level where the bus, you can pre-programme the</p> <p>2 parameters that bus -- any time transcends, it creates</p> <p>3 an alert for the driver.</p> <p>4 The second level of alert could be triggered by</p> <p>5 somebody sitting in the operation control centre. Let's</p> <p>6 say, for example, if a bus is running too fast, but</p> <p>7 still within the speed limit, and the on-board device</p> <p>8 does not detect any anomaly. However, at the OCC,</p> <p>9 a supervisor detects that on a particular section the</p> <p>10 bus driver, probably because of weather conditions or</p> <p>11 because of any accident or road conditions, they should</p> <p>12 be driving slower, then a supervisor can technically</p> <p>13 intervene and alert the driver or remind the driver to</p> <p>14 go slow in that section.</p> <p>15 So there are two levels of interventions that can be</p> <p>16 done.</p> <p>17 Chairman: On the second intervention, that is the</p> <p>18 supervisor in the OCC, how would he communicate his</p> <p>19 intervention to the driver?</p> <p>20 Mr Jain: So we had many options being discussed at</p> <p>21 the time. We were talking about just a display system.</p> <p>22 The second was we were also talking about an audio</p> <p>23 system.</p> <p>24 Chairman: So there were two possibilities. One was</p> <p>25 through the display system or otherwise by audio?</p>	<p>1 MR LEUNG KIN WANG: (Via interpreter) Right now we don't</p> <p>2 have any such project going on. At present, the ROM</p> <p>3 does not have this function.</p> <p>4 CHAIRMAN: You were asked about at that time, when Mr Alok</p> <p>5 Jain was in the company. Was there any such project</p> <p>6 going on that you are aware of, perhaps not the one</p> <p>7 you've told us about?</p> <p>8 MR LEUNG KIN WANG: No.</p> <p>9 MR PETER DUNCAN: Mr Jain at line 19 on page 91 has referred</p> <p>10 to "presentations". You also had referred to</p> <p>11 presentations, I think, in your evidence earlier, with</p> <p>12 regard to the same ROM project. Do those presentations</p> <p>13 still exist?</p> <p>14 MR LEUNG KIN WANG: I have to find out.</p> <p>15 MR PETER DUNCAN: I would be grateful if you could look</p> <p>16 further into that, so the committee can view</p> <p>17 presentations, emails, and so on, regarding the ROM</p> <p>18 project at the time that Mr Jain was at the company.</p> <p>19 Could you have somebody explore that for us?</p> <p>20 MR LEUNG KIN WANG: Yes.</p> <p>21 CHAIRMAN: Thank you.</p> <p>22 MR PETER DUNCAN: Just before we leave this --</p> <p>23 CHAIRMAN: Before we move on, Mr Duncan.</p> <p>24 MR PETER DUNCAN: Thank you.</p> <p>25 CHAIRMAN: In that context -- this was a matter that arose</p>

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<p>1 earlier -- would you provide us with information as to 2 the company system of the preservation of these kinds of 3 records? Mr Duncan has already mentioned the 4 preservation of emails, but of other records. In this 5 case, we are talking about presentations. Could we have 6 some information about what the company policy is? Not 7 necessarily now but when you come back to us. 8 MR LEUNG KIN WANG: (Via interpreter) I would like to add 9 one point. With regards to ROM, we do have the entire 10 ROM proposal for October 2014. We have it here. It 11 talks about what the ROM is for. Some parts are about 12 using the central control room to replace regulators, 13 but it was not done because I thought that it was not 14 practical. And it was not discussed by the board of 15 directors. 16 So if you are talking about the ROM, the information 17 is here. What the ROM is, it is here. I can submit it 18 to the IRC so you will know what the ROM is. As I was 19 saying, ROM is real-time operations management system, 20 which has nothing to do with driving safety. 21 CHAIRMAN: We understand your evidence. We also have 22 Mr Alok Jain's evidence, and clearly he speaks about 23 what you are talking about, but he also speaks about 24 another allied use of the data. The data is generated 25 for one purpose but could be used for another. That's</p>	<p>1 other words, on the dashboard, there will be an audio 2 alert if there is speeding beyond 50km or 70km. 3 This was started on 31 July. That is, a trial was 4 started. And on the day before yesterday, we submitted 5 papers to explain to you that this was being done. 6 MR PETER DUNCAN: Yes. That covers speed. What about 7 excessive braking, excessive acceleration, other aspects 8 of the driver's behaviour that might constitute unsafe 9 driving? 10 MR ROGER LEE: (Chinese words not interpreted). 11 CHAIRMAN: Forgive me, are you putting your question in the 12 context of real-time information? 13 MR PETER DUNCAN: Yes, real-time driver monitoring. 14 CHAIRMAN: May I invite you to rephrase it with that 15 included? 16 MR PETER DUNCAN: Certainly. 17 Has the company taken any steps in respect of 18 real-time driver monitoring with regard to matters other 19 than speed, specifically matters such as harsh braking, 20 excessive acceleration? 21 MR ROGER LEE: (Via interpreter) Today, on board the buses, 22 sudden acceleration and harsh braking are already 23 subjects of alert sent to bus captains. We already have 24 it today. But in this past period, we discovered that 25 apart from Openmatics, passengers should be alerted as</p>
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<p>1 what we are asking about. But we will happily receive 2 the material that you have. 3 Mr Duncan. 4 MR PETER DUNCAN: Thank you, Mr Chairman. 5 Just before I leave this topic, Mr Leung -- and I'm 6 talking about real-time driver monitoring, you 7 understand; that's the system that Mr Kulis was 8 referring to -- I understand your position, that you say 9 it's just not practical. What I do want to have clearly 10 understood is how far the company has looked into this. 11 You mentioned some discussions with Openmatics but 12 with regard to other sorts of vehicles. Has the company 13 undertaken any study at all as to how this system is 14 engaged, for example, in Western European countries as 15 per the evidence of Mr Kulis? 16 MR ROGER LEE: (Via interpreter) Let me answer the question 17 Yes, on Tuesday, we said that some colleagues went to 18 Northern Ireland to learn about this, and talking about 19 Openmatics and real-time systems. 20 In the past, when bus captains drove, they knew 21 whether they were speeding, and today, when the 22 speedometer points to 70 kilometres, he will be 23 reminded. At present, Openmatics and our company are 24 doing a study. There will be speed limits set on the 25 map; whether it is 50km or 70km, it will be seen. In</p>	<p>1 well because we have found that apart from elderly 2 people, young people may be using their handphones and 3 they may have accidents caused to them when there is 4 sudden acceleration or harsh braking. 5 We have done a lot in order to avoid those 6 accidents. My colleagues, say along Cheung Sha 7 Wan Road, we have done something to distribute leaflets 8 there to remind people that they should not concentrate 9 on their mobile phones when they travel on buses. 10 As for Openmatics, we have done something as well 11 and we are working on geo-fencing. We are testing it 12 out on our fleet. But this is a little complicated, 13 because the vehicle itself has a speed and then the 14 black box would identify the location of the bus and 15 what the speed should be, and number three, it is 16 geo-fencing. This will feed the information back to the 17 vehicle. This is electronic. Say, for example, the 18 brake, the gas pedal, and how this is controlled -- 19 well, we are going in that direction. 20 We can give you supplementary information but this 21 is being done. 22 MR PETER DUNCAN: Yes. I think we understand that, Mr Lee, 23 and thank you for that. But my question is specifically 24 aimed at the system that Mr Kulis was describing, where 25 there is active supervision within a central control</p>

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<p>1 unit of a driver's speed and other aspects of his 2 driving. 3 I have asked Mr Leung about that and he says, "No, 4 it's not practical; it's been considered and we are not 5 doing it." 6 My question is what investigations, if any, has the 7 company conducted with regard to how that system is 8 incorporated in other jurisdictions and whether, 9 therefore, it might be suitable in Hong Kong? 10 MR LEUNG KIN WANG: (Via interpreter) Let me say something 11 else about this issue. Technological advance is such 12 that if we can have data to know whether a bus captain 13 is speeding and if the information can be seen real-time 14 and can be transmitted real-time and so we can identify 15 the bus captains -- well, we will be able to take care 16 of all the problems we thought we might have. So it 17 depends on technological advance. We hope technology 18 can help us. That is why now we have the 30-second 19 interval. We hope it will be reduced to 10 seconds and 20 maybe down to 2 seconds, 1 second. This is about 21 technology. We wait for this to happen. 22 MR PETER DUNCAN: I don't think you have answered my 23 question, but I conclude from that that you have done 24 very little about what I had asked about, because you 25 believe there are better ways of achieving it through</p>	<p>1 not practical? 2 MR LEUNG KIN WANG: (Via interpreter) At that time, the 3 decision not to do it was based on the fact that it was 4 not practicable, but later on, if there is a practicable 5 real-time monitoring system, we will be very happy to 6 adopt it. 7 MR PETER DUNCAN: But it is not something which the company 8 is currently considering; is that correct? 9 MR LEUNG KIN WANG: (Via interpreter) For the time being, we 10 cannot see a practicable solution. If there is one, we 11 would be very happy to adopt it immediately. 12 MR PETER DUNCAN: Mr Lee, a few moments ago, mentioned the 13 matter of passengers on the bus. I'm going to move to 14 an aspect of passengers. That's the question of 15 passenger behaviour on your buses. 16 I think you are aware that the committee has heard 17 that it is a daily occurrence almost that your drivers 18 will be subjected to verbal and sometimes even physical 19 abuse. Is that a fair summary of the present 20 unfortunate situation? 21 MR ROGER LEE: Yes. 22 MR PATRICK PANG: (Via interpreter) Let me respond to this 23 question. Yes, indeed it is. 24 MR PETER DUNCAN: I'm going to ask you, please, to turn to 25 bundle KMB-1 at page 203.</p>
Page 66	Page 68
<p>1 different technology. Is that a fair summary of the 2 situation? 3 MR LEUNG KIN WANG: (Via interpreter) What I mean is if 4 technology will allow us to have real-time monitoring -- 5 you are talking about monitoring -- not real-time assist 6 or real-time alert but real-time monitoring, that 7 someone can be watching over the bus captains. Just now 8 we talked about Western countries where a supervisor 9 will be watching over a bus captain, for safety reasons, 10 for commercial reasons. But talking about our buses, we 11 have 4,000 of them. 90 per cent of the bus captains are 12 competent and safe drivers. Do we have to have 3,999 13 people watching over 4,000 drivers? That is a technical 14 issue. 15 If technology can help us, say two persons can watch 16 over 4,000 bus captains and if every bus captain drives 17 well, then I will be embracing that system. 18 MR PETER DUNCAN: So because of those matters, the matter 19 has not been explored; is that the situation? You have 20 simply concluded it is not practical so it would be 21 a waste of time exploring it? 22 MR LEUNG KIN WANG: (Via interpreter) We have an open mind. 23 MR PETER DUNCAN: I'm sorry but when you say you have 24 an open mind, is it something that is on the table for 25 your consideration, or have you concluded that it's just</p>	<p>1 At this page, we will see a letter from the 2 committee to the company, dated 20 July this year. If 3 I could remind you that the letter seeks further 4 information with regard to physical assaults on bus 5 captains. In paragraphs 2 to 4, which you will see on 6 page 204, you are requested to supply details pertaining 7 to five particular assault cases. Do you see those 8 references? 9 MR PATRICK PANG: (Via interpreter) Yes, I can see them. 10 MR PETER DUNCAN: Thank you. 11 If you then turn to page 212 of the bundle, you will 12 see the response from the company, and the number of 13 statistics relating to assault cases which occurred 14 between the period of January 2015 to 22 July 2018. 15 At page 218 -- I'm looking at the translation -- you 16 will see particulars of the five cases to which the 17 committee have referred in its letter. Those cases 18 having existed -- the dates were all in the month of 19 April of this year. 20 Are you at page 218? 21 MR PATRICK PANG: Yes. 22 MR PETER DUNCAN: Thank you. Of those five cases, if we 23 look at the "Penalty/Imprisonment" column there, we see 24 that the first two are classified as "Not pursued by 25 police", and we see the last referred to as "Still under</p>

Annex 3

Request from IRC
<p>to provide records of presentations and/or email exchanges regarding the ROM project at the time Mr. Alok Jain was employed by KMB;</p> <p>[Transcript Day 13; 10 August 2018, page 60]</p>

Reply:-

1. The main functions of ROM are to assist dispatchers in the monitoring and management of bus operation according to the System Specifications for ROM under document 3.2, System Requirements Specification for ROM under document 3.11 and System Proposal for ROM under document 3.12. There is no mention of bus safety in any of the documents.
2. Most of the staff involved in the ROM project have left the companies. Andrew Kwan (ST) and Terry Lo (TR), who served the taskforce, confirmed that, to the best of their knowledge, the emails and documents are substantially all the relevant records relating to the ROM project and that Mr. Alok Jain was not involved in the project. His name is not mentioned in the records of the ROM project.
3. Although the ROM system in its original version was not fully implemented, KMB later developed the unimplemented elements into ETA and FMI.
4. The table below sets out the relevant documents/emails relating to the ROM project.

Documents/Information by KMB/LWB			
Doc. No.	Date	Description	Remarks
3.1	13 Jul 2013 (1:44 PM)	Email from Terry Lo (TR) to ROM Taskforce with ROM Implementation Plan	At the kick off meeting, it was agreed that the system name of “Next Generation Fleet Management Software” should be changed to “Real-time Operations Management System (ROM)”.
- ditto -	- ditto -	- ditto -	4 taskforces were formed to work on different stages of the ROM implementation.
3.2	Undated	ROM System Specifications	System Specifications for ROM (version 1.10) were prepared. It confirmed that the objectives of ROM were 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 would cause bus disruption.
3.3	Undated	Tender Document of ROM	KMB invited vendors to tender for ROM.
3.4	29 Oct 2013	Email correspondence between Catherine Yip (IT) and Evan Auyang (DMD)	The Deputy Managing Director agreed to extend the ROM tender closing date from 8 Nov 2013 to 6 Dec 2013.
3.4	6 Dec 2013	- ditto -	New deadline for submission of tender.

3.5	13 Dec 2013 (4:46 PM)	Email from Virginia Lam (PUR) to the concerned parties for ROM tendering	The Purchasing Department was clarifying with the tenderers on their quotes and requesting detailed breakdowns.
3.6	2 Jan 2014 (11:09 AM)	Email from Kelvin Yeung (PUR) to the concerned parties for ROM tendering	The Purchasing Department reported that 4 tenderers were invited to attend a post-tender meeting individually on various dates.
3.7	Undated	ROM Tender Analysis	Taskforce analysed the overall tender price submitted by 4 tenderers, namely Autotoll, INIT, Trapeze and Volvo.
3.8	12 Mar 2014 to 13 Mar 2014	Email correspondence amongst the concerned parties for ROM tendering with Powerpoint presentation – ROM Project Status Update	A Powerpoint regarding ROM Project Status Update was prepared. It included the summaries of the assessment and evaluation of the tenderers. Despite Autotoll obtained the highest total scores, its bus operations knowledge was limited.
3.9	2 Apr 2014	4 Emails from Virginia Lam (PUR) to the Tenderers	It was agreed not to award the ROM contract to any tenderer. KMB notified all tenderers its decision.
3.10	23 Jun 2014	Memo of Chung Lim Chan (IT)	Information Technology Department took up the development of the ROM project.

3.11	18 Aug 2014	Memo of Chung Lim Chan (IT) with System Requirements Specification	The System Requirements Specification for ROM was prepared with a view to achieve the following functions:- 1) Real time bus monitoring; 2) Departure Management; 3) Diversion Management; and 4) Communication Management.
3.12	18 Nov 2014	Memo of Chung Lim Chan (IT) with System Proposal	The ROM System Proposal was completed and approved by the Head of Depot and the General Managers of respective Depots.
- ditto -	- ditto -	- ditto -	ROM project was at its implementation stage. ROM would provide the following set of functions:- 1) Reference tables maintenance; 2) Real-time Bus Monitoring; 3) Departure Management; 4) Dispatchers Managers; 5) Reporting; and 6) Access Control.
3.13	19 Dec 2014 to 17 Sept 2015	Memos of Chung Lim Chan (IT) concerning ROM Status Report	Development status was reported, the progress was generally on schedule.
3.14	26 Oct 2015	Memo of Chung Lim Chan (IT)	LCK Depot decided that ROM was sufficient to replace TER system in department management for 3 designated routes 5A, 108 and 37M. ROM was also deployed to 5 termini to assist terminus supervisors in departure management.

3.15	17 Dec 2015	Memo of Chung Lim Chan (IT)	Dispatchers were accustomed to the new system and ready to abandon the old TER system in a short time for the selected routes.
3.16	3 Feb 2016 25 Feb 2016	Email correspondence between Chung Lim Chan (IT) and Louisa Lam (ODD)	The scope of ROM had been changed and was renamed to Fleet Management Information System (FMI).
3.17	Various	Application forms for FMI to add new users to access the project	FMI is still widely adopted
3.18	N/A	Update list of names and positions of key persons shown in the documents / emails above	N/A

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

Lever	Activity	Owner	Status	Start date	Revised start date	End date	Revised end date	Remark
1.1	Fleet management software	Catherine Yip	On track	29-Apr-13		17-May-13		
			Not started	20-May-13		22-May-13		Changed to build KMB's own software with the help of software developers
			Not started	15-Jul-13		16-Aug-13		
			Not started	02-Sep-13		30-Sep-13		
			Not started	16-Sep-13		18-Oct-13		
			Not started	01-Aug-13		30-Sep-13		
			Not started	21-Oct-13		21-Nov-13		
			Not started	02-Apr-14		31-Jul-14		
1.2	Bus cabin set up	Jeff Poon	Not started	01-Aug-13		16-Aug-13		
		Catherine Yip	Not started	02-Sep-13		30-Sep-13		
		CK Chan	Not started	01-Sep-13		19-Sep-13		
		CK Chan	Not started	22-Sep-13		03-Oct-13		
		Catherine Yip	Not started	15-Jul-13		16-Aug-13		
		Catherine Yip	Not started	02-Sep-13		30-Sep-13		
		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

Objective
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

Item	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 / termini 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

Level	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

Lever	Activity	Owner	Status	Start date	Revised start date	End date	Revised end date	Remark
4.1	Pre-pilot - TMD	Woo Kin Keung and Catherine Yip	Not started	01-Jan-14		14-Jan-14		
			Not started	31-Jan-14		01-Mar-14		
			Not started	02-Mar-14		31-Mar-14		
4.2	Control center setup - LCKD pilot design	Andrew Kwan	Not started	29-Jul-13		12-Aug-13		
			Not started	15-Aug-13		30-Sep-13		
			Not started	01-Oct-13		31-Dec-13		
			Not started	01-Mar-14		31-Mar-14		
			Not started	15-Apr-14		30-Apr-14		
4.3	Candidate identification & training - LCKD pilot	Andrew Kwan	Not started	07-Oct-13		18-Oct-13		
			Not started	21-Oct-13		31-Jan-14		
		Woo Kin Keung and Susanna Wong	Not started	31-Mar-14		20-May-14		
			Not started	31-Mar-14		20-May-14		
4.4	Pilot launch	Andrew Kwan	Not started	01-Jul-14		31-Aug-14		
			Not started	04-Aug-14		05-Sep-14		
4.5	LCKD full scale roll-out	Andrew Kwan	Not started	29-Jul-13		12-Aug-13		
			Not started	15-Aug-13		19-Aug-13		
			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 up based 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

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Real-time Operations Management System (ROM) System Specifications

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Part I Definitions, Acronyms and Abbreviations

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

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.

Part II Introduction and Scope of Work

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

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

Part III Functional Requirements

- 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.

Part III Functional Requirements

- 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.

Part III Functional Requirements

- 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.

Part III Functional Requirements

- 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)

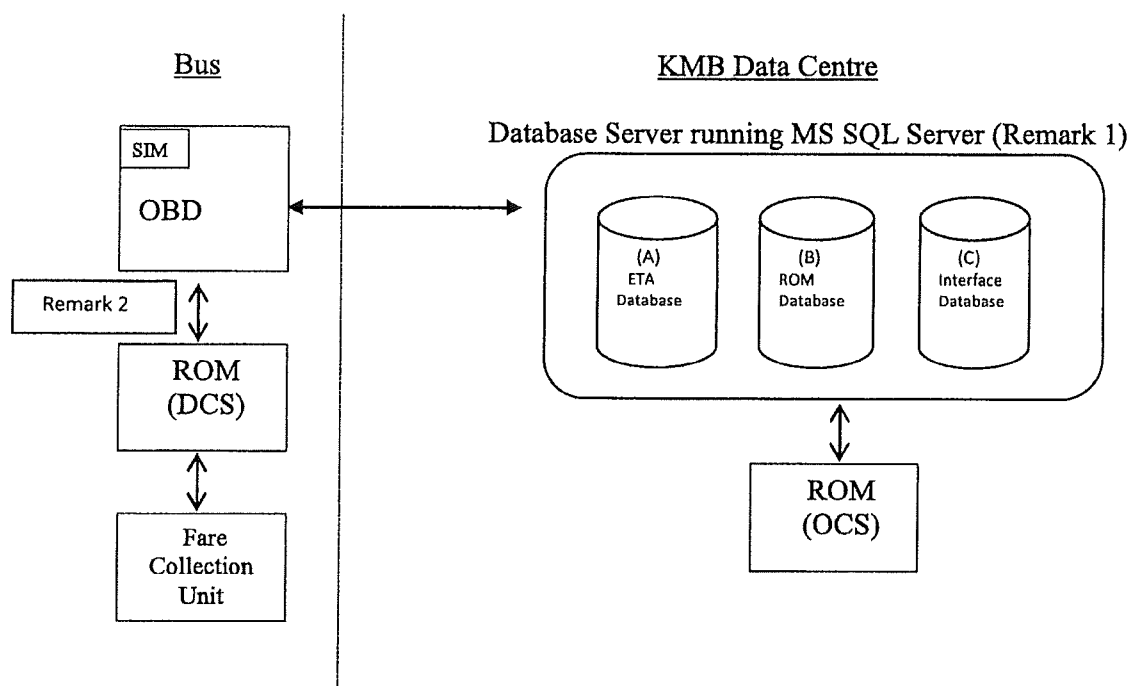
- 2.1 A driver console will be installed on each bus. The driver console will provide the following functions:
 - 2.1.1 Display color graphics and text data
 - a. Dynamic text messages can only be displayed when the bus is stationary where the stationary information is provided by the on-board device (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.

Part III Functional Requirements

- 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

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.

Part IV External Interface Requirements

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) \leftrightarrow 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

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	<ul style="list-style-type: none"> - 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.}

Part V System Hardware & Software Requirements

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

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.

Part VI System Quality Requirements

- 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

Part VI System Quality Requirements

- 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.

Part VI System Quality Requirements

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

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 IX Documentation and Training Requirements

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

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 Milestone Dates

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

Part X Implementation Plan and Milestone Dates

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.

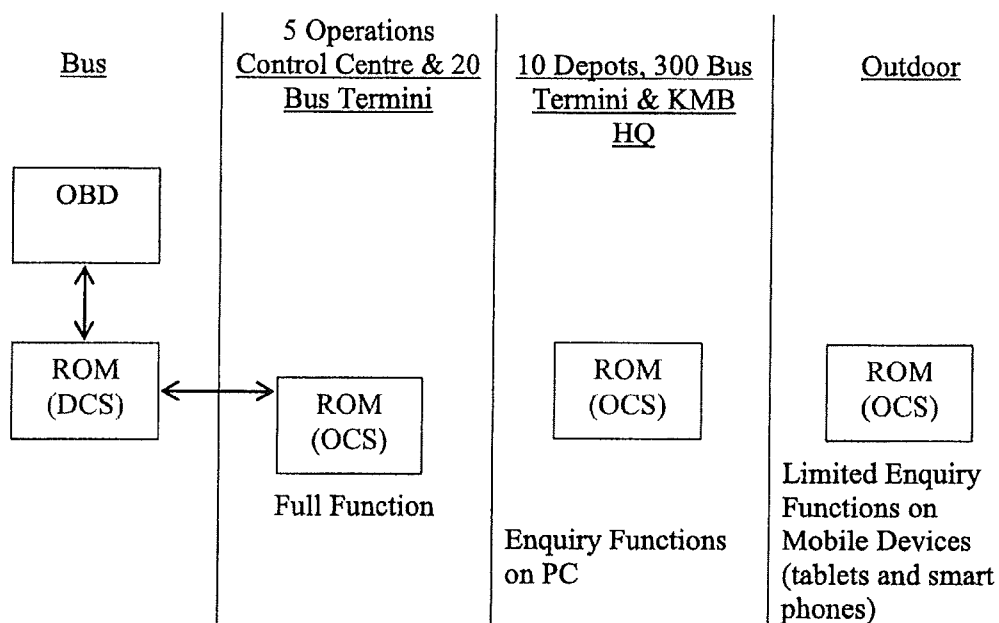
(2) Estimated DCS Loading

	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	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 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

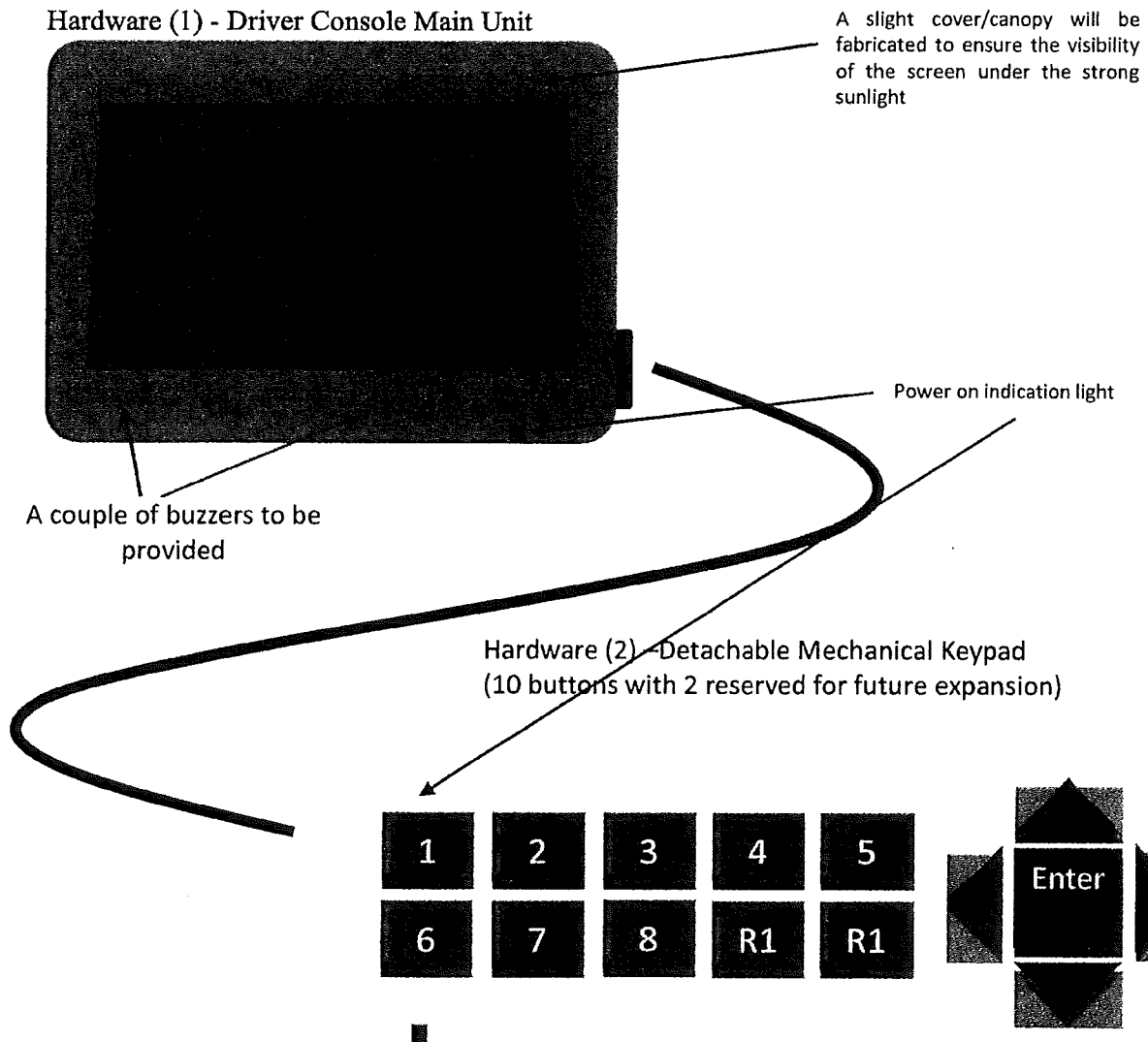
4. Loudspeaker(s)

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



Hardware (3) - Microphone



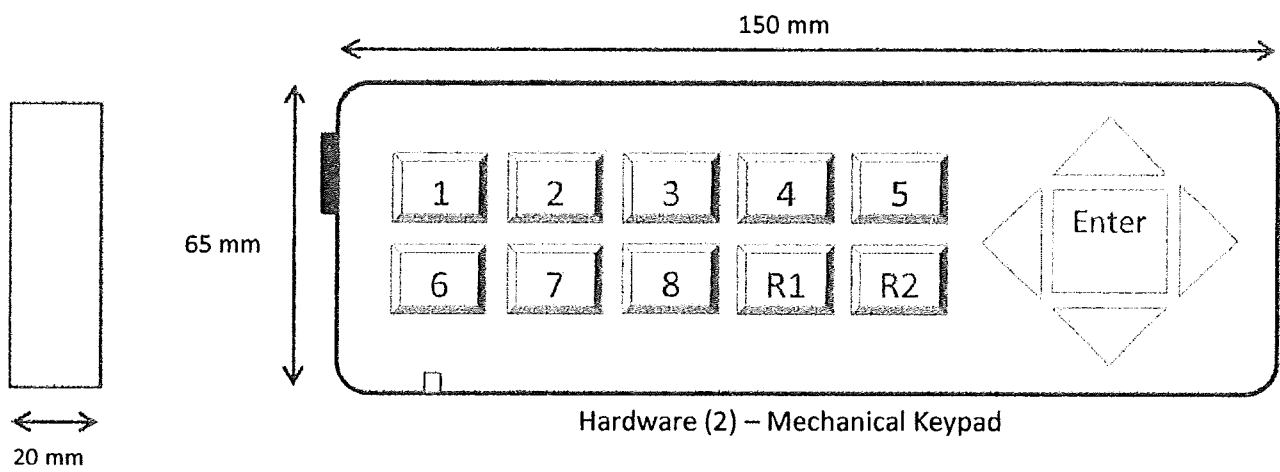
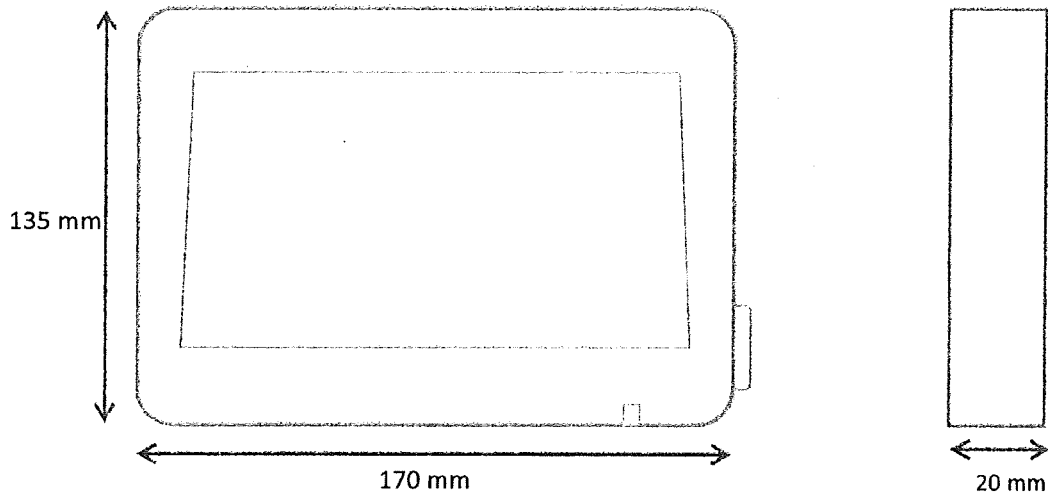
Hardware (4) - Loudspeaker



About 60 x 40 (mm)

Appendix F Driver Console Dimension Sketch

Hardware (1) – Driver Console Unit



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)

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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 (Phase 2) 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:

<u>Current</u>	<u>Propose</u>
Tender Issue Date: 11-Oct-2013	Tender Issue Date: 11-Oct-2013
28-Oct: 1 st round tender queries close	28-Oct: 1 st round tender queries close
31-Oct: taskforce response deadline	31-Oct: taskforce response deadline
4-Nov: 1 st round queries distribution to tenderers	4-Nov: 1 st round queries distribution
	11-Nov: 2 nd round queries close
	18-Nov: taskforce response deadline
	20 Nov: 2 nd 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	<ul style="list-style-type: none"> • Don Chan • Owen Leung • Aileen Ng • Joanna Chan 	1201 conference room	In-person
14 Jan 2014, 9:00am – 10:30am	INIT	<ul style="list-style-type: none"> • Paul Gwynn • Klaus Janke • Michael Kadisch • Keith Rowell • Suvi Hamunen 	1201 conference room	In-person
14 Jan 2014, 11:30am – 1:00pm	Volvo	<ul style="list-style-type: none"> • 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

	Tenders			
	<u>Autotoll</u> (HK\$ 'Millions)	<u>INIT*</u> (HK\$ 'Millions)	<u>Trapeze</u> (HK\$ 'Millions)	<u>Volvo*</u> (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 communication 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, text 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 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]



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

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

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Taskforce members

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	Staff	Title
Purchasing	<ul style="list-style-type: none">• Virginia Lam	Assistant Manager
ITD	<ul style="list-style-type: none">• Catherine Yip	Senior Manager, Information Systems
Depots	<ul style="list-style-type: none">• Fung Siu Hung• Alice Wong	Depot GM, Shatin Depot Assistant Manager, Projects, ODO
Traffic	<ul style="list-style-type: none">• Terry Lo	Assistant Manager, Operations Projects
Service	<ul style="list-style-type: none">• CK Chan	Senior Engineer, Engineering Office

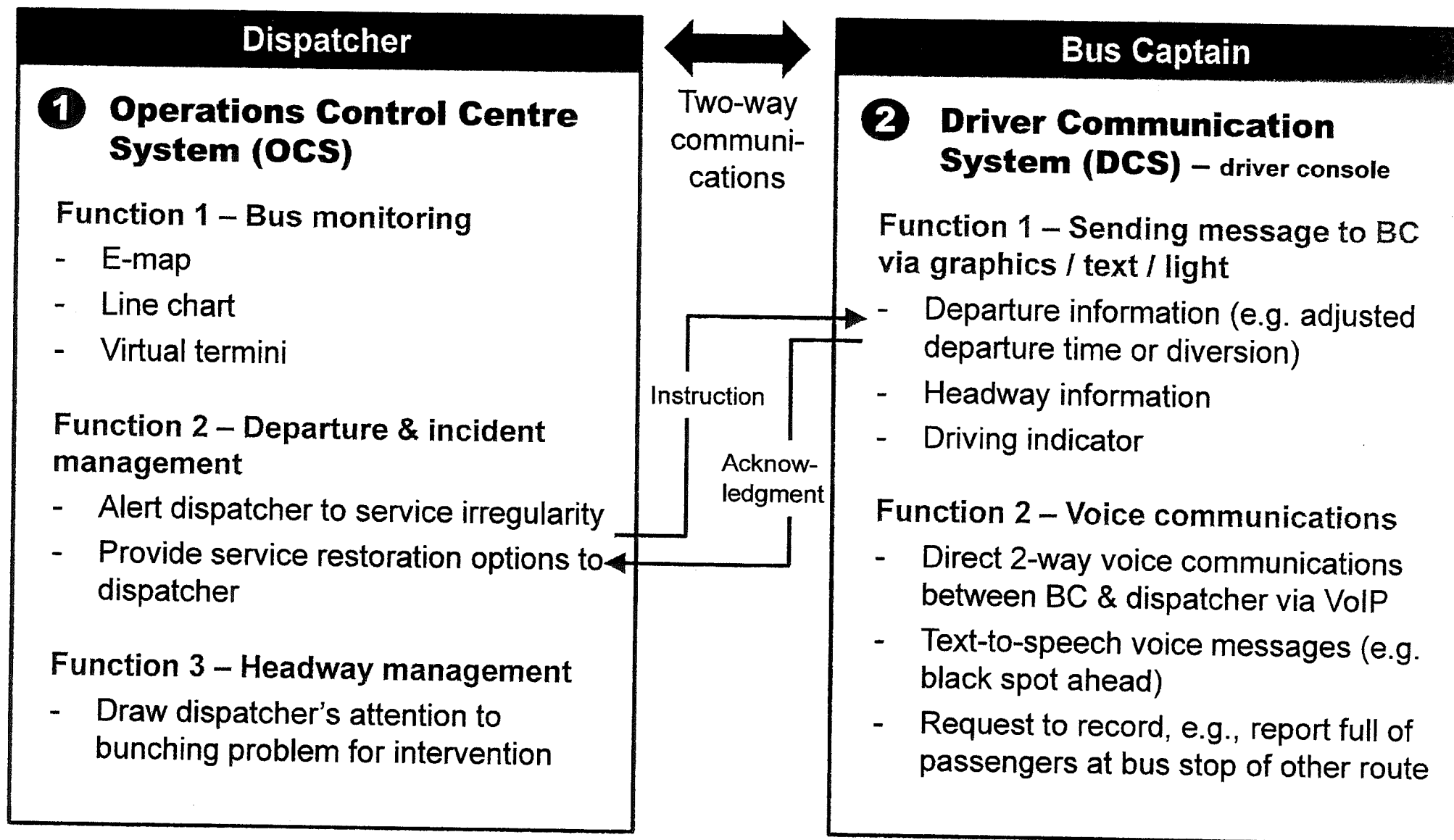
1. Overview of the major modules of ROM

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

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1. Overview of two major modules of ROM

2. Review of current progress and tender assessment

3. Cost and benefit analysis

4. The way forward

Schedule of this tender

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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%)

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	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**.

1. Overview of two major modules of ROM
2. Review ROM tender progress and tender assessment
3. Tender benefit analysis
4. The way forward

Benefits of OCS vs OCS & DCS for the years from 2014 to 2024 CONFIDENTIAL 3.8 (HK\$ million)

	OCS	OCS & DCS
Increase in operating cost		
<ul style="list-style-type: none"> Depreciation for the system OCC setup / renovation Staff costs System repair & maintenance fee 		
Saving in operating costs		
<ul style="list-style-type: none"> 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		
<ul style="list-style-type: none"> Ridership increase due to departure & headway management <ul style="list-style-type: none"> ➢ 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:

- Enable real-time communication with BCs for more dynamic and better timeliness in resources re-allocation
- BCs obtain information of parking location at terminus via DCS for better yard management
- BCs report spots of high demand via DCS to improve service and increase revenue
- BCs input statistics via DCS under un-attended operation to collect valuable statistics for planning & operational purposes
- BCs report bus problem via DCS to transmit details to Service Department for early preparation of maintenance
- 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

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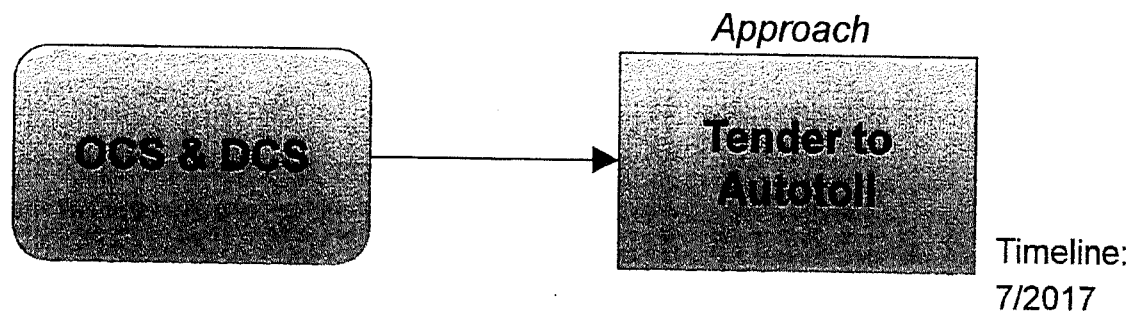
	OCS	DCS
1) Cost	Low	High (Installation of driver consoles on the whole fleet)
2) Benefit	High	High
3) Risks	Low (Crucial functions such as receiving data from bus and ETA are already in place)	High <ul style="list-style-type: none">• No off-the-shelf driver console that suits our requirements is available• Bus captains are involved in the workflow change
4) Implementation timeline	~ 1 year	~ 3 years

One-off delivery vs phased-delivery

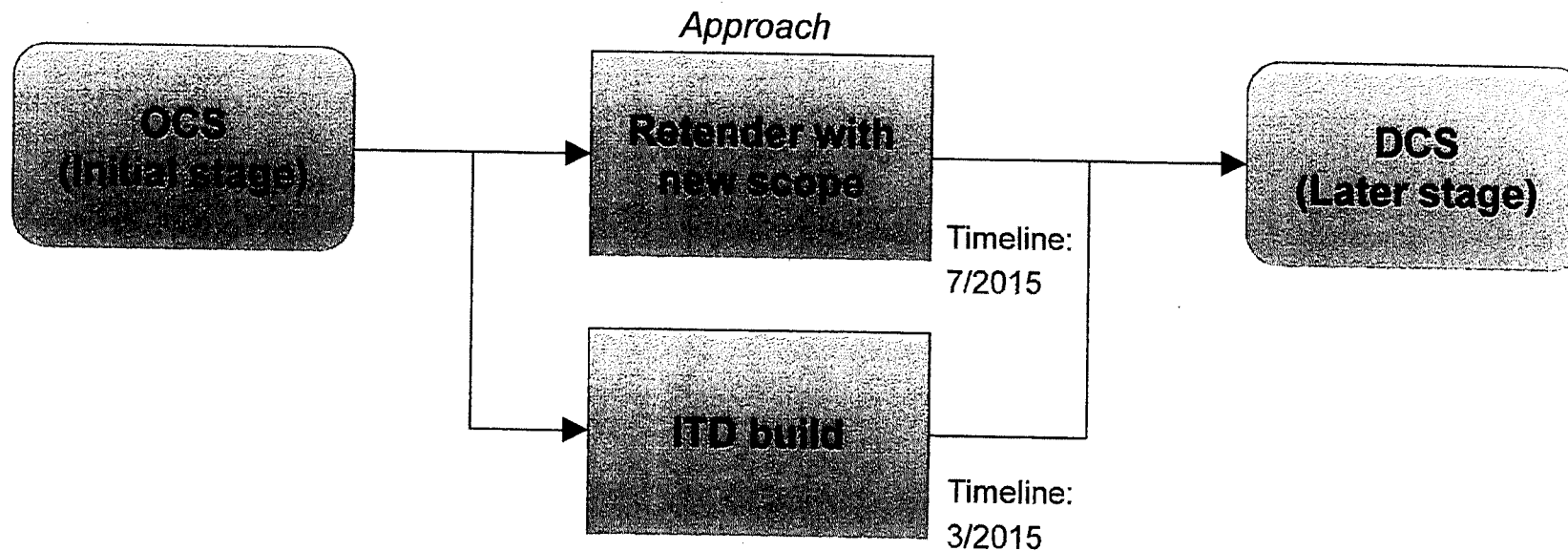
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Option 1: One-off delivery



Option 2: Phased-delivery

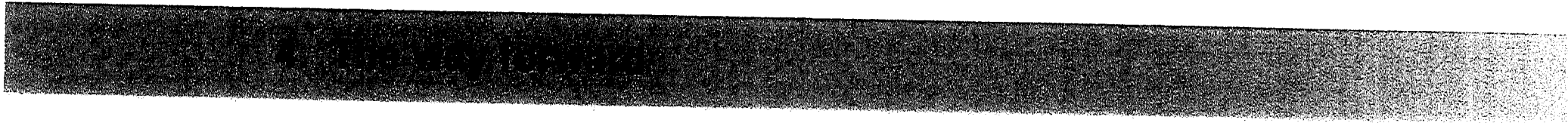


Agenda

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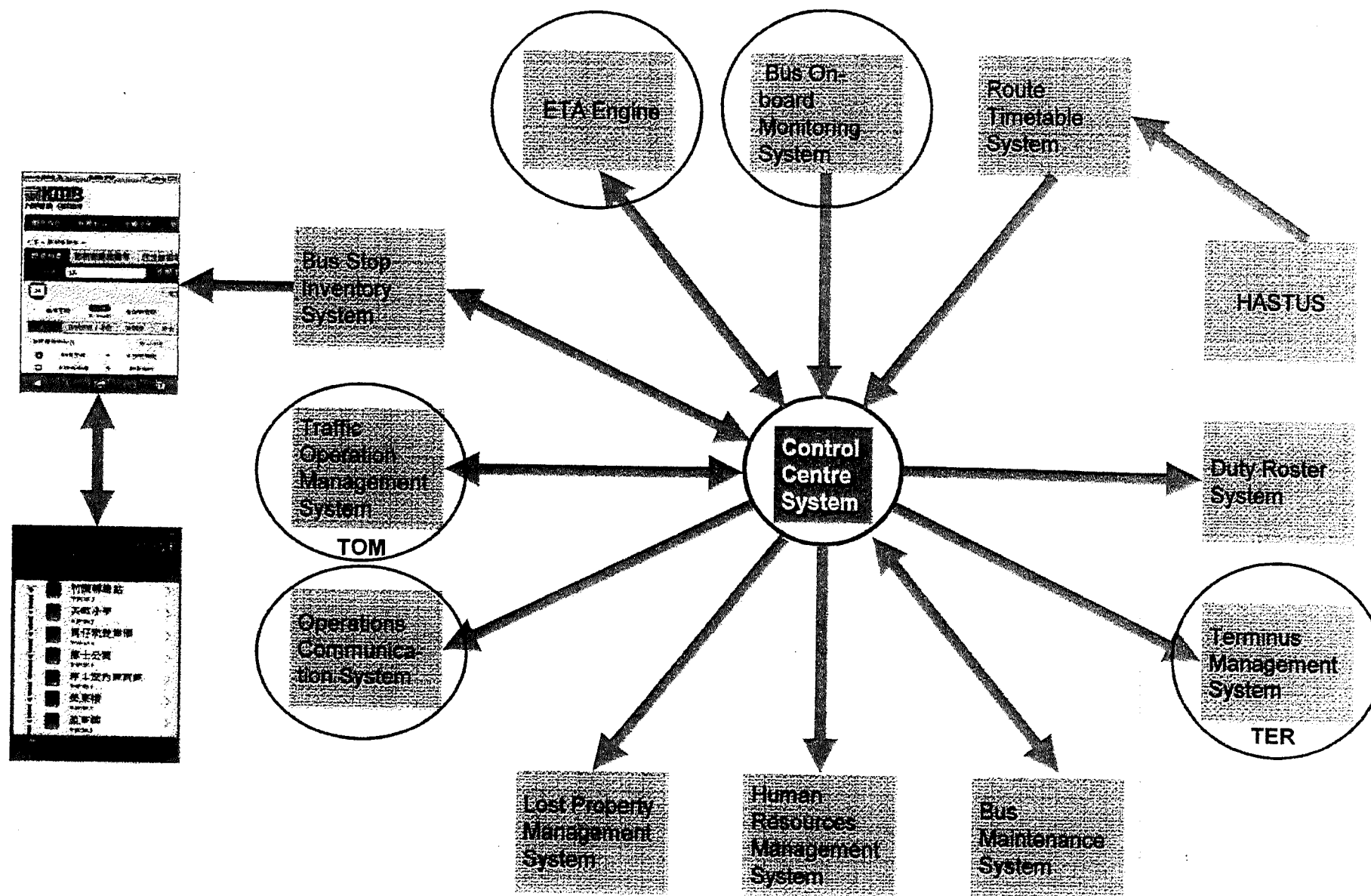
1. Overview of two major modules of ROM
2. Review ROM tender progress and tender assessment
3. Cost and benefit analysis



KMB IT application interfaces

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ITD Build vs Retender option

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	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 (1 st phase)	Tentative 7/2015 (full functional)

Thank You

Balanced Score Card for tender assessment rating

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3.8

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

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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

CONFIDENTIAL

3.8

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	ICQ	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

CONFIDENTIAL

3.8

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	PCCW	ICD	HP	NU
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
Information Technology Department**

Ref. : MM/ADD/14011

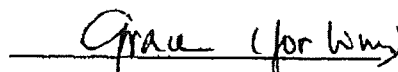
Real-time Operations Management System (ROM) Project Status

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.


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


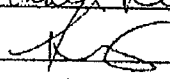
For

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		
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.

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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 overview 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
- Coastline
- 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

ROM Requirement Specification Activities Description

- 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

ROM Requirement Specification
Activities Description

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

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2.2 Departure Management

2.2.1 Goals and Objectives

- 2.2.1.1 To improve bus service by attaining 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 guidelines compliance, overnight parking location compliance etc

ROM Requirement Specification Activities Description

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

**ROM Requirement Specification
Activities Description**

2.4 Communication Management**2.4.1 Goals and Objectives**

- 2.4.1.1 To improve the efficiency in the communication among dispatchers, 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 Inventory 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.



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

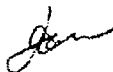
APPROVAL OF SYSTEM PROPOSAL

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

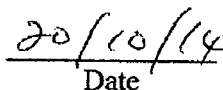
Project : Real-Time Operation Management System (ROM)

Document No. : KDP-LPM-SP01.0

We approve the above-mentioned System Proposal.

Approved By


Head of Department/Depot


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

ROM System Proposal

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	Michael Lee
Signature	<i>Lim</i>	<i>Michael Lee</i>
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. |

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- 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.

ROM System Proposal

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:

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ROM System Proposal

1. System Overview

ROM System Proposal**System Objectives and Benefits****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

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General System Flow

ROM System Proposal System Overview

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)

General System Flow

ROM System Proposal System Overview

- 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

System Functions

ROM System Proposal System Overview

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

Description of 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)
- The threshold headway beyond which warning should be given on an attempt to further increase it

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**

ROM System Proposal System Overview

Description of System Functions

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 status 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 The set of bus routes or bus stops can be selected by line segment(s) which may be a portion of a bus route or drawn by user on map.
- 1.4.2.1.4 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
- 1.4.2.1.5 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
- 1.4.2.1.6 User can switch on or off the information of a bus stop on map such as last arrival time, boarding and ETA of each route etc
- 1.4.2.1.7 Buses going off track are high-lighted
- 1.4.2.1.8 May auto-refresh at a configurable interval
- 1.4.2.1.9 Use different colours/icons to illustrate buses of specific conditions such as not in service, buses of lost GPS location, etc
- 1.4.2.1.10 Can easily toggle into line chart
- 1.4.2.1.11 User can configure which map layers should be visible or invisible
- 1.4.2.1.12 Multiple routes should be shown in different colours on map
- 1.4.2.1.13 Able to play back the movement of a set of buses on map
- 1.4.2.1.14 Able to retrieve a past snapshot of the map view
- 1.4.2.1.15 Provide link to Google street view
- 1.4.2.1.16 Provide icon on map to link to CCTV cameras provided by Transport Department
- 1.4.2.1.17 Allow user to disseminate message to a specific bus captain/bus duty
- 1.4.2.1.18 Result of 1.4.2.1.2 can be filtered by specific timeframe

1.4.2.2 Bus Display on line chart

- 1.4.2.2.1 User can check the status 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, boarding 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 equal-separation
- 1.4.2.2.10 Allow to hide a number of stops on a line chart

Description of System Functions

ROM System Proposal System Overview

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 inconsistent 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 and added 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 dispatcher's monitor
- 1.4.3.1.8 The assigned dispatcher should acknowledge the incident within a time limit which is a configurable 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 dispatcher 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

Description of System Functions

ROM System Proposal System Overview

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 together 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-allocation 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

ROM System Proposal System Overview

Description of System Functions

- 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 disseminated 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

Description of System Functions

ROM System Proposal System Overview

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 responsible persons

1.4.4.5.3 User may temporarily add the primary/secondary responsible dispatcher for a route

Description of System Functions

ROM System Proposal System Overview

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

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Description of System Functions

- 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 routing, 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

Description of System Functions

ROM System Proposal System Overview

- 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 STA & 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 STA & Punctuality
 - 1.4.5.1.5.2.7.2 MoM average of STA & Punctuality
 - 1.4.5.1.5.2.7.3 YoY average of STA & 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

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Description of System Functions

- 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 STA & 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 STA & Punctuality
 - 1.4.5.1.6.2.4.2 MoM average of STA & Punctuality
 - 1.4.5.1.6.2.4.3 YoY average of STA & 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 Primary Dispatcher (assigned by system)
 - 1.4.5.1.7.2.2 Number (and percentage) of cases handled by Secondary Dispatcher (assigned by system)
 - 1.4.5.1.7.2.3 Number (and percentage) of cases handled by Secondary Dispatcher (self-initiated pick up)
 - 1.4.5.1.7.2.4 Average time (minutes) for Primary Dispatcher to handle each case
 - 1.4.5.1.7.2.5 Average time (minutes) for Secondary 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

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Description of System Functions

- 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

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Description of System Functions

- 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
- 1.4.5.2.4 Used By
 - 1.4.5.2.4.1 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

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- 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

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Description of System Functions

- 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

ROM System Proposal System Overview

Description of System Functions

- 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)

ROM System Proposal System Overview

Description of System Functions

- 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

ROM System Proposal System Overview

Description of System Functions

- 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

Description of System Functions**ROM System Proposal
System Overview****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

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Description of System Functions

ROM System Proposal System Overview

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

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System Assumptions and Constraints

ROM System Proposal System Overview

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

System Interface

ROM System Proposal
System Overview

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
	Driver 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

ROM System Proposal 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

ROM System Proposal

3. Contact Points

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ROM System Proposal
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. Kwok 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)

ROM System Proposal

4. System Security

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ROM System Proposal 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

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ROM System Proposal
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.

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ROM System Proposal

6. Data Retention Policy

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ROM System Proposal
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

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7. System Functions Section

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Summary of System Functions

ROM System Proposal 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		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		

Summary of System Functions

ROM System Proposal System Functions Section

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

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Summary of System Functions

ROM System Proposal System Functions Section

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

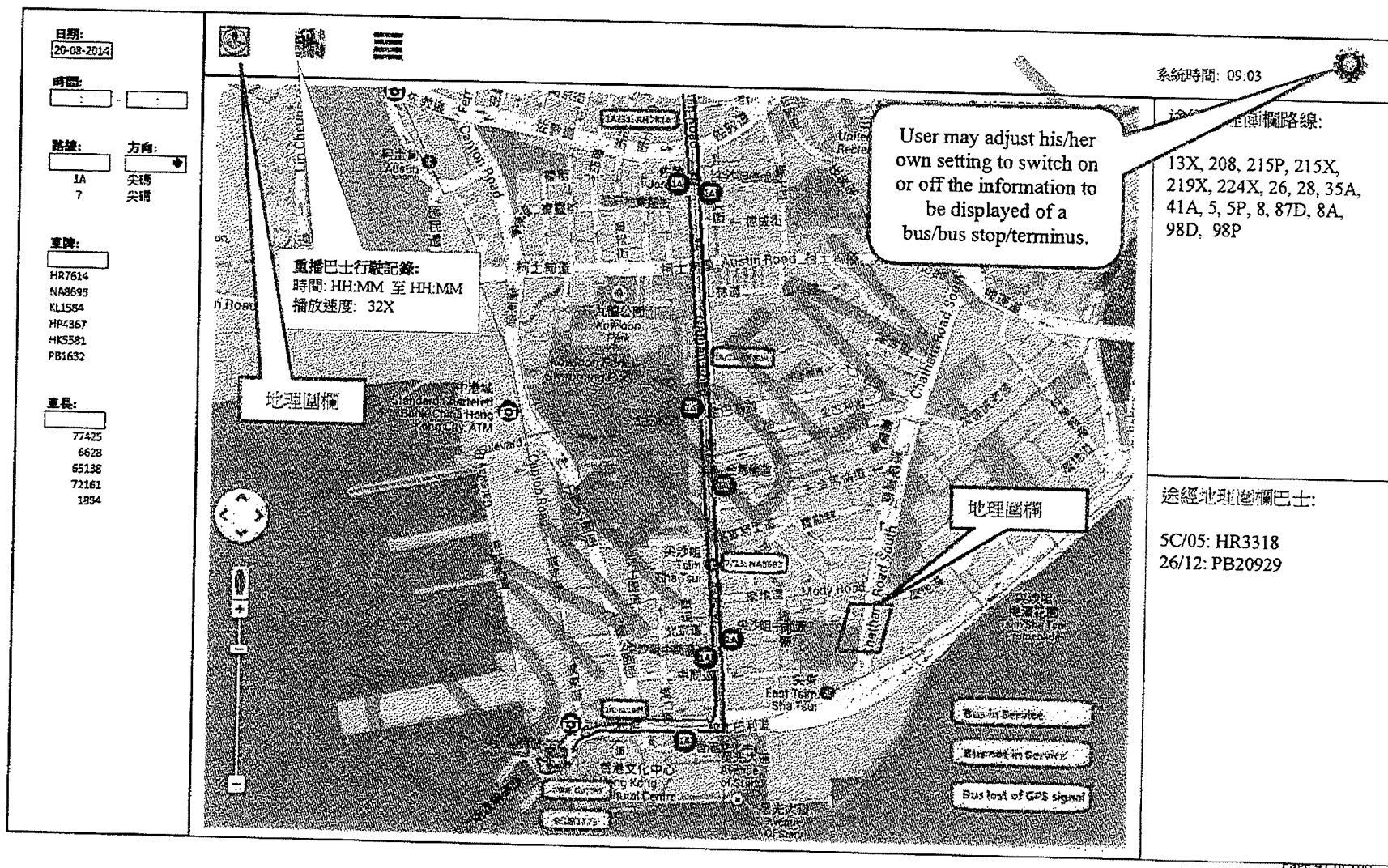
7.2.1 Real-time Bus Monitoring

7.2.1.1 Bus Display on map view

7.2.1.1.1 General View



7.2.1.1.1 Geo-fencing

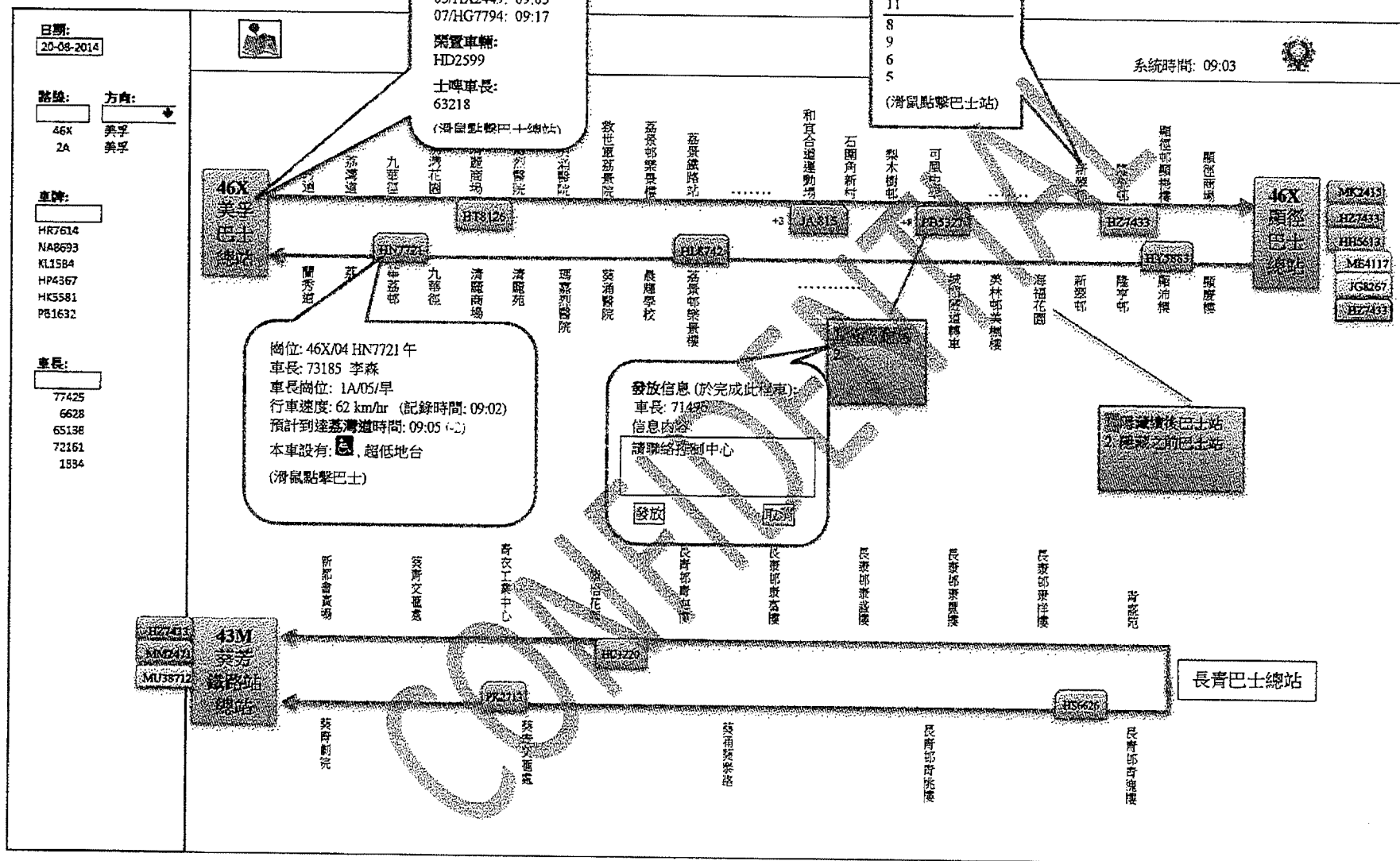


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Real-time Bus Monitoring

ROM System Proposal System Functions Section

7.2.1.2 Bus Display on line chart



Departure Management

ROM System Proposal System Functions Section

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	車廂編號	輸入者	輸入時間	參考編號
王大同	預計延遲到達	C 8A	01	1155	RJ6184	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	GZ4853	TOM	08:45:20	31523
王大同	欠車	C 2A	06	65558	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	離行車路線	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		最長提早		本月累積 失班率	當天累積失班率			
					分鐘	車次	分鐘	車次		0500-1000	1000-1500	1500-2000	2000-0200
2A	美孚			0/3/2	4	06	45	003					
	梨木			2/3/2	4	06	43	005	1.24%	2/59 (3.51%)	2/59 (3.51%)	2/59 (3.51%)	2/59 (3.51%)
6	美孚			2/8/0	9	03	45	007	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	45	007	1.11%	1/51 (1.96%)	1/51 (1.96%)	1/51 (1.96%)	1/51 (1.96%)
6C	美孚			5/6/2	12	04	44	006	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	04	44	006	2.18%	3/71 (4.23%)	3/71 (4.23%)	3/71 (4.23%)	3/71 (4.23%)
6D	美孚			3/3/2	8	05	46	002	1.87%	0/39 (0%)	0/39 (0%)	0/39 (0%)	0/39 (0%)
	牛頭角			1/5/2	8	05	46	002	1.87%	0/39 (0%)	0/39 (0%)	0/39 (0%)	0/39 (0%)
6X	中環道			0/4/1	-	-	43	003	0	0/8 (0%)	-	-	-
28	麼地道			1/6/2	4	05	46	001	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	46	001	1.34%	2/47 (4.26%)	2/47 (4.26%)	2/47 (4.26%)	2/47 (4.26%)
30	長沙灣			4/2/2	6	07	45	003	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	45	003	1.84%	2/24 (8.33%)	2/24 (8.33%)	2/24 (8.33%)	2/24 (8.33%)
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	-	-	-	-	0.8%	1/8 (0%)	1/8 (0%)	1/8 (0%)	1/8 (0%)
46X	美孚			3/10/2	5	05	43	008	0.78%	4/84 (4.76%)	4/84 (4.76%)	4/84 (4.76%)	4/84 (4.76%)
	顯徑			2/14/1	6	05	43	008	0.78%	4/84 (4.76%)	4/84 (4.76%)	4/84 (4.76%)	4/84 (4.76%)
72	長沙灣			3/5/1	4	05	43	009	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	43	009	2.55%	1/29 (3.45%)	1/29 (3.45%)	1/29 (3.45%)	1/29 (3.45%)
85	美孚			2/3/2	5	02	47	002	1.61%	0/36 (0%)	0/36 (0%)	0/36 (0%)	0/36 (0%)
	黃泥頭			1/8/2	9	02	47	002	1.61%	0/36 (0%)	0/36 (0%)	0/36 (0%)	0/36 (0%)
86A	甘泉街			0/5/3	-	-	44	003	1.91%	2/49 (4.08%)	2/49 (4.08%)	2/49 (4.08%)	2/49 (4.08%)
	沙田圍			3/4/2	-	-	44	003	1.91%	2/49 (4.08%)	2/49 (4.08%)	2/49 (4.08%)	2/49 (4.08%)
102	美孚			3/13/0	4	08	45	003	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	45	003	1.58%	3/36 (8.33%)	3/36 (8.33%)	3/36 (8.33%)	3/36 (8.33%)
102P	筲箕灣			4/12/3	6	08	44	006	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

系統顯示所有調度員負責之事件。
(包括已/未確認之事故。)

調度員: 事件狀況: 處理中/ 未確認/ 處理完畢/ 所有 ↓

調度員: 20646 (張子良)

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	開出時間	預計到站	實際到站	參考編號	行車概況	行車時間表	折線圖	地圖	受影響路線	受影響字軌	次(車)開出	受影響字軌	次(車)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
張子良	交通意外	C39A	05	85047	LM2168	07:38	08:20		31353	■	■	■	■	C39A	05	08:28	C39A	10
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

確認處理事件
轉駁至調度員
拒絕處理事件
事件無須處理
事件處理完畢
處理事件

系統將轉換至
詳細行車時間表

系統將轉換至此線次調度員, 如沒有可安排之調度員, 事件將交由控制中心指揮長安排/處理。

路線	往	遲	早	-/0/+	最長延誤		最長提早		本月累積失班率	當天累積失班率			
					分鐘	字軌	分鐘	字軌		0500-1000	1000-1500	1500-2000	2000-0200
2A	美孚	■	■	0/3/2	-4	06	-9	06	1.24%	2/59 (3.51%)	2/59 (3.51%)	2/59 (3.51%)	2/59 (3.51%)
	梨樹	■	■	2/3/2	-4	06	-9	06					
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%)	-	-	-
	麼地道	■	■	1/6/2	-4	05	-6	01					
28	麼地道	■	■	2/6/0	-4	05	-6	01	1.34%	2/47 (4.26%)	2/47 (4.26%)	2/47 (4.26%)	2/47 (4.26%)
	美孚	■	■	0/4/0									
38A	海濱花園	■	■	0/4/0					0.8%	1/8 (0%)	1/8 (0%)	1/8 (0%)	1/8 (0%)
	長沙灣	■	■	3/5/1	-4	05	-11	09					
2	太和	■	■		-4	05	-11	09	2.55%	1/29 (3.45%)	1/29 (3.45%)	1/29 (3.45%)	1/29 (3.45%)
	美孚	■	■		-5	02	-7	502					
5	荳泥頭	■	■		-5	02	-7	502	1.61%	0/36 (0%)	0/36 (0%)	0/36 (0%)	0/36 (0%)
	美孚	■	■		-12	504	-4	06					
6C	九龍城碼頭	■	■		-12	504	-4	06	2.18%	1/71 (4.23%)	3/71 (4.23%)	3/71 (4.23%)	3/71 (4.23%)
	長沙灣	■	■	4/2/2	-6	07	-5	03					
30	荳泥花園	■	■	2/7/0	-6	07	-5	03	1.84%	1/24 (8.33%)	2/24 (8.33%)	2/24 (8.33%)	2/24 (8.33%)

7.2.2.3.1 Record call-in incident

調度員: 張子良 事故狀況: 處理中 / 未確認 / 處理完畢 / 所有 ↓

系統時間: 2014-08-01 09:34:11

車種: 車長:

已記錄事件:

參考編號	時間	事件類別	路線	字軌	車輛	車長	資料補充
							編輯
							編輯
							編輯

[新增]事件類別: 壞車 (壞車/交通意外/失物處理/其他事項) 新增

新增事件 - 壞車

車牌: 時間: : :

地點: ☐ 站頭 ☐ 中途

時間: : : 往維修 車長 維修站 / 車廠

時間: : : 車長用膳 至 : :

時間: : : 車長收工

時間: : : 車長自行往站頭候命 站頭

時間: : : 重新入線 車輛 調頭 / 中途起載

儲存 取消

調度員	事件	時間	地點	車輛	車長	資料補充
張子良	延遲抵					
張子良	壞車					
張子良	交通意外					
張子良	失物處理					
張子良	偏離行					

路線	往
2A	美芝路
6	荔枝角
6D	牛頭角
6X	中環
28	慶龍
38A	美芝路
72	海濱
86	美芝路
6C	九龍城
30	荃葵花園

失班率	1500-2000	2000-0200
2/59 (3.51%)	2/59 (3.51%)	
1/51 (1.96%)	1/51 (1.96%)	
0/39 (0%)	0/39 (0%)	
2/47 (4.26%)	2/47 (4.26%)	
1/8 (0%)	1/8 (0%)	
1/29 (3.45%)	1/29 (3.45%)	
0/36 (0%)	0/36 (0%)	
3/71 (4.23%)	3/71 (4.23%)	
2/24 (8.33%)	2/24 (8.33%)	

06

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	往柴灣	✓
6	往尖沙咀	
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	✓

System will display all routes for user selection

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	操作
04/09/2014 18:20	全線	受鯉安苑對開的爆水管影響，觀塘道往油塘方向擠塞，龍尾：九龍灣港鐵站	公司電台	修改 / 復制
04/09/2014 18:05	全線	鯉魚門道近鯉安苑因爆水管，往油塘方向只有1條行車線可以通車。將軍澳道下行往觀塘，近翠屏南一帶車多行車緩慢。(HKT 18:20)	公司電台	修改 / 復制
04/09/2014 18:00	107, 170, 671	藍拿道天橋往香港仔隧道方向，近軒尼詩道橋面快線有單車阻路，龍尾：灣仔交匯處。(HKT 18:05)	公司電台	修改 / 復制
04/09/2014 17:55	62X, 258P, 258D, 259D	所有車輛請於觀塘回旋處調頭	屯門車務	修改 / 復制

已確認訊息之調度員:

調度員	確認時間	OCC
李超	20-09-2014 10:24	荔枝角
王大同	20-09-2014 10:24	荔枝角
何小明	20-09-2014 10:24	荔枝角
張子良	20-09-2014 10:24	荔枝角

發放信息:

發放人或組別:

收件人: 調度員

日期: 88/88/88 - 88/88/88

時段: 99:99 - 99:99

訊息類別: 交通意外/壞車 / 修路上程 / 爆水管 / 車務訊息 ↓

狀況: 新增 / 清理 / 跟進 ↓

內容:

發放

Allow user to select affected route(s) by specifying a geofence on the map.

訊息發放範圍:

路段: 方向: 全選

2A	往美孚	✓
2A	往樂華	✓
6	往尖碼	
6	往荔枝角	
6D	往牛頭角	✓
6D	往美孚	✓
6X	往中區道	✓
6X	往美孚	✓
905	往荔枝角	✓
905	往灣仔碼頭	✓

發放日期: / / 車長編號: 車輛號碼: 訊息狀況: 現行訊息 / 完成訊息 / 所有訊息 ↓

已確認訊息之調度員:

調度員	確認時間	OCC
李超	10-09-2016 10:34	荔枝角

受影響路段:

路段	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	麗達	✓
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	禾輦	✓
81	渡華路	
95	翠林	✓
95	渡華路	
203E	彩虹	✓
203E	九龍鐵路站	

亦可從現有路段選取受影路線

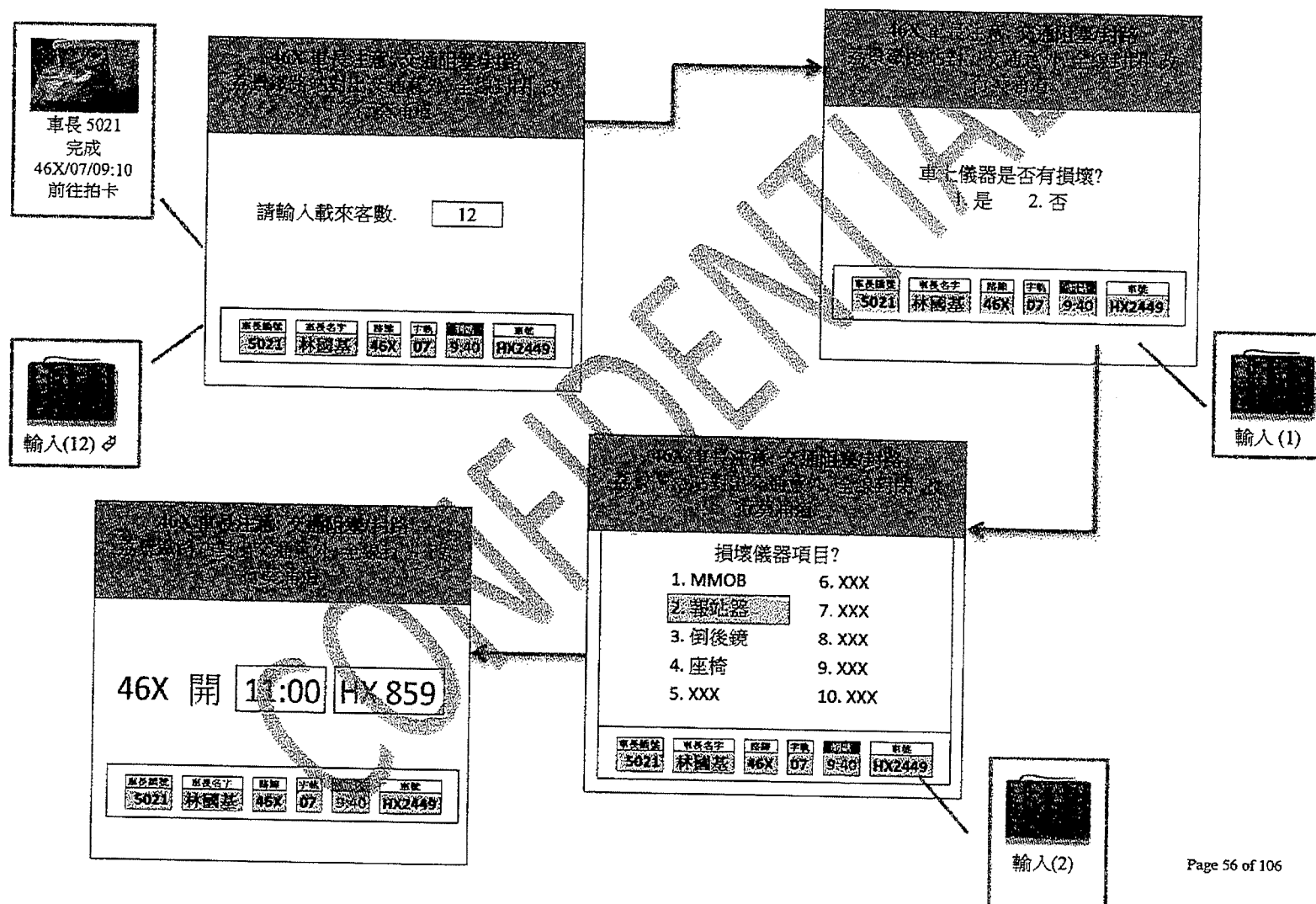
受影響路段範圍

確定 取消

7.2.2.5 OCC Message dissemination

[illegible]

7.2.2.6 Arrival Reporting by Bus Captain



[illegible]

Departure Management

ROM System Proposal
System Functions Section

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 2A/ 14	08:45	08:55	6	09:51	11:00		
		63625			63625(膳)		
JD9717 2A/ 02	08:55	09:05	12	10:03	11:12		
		63663			63663(膳)		
MS5729 2A/ 04	09:07	09:20	12	10:15	10:24		
		71169			71169		
GW2410 2A/ 13	09:15	09:35	11	10:27	10:35		
		61941			61941		
MP6513 2A/ 01	09:31	09:34	12	10:39	10:48		
		68022			68022		
PC3760 2A/ 11	09:45	09:55	10	10:51	10:51		
		76199			樂華=>牛頭角 76199		(私)
JD9093 2A/ 07	10:00	10:08	12	09:00	09:00		
		23864			23864		
PC4344 2A/S02	10:20	10:20	12	10:16	10:16		
		(欠人)			荔枝角廠=>美孚 (欠人)		(廠)
LF3614 2A/ 03	09:19	10:32	12	11:32	11:36		
		74658			74658		
KR4350 2A/ 06	09:25	10:14	12	11:44	11:48		
		69966			69966		
NE 714 2A/ 05	09:31	10:16	12	11:56	12:00		
		78696			78696		
GW2556 2A/ 16	11:00	11:08	12	09:05	10:00		
		18635			18635		
JA9579 2A/S01	11:12	11:20	12	10:12	10:12		
		73252			73252		
PC3112 2A/ 15	10:12	11:30	10	09:03	09:12		
		68802			68802		
RE 508 2A/ 08	10:24	11:40	10	09:15	09:24		
		28476			28476		
PC3522 2A/ 12	10:36	11:55	15	09:27	09:55		
		69800			69800		
MZ2851 2A/ 09	10:48	12:00	5	09:35	09:45		
		63665			63665		

Departure Management

ROM System Proposal
System Functions Section
☒ 顯示已收字軌 ☒ 顯示私/廠 ☒ 只計算總站開 Headway

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 2A/ 14	08:55	09:55	10:55	11:00	11:00	63625(膳)	
JD9717 2A/ 02	08:55	09:55	10:55	11:12	11:12	63663(膳)	
MS5729 2A/ 04	09:07	09:20	10:24	10:24	10:24	71169	
GW2410 2A/ 13	08:13	09:27	10:27	10:36	10:36	61941	
MP6513 2A/ 01	08:21	09:35	10:39	10:48	10:48	68022	
PC3760 2A/ 11	08:23	09:36	10:51	10:51	10:51	樂華=>牛頭角	
JD9093 2A/ 07	10:00	10:08	10:51	10:51	10:51	76199	(私)
PC4344 2A/S02	10:20	10:20	10:16	10:16	10:16	荔枝角廠=>美孚	(欠人)

上一班次之編號/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)

黃色說明:

上一班次未開出

ROM System Proposal

System Fucntions Section

7.2.2.9.1 Working Timetable – Time View

日期:		調整班次 (F12)		發訊放息 (F10)		排班車輛 / 車長 / 時間			
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 往屯碼頭									
59M 往荃灣									
車牌:									
HR7614									
NA8693									
KL1584									
HP4367									
HK5581									
PB1632									
車長:									
77425									
6528									
65138									
72161									
1834									

站名	車次	車牌	車長	開出時間	預計到達	實際到達	行車時間	行車狀況	地點	受影響	警務處	文(車)	受影響	警務處	文(車)
張子良	壞車	6D	B2	62564	HY754	11:45	12:45		35216						
張子良	交通意外	C39A	05	85047	LM2168	07:38	08:20		31353						
張子良	失物處理、留後	C43A	08	70524	MK5518	07:00	07:48	07:48	31381						

ROM System Proposal

System Functions Section

排序: 車種 / 車長 / 時間

↓ 相關文章推介

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: —

Departure Management

ROM System Proposal System Functions Section

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

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:

SBM/01/早 65157	SBM/02/早 60804	SBM/03/早 60805	SBM/04/早 60806	SBM/05/早 71733	SBM/06/早 72460	SBM/07/早 72460	SBM/08/早 60809	SBM/09/早 60809	SBM/10/早 71306	SBM/11/早 60809	SBM/12/早 60809	SBM/13/早 60809	SBM/14/早 60809
05:15 JUZ409 東門南廠 → 良景	05:41 KV6817 東門南廠 → 良景	05:41 KV6817 東門南廠 → 良景	05:50 JV6880 東門南廠 → 良景	05:50 JV6880 東門南廠 → 良景	06:27 欠東 東門南廠 → 良景	06:25 KC3551 東門南廠 → 良景	06:25 KC3551 東門南廠 → 良景	06:32 KV7191 東門南廠 → 良景	06:32 KV7191 東門南廠 → 良景	06:42 KV7191 東門南廠 → 良景	06:42 KV7191 東門南廠 → 良景	06:42 KV7191 東門南廠 → 良景	06:42 KV7191 東門南廠 → 良景
05:25 JUZ409 良景 → 東門南廠	05:51 KV6817 良景 → 東門南廠	05:51 KV6817 良景 → 東門南廠	06:00 JV6880 良景 → 東門南廠	06:00 JV6880 良景 → 東門南廠	06:37 欠東 良景 → 東門南廠	06:35 KC3551 良景 → 東門南廠	06:35 KC3551 良景 → 東門南廠	06:42 KV7191 良景 → 東門南廠	06:42 KV7191 良景 → 東門南廠	06:52 KV7191 良景 → 東門南廠	06:52 KV7191 良景 → 東門南廠	06:52 KV7191 良景 → 東門南廠	06:52 KV7191 良景 → 東門南廠
06:20 JUZ409 良景 → 東門南廠	06:56 KV6817 良景 → 東門南廠	06:56 KV6817 良景 → 東門南廠	07:05 JV6880 良景 → 東門南廠	07:05 JV6880 良景 → 東門南廠	07:42 欠東 良景 → 東門南廠	07:40 KC3551 良景 → 東門南廠	07:40 KC3551 良景 → 東門南廠	07:47 KV7191 良景 → 東門南廠	07:47 KV7191 良景 → 東門南廠	07:57 KV7191 良景 → 東門南廠	07:57 KV7191 良景 → 東門南廠	07:57 KV7191 良景 → 東門南廠	07:57 KV7191 良景 → 東門南廠
07:15 JUZ409 良景 → 東門南廠	07:45 KV6817 良景 → 東門南廠	07:45 KV6817 良景 → 東門南廠	07:54 JV6880 良景 → 東門南廠	07:54 JV6880 良景 → 東門南廠	08:29 欠東 良景 → 東門南廠	08:27 KC3551 良景 → 東門南廠	08:27 KC3551 良景 → 東門南廠	08:34 KV7191 良景 → 東門南廠	08:34 KV7191 良景 → 東門南廠	08:44 KV7191 良景 → 東門南廠	08:44 KV7191 良景 → 東門南廠	08:44 KV7191 良景 → 東門南廠	08:44 KV7191 良景 → 東門南廠
08:11 JUZ409 良景 → 東門南廠	08:46 KV6817 良景 → 東門南廠	08:46 KV6817 良景 → 東門南廠	08:55 JV6880 良景 → 東門南廠	08:55 JV6880 良景 → 東門南廠	09:29 欠東 良景 → 東門南廠	09:27 KC3551 良景 → 東門南廠	09:27 KC3551 良景 → 東門南廠	09:34 KV7191 良景 → 東門南廠	09:34 KV7191 良景 → 東門南廠	09:44 KV7191 良景 → 東門南廠	09:44 KV7191 良景 → 東門南廠	09:44 KV7191 良景 → 東門南廠	09:44 KV7191 良景 → 東門南廠
09:11 (備) 東門南廠 → 良景	09:36 KV6817 東門南廠 → 良景	09:36 KV6817 東門南廠 → 良景	09:45 JV6880 東門南廠 → 良景	09:45 JV6880 東門南廠 → 良景	10:19 欠東 東門南廠 → 良景	10:17 KC3551 東門南廠 → 良景	10:17 KC3551 東門南廠 → 良景	10:24 KV7191 東門南廠 → 良景	10:24 KV7191 東門南廠 → 良景	10:34 KV7191 東門南廠 → 良景	10:34 KV7191 東門南廠 → 良景	10:34 KV7191 東門南廠 → 良景	10:34 KV7191 東門南廠 → 良景
10:37 JUZ409 東門南廠 → 良景	10:56 KV6817 東門南廠 → 良景	10:56 KV6817 東門南廠 → 良景	11:05 JV6880 東門南廠 → 良景	11:05 JV6880 東門南廠 → 良景	11:39 欠東 東門南廠 → 良景	11:37 KC3551 東門南廠 → 良景	11:37 KC3551 東門南廠 → 良景	11:44 KV7191 東門南廠 → 良景	11:44 KV7191 東門南廠 → 良景	11:54 KV7191 東門南廠 → 良景	11:54 KV7191 東門南廠 → 良景	11:54 KV7191 東門南廠 → 良景	11:54 KV7191 東門南廠 → 良景
10:47 JUZ409 良景 → 東門南廠	11:50 KV6817 良景 → 東門南廠	11:50 KV6817 良景 → 東門南廠	12:00 JV6880 良景 → 東門南廠	12:00 JV6880 良景 → 東門南廠	12:35 欠東 良景 → 東門南廠	12:33 KC3551 良景 → 東門南廠	12:33 KC3551 良景 → 東門南廠	12:40 KV7191 良景 → 東門南廠	12:40 KV7191 良景 → 東門南廠	12:50 KV7191 良景 → 東門南廠	12:50 KV7191 良景 → 東門南廠	12:50 KV7191 良景 → 東門南廠	12:50 KV7191 良景 → 東門南廠
12:00 JUZ409 良景 → 東門南廠	12:35 KV6817 良景 → 東門南廠	12:35 KV6817 良景 → 東門南廠	12:44 JV6880 良景 → 東門南廠	12:44 JV6880 良景 → 東門南廠	13:19 欠東 良景 → 東門南廠	13:17 KC3551 良景 → 東門南廠	13:17 KC3551 良景 → 東門南廠	13:24 KV7191 良景 → 東門南廠	13:24 KV7191 良景 → 東門南廠	13:34 KV7191 良景 → 東門南廠	13:34 KV7191 良景 → 東門南廠	13:34 KV7191 良景 → 東門南廠	13:34 KV7191 良景 → 東門南廠

調度員事件板:

調度員	事件類別	路線	車長	車次	出	預計	實際	車次	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車	行車
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調度員事件板:													
調度員	事件類別	路線	車次	時間	預計	實際	車次	時間	預計	實際	車次	時間	預計
張子良	壞車	6D	02	62564	11:45	12:45	35216				6D	02	15:10
張子良	交通意外	C39A	05	50472	07:38	08:20	31353				C39A	05	08:28
張子良	失物處理 - 留後	C43A	08	70524	07:00	07:48	31381				C43A	08	07:55

7.2.2.9.4

Working Timetable – Regulation Mode in Time View

日期: 20-08-2014

時間: 99:99 - 99:99

路線: 58M 58P 59M 59M

方向: 往良景 往葵芳 往屯門 往荃葵

車牌: HR7514 NA8693 KL1584 HP4367 MK5581 PB1632

車長: 77425 6628 65138 72151 1834

行車時間表 (F12) 發放訊息 (F10)

排序: 車輛 / 車長 / 時間

路線	車輛	車牌	車長	預定開車	預定到達	起點	中途起點站	終點	車長車長	預定車位	預定DCC	預定車位	車長車位	班次
58M	KV5817	58M/03	12:54	13:48	良景邨	葵芳站	葵芳站	葵芳站	60583	53678	58M/03/早	58M/03/夜	8	
58M	JV6725	58M/08	13:03	13:57	良景邨	葵芳站	葵芳站	葵芳站	60583	53678	58M/08/早	58M/08/夜	9	
58M	KV2052	58M/10	13:11	14:05	良景邨	葵芳站	葵芳站	葵芳站	60583	53678	58M/10/早	58M/10/夜	8	
58M	JV5680	58M/05	13:19	13:59	良景邨	葵芳站	葵芳站	葵芳站	60583	53678	58M/05/早	58M/05/夜	9	
58M	JV71030	58M/15	13:20	14:14	良景邨	葵芳站	葵芳站	葵芳站	60583	53678	58M/15/早	58M/15/夜	9	
58M	JV6814	58M/12	13:27	13:57	屯門南廠	葵芳站	葵芳站	葵芳站	60583	53678	58M/12/早	58M/12/夜	8	
58M	JV7054	58M/04	13:28	14:22	良景邨	葵芳站	葵芳站	葵芳站	60583	53678	58M/04/早	58M/04/夜	9	
58M	KS 709	58M/06	13:30	14:24	良景邨	葵芳站	葵芳站	葵芳站	60583	53678	58M/06/早	58M/06/夜	9	
58M	KU8269	58M/13	14:02	14:56	良景邨	葵芳站	葵芳站	葵芳站	60583	53678	58M/13/早	58M/13/夜	8	
58M	KC7617	58M/11	14:10	15:04	良景邨	葵芳站	葵芳站	葵芳站	60583	53678	58M/11/早	58M/11/夜	9	
58M	JV7191	58M/11	14:20	15:14	良景邨	葵芳站	葵芳站	葵芳站	60583	53678	58M/11/早	58M/11/夜	9	

☐ 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

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	事件類別	路線	車牌	車長	車輛	開出時間	預計到達	實際到達	車長	行車時間	行車時間表	車牌	車長	車牌	車長	車牌	車長
張子良	壞車	6D	02	65554	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	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

3.12

Departure Management

ROM System Proposal System Functions Section

7.2.2.9.5

Working Timetable – Regulation Mode in Bus View

行車時間表 (F12)

58M/07 欠車	58M/11 JV7191	58M/13 K07538	960/13 欠車
06:37 72460 廠屯門南廠 建生邨	06:32 71306 廠屯門南廠 良景邨	06:13 欠車 廠屯門南廠 良景邨	(960) 06:54 67882 廠屯門南廠 建生邨
06:50 72460 建生邨 葵芳鐵路站	06:42 71306 良景邨 葵芳鐵路站	06:23 欠車 良景邨 葵芳鐵路站	(960) 07:07 67882 建生邨 灣仔碼頭
07:42 72460 私葵芳鐵路站 寶田	07:44 71306 葵芳鐵路站 良景邨	07:20 欠車 葵芳鐵路站 良景邨	(960) 08:26 67882 灣仔碼頭 建生邨
08:20 72460 寶田 葵芳鐵路站	08:41 71306 良景邨 葵芳鐵路站	08:17 欠車 良景邨 葵芳鐵路站	(960) 10:56 67882(舊) 建生邨 灣仔碼頭
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	09:23 欠車 廠葵芳鐵路站 屯門南廠	(960) 12:30 67882 灣仔碼頭 建生邨

發放訊息 (F10)

排序: 車輛 / 車長 / 時間

☐ 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

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	事件類別	日期	字軌	車長編號	車輛編號	開出時間	預計到達	實際到達	參差	行車	行車	折返	地點	受影響	實班	次(車)	受影響	實班	次(車)
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	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

行車時間表 (F12)

58M/07/早 72460	58M/11/早 71306	58M/12/早 70152	960/13/早 67882	960/13/夜 65722
06:37 欠車 (廠)屯門南廠→ 建生邨	06:32 JV7191 (廠)屯門南廠→ 良景邨	06:21 JV7191 (廠)屯門南廠→ 良景邨	(960) 06:54 欠車 (廠)屯門南廠→ 建生邨	12:07 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	06:29 JV7191 良景邨→葵芳鐵路 站	(960) 07:07 欠車 建生邨→灣仔碼頭	12:21 欠車 建生邨→灣仔碼頭
07:42 欠車 葵芳鐵路站→ 寶田	07:44 JV7191 葵芳鐵路站→良 景邨	07:27 JV7191 葵芳鐵路站→良 景邨	(960) 08:26 欠車 灣仔碼頭→建生 邨	(960) 12:45 欠車 建生邨→灣仔碼頭
08:20 欠車 寶田→葵芳鐵路 站	08:41 JV7191 良景邨→葵芳鐵路 站	08:17 JV7191 良景邨→葵芳鐵路 站	(960) 10:56(醫) 欠車 建生邨→灣仔碼頭	(960) 12:59 欠車 建生邨→灣仔碼頭
08:20 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	09:47 JV7191 (廠)葵芳鐵路站→ 屯門南廠	(960) 12:30 欠車 灣仔碼頭→建生 邨	(960) 12:47(醫) 欠車 建生邨→灣仔碼頭
09:31 (茶) 屯門南廠	10:36 (醫) 屯門南廠	10:27 (醫) 屯門南廠	(960) 13:50 欠車 建生邨→良景邨	(960) 13:30 欠車 建生邨→灣仔碼頭

發放訊息 (F10)

排序: 車輛 / 車長 / 時間

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

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	事件類別	路綫	字機	車次	車輛	車長	開出 時間	預計 到達	實際 到達	參考 新到	行車 時間	行車 時間	折讓 國	形 國	受影 路線	重排 字機	次(車) 開出	受影 路線	重排 字機	次(車) 開出
張子良	壞車	6D	02	62564	HY754		11:45	12:45		35216						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	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

Working Timetable – Resources Hunting (抽調)

3.12

7.2.2.9.8 Resources Available for resources re-allocation

字軌: 原編車輛: 原編車長: 開車時間: 起點:

抽調時段: 往後 班 抽調範圍: 同時抽調車輛和車長

總站:

廠來行車時間: 私牌行車時間:

與下一班出車時間相距最少: 路線失車 載客比例 投訴比例

不能違反工作指引: ☐ A ☐ B ☐ C ☐ D ☐ E

☐ 跨廠 ☐ 跨控制中心 ☐ 顯示調走/接車 ☐ 中段泊廠 ☐ 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	倒走/接車	抽調車長違反工作指引					原路線失車率	載客比例	投訴比例	備註
										A	B	C	D	E				
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 72X-S01-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									違反夜泊	
富亨	HK6789	SWH	71B-03	6789 71B-03-早	26644944	71B	15:21	15:29						1.00%	1.4	1.85	違反夜泊	
大埔火車站		SWH		56432 72X-06-早	62322100	站頭候命											違反夜泊	
富善	HK7890	SWH	73X-S10	76543 73X-10-夜	26640142	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.

ROM System Proposal
System Functions Section

Real-time Bus Monitoring

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: 1A Direction: TST Ferry Pier
7 TST Ferry Pier

Arrival time for each route:

Route	Previous trip	Next trip
-------	---------------	-----------

(Click the bus station with mouse)

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]

Message delivery (after completing this trip)

Bus Captain:
Message:

Send Cancel

Date:
20-08-2014
星期: 一
日期: 20-08-2014
星期: 一
日期: 20-08-2014
星期: 一
日期: 20-08-2014

Licence plate:

HK7814
NA6991
R1384
HP1667
HK3332
PB1693

Bus captain:

77425
6628
6538

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)

This bus has been delayed for 4 minutes

This bus has deviated from the originally designated route

Private licence plate

Delayed/overdue buses

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

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)

Real-time Bus Monitoring

ROM System Proposal
System Functions Section

7.2.1.1.1 Geo-fencing

Date:
20-08-2014
時間:
: - :
路線:
1A
7
方向:
尖沙咀
尖沙咀

Licence plate:
HR7614
NA8693
KL1584
HP4367
HK5581
PB1632
Bus captain:
77425
6628
65138
72161
1894

Time:
Route:
1A
7
Direction:
TST Ferry Pier
TST Ferry Pier

Replay travelling record of the bus:
Time: HH:MM to HH:MM
Play speed: 32X

Geo-fence

System time: 09:03
Bus routes passing through the geo-fence
13X, 208, 215P, 215X, 219X, 224X, 26, 28, 35A, 41A, 5, 5P, 8, 87D, 8A, 98D, 98P
User may adjust his/her own setting to switch on or off the information to be displayed of a bus/bus stop/terminus.

Geo-fence

Bus routes passing through the geo-fence
5C/05: HR3318
26/12: PB20929

Bus in Service
Bus not in Service
Bus lost of GPS signal

Real-time Bus Monitoring

7.2.1.2 Bus Display on line chart

日期: 20-08-2014

路線: 46X 2A

車牌: HR7614 NA8693

Direction: Mei Foo Mei Foo

Post: 46X/04 HN7721 noon

Bus captain: 73185 Lee Sam

Duty: 1A/05/morning

Driving speed: 62 km/hr (recording time: 09:02)

Estimated time for arrival at Lai Wan Road: 09:05

The bus is equipped with: , ultra low floor

(Click the bus with mouse)

Waiting for departure/time: 03/HX2449: 09:05 07/HG7794: 09:17

Idle bus: HD2599

Spare captain: 63218

(Click the terminus with mouse)

ROM System Proposal

SysFrequencies: Section

System time: 09:03

Mei Foo Bus Terminus for 46X

46X 美孚巴士

HN7721

Bus captain: 73185 Lee Sam

車長: 73185

車牌: 73185

車速: 62 km/hr

預計到達美孚時間: 09:05

本車設有: 超低地台

滑鼠點擊巴士

Nassau Street

Lai Wan Road

Kau Wa Keng

Lai Chi Kok Bay Garden

Ching Lai Commercial Centre

Princess Margaret Hospital

Kwai Chung Hospital

The Salvation Army Lai King Home

Lok King House, Lai King Estate

Lai King Station

Wo Yi Hop Road

Sportsground

Shek Wai Kok Sun Village

Lei Muk Shue Estate

Ho Fung College

Sun Chui Estate

Lung Hang Estate

Hin Yung House

Hin Keng Estate

Hin Keng Shopping Centre

Hin Keng Bus Terminus for 46X

Shing Mun Tunnels Bus Interchange

House Mei Lam Estate

Holford Garden

Sun Chui Estate

Lung Hang Estate

Hin Pui House

Hin Hing House

Disseminate message

1. Hide next bus stop

2. Hide previous bus stop

Disseminate message (after completing this trip)

Bus Captain: 71496

Message: Please contact the Control Centre

Send Cancel

Kwai Fong Station Bus Terminus for 43M

Metrolaza

Kwai Tsing Interchange

Tsing Yi Industrial Centre

Greenfield Garden

Ching Mui House Cheung Ching Estate

Hong Fu House Cheung Hong Estate

Hong Shing House Cheung Hong Estate

Hong Fung House Cheung Hong Estate

Hong Cheung House Cheung Hong Estate

Ching Shing Court

Ching Wai House Cheung Ching Estate

Cheung Ching Bus Terminus

ROM System Proposal
System Functions Section

Departure Management

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		
Dispatcher	Type of incident	Route	Running number	Captain number	Bus number	Inputter	Input time	Reference number
Wong 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
Lee Chiu	Staff unavailable	C12	05	66421	GZ4853	TOM	08:45:20	31523
Wong Tai Tung	Bus unavailable	C 2A	06	65558	KR4350	TOM	08:45:20	31513
Ho 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
Lee 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
Wong Tai Tung	Handling lost property – keep for future handling	C43A	08	70524	MK5518	Wong Tai Tung	07:50:10	31381
Lee 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		

Departure Management

ROM System Proposal
System Functions Section

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	-4	06	45	105				
	Lok Wah				2/3/2	-4	06	49	105	1.24%	2/59 (3.51%)	2/59 (3.51%)	2/59 (3.51%)
6	Mei Foo				2/8/0	-9	03	45	07				
	Lai Chi Kok				3/6/2	-9	03	45	07	1.11%	1/51 (1.96%)	1/51 (1.96%)	1/51 (1.96%)
6C	Mei Foo				5/6/2	-12	504	48	06				
	Kowloon City Ferry Pier				3/10/2	-12	504	48	06	2.18%	3/71 (4.23%)	3/71 (4.23%)	3/71 (4.23%)
					3/3/2	-8	09	49	02				
6D	Mei Foo				1/5/2	-8	09	49	02	1.87%	0/39 (0%)	0/39 (0%)	0/39 (0%)
6X	Ngau Tau Kok				0/4/1	-		43	03		0/8 (0%)		
	Middle Road				1/6/2	-4	05	46	01				
28	Mody Road				2/6/0	-4	05	46	01	1.34%	2/47 (4.26%)	2/47 (4.26%)	2/47 (4.26%)
	Mody Road				4/2/2	-6	07	45	03				
30	Cheung Sha Wan				2/7/0	-6	07	45	03	3.84%	2/24 (8.33%)	2/24 (8.33%)	2/24 (8.33%)
	Allway Garden				0/4/0	-							
38A	Mei Foo				0/4/0	-				0.8%	1/8 (0%)	1/8 (0%)	1/8 (0%)
	Riviera Gardens				3/10/2	-5	511	49	08				
46X	Mei Foo				2/14/1	-5	511	49	08	1.78%	4/84 (4.76%)	4/84 (4.76%)	4/84 (4.76%)
	Hin Keng				3/5/1	-5	05	43	09				
72	Cheung Sha Wan				1/3/4	-4	05	41	05	2.55%	1/29 (3.45%)	1/29 (3.45%)	1/29 (3.45%)
	Tai Wo				2/3/2	-5	02	47	502				
85	Mei Foo				1/4/2	-5	02	47	502	1.61%	0/36 (0%)	0/36 (0%)	0/36 (0%)
	Wong Nai Tau				0/5/0	-		46	03				
86A	Kom Tsun Street				2/4/2	-		44	103	1.91%	2/49 (4.08%)	2/49 (4.08%)	2/49 (4.08%)
	Sha Tin Wai				3/13/0	-4	08	43	505				
102	Mei Foo				1/8/2	-4	08	43	505	1.58%	3/36 (8.33%)	3/36 (8.33%)	3/36 (8.33%)
	Shau Kei Wan				4/12/3	-6	513	44	06				
102P	Shau Kei Wan									1.91%	2/49 (4.08%)	2/49 (4.08%)	2/49 (4.08%)

7.2.2.3 Dispatcher Monitor Board



	Route	To	Late	Early	-/0/+	Longest delay		Longest ahead of time		Accumulated this month Lost trips rate	Cumulative same-day lost trips rate								
						Minutes	Running number	Minutes	Running number		0500-1000	1000-1500	1500-2000	2000-0200					
Confirm handling of the incident	2A	Mei Foo			0/3/2	-4	06	-9	05	1.24%	2/59 (3.51%)	2/59 (3.51%)	2/59 (3.51%)	2/59 (3.51%)					
Referral to dispatcher		Lok Wah			2/3/2	-4	06	-9	05										
Objection to handling the incident	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%)					
Need not handle the incident		Lai Chi Kok			3/6/2	-9	03	-5	07										
					3/3/2	-8	09	-6	02										
Completion of the incident	6C	Mei Foo			1/5/2	-8	09	-6	02	1.87%	0/39 (0%)	0/39 (0%)	0/39 (0%)	0/39 (0%)					
		Kowloon City Ferry Pier			0/4/1	-	-	-3	03						0	0/8 (0%)	-	-	-
					1/6/2	-4	05	-6	01										
Handle the incident	6D	Mei Foo			2/6/0	-4	05	-6	01	1.34%	2/47	Main routes for handling		47 (4.26%)	2/47 (4.26%)				
	6X	Ngau Tau Kok			0/4/0	-	-	-	-							0.8%	1/8 (0%)	1/8 (0%)	1/8 (0%)
	28	Middle Road			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%)					
		Mody Road				-5	02	-7	02						1.61%	0/36 (0%)	0/36 (0%)	0/36 (0%)	0/36 (0%)
	30	Mody Road				-5	02	-7	02	2.18%	1/71 (4.23%)	3/71 (4.23%)	3/71 (4.23%)	3/71 (4.23%)					
						-12	04	+4	05						1.84%	2/24 (8.33%)	2/24 (8.33%)	2/24 (8.33%)	2/24 (8.33%)
		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										

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.

Auxiliary routes for handling

Departure Management

ROM System Proposal
System Functions Section

7.2.2.3.1 Record call-in incident

Dispatcher Status of the incident System time: 2014-08-01 09:34:12

Dispatcher

Cheung Chi Leung

Cheung Chi Leung

Cheung Chi Leung

Cheung Chi Leung

Cheung Chi Leung

Cheung Chi Leung

Cheung Chi Leung

Route

2A

6

6D

6X

28

38A

72

86

6C

30

車輛: 車長:

已記錄事件:

參考編號	時間	事件類別	路線	字軌	車輛	車長	資料補充
							編輯
							編輯
							編輯

(新增)事件類別: (壞車/交通意外/失物處理/其他事項) 新增

新增事件 - 壞車

車牌: 時間:

地點 ☐ 站頭

☐ 中途

時間: 往維修 車長 維修站 / 車廠

時間: 車長用膳 至

時間: 車長收工

時間: 車長自行往站頭候命 站頭

時間: 重新入線 車輛 調頭/中途起載

儲存 取消

班次	車次	開出
	02	15:10
A	10	08:35
	15	18:15
C43A	08	07:55

失班率

1500-2000	2000-0200
2/59 (3.51%)	2/59 (3.51%)
1/51 (1.96%)	1/51 (1.96%)
0/39 (0%)	0/39 (0%)
-	-
2/47 (4.26%)	2/47 (4.26%)
1/8 (0%)	1/8 (0%)
1/29 (3.45%)	1/29 (3.45%)
0/36 (0%)	0/36 (0%)
3/71 (4.23%)	3/71 (4.23%)
2/24 (8.33%)	2/24 (8.33%)

(Translation of the form in next page)

Bus
Recorded incident

Captain

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

Time

:

Captain for meal

To

:

Time

:

Captain off duty

Stop flag

Time

:

Captain to standby at stop

Bus

Time

:

Re-entering the route

Reversed/boarding midway

Service centre

Bus depot

Save

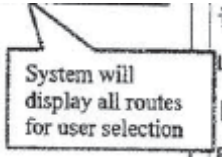
Cancel

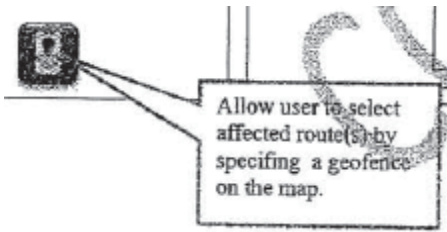
Departure Management

ROM System Proposal
System Functions Section

7.2.2.4 Message dissemination to OCC

Scope for message dissemination			Date of dissemination n / /	Captain number	Bus number	Message status:	Current message / Completed message / All messages	
Route	Direction	Select all	Date of message dissemination	Disseminate to	Message		Sender	
<input type="checkbox"/> 2A	To Mei Foo	<input checked="" type="checkbox"/>		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
<input type="checkbox"/> 2A	To Lok Wah	<input checked="" type="checkbox"/>				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
<input type="checkbox"/> 6	To TST Ferry Pier	<input type="checkbox"/>			All routes	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
<input type="checkbox"/> 6	To Lai Chi Kok	<input type="checkbox"/>				All vehicles have a U-turn at the Kwun Tong Road Roundabout.		Tuen Mun Bus Operations
<input type="checkbox"/> 6D	To Ngau Tau Kok	<input checked="" type="checkbox"/>						
<input type="checkbox"/> 6D	To Mei Foo	<input checked="" type="checkbox"/>						
<input type="checkbox"/> 6X	To Middle Road	<input checked="" type="checkbox"/>						
<input type="checkbox"/> 6X	To Mei Foo	<input checked="" type="checkbox"/>						
<input type="checkbox"/> 905	To Lai Chi Kok	<input checked="" type="checkbox"/>						
<input type="checkbox"/> 905	To Wan Chai Ferry Pier	<input checked="" type="checkbox"/>						





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		Status: New/Clear/Follow
Content			
			Send

Dispatchers who confirmed the message		
Dispatcher	Time of confirmation	OCC
Lee Chiu		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 Functions Section

Scope for message dissemination

Route	Direction	Select all
2A	To Mei Foo	<input checked="" type="checkbox"/>
2A	To Lok Wah	<input checked="" type="checkbox"/>
5	To TST Ferry Pier	<input type="checkbox"/>
5	To Lai Chi Kok	<input type="checkbox"/>
60	To Ngau Tau Kok	<input checked="" type="checkbox"/>
60	To Mei Foo	<input checked="" type="checkbox"/>
60X	To Middle Road	<input checked="" type="checkbox"/>
60X	To Mei Foo	<input checked="" type="checkbox"/>
905	To Lai Chi Kok	<input checked="" type="checkbox"/>
905	To Wan Chai Ferry Pier	<input checked="" type="checkbox"/>

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

受影

Road section affected

亦可受影

You can also select the route affected from the current road section.

System will display all routes for user selection

受影響路線:

路線	方向	全選
8	尖嘴	<input checked="" type="checkbox"/>
8	九龍鐵路站	<input checked="" type="checkbox"/>
36B	梨木樹	<input checked="" type="checkbox"/>
36B	渡華路	<input checked="" type="checkbox"/>
42A	長亨	<input checked="" type="checkbox"/>
42A	渡華路	<input checked="" type="checkbox"/>
46	麗達	<input checked="" type="checkbox"/>
46	渡華路	<input checked="" type="checkbox"/>
60X	屯門市中心	<input checked="" type="checkbox"/>
60X	渡華路	<input checked="" type="checkbox"/>
63X	田心路	<input checked="" type="checkbox"/>
63X	渡華路	<input checked="" type="checkbox"/>
68X	洪元路	<input checked="" type="checkbox"/>
68X	渡華路	<input checked="" type="checkbox"/>
69X	天瑞邨	<input checked="" type="checkbox"/>
69X	渡華路	<input checked="" type="checkbox"/>
81	禾輦	<input checked="" type="checkbox"/>
81	渡華路	<input checked="" type="checkbox"/>
95	翠林	<input checked="" type="checkbox"/>
95	渡華路	<input checked="" type="checkbox"/>
203E	彩虹	<input checked="" type="checkbox"/>
203E	九龍鐵路站	<input checked="" type="checkbox"/>

Clear All

OK Cancel

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		

Departure Management

ROM System Proposal
System Functions Section

7.2.2.5 OCC Message dissemination

Scope for message dissemination			Date of dissemination n / /	Captain number	Bus number	Message status:	Current message / Completed message / All messages		
Route	Direction	Select all	Date of message dissemination	Disseminate to	Message			Sender	
2A	To Mei Foo	<input checked="" type="checkbox"/>		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
2A	To Lok Wah	<input checked="" type="checkbox"/>			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
6	To TST Ferry Pier	<input checked="" type="checkbox"/>	04/09/2014 18:20	All routes	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
6	To Lai Chi Kok	<input checked="" type="checkbox"/>	04/09/2014 18:05		All vehicles have a U-turn at the Kwun Tong Road Roundabout.			Tuen Mun Bus Operations	Edit/copy
6D	To Ngau Tau Kok	<input checked="" type="checkbox"/>	04/09/2014 18:00	107, 170, 671, 62X, 258P, 258D, 258D					
6D	To Mei Foo	<input checked="" type="checkbox"/>	04/09/2014 17:55	258D					
6X	To Middle Road	<input checked="" type="checkbox"/>							
6X	To Mei Foo	<input checked="" type="checkbox"/>							
905	To Lai Chi Kok	<input checked="" type="checkbox"/>							
905	To Wan Chai Ferry Pier	<input checked="" type="checkbox"/>							

System will display all routes for user selection

Message dissemination			
Recipient	Captain <input type="text"/> Bus <input type="text"/>		
Date	88/88/88 - 88/88/88		
Time slot	Instant display / departure time 99:99 - 99:99		
Displayed on	Upon arrival/ before departure / Display when delay? <input type="text"/> Yes/No		
Degree of importance of the message	<input type="text"/>		
Display times	Next trip/Each future trip Display Mode <input type="text"/> Single/Combined		
Type of message	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		
	Task indication/temporary message/ Data collection/safety information		
Request response	Need/No need Duration of display <input type="text"/> seconds		
Message 1	Message	Respond to previous message	
	Please enter the number of passengers	Confirmation button <input type="text"/> Enter	Options <input type="text"/>
Message 2	Is there any damage of equipment on the bus?	<input type="text"/>	<input type="text"/>
Message 3	What equipment is damaged?	<input type="text"/> Enter	1 <input type="text"/>
			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			C46	05	05325	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	08:25		31353				C39A	05	08:28	C39A	10	08:35
Cheung Chi Leung	Overtime travelling																			
Cheung Chi Leung	Handling lost property – keep for future handling																			

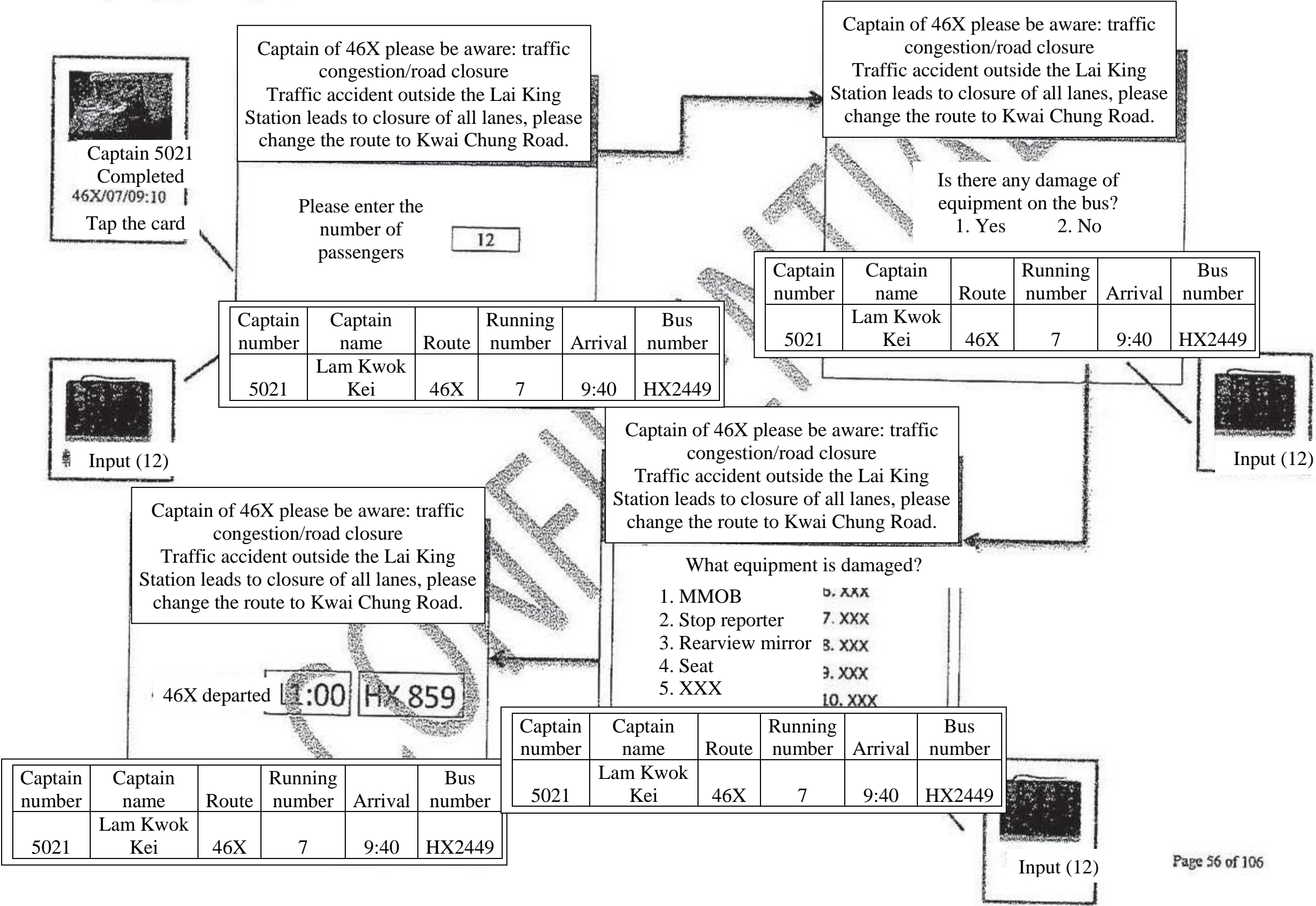
Information of telecommunications team

Type	Content	Route affected	Status	Time
Traffic accident	Gloucester Road to Central	107, 309, 310	New	12:27
Road construction	Prince Edward Road West to Mong Kok	1, 3A, 2, 2A	New	12:35
Traffic accident	Waterloo Road to Yau Ma Tei	9, 7, 35C, 8	Clear	11:09
Traffic accident	Salisbury Road to Hung Hom	5, 3A, 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	09:38
Busy traffic	School region of Kowloon Tong		Clear	09:28
Busy traffic	School region in Mid-levels of North Point, Hong Kong Island		Clear	09:57
Traffic accident	Waterloo Road to Yau Ma Tei		Clear	09:30
Traffic accident	Route 3 to Tsim Sha Tsui		New	09:27
Traffic accident	Gascoigne Road Flyover to Hung Hom		Clear	09:00
Traffic accident	Tolo Highway to Kowloon		Clear	08:31
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	06:00

Departure Management

ROM System Proposal
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7.2.2.6 Arrival Reporting by Bus Captain



Departure Management

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2.2.7 Multiple Arrival and Departure Board

System time: 10:00

Route
14
To Yau Tong
Terminus

Captain

Bus number

Licence plate and Running number		Mei Foo => Ngau Tau Kok	Ngau Tau Kok => Mei Foo	Time slot	Number of lost trips/total trips
1401	1401	1401	1401	1401	1401
1402	1402	1402	1402	1402	1402
1403	1403	1403	1403	1403	1403
1404	1404	1404	1404	1404	1404
1405	1405	1405	1405	1405	1405
1406	1406	1406	1406	1406	1406
1407	1407	1407	1407	1407	1407
1408	1408	1408	1408	1408	1408
1409	1409	1409	1409	1409	1409
1410	1410	1410	1410	1410	1410
1411	1411	1411	1411	1411	1411
1412	1412	1412	1412	1412	1412
1413	1413	1413	1413	1413	1413
1414	1414	1414	1414	1414	1414
1415	1415	1415	1415	1415	1415
1416	1416	1416	1416	1416	1416
1417	1417	1417	1417	1417	1417
1418	1418	1418	1418	1418	1418
1419	1419	1419	1419	1419	1419
1420	1420	1420	1420	1420	1420
1421	1421	1421	1421	1421	1421
1422	1422	1422	1422	1422	1422
1423	1423	1423	1423	1423	1423
1424	1424	1424	1424	1424	1424
1425	1425	1425	1425	1425	1425
1426	1426	1426	1426	1426	1426
1427	1427	1427	1427	1427	1427
1428	1428	1428	1428	1428	1428
1429	1429	1429	1429	1429	1429
1430	1430	1430	1430	1430	1430
1431	1431	1431	1431	1431	1431
1432	1432	1432	1432	1432	1432
1433	1433	1433	1433	1433	1433
1434	1434	1434	1434	1434	1434
1435	1435	1435	1435	1435	1435
1436	1436	1436	1436	1436	1436
1437	1437	1437	1437	1437	1437
1438	1438	1438	1438	1438	1438
1439	1439	1439	1439	1439	1439
1440	1440	1440	1440	1440	1440
1441	1441	1441	1441	1441	1441
1442	1442	1442	1442	1442	1442
1443	1443	1443	1443	1443	1443
1444	1444	1444	1444	1444	1444
1445	1445	1445	1445	1445	1445
1446	1446	1446	1446	1446	1446
1447	1447	1447	1447	1447	1447
1448	1448	1448	1448	1448	1448
1449	1449	1449	1449	1449	1449
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1468	1468	1468	1468	1468	1468
1469	1469	1469	1469	1469	1469
1470	1470	1470	1470	1470	1470
1471	1471	1471	1471	1471	1471
1472	1472	1472	1472	1472	1472
1473	1473	1473	1473	1473	1473
1474	1474	1474	1474	1474	1474
1475	1475	1475	1475	1475	1475
1476	1476	1476	1476	1476	1476
1477	1477	1477	1477	1477	1477
1478	1478	1478	1478	1478	1478
1479	1479	1479	1479	1479	1479
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1482	1482	1482	1482	1482	1482
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1492	1492	1492	1492	1492	1492
1493	1493	1493	1493	1493	1493
1494	1494	1494	1494	1494	1494
1495	1495	1495	1495	1495	1495
1496	1496	1496	1496	1496	1496
1497	1497	1497	1497	1497	1497
1498	1498	1498	1498	1498	1498
1499	1499	1499	1499	1499	1499
1500	1500	1500	1500	1500	1500

Departure Management

ROM System Proposal
System Functions Section

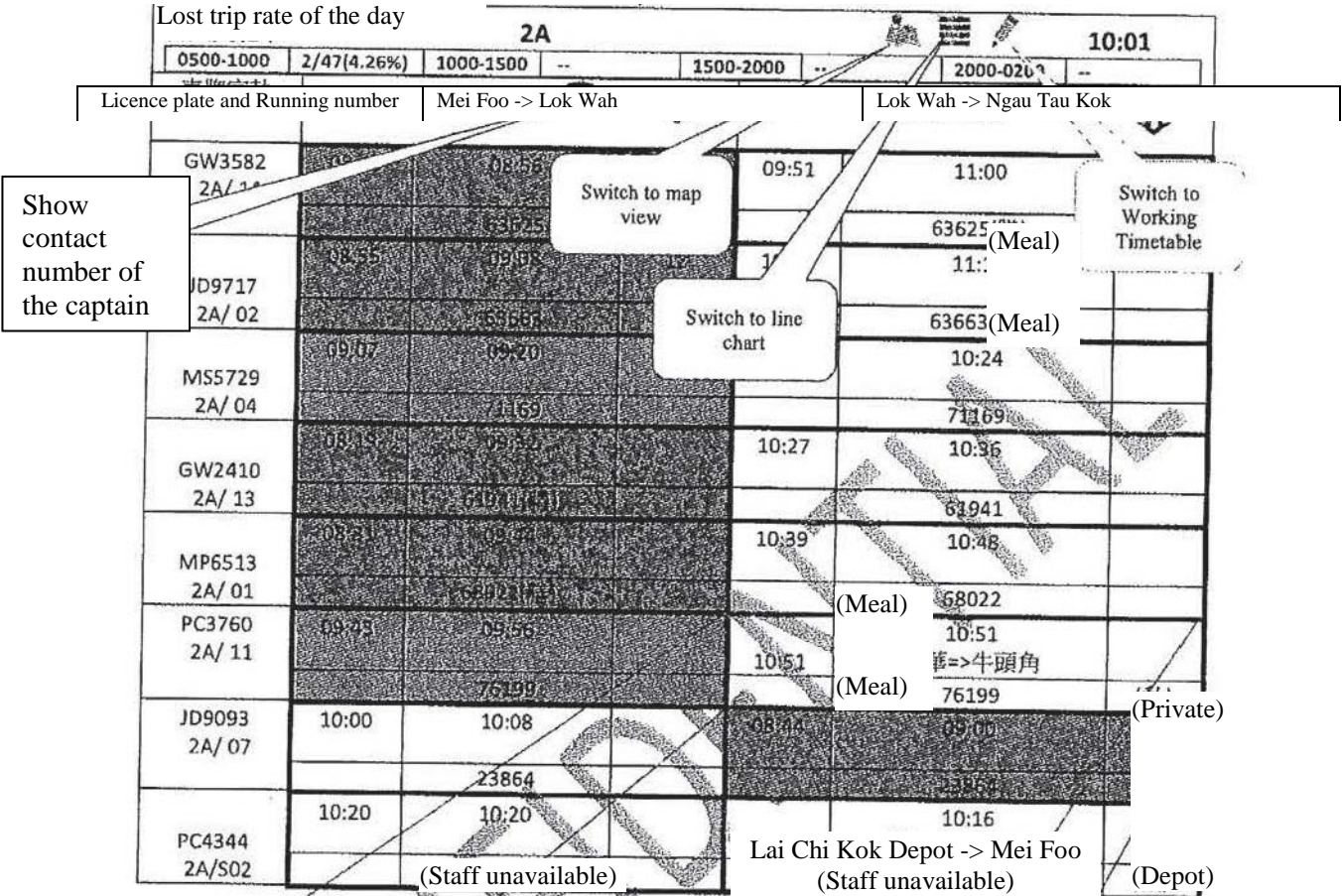
7.2.2.8 Single Arrival and Departure Monitoring

當天失班率: Lost trip rate of the day		2A		10:01	
0500-1000	2/47(4.26%)	1000-1500	--	1500-2000	--
Licence plate and Running number		Mei Foo -> Lok Wah		Lok Wah -> Ngau Tau Kok	
GW3582 2A/ 14	09:05	09:56	5	09:51	11:00
		63625			63625(Meal)
JD9717 2A/ 02	09:55	09:08	12	10:03	11:1
		63663			63663(Meal)
M55729 2A/ 04	09:07	09:20	12	10:15	10:24
		71169			71169
GW2410 2A/ 13	09:19	09:38	12	10:27	10:36
		61941			61941
MP6513 2A/ 01	09:31	09:31	12	10:39	10:48
		68022			68022
PC3760 2A/ 11	09:45	09:55	12	10:51	10:51
		76199			76199 (Private)
JD9093 2A/ 07	10:00	10:08	12	10:00	
		23864			23864
PC4344 2A/ S02	10:20	10:20	12	10:16	
		(Staff unavailable)		(Staff unavailable)	(Depot)
LF3614 2A/ 03	09:19	10:32	12	11:32	11:36
		74658			74658
KR4350 2A/ 06	09:25	10:00	12	11:44	11:48
		69966			69966
NE 714 2A/ 05	09:31	10:00	12	11:56	12:00
		78696			78696
GW2556 2A/ 16	11:00	11:08	12	10:00	10:00
		18635			18635
JA9579 2A/ S01	11:12	11:20	12	10:12	10:12
		73252			73252
PC3112 2A/ 15	10:12	11:30	10	09:08	09:12
		68802			68802
RE 508 2A/ 08	10:24	11:4	10	09:15	09:24
		28476			28476
PC3522 2A/ 12	10:36	11:5	15	09:27	09:36
		69800			69800
MZ2851 2A/ 09	10:48	12:0	5	09:35	09:48
		63665			63665

Departure Management

ROM System Proposal
System Functions Section

✓ 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

Departure Management

ROM System Proposal
System Functions Section

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

SBM

SBM

SBP

SBP

SBM

SBM

To Leung King

To Kwai Fong

To Leung King

To Kwai Fong

To Tuen Mun Ferry Pier

To Tsuen Wan

Licence plate

HR7614

NA3693

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	E T A	Start point	End point	Captain carried in	Captain carried away	Captain duty	Cumulative/continuous working time	Meal	Bus break down	Accident
(Private)									Kwai Fong Station	Leung King Estate					Morning (Meal)		
(Private)									Leung King Estate	Kwai Fong Station					Morning (Meal)		
(Private)									Kwai Fong Station	Kwai Fong Station					Morning (Meal)		
(Private)									Leung King Estate	Kwai Fong Station							
(Private)									Kwai Fong Station	Leung King Estate							
(Private)									Kwai Fong Station	Kin Sang Estate							
(Depot)									Leung King Estate	Kwai Fong Station							
(Depot)									Kwai Fong Station	Tuen Mun (South) Depot							
(Depot)									Kwai Fong Station	Tuen Mun (South) Depot							
(Depot)									Kwai Fong Station	Leung King Estate							
(Depot)									Leung King Estate	Kwai Fong Station							
(Depot)									Kwai Fong Station	Tuen Mun (South) Depot							
(Depot)									Leung King Estate	Kwai Fong Station							
(Depot)									Kwai Fong Station	Tuen Mun (South) Depot							
(Depot)									Leung King Estate	Kwai Fong Station							
(Depot)									Kwai Fong Station	Tuen Mun (South) Depot							
(Depot)									Leung King Estate	Kwai Fong Station							
(Depot)									Kwai Fong Station	Tuen Mun (South) Depot							
(Depot)									Leung King Estate	Kwai Fong Station							
(Depot)									Kwai Fong Station	Tuen Mun (South) Depot							
(Depot)									Leung King Estate	Kwai Fong Station							
(Depot)									Kwai Fong Station	Tuen Mun (South) Depot							
(Private)									Leung King Estate	Tuen Mun (South) Depot							
(Private)									Kwai Fong Station	Leung King Estate							
(Private)									Kwai Fong Station	Leung King Estate							
(Depot)									Leung King Estate	Kwai Fong Station							
(Depot)									Leung King Estate	Tuen Mun (South) Depot							

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)

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

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	31381					C43A	08	07:55	C43A	08	07:55

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46-234-17
3.12

Departure Management

ROM System Proposal
System Functions Section

7.2.2.9.2 Working Timetable – Bus View

Bus: KJ2052 Route: Running number

Sort by: Vehicle / Bus Length / Time

58M/01 J03409	58M/02 J03405	58M/03 J03417	58M/04 J03424	58M/05 J03430	58M/06 J03437	58M/07 J03443	58M/08 J03450	58M/09 J03456	58M/10 J03503	58M/11 J03509	58M/12 J03516	58M/13 J03523
05:32 66187	05:32 66187	05:41 60583	05:41 60583	05:50 71733	05:50 71733	05:59 62589	06:07 72460	06:15 60005	06:25 60005	06:35 60005	06:45 60005	06:47 60005
(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
05:35 66187	05:41 60583	05:51 60583	06:00 60583	06:00 71733	06:09 62589	06:18 72460	06:27 60005	06:35 60005	06:45 60005	06:55 60005	07:05 60005	07:05 60005
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	06:25 60583	06:35 60583	06:45 60583	06:54 71733	07:04 62589	07:13 72460	07:22 60005	07:32 60005	07:42 60005	07:52 60005	08:02 60005	08:02 60005
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	07:15 60583	07:25 60583	07:35 60583	07:44 71733	07:54 62589	08:03 72460	08:12 60005	08:22 60005	08:32 60005	08:42 60005	08:52 60005	08:52 60005
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	08:25 60583	08:35 60583	08:45 60583	08:54 71733	09:04 62589	09:13 72460	09:22 60005	09:32 60005	09:42 60005	09:52 60005	10:02 60005	10:02 60005
(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	10:42 60583	10:52 60583	11:02 60583	11:11 71733	11:21 62589	11:30 72460	11:39 60005	11:49 60005	11:59 60005	12:09 60005	12:19 60005	12:19 60005
(Meal)	(Meal)	(Meal)	(Meal)	(Meal)	(Meal)	(Meal)	(Meal)	(Meal)	(Meal)	(Meal)	(Meal)	(Meal)
(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) Tuen Mun (South) Depot => Leung King Estate	Leung King Estate => Kwai Fong Station
11:47 66187	11:50 60583	12:00 60583	12:10 60583	12:19 71733	12:29 62589	12:38 72460	12:47 60005	12:57 60005	13:07 60005	13:17 60005	13:27 60005	13:27 60005
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																		
Cheung Chi Leung	Traffic accident																		
Cheung Chi Leung	Overtime travelling																		
Cheung Chi Leung	Handling lost property – keep for future handling																		

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: --

Departure Management

ROM System Proposal
System Fucntions Section

7.2.2.9.3 Working Timetable – BC View

Captain: 60804 Route Running number: Shift:

Sort by: Vehicle/ Bus Length /Time

58M/01早 65137	58M/02早 60127	58M/03早 50583	58M/04早 1135	58M/05早 71733	58M/06早 82258	58M/07早 72450	58M/08早 85413	58M/09早 60009	58M/10早 82204	58M/11早 71306	58M/12早 50518	58M/13早 60937	58M/14早 50518
05:16 JU2409	05:25 JU2409	05:41 KV6817	05:50 JU2409	05:50 JV6830	05:54 JU2409	06:17 JU2409	06:17 JU2409	06:25 KV6817	06:25 KV6817	06:32 JU2409	06:32 JU2409	06:32 JU2409	06:32 JU2409
(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	(Depot) Tuen Mun (South) Depot => Leung King Estate
05:25 JU2409	05:41 KV6817	05:51 KV6817	05:51 KV6817	06:00 JV6830	06:00 JV6830	06:50 KV6817	06:50 KV6817	06:25 KV6817	06:25 KV6817	06:47 JV7191	06:47 JV7191	07:00 KV6817	07:00 KV6817
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	Leung King Estate => Kwai Fong Station
06:20 JU2409	06:20 JV6817	06:58 KV6817	06:58 KV6817	06:58 KV6817	06:58 KV6817	07:42 KV6817	07:42 KV6817	07:32 KV6817	07:32 KV6817	07:54 JV7191	07:54 JV7191	07:54 JV7191	07:54 JV7191
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	Kwai Fong Station => Leung King Estate
07:16 JU2409	07:16 KV6817	07:49 KV6817	07:49 KV6817	07:31 JV6830	07:31 JV6830	08:20 KV6817	08:20 KV6817	08:29 KV6817	08:29 KV6817	08:41 JV7191	08:41 JV7191	08:41 JV7191	08:41 JV7191
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	Leung King Estate => Kwai Fong Station
08:11 JU2409	08:11 JV6817	08:59 KV6817	08:59 KV6817	08:41 JV6830	08:41 JV6830	09:20 KV6817	09:20 KV6817	09:30 KV6817	09:30 KV6817	09:46 JV7191	09:46 JV7191	09:46 JV7191	09:46 JV7191
(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	(Depot) Kwai Fong Station => Tuen Mun (South) Depot
09:11 JU2409	09:11 KV6817	09:20 KV6817	09:20 KV6817	09:21 JV6830	09:21 JV6830	09:31 KV6817	09:31 KV6817	09:37 KV6817	09:37 KV6817	10:05 JV7191	10:05 JV7191	10:05 JV7191	10:05 JV7191
(Meal) Tuen Mun (South) Depot	(Meal) Leung King Estate	(Meal) Leung King Estate	(Meal) Tuen Mun (South) Depot	(Meal) Tuen Mun (South) Depot	(Meal) Leung King Estate	(Tea) Tuen Mun (South) Depot	Leung King Estate => Kwai Fong Station	(Meal) Tuen Mun (South) Depot	(Meal) Leung King Estate	(Meal) Tuen Mun (South) Depot	(Depot) Tuen Mun (South) Depot => Leung King Estate	(Meal) Leung King Estate	(Meal) Tuen Mun (South) Depot
10:37 JU2409	10:37 KV6817	10:38 KV6817	10:38 KV6817	11:02 JV6830	11:02 JV6830	11:04 KV6817	11:04 KV6817	12:10 KV6817	12:10 KV6817	12:19 KV6817	12:19 KV6817	11:58 KV6817	11:58 KV6817
(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	(Meal) Tuen Mun (South) Depot	Leung King Estate => Kwai Fong Station	(Depot) Tuen Mun (South) Depot => Leung King Estate	(Depot) Tuen Mun (South) Depot => Leung King Estate
10:47 JU2409	11:20 JU2409	11:50 KV6817	11:50 KV6817	11:12 JV6830	11:12 JV6830	11:21 KV6817	11:21 KV6817	12:20 KV6817	12:20 KV6817	12:29 KV6817	12:29 KV6817	12:50 KV6817	12:50 KV6817
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	(Meal) 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	Leung King Estate => Kwai Fong Station
12:00 JU2409	12:00 JV6817	12:00 JV6817	12:00 JV6817	12:18 JV6830	12:18 JV6830	12:30 KV6817	12:30 KV6817	13:30 KV6817	13:30 KV6817	13:40 KV6817	13:40 KV6817	13:40 KV6817	13:40 KV6817
Bus unavailable	Bus unavailable	Bus unavailable	Bus unavailable	Bus unavailable	Bus unavailable	Bus 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	52564	11:45	12:45		35216					6D	02	15:10	6D	02	15:10
Cheung Chi Leung	Traffic accident		C39A	05	70547	07:38	09:20		31353					C39A	05	08:28	C39A	10	08:35
Cheung Chi Leung	Overtime travelling		C43A	08	70524	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																		

Departure Management

ROM System Proposal
System Functions Section

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

NA3695

KL1584

HP4357

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	KV5817	58M/03	12:54	13:48	Leung King Estate		Kwai Fong Station						
58M	JS7054	58M/04	13:00	13:54	Kwai Fong Station		Leung King Estate						
58M	JV6715	58M/08	13:03	13:57	Leung King Estate		Kwai Fong Station						
58M	KC7617	58M/S11	13:10	14:04	Kwai Fong Station		Leung King Estate						
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	JV7201	58M/11	13:29	14:23	Kwai Fong Station		Leung King Estate						
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	JS7632	58M/06	13:28	14:22	Leung King Estate		Kwai Fong Station						
58M	KJ1951	58M/09	13:30	14:24	Kwai Fong Station		Leung King Estate						
58M	JV6814	58M/12	13:37	14:31	Leung King Estate		Kwai Fong Station						
58M	JS7054	58M/07	13:49	14:43	Kwai Fong Station		Leung King Estate						
58M	KJ7538	58M/14	13:45	14:39	Leung King Estate		Kwai Fong Station						
58M	JS7054	58M/02	13:46	14:40	Kwai Fong Station		Leung King Estate						
58M	JS7054	58M/16	13:46	14:40	Kwai Fong Station		Leung King Estate						
58M	JS7054	58M/04 (Depot)	13:54	14:48	Leung King Estate		Tuen Mun (South) Depot						
58M	KS709	58M/96	13:54	14:48	Leung King Estate		Kwai Fong Station						
58M	KV4817	58M/03	14:00	14:54	Kwai Fong Station		Leung King Estate						
58M	KJ8259	58M/13	14:07	15:01	Leung King Estate		Kwai Fong Station						
58M	KC7617	58M/S11 (Depot)	14:07	15:01	Leung King Estate		Tuen Mun (South) Depot						
58M	JV6715	58M/08	14:10	15:04	Kwai Fong Station		Leung King Estate						
58M	JS7054	960/113	14:11	15:05	Leung King Estate		Kwai Fong Station						
58M	KJ2052	58M/10	14:11	15:05	Kwai Fong Station		Leung King Estate						
58M	JV7191	58M/11	14:23	15:17	Leung King Estate		Kwai Fong Station						
58M	JV7191	58M/11	14:23	15:17	Kwai Fong Station		Leung King Estate						

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	65534	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)

Save Apply

ROM System Proposal
System Functions Section

Departure Management

Date

20-08-2014

Time

99:99 - 99:99

Route

Direction

58M

58M

58P

58P

59M

59M

To Leung King

To Kwai Fong

To Leung King

To Kwai Fong

To Tuen Mun Ferry Pier

To Tsuen Wan

Licence plate

+

HR7614

NA369S

KL1584

HP4367

HK5581

FB1632

Captain

+

77425

6628

65138

72161

1834

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	
58M	KV6817	58M/ 03		12:54	13:48	Leung King Estate	Kwai Fong Station		60583	53679	Morning	58M/ 03/早	58M/ 03/夜	Night
58M	JV6725	58M/ 08		13:03	13:57	Leung King Estate	Kwai Fong Station		65489	65489	Morning	58M/ 08/早	58M/ 08/早	Morning
58P	KJ2052	58M/ 10		13:11	14:05	Leung King Estate	Kwai Fong Station		78464	1524	Morning	58M/ 10/早	58M/ 10/夜	Night
58P	JT1030	58M/ 15		13:20	14:14	Leung King Estate	Kwai Fong Station		65381	64581	Morning	58M/ 15/早	58M/ 15/早	Morning
58P				13:24	14:28	Leung King Estate			72460	((Meal		58M/ 07/早		Morning
58P	J57632	58M/ 06		13:28	14:22	Leung King Estate	Kwai Fong Station		62959	4801	Morning	58M/ 06/早	58M/ 03/夜	Night
58P	JV5814	58M/ 12		13:37	14:31	Leung King Estate	Kwai Fong Station		62918	62918	Morning	58M/ 12/早	58M/ 12/早	Morning
58P	KU7538	58M/ 14		13:45	14:39	Leung King Estate	Kwai Fong Station		72850	70819	Morning	58M/ 07/早	58M/ 02/夜	Night
58P	KS 709	58M/ 96		13:54	14:48	Leung King Estate	Kwai Fong Station		21855	1611	Morning	58M/ 96/早	58M/ 04/夜	Night
58P	KU8269	58M/ 13		14:02	14:56	Leung King Estate	Kwai Fong Station		60937	64039	Morning	58M/ 13/早	58M/ 06/夜	Night
58P		Bus unavailable		14:19	15:13	Leung King Estate	Kwai Fong Station			67882	Morning	58M/ 13/早	58M/ 06/夜	Night
58P	JV7191	58M/ 11		14:28	15:22	Leung King Estate	Kwai Fong Station		70804	73003	Morning	58M/ 14/早	58M/ 07/早	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	
58M	KV6817	58M/ 03		13:00	13:48	Kwai Fong Station	Leung King Estate		1946	1548	Morning	58M/ 03/早	58M/ 03/早	Morning
58M	KJ2052	58M/ 10		13:10	14:05	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	JT1030	58M/ 15		13:20	14:14	Kwai Fong Station	Leung King Estate		65381	64581	Morning	58M/ 15/早	58M/ 15/早	Morning
58M	KJ2052	58M/ 10		13:30	14:24	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		13:40	14:34	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		13:50	14:44	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		14:00	14:54	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		14:10	15:04	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		14:20	15:14	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		14:30	15:24	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		14:40	15:34	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		14:50	15:44	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		15:00	15:54	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		15:10	16:04	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		15:20	16:14	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		15:30	16:24	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		15:40	16:34	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		15:50	16:44	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		16:00	16:54	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		16:10	17:04	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		16:20	17:14	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		16:30	17:24	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		16:40	17:34	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		16:50	17:44	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		17:00	17:54	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		17:10	18:04	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		17:20	18:14	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		17:30	18:24	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		17:40	18:34	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		17:50	18:44	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		18:00	18:54	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		18:10	19:04	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		18:20	19:14	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		18:30	19:24	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		18:40	19:34	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		18:50	19:44	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		19:00	19:54	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		19:10	20:04	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		19:20	20:14	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		19:30	20:24	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		19:40	20:34	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		19:50	20:44	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		20:00	20:54	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		20:10	21:04	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		20:20	21:14	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		20:30	21:24	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		20:40	21:34	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		20:50	21:44	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		21:00	21:54	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		21:10	22:04	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		21:20	22:14	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		21:30	22:24	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		21:40	22:34	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		21:50	22:44	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		22:00	22:54	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		22:10	23:04	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		22:20	23:14	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		22:30	23:24	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		22:40	23:34	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		22:50	23:44	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		23:00	23:54	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		23:10	00:04	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		23:20	00:14	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		23:30	00:24	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		23:40	00:34	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		23:50	00:44	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		00:00	00:54	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		00:10	01:04	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		00:20	01:14	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		00:30	01:24	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052	58M/ 10		00:40	01:34	Kwai Fong Station	Leung King Estate		60583	65489	Morning	58M/ 10/早	58M/ 10/早	Morning
58M	KJ2052													

Departure Management

ROM System Proposal
System Fucntions Section

7.2.2.9.5 Working Timetable – Regulation Mode in Bus View

Working timetable (F12)

Message dissemination (F10)

Sort by: Vehicle / Bus Length / Time

行車時間

58M/07 欠車	58M/11	58M/13 KU7538	960/13 欠車
06:37 72460	06:32 71306	Staff unavailable	06:54 72460
(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	Staff unavailable	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	Staff unavailable	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	Staff unavailable	10:56 57882
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	12:30 57882
(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

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																		
Cheung Chi Leung	Traffic accident																		
Cheung Chi Leung	Overtime travelling																		
Cheung Chi Leung	Handling lost property – keep for future handling																		

02	62564	HY754	11:45	12:45		35216								6D	02	15:10	6D	02	15:10
05	85047	LM2169	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

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

Departure Management

ROM System Proposal
System Fucntions Section

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/12/Morning Staff unavailable	960/13/Morning 67882	960/13/Night 45722
06:37 Bus unavailable (Depot) Tuen Mun (South) Depot => Kin Sang Estate	06:32 JY7191 (Depot) Tuen Mun (South) Depot => Kin Sang Estate	06:21 KJ7538 (Depot) Tuen Mun (South) Depot => Kin Sang Estate	06:54 Bus unavailable (Depot) Tuen Mun (South) Depot => Kin Sang Estate	12:27 Bus unavailable (Depot) Tuen Mun (South) Depot => Kin Sang Estate
06:50 Bus unavailable Kin Sang Estate => Kwai Fong Station	06:42 JY7191 Leung King Estate => Kwai Fong Station	06:21 KJ7538 Leung King Estate => Kwai Fong Station	07:07 Bus unavailable Kin Sang Estate => Wan Chai Ferry Pier	17:31 Bus unavailable King's Road at Quarry Bay
07:42 Bus unavailable e(Private) Kwai Fong Station => Po Tin	07:44 JY7191 Kwai Fong Station => Leung King Estate	07:25 KJ7538 Kwai Fong Station => Leung King Estate	08:26 Bus unavailable Wan Chai Ferry Pier => Kin Sang Estate	18:45 Bus unavailable King's Road at Quarry Bay => Hung Shui Kiu
08:20 Bus unavailable Po Tin => Kwai Fong Station	08:41 JY7191 Leung King Estate => Kwai Fong Station	08:17 KJ7538 Leung King Estate => Kwai Fong Station	10:56 (Meal) Bus unavailable Kin Sang Estate => Wan Chai Ferry Pier	19:20 Bus unavailable (Private) Hung Shui Kiu => Kin Sang Estate
09:20 Bus unavailable (Depot) Kwai Fong Station => Tuen Mun (South) Depot	09:46 JY7191 (Depot) Kwai Fong Station => Tuen Mun (South) Depot	09:27 KJ7538 (Depot) Kwai Fong Station => Tuen Mun (South) Depot	12:30 Bus unavailable Wan Chai Ferry Pier => Kin Sang Estate	19:40 Bus unavailable Kin Sang Estate => Wan Chai Ferry Pier
09:31 (Tea) Tuen Mun (South) Depot	10:36 (Meal) Tuen Mun (South) Depot	10:17 (Meal) Tuen Mun (South) Depot	13:50 Bus unavailable (Private) Kin Sang Estate => Leung King Estate	19:40 Bus unavailable 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

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)

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 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

ROM System Proposal
System Functions Section

7.2.2.9.7

Working Timetable – Resources Hunting (Resources re-allocation)

Date
20-08-2014

Time
99:99 - 99:99

Route
Direction

SBM

SBM

SBP

SBP

SBM

SBM

To Leung King

To Kwai Fong

To Leung King

To Kwai Fong

To Tuen Mun Ferry Pier

To Tsuen Wan

Licence plate

HR7614

NA8693

KL1584

HP4367

HK5581

FB1632

Captain

77425

6628

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	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
SBM	757652	SBM/06	13:25	13:28	0:02	14:22	Leung King Estate		Kwai Fong Station							
SBM	757652	SBM/06	13:25	13:28	0:02	14:22	Kwai Fong Station		Leung King Estate							
SBM	757652	SBM/12	13:37	13:37	0:00	14:31	Leung King Estate		Kwai Fong Station							
SBM	757652	SBM/12	13:37	13:37	0:00	14:31	Kwai Fong Station		Leung King Estate							
SBM	757652	SBM/14	13:45	13:45	0:00	14:39	Leung King Estate		Kwai Fong Station							
SBM	757652	SBM/14	13:45	13:45	0:00	14:39	Kwai Fong Station		Leung King Estate							
SBM	757652	SBM/08	13:54	13:54	0:00	14:34	Leung King Estate		Tuen Mun (South) Depot							
SBM	757652	SBM/08	13:54	13:54	0:00	14:34	Leung King Estate		Kwai Fong Station							
SBM	757652	SBM/03	14:02	14:02	0:00	14:56	Kwai Fong Station		Leung King Estate							
SBM	757652	SBM/511	14:04	14:04	0:00	14:24	Leung King Estate		Kwai Fong Station							
SBM	757652	SBM/511	14:04	14:04	0:00	14:24	Leung King Estate		Tuen Mun (South) Depot							
SBM	757652	SBM/13	14:10	14:19	0:00	15:13	Leung King Estate		Kwai Fong Station							
SBM	757652	SBM/13	14:10	14:19	0:00	15:13	Kwai Fong Station		Leung King Estate							
SBM	757652	SBM/11	14:28	14:28	0:00	15:22	Leung King Estate		Kwai Fong Station							
SBM	757652	SBM/11	14:28	14:28	0:00	15:22	Kwai Fong Station		Leung King Estate							
SBM	757652	SBM/515	14:34	14:34	0:00	14:42	Tuen Mun (South) Depot		Leung King Estate							
SBM	757652	SBM/07	14:34	14:34	0:00	14:54	Tuen Mun (South) Depot		Leung King Estate							
SBM	757652	SBM/09	14:36	14:36	0:00	15:10	Leung King Estate		Kwai Fong Station							
SBM	757652	SBM/09	14:36	14:36	0:00	15:10	Kwai Fong Station		Leung King Estate							
SBM	757652	SBM/515	14:44	14:44	0:00	14:58	Leung King Estate		Kwai Fong Station							
SBM	757652	SBM/12	14:52	14:52	0:00	15:00	Leung King Estate		Kwai Fong Station							
SBM	757652	SBM/02	14:52	14:52	0:00	15:46	Leung King Estate		Kwai Fong Station							
SBM	757652	SBM/01	14:54	14:54	0:00	15:14	Leung King Estate		Kwai Fong Station							
SBM	757652	SBM/503	14:58	14:58	0:00	15:08	Tuen Mun (South) Depot		Leung King Estate							
SBM	757652	SBM/18	15:00	15:00	0:00	15:16	Leung King Estate		Kwai Fong Station							
SBM	757652	SBM/18	15:00	15:00	0:00	15:16	Leung King Estate		Kwai Fong Station							
SBM	757652	SBM/15	15:08	15:08	0:00	16:02	Kwai Fong Station		Leung King Estate							
SBM	757652	SBM/15	15:08	15:08	0:00	16:02	Kwai Fong Station		Leung King Estate							
SBM	757652	SBM/15	15:08	15:08	0:00	16:02	Leung King Estate		Kwai Fong Station							
SBM	757652	SBM/15	15:08	15:08	0:00	16:02	Leung King Estate		Leung King Estate							
SBM	757652	SBM/15	15:08	15:08	0:00	16:02	Tuen Mun (South) Depot		Leung King Estate							
SBM	757652	SBM/15	15:08	15:08	0:00	16:02	Kwai Fong Station		Leung King Estate							
SBM	757652	SBM/15	15:08	15:08	0:00	16:02	Leung King Estate		Kwai Fong Station							
SBM	757652	SBM/15	15:08	15:08	0:00	16:02	Leung King Estate		Tuen Mun (South) Depot							
SBM	757652	SBM/15	15:08	15:08	0:00	16:02	Leung King Estate		Kwai Fong Station							

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 property	C43A	08	70524	MK5518	07:00	07:48	07:48	31381					C43A	08	07:55	C43A	08	07:55

Departure Management

ROM System Proposal
System Functions Section

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:	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> E			Travelling time for private purpose			<input type="checkbox"/> Cross-depots <input type="checkbox"/> Cross control centres <input type="checkbox"/> Cross control centres <input type="checkbox"/> Display transfer / pick up <input type="checkbox"/> Stop at depot midway		
Minimum time gap with departure time of next trip				Missing bus for the route			Display only the same route / all routes		
				Passenger ratio					
No violation of work guidelines	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> E			Complaint ratio					

Location	Licence plate	Depot	Running number	Captain number and duties	Contact number	Working arrangements	Actual/estimated arrival time	Schedule d departur	Transfer/ pick up	Re-allocation of captain violating the work guidelines					Missing rate for the original route	Passenge r ratio	Complai nt ratio	Remark
										A	B	C	D	E				
Tai Po Centre	HK1234	SWH		—		Spare												74X withdrawn from service due to night parking violation
Tai Po Market	HK2345	SWH	74X-S10	1234 Morning 74X-S10-1		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			Transfer									73X-03 withdrawn from service due to night parking violation
Tai Po Centre	HK4567	SWH	72X-03	2345 Morning 72X-01-1	65432	72X	15:20	15:28							3.70%	0.95	1.3	Night parking violation
Tai Po Centre (Midway)	HK5678	SWH	74X-06	3456 Morning 74X-S02-1		74X	Expected 15:28	15:38										Night parking violation
Fu Heng	HK6789	SWH	71B-05	67890 Morning 71B-03-1	44944	71B	15:21	15:29							1.00%	1.4	1.85	Night parking violation
Tai Po Market Station		SWH		65432 Night 72X-05-1	61232100	Standby at stop												Night parking violation
Fu Shin	HK7890	SWH	73X-S10	76543 Night 73X-L01-1	76610142	73X parked midway		16:48	Pick up						3.30%	1.13	0.82	Night parking violation

Double click to select swapping Bus and/or BC

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8. Control Center Operation

Illustration by Examples**ROM System Proposal
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

CONFIDENTIAL

**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.

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 12:25:12

車牌: 車長:

已記錄事故:

參考編號	時間	事件類別	路線	字軌	車輛	車長	資料補充
							編輯
							編輯
							編輯

[新增]事件類別: 壞車 (壞車/交通意外/失物處理/其他事項) 新增

車牌: HY 754 時間: 12:45 地點: 站頭

路線: 6D 字軌: 02

時間: 12:50 往維修: 維修站: 維修站

儲存 取消

路線	往	班次	時間	車長	車輛	車長	資料補充
2A	美芝						
6	荔枝						
6D	牛頭						
6X	中間						
28	鹿地						
38A	美芝						
72	太和						
86	美芝						
6C	九龍城碼頭						
30	長沙灣						

班次	時間	車長	車輛	車長	資料補充
D	02	15:10			
C39A	10	08:35			
C43A	08	07:55			

班次	時間	車長	車輛	車長	資料補充
D	02	15:10			
C39A	10	08:35			
C43A	08	07:55			

班次	時間	車長	車輛	車長	資料補充
D	02	15:10			
C39A	10	08:35			
C43A	08	07:55			

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D	02	15:10			
C39A	10	08:35			
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班次	時間	車長	車輛	車長	資料補充
D	02	15:10			
C39A	10	08:35			
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C39A	10	08:35			
C43A	08	07:55			

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C43A	08	07:55			

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C39A	10	08:35			
C43A	08	07:55			

班次	時間	車長	車輛	車長	資料補充
D	02	15:10			

- 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	421		421	GZ4853	TOM	08:45:20	31523
王大同	欠車	C 2A	加入壞車事件	558	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
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	68325	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	子軌	車長	車輛	開出時間	預計到達	實際到達	參考	行車	行車	新線	地	影	影	次(車)	受影	受影	次(人)
				編號	編號				編號	編號	編號	編號	編號	編號	編號	開出	路線	子軌	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	失物處理 - 留後	C43A	08	70524	MK5518	07:00	07:48	07:58	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	-f0/+	最長延誤		最長提早		本月累積	當天累積失班率			
					分鐘	子軌	分鐘	子軌		失班率	0500-1000	1000-1500	1500-2000
2A	美孚			0/3/2	01	06	05	05	1.24%	2/59 (3.51%)	2/59 (3.51%)	2/59 (3.51%)	2/59 (3.51%)
	觀塘			2/3/2	04	06	05	05					
6	美孚			2/8/0	09	03	05	07	1.11%	1/51 (1.96%)	1/51 (1.96%)	1/51 (1.96%)	1/51 (1.96%)
	荔枝角			3/5/2	05	05	05	07					
6D	美孚			3/5/2	08	09	05	02	1.87%	0/39 (0%)	0/39 (0%)	0/39 (0%)	0/39 (0%)
	牛頭角			1/5/2	08	09	05	02					
6X	中環道			0/4/1			03	03	0	0/8 (0%)	-	-	-
28	麼地道			1/6/2	04	05	06	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	04	05	06	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	04	05	04	05	2.55%	1/29 (3.45%)	1/29 (3.45%)	1/29 (3.45%)	1/29 (3.45%)
	太和			1/3/4	04	05	04	05					
86	美孚			2/3/2	05	02	07	02	1.61%	0/36 (0%)	0/36 (0%)	0/36 (0%)	0/36 (0%)
	黃泥頭			1/4/2	05	02	07	02					
6C	美孚			5/6/2	12	04	04	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	04	04	06					
30	長沙灣			4/2/2	06	07	05	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	06	07	05	03					

Bus Breakdown + Redeployment

- 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.

ROM System Proposal Control Center Operation

日期:		調整班次 (F12)		排序: 車輛 / 車長 / 時間										
20-08-2014														
時間:		車次		車次										
99:99 - 99:99														
路線:		車次		車次										
方向:		車次		車次										
6D 往美孚		6D 往牛車水		6D 往美孚										
58P 往良景		58P 往美孚		58P 往美孚										
59M 往屯門		59M 往美孚		59M 往美孚										
59M 往美孚		59M 往美孚		59M 往美孚										
車牌:		車次		車次										
HY 754		NA8699		KL1584										
HP4367		HK5581		P61632										
車長:		車次		車次										
77425		6628		65138										
72161		1834												
張子良	肇事	6D	02	62564	HY 754	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	31675	C46	05	08:28	C46	05	08:28
張子良	交通意外	C39A	05	35047	LM2168	07:35	08:20	31353	C39A	05	08:28	C39A	10	08:35
張子良	失物處理 - 留後	C43A	08	70524	4K5503	07:00	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	C35A	04	--	C35A	--	--

→ Select the trip with missing bus and select “resource hunting”

Control Center Operation

[illegible]

Illustration by Examples –
Bus Breakdown + Redeployment

ROM System Proposal
Control Center Operation

→ Select the bus to be re-allocated

字軌: 6D-02
原編車輛: B7-754 (雙車)
原編車長: 62564 (陳勁文)
開車時間: 11:43
起點: 牛頭角

抽調時段: 往後 班

抽調範圍: 同時抽調車輛和車長

總站: 美孚 荔枝角 海麗邨 葵芳 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 選擇用作抽調之巴士

路線失車
載客比例
投訴比例

☐ 跨廠
☐ 跨控制中心
☐ 顯示調走/接車
☐ 中段泊廠
☐ 中段泊站

只顯示同線/所有線 ↓

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	預定開車時間	調走/接車	抽調車長違反工作指引					原路線失車率 0	載客比例	投訴比例	備注
										A	B	C	D	E				
美孚	BC2678	LCK		—		士啤												
美孚	HK2345	LCK	86-04	1234 86-04 早		85 中段回廠		14:12										

ROM System Proposal

Control Center Operation

3.12

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

車務控制中心：荔枝角					系統時間： 2014-08-01 05:00:00			
組員	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	自動顯示欠人收車事件			18	KW3187	王大同	09:18:05
張子良	壞車				93	MM2038	李超	08:12:16
李超	劈車				51	JK1583	何小明	09:12:06
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
	:					:		
	:					:		
	:					:		

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

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	行車狀況	行車時間表	新線圖	舊線圖	受影響路線	替班字軌	次(車)開出	受影響路線	替班字軌	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	C3	05	65325	K1-6385	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
自動顯示欠人收車事件																			
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		最長提早		本月累積失班率	當天累積失班率			
					分鐘	字軌	分鐘	字軌		0500-1000	1000-1500	1500-2000	2000-0200
2A	美孚	■	■	0/3/2	-4	06	05	105	1.24%	2/59 (3.51%)	2/59 (3.51%)	2/59 (3.51%)	2/59 (3.51%)
	樂基	■	■	2/3/2	-4	06	09	105					
6	美孚	■	■	2/8/0	-5	03	05	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	-5	03	05	07					
6D	美孚	■	■	3/3/2	-8	03	06	02	1.87%	0/39 (0%)	0/39 (0%)	0/39 (0%)	0/39 (0%)
	牛頭角	■	■	1/5/2	-8	09	06	02					
6X	中間道	■	■	0/4/1			03	03	0	0/8 (0%)	-	-	-
28	麼地道	■	■	1/6/2	-4	05	06	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	06	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	01	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	01	09					
86	美孚	■	■	2/3/2	-5	02	07	002	1.61%	0/36 (0%)	0/36 (0%)	0/36 (0%)	0/36 (0%)
	黃泥頭	■	■	1/4/2	-5	02	07	002					
6C	美孚	■	■	5/6/2	-12	504	04	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	504	04	06					

→ Departures affected will have the word “欠人収車” displayed in the BC columns

➔ 路線出車率:

► 中國史料

↓ 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:

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Illustration by Examples – Crew Shortage + Automatic Departure Regulation

- Regulate departures to evenly distribute the departure times

ROM System Proposal Control Center Operation

日期:		20-08-2014		時間:		99:99 - 99:99		路線:		方向:		<input type="checkbox"/> 不同方向班次分開顯示 <input type="checkbox"/> 只顯示班次			
98C	往葵孚	<input checked="" type="checkbox"/>		98C	往坑口(北)	<input checked="" type="checkbox"/>		58P	往良景	<input type="checkbox"/>		58P	往葵芳	<input type="checkbox"/>	
59M	往屯碼頭	<input type="checkbox"/>		59M	往荃樓	<input type="checkbox"/>		適用於: <input type="text"/> 至 <input type="text"/> 開出之班次 提前欠人/欠車班次之後 <input type="checkbox"/> 班車的開車時間 <input type="checkbox"/> 所有班車的開車時間 <div>執行</div>							
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)															

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	預定開車	預定到達	已預站	已約站	已約站	經站	中途經站	終點	聯絡	班次
98C	SH6462	98C/02	73119	98C/02/準	73119	98C/02/準	5:45	6:40				坑口(北)		葵孚		15
98C	SH9990	98C/05	-	欠人收車	98C/05/準	5:54	5:55				坑口(北)		葵孚		-	
98C	SH571	98C/04	62660	98C/04/準	62660	98C/04/準	6:00	6:55				坑口(北)		葵孚		15
98C	SH9990	98C/05	欠人收車	98C/05/準	欠人收車	98C/05/準	6:12	7:07				坑口(北)		葵孚		-
98C	SH4110	98C/15	-	-	78334	98C/15/準	6:15	6:24				將軍澳廠		坑口(北)		-
98C	SH8461	98C/06	-	-	73893	98C/06/準	6:20	6:36				駿立街<行		坑口(北)		-
98C	SH4110	98C/15	78334	98C/15/準	78334	98C/15/準	6:24	7:24				坑口(北)		葵孚		24
98C	SH9233	98C/08	-	-	77234	98C/08/準	6:32	6:48				駿立街<行		坑口(北)		-
98C	SH7984	98C/09	-	-	70074	98C/09/準	6:34	6:35				坑口(北)		葵孚		-
98C	SH8461	98C/06	73893	98C/06/準	73893	98C/06/準	6:36	7:36				坑口(北)		葵孚		12
98C	SH4110	98C/15	77234	98C/15/準	77234	98C/15/準	6:48	7:48				坑口(北)		葵孚		12
98C	SH9233	98C/08	77234	98C/08/準	77234	98C/08/準	6:48	7:48				坑口(北)		葵孚		12
98C	SH4110	98C/15	73119	98C/15/準	73119	98C/15/準	6:54	7:54				坑口(北)		葵孚		15
98C	SH3942	98C/03	-	-	77977	98C/03/準	6:58	6:59				坑口(北)		葵孚		-
98C	SH3942	98C/03	77977	98C/03/準	77977	98C/03/準	6:59	7:59				坑口(北)		葵孚		11
98C	SH4443	98C/07	-	-	70461	98C/07/準	7:00	7:09				將軍澳廠		坑口(北)		-
98C	SH4443	98C/07	70461	98C/07/準	70461	98C/07/準	7:09	8:09				坑口(北)		葵孚		10
98C	SH4110	98C/15	62660	98C/15/準	62660	98C/15/準	7:16	8:16				坑口(北)		葵孚		15
98C	SH8405	98C/10	-	-	63253	98C/10/準	7:14	7:30				駿立街<行		坑口(北)		-
98C	SH7944	98C/09	70074	98C/09/準	70074	98C/09/準	7:20	8:20				坑口(北)		葵孚		21
98C	SH9990	98C/05	欠人收車	98C/05/準	欠人收車	98C/05/準	7:24	8:24				坑口(北)		葵孚		-
98C	SH227	98C/11	-	-	75263	98C/11/準										

Crew Shortage + Automatic Departure Regulation

→ Select first departure with missing BC and input departure regulating instructions, and then click “Execute 執行”

ROM System Proposal Control Center Operation

[illegible]

→ Departure regulation complete

Control Center Operation

☐ 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

**Illustration by Examples –
Delay of Arrival + Departure Regulation**

**ROM System Proposal
Control Center Operation**

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	JU3865	ROM	12:45:00	35216
李超	欠人	C12	05	65421	GZ4853	TOM	08:45:20	31523
王大同	欠車		06	65638	KR4350	TOM	08:45:20	31513
何小明	尚未抵達 影響往後出車	自動顯示行車過時事件		18	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			91	JK1583	何小明	09:12:06	31594
張子良	交通意外	C39A	05	25047	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	C38A	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
	:					:		
	:					:		
	:					:		

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

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

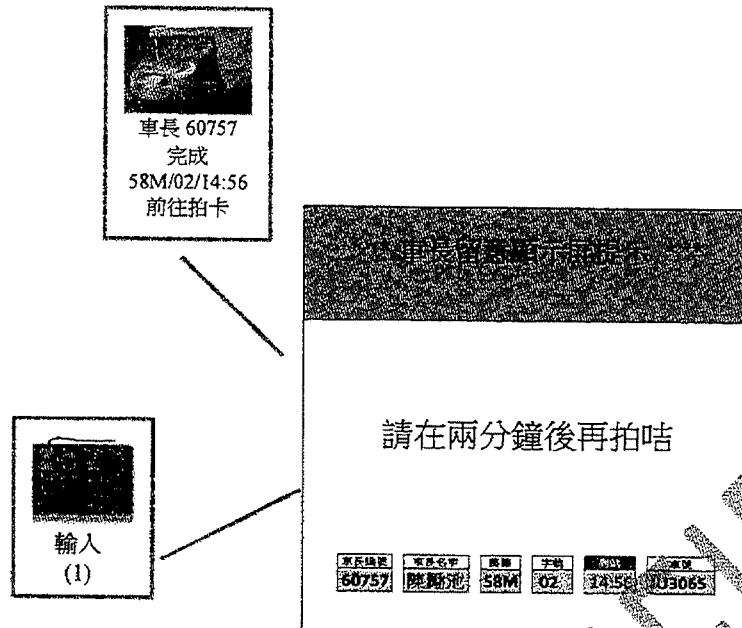
調度員	事件類別	路線	字軌	車長 編號	車輛 編號	開出 時間	預計 到達	實際 到達	參考 編號	行車 狀況	行車 時間	折返 時間	折返 地點	受影 路線	受影 字軌	次(車) 開出	受影 路線	受影 字軌	次(車) 開出
張子良	行車過時	58M	02	60757	JU3065	13:45	14:45		31653	三	三	三	58M	02	14:52	58M	02	14:52	
張子良	延遲抵達沒有原因	C43A	05	65325	KL6385	08:25	09:20	09:28	31675	三	三	三		--	--	--	--	--	
張子良	壞車	6D	02	754	11:45	12:45		35216	三	三	三	6D	02	15:10	6D	02	15:10		
張子良	交通意外	C39A	05	2168	07:38	08:20		31353	三	三	三	C39A	05	08:28	C39A	10	08:35		
自動顯示行車過時事件																			
張子良	失物處理 - 留後	C43A	08	70524	MK5518	07:00	07:48	07:48	31381	三	三	三	C43A	08	07:55	C43A	08	07:55	

路線	往	遲	早	-10/+	最長延誤 分鐘	字軌	最長提早 分鐘	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	05	15	03	1.24%	2/59 (3.51%)	2/59 (3.51%)	2/59 (3.51%)	2/59 (3.51%)
	樂華			2/3/2	4	05	15	03					
6	美孚			2/8/0	5	03	15	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	5	03	15	07					
6D	美孚			3/3/2	8	05	15	02	1.87%	0/39 (0%)	0/39 (0%)	0/39 (0%)	0/39 (0%)
	牛頭角			1/5/2	8	03	15	02					
6X	中間道			0/3/1			13	03	0	0/8 (0%)	-	-	-
28	麼地道			1/6/2	4	05	15	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	15	01					
38A	美孚			0/1/0					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			1/3/3	4	05	11	09					
86	美孚			2/3/2	5	02	17	502	1.61%	0/36 (0%)	0/36 (0%)	0/36 (0%)	0/36 (0%)
	黃泥頭			1/0/2	5	02	17	502					
6C	美孚			5/6/2	12	504	15	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	504	15	06					

**Illustration by Examples –
Delay of Arrival + Departure Regulation**

**ROM System Proposal
Control Center Operation**

→ 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



Delay of Arrival + Departure Regulation

→ Departures affected will have the scheduled departure time displayed in red

ROM System Proposal Control Center Operation

日期:		調整班次 (F12)		排序: 車輛 / 車長 / 時間	
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 往屯門					
59M 往荃灣					
車號:					
JU3065					
NA8693					
KL1584					
HP4367					
HK5581					
PB1632					
車長:					
77425					
6628					
65138					
72161					
1834					
因行車過時而未能準時開出之班次					

編號	事件類別	路線	車次	車號	車長	預計開出	實際開出	延誤分鐘	行車時間	折返	受影響路段	受影響班期	受影響班期	受影響班期	受影響班期	受影響班期	受影響班期
張子傑	行車過時	58M	02	60757	JU3065	13:45	14:45		31:653		58M	02	14:52	58M	02	14:52	
張子傑	延遲抵達沒有原因	C46	05	65325	KL6385	08:25	09:20	09:28	31:675		--	--	--	--	--	--	
張子傑	壞車	6D	05	62564	HY754	11:45	12:45		35:216		6D	02	15:10	6D	02	15:10	
張子傑	交通意外	C39A	05	85047	LM2168	07:38	08:20		31:353		C39A	05	08:29	C39A	10	08:35	
張子傑	失物處理 - 留後	C43A	08	70524	MK5518	07:00	07:48	07:48	31:381		C43A	08	07:55	C43A	08	07:55	

→ Departure regulation is selected and the departures with different destinations are sorted separately

Control Center Operation

3.1.2

→ Manually change the departure time and location of mid-way departure

ROM System Proposal Control Center Operation

3.12

→ Modified departure time and location of mid-way departure

ROM System Proposal Control Center Operation

3.12

**Illustration by Examples –
Delay of Arrival + Departure Regulation**

**ROM System Proposal
Control Center Operation**

→ When the BC presents the driver card again, information of next departure including departure time and location of mid-way departure will be shown

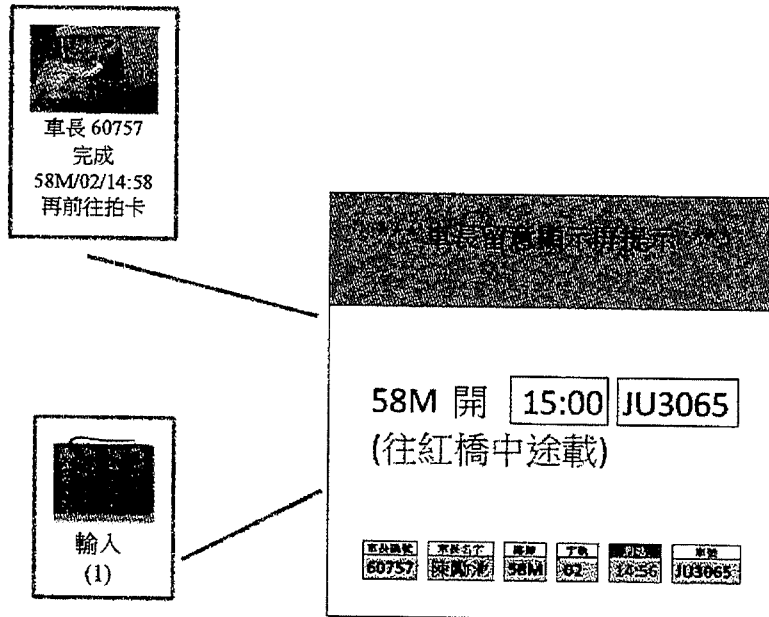


Illustration by Examples –
Delay of Arrival + Departure Regulation

ROM System Proposal
Control Center Operation

→ After the BC has presented the driver card and obtain the departure information, the incident will be removed

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	行車時間	行車時間表	折返	地點	受影響路線	受影響字軌	次(車)開出	受影響路線	受影響字軌	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			11:38	08:20		31353					C39A	05	08:28	C39A	10	08:35
				車長拍咗後事件會被移除															
張子良	失物處理 - 留後	C43A	08			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		最長遲早		本月累積失班率	當天累積失班率			
					分鐘	字軌	分鐘	字軌		0500-1000	1000-1500	1500-2000	2000-0200
2A	美孚			0/3/2	-4	06	-9	08	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	08					
6	美孚			2/8/0	-9	03	-15	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	-15	07					
6D	美孚			3/3/2	-8	09	-16	02	1.87%	0/39 (0%)	0/39 (0%)	0/39 (0%)	0/39 (0%)
	牛頭角			1/5/2	-8	09	-16	02					
6X	中間道			0/4/1			-13	03	0	0/8 (0%)	-	-	-
28	磨地道			1/6/2	-4	05	-16	01	1.34%	2/47 (4.26%)	2/47 (4.26%)	2/47 (4.26%)	2/47 (4.26%)
	磨地道			2/6/0	-4	05	-16	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	-17	02	1.61%	0/36 (0%)	0/36 (0%)	0/36 (0%)	0/36 (0%)
	荳泥頭			1/4/2	-5	02	-17	02					
6C	美孚			5/6/2	-12	04	-14	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	04	-14	06					
30	長沙灣			4/2/2	-6	07	-15	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	-15	03					

ROM System Proposal Control Center Operation

(Translation of the form in next page)

- (Translation of the form in next page)

Page 72 of 106[illegible]

Bus
Recorded incident

Captain

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

Time

:

Captain for meal

To

:

Time

:

Captain off duty

Stop flag

Time

:

Captain to standby at stop

Bus

Time

:

Re-entering the route

Service centre

Bus depot

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 number
Cheung Chi Leung	Bus breakdown	6D	02	62564	HY754	Cheung Chi Leung	12:45:00	35216
Lee Chiu	Staff unavailable	C 2A	“Bus breakdown” was created		421	TOM	08:45:20	31523
Wong Tai Tung	Bus unavailable				558		08:45:20	31513
Ho Siu Ming	Not yet arrived Affecting future departure					Wong Tai Tung		
Cheung Chi Leung	Bus breakdown	C40	03	65318	KW3187		09:18:05	31608
Lee Chiu	Early leave of captain	C108	02	73493	MM2038	Lee Chiu	08:12:16	31468
Cheung Chi Leung	Traffic accident	C42A	07	77231	IK1583	Ho Siu Ming	09:12:06	31594
Wong Tai Tung	Handling lost property – keep for future handling	C39A	05	85047	LM12168	OCM	07:45:20	31353
Wong Tai Tung	Arrival will be delayed	C43A	08	70524	MK5518	Wong Tai Tung	07:50:10	31381
Lee Chiu	Deviated from driving route	C 8A	01	4155	RJ6184	ROM	09:32:47	31668
Cheung Chi Leung	Late arrival without reason	C35A	04	73914	ND6181	ROM:	09:28:20	31618
		C46	05	68325	KL6385	ROM	09:33:51	31675
						:		
						:		

Illustration by Examples –
Bus Breakdown + Redeployment

ROM System Proposal
Control Center Operation

→ 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	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	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	31351					C43A	08	07:55	C43A	08	07:55
Cheung Chi Leung	Deviated from driving route	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
2A	Mei Foo			0/3/2	4	06	19	05					
	Lok Wah			2/3/2	4	06	19	05	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	15	07					
	Lai Chi Kok			3/5/2	9	03	15	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	16	02					
	Ngau Tau Kok			1/5/4	8	09	16	02	1.87%	0/39 (0%)	0/39 (0%)	0/39 (0%)	0/39 (0%)
6X	Middle Road			0/4/1			13	03	0	0/8 (0%)	-	-	-
28	Mody Road			1/6/2	4	05	16	01					
	Mody Road			2/6/6	4	05	16	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	17	02					
	Wong Nai Tau			1/4/2	5	02	17	02	1.61%	0/36 (0%)	0/36 (0%)	0/36 (0%)	0/36 (0%)
6C	Mei Foo			5/6/2	12	04	14	06					
	Kowloon City Ferry Pier			3/10/2	12	04	14	06	2.18%	3/71 (4.23%)	3/71 (4.23%)	3/71 (4.23%)	3/71 (4.23%)
30	Cheung Sha Wan			4/2/2	6	07	15	03					
	Allway Garden			2/7/0	6	07	15	03	1.84%	2/24 (8.33%)	2/24 (8.33%)	2/24 (8.33%)	2/24 (8.33%)

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

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 of captain	Captain carried in	Captain carried away	Duty of captain	Companion captain	Scheduled departure	Actual departure	In advance	Delayed	Scheduled arrival	Arrival at midway station	Stop name	Expected remaining travelling time (minutes)	Clocked- Arrived in	Start point	Midway boarding station	End point	Contact OCC
6D	02	62564	HY 754	11:45	12:45		35216								6D	02	15:10	6D	02	15:10
C46	05	65325	KL 6385	08:25	09:20	09:28	31675								--	--	--	--	--	
C39A	05	35047	LM2168	07:58	08:20		31353							C39A	05	08:28	C39A	10	08:35	
C43A	08	70524	HK 5581	07:00	07:48	07:48	31381							C43A	08	07:55	C43A	08	07:55	
C35A	04	73914	ND 5181	--	--	--	31618							--	--	--	--	--	--	

Staff unavailable

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
Cheung Chi Leung	Bus broken	6D	02	62564	HY 754	11:45	12:45		35216					6D	02	15:10	6D	02	15:10
Cheung Chi Leung	Late arrival without reason	C46	05	65325	KL 6385	08:25	09:20	09:28	31675					--	--	--	--	--	--
Cheung Chi Leung	Traffic accident	C39A	05	35047	LM2168	07:58	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	HK 5581	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	ND 5181	--	--	--	31618					--	--	--	--	--	--

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:

Illustration by Examples –
Bus Breakdown + Redeployment

ROM System Proposal
Control Center Operation

→ Select the trip with missing bus and select “resource hunting”

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 of captain	Captain carried in	Duty of captain	Companion	Scheduled departure	Actual departure	In advance	Scheduled arrival	Arrival at midway station	Stop name	Expected remaining travelling time (minutes)	Clocked-Start	Midway boarding station	End point	Contact OCC	Frequency
6D	HY754	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	NA8693	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	KL1584	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	HP4367	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	HK5581	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	PB1632	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	HY754	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	NA8693	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	KL1584	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	HP4367	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	HK5581	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	PB1632	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	HY754	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	NA8693	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	KL1584	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	HP4367	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	HK5581	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	PB1632	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	HY754	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	NA8693	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	KL1584	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	HP4367	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	HK5581	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	PB1632	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	HY754	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	NA8693	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	KL1584	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	HP4367	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	HK5581	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	PB1632	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	HY754	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	NA8693	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	KL1584	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	HP4367	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	HK5581	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	PB1632	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	HY754	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	NA8693	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	KL1584	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	HP4367	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	HK5581	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	PB1632	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	HY754	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	NA8693	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	KL1584	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	HP4367	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	HK5581	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	PB1632	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	HY754	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	NA8693	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	KL1584	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	HP4367	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	HK5581	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	PB1632	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	HY754	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	NA8693	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	KL1584	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	HP4367	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	HK5581	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	PB1632	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	HY754	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	NA8693	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	KL1584	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	HP4367	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	HK5581	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	PB1632	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	HY754	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	NA8693	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	KL1584	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	HP4367	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	HK5581	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25	05:00	12:24	Mei Foo	Ngau Tau Kok	15				
6D	PB1632	6D/04	Morning	62564	6D/04/早	62564	6D/04/早	11:25	11:25									

ROM System Proposal Control Center Operation

➔ 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:	<input type="text"/> <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> E			Travelling time for private purpose	<input type="text"/> <input type="checkbox"/> Cross-depots <input type="checkbox"/> Cross control centres				
Minimum time gap with departure time of next trip	<input type="text"/>			Missing bus for the route	<input type="text"/> <input type="checkbox"/> Cross control centres <input type="checkbox"/> Display transfer / pick up		<input type="checkbox"/> Stop at depot midway <input type="checkbox"/> Display only the same route / all routes		
No violation of work guidelines	<input type="checkbox"/> Bus selected for re-allocation			Passenger ratio	<input type="text"/>				
				Complaint ratio	<input type="text"/>				

[illegible]

ROM System Proposal Control Center Operation

46^{3.12}-258-8

**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		05	65658	KR4350		08:45:20	31513
Ho Siu Ming	Not yet arrived Affecting future departure	Automatic display of the incident: Withdrawn from service due to Staff unavailable				Wong Tai Tung		
Cheung Chi Leung	Bus breakdown				18	Lee Chiu	09:18:05	31608
Lee Chiu	Early leave of captain				93	Ho Siu Ming	08:12:16	31468
Cheung Chi Leung	Traffic accident				51	OCM	09:12:06	31594
Wong Tai Tung	Handling lost property – keep for future handling	C39A	05	85047	LM2168	Wong Tai Tung	07:45:20	31353
Wong Tai Tung	Arrival will be delayed	C43A	08	70524	MK5518	ROM	07:50:10	31381
Lee Chiu	Deviated from driving route	C 8A	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		09:33:51	31675
						:		
						:		

ROM System Proposal
Control Center Operation

Illustration by Examples –
Crew Shortage + Automatic Departure Regulation

→ 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	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	C	05	65325	KL6385	08:25	09:20	09:28	31675					--	--	--	--	--	--
Cheung Chi Leung	Traffic accident	6			754	11:45	12:45		34516					6D	02	15:10	6D	02	15:10
Cheung Chi Leung	Overtime travelling	C			2168	07:38	08:20		31353					C39A	05	08:28	C39A	10	08:35
Cheung Chi Leung	Handling lost property – keep for future handling																		
Cheung Chi Leung	Deviated from driving route	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	13	105					
	Lok Wah			2/3/2	-4	06	15	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	-3	03	15	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	15	07					
6D	Mei Foo			3/3/2	-8	09	16	02	1.87%	0/39 (0%)	0/39 (0%)	0/39 (0%)	0/39 (0%)
	Ngau Tau Kok			1/5/2	-8	09	16	02					
6X	Middle Road			0/4/1			13	03	0	0/8 (0%)	-	-	-
28	Mody Road			1/6/2	-4	05	16	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	16	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	17	502	1.61%	0/36 (0%)	0/36 (0%)	0/36 (0%)	0/36 (0%)
	Wong Nai Tau			1/4/2	-5	02	17	502					
6C	Mei Foo			5/6/2	12	504	14	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	14	06					

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

Date
20-08-2014

Time
99:99 - 99:99

Route
Direction

58M
58M
58P
58P
59M
59M

To Leung King
To Kwai Fong
To Leung King
To Kwai Fong
To Tuen Mun Ferry Pier
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

Route	Bus	Vehicle duty	Captain carried in	Duty of captain carried in	Captain carried away	Duty of captain carried away	Companion	Scheduled departure	Actual departure	In advance Delayed	Scheduled arrival	Arrival at midway station	Stop name	Expected remaining travelling time (minutes)	Clocked- Arrived in	Start point	Midway boarding station	End point	Contact OCC	Frequency
9C	51708	98C/01	(Depot)					777 98C/01	Morning	5:28	5:30		Hang Hau (North)		Hang Hau (North)					
9C	51708	98C/01			76777 98C/01	Morning		777 98C/01	Morning	5:30	5:30		Hang Hau (North)		Hang Hau (North)					
9C	51571	98C/04	(Private)					98C 98C/04	Morning	5:38	5:40		Hang Hau (North)		Mei Foo					
9C	51642	98C/01	(Depot)					15P 98C/02	Morning	5:44	5:45		Hang Hau (North)		Hang Hau (North)					
9C	51642	98C/02			72113 98C/02	Morning		15P 98C/02	Morning	5:45	5:45		Hang Hau (North)		Hang Hau (North)					
9C	517990	98C/05	(Private)					98C 98C/05	Morning	5:54	5:55		Hang Hau (North)		Mei Foo					15
9C	51671	98C/04			98C 98C/04	Morning		98C 98C/04	Morning	6:00	6:00		Hang Hau (North)		Hang Hau (North)					16
9C	518990	98C						98C 98C/04	Morning	6:00	6:00		Hang Hau (North)		Mei Foo					12
9C	514130	98C/15	(Depot)					98C 98C/15	Morning	6:24	6:24		Tseung Kwan O Depot		Hang Hau (North)					
9C	518461	98C/06	(Depot)					98C 98C/06	Morning	6:26	6:26		Chun Wang Street lane C		Hang Hau (North)					
9C	514130	98C/15			78334 98C/15	Morning		98C 98C/15	Morning	6:30	6:30		Hang Hau (North)		Mei Foo					12
9C	519133	98C/08	(Depot)					98C 98C/08	Morning	6:34	6:34		Chun Wang Street lane C		Hang Hau (North)					
9C	517944	98C/09	(Private)					98C 98C/09	Morning	6:34	6:34		Hang Hau (North)		Hang Hau (North)					
9C	518461	98C/06			73893 98C/06	Morning		98C 98C/06	Morning	6:36	6:36		Hang Hau (North)		Mei Foo					12
9C	519133	98C/08			77234 98C/08	Morning		98C 98C/08	Morning	6:36	6:36		Mei Foo		Hang Hau (North)					12
9C	519133	98C/08			77234 98C/08	Morning		98C 98C/08	Morning	6:36	6:36		Mei Foo		Hang Hau (North)					12
9C	519133	98C/08	(Depot)					98C 98C/08	Morning	6:38	6:38		Hang Hau (North)		Hang Hau (North)					
9C	519133	98C/08			77977 98C/08	Morning		98C 98C/08	Morning	6:38	6:38		Hang Hau (North)		Mei Foo					11
9C	514443	98C/07	(Depot)					98C 98C/07	Morning	7:00	7:00		Tseung Kwan O Depot		Hang Hau (North)					
9C	514443	98C/07			70481 98C/07	Morning		98C 98C/07	Morning	7:00	7:00		Hang Hau (North)		Mei Foo					10
9C	514443	98C/07			70481 98C/07	Morning		98C 98C/07	Morning	7:00	7:00		Hang Hau (North)		Mei Foo					10
9C	514404	98C/10	(Depot)					98C 98C/10	Morning	7:14	7:14		Tseung Kwan O Depot		Hang Hau (North)					
9C	517944	98C/09			70074 98C/09	Morning		98C 98C/09	Morning	7:20	7:20		Hang Hau (North)		Hang Hau (North)					11
9C	517944	98C/09			70074 98C/09	Morning		98C 98C/09	Morning	7:20	7:20		Hang Hau (North)		Mei Foo					11
9C	517944	98C/09			70074 98C/09	Morning		98C 98C/09	Morning	7:20	7:20		Hang Hau (North)		Hang Hau (North)					11
9C	51227	98C/11	(Depot)					98C 98C/11	Morning	7:25	7:25		Tseung Kwan O Depot		Hang Hau (North)					
9C	51227	98C/11			65254 98C/11	Morning		98C 98C/11	Morning	7:30	7:30		Hang Hau (North)		Mei Foo					10
9C	51227	98C/11			65254 98C/11	Morning		98C 98C/11	Morning	7:30	7:30		Hang Hau (North)		Mei Foo					10
9C	51227	98C/11			65254 98C/11	Morning		98C 98C/11	Morning	7:30	7:30		Hang Hau (North)		Mei Foo					11
9C	51227	98C/11			65254 98C/11	Morning		98C 98C/11	Morning	7:30	7:30		Hang Hau (North)		Mei Foo					11

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					98C	05	06:12	98C	05	06:12
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	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

Date
20-08-2014

Time
99:99 - 99:99

RouteDirection
98CTo Mei Foo
98CHang Hau (North)
58PTo Leung King
58PTo Kwai Fong
59MTo Tuen Mun Ferry Pier
59MTo Tsuen Wan

Licence plate
3C2678
4A8693
CL1584
HP4367
HK5581
7B1632

Captain
77425
6528
65138
72161
1834

Working timetable (F12)

Vehicle	Duty of captain	Captain carried in	Duty of captain	Companion	Scheduled departure	Actual departure	In advance	Scheduled arrival	Arrival at midway station	Stop name	Expected remaining travelling time (minutes)	Arrived in	Clocked- Start point	Midway boarding station	End point	Contact OCC	Frequency
8C	SH6452	98C/02			73119	98C/02	Morning	73119	98C/02	Morning	1:45	6:40					
8C	SH9990	98C/05	(Private)	Withdrawn from service due to crew shortage			Morning	1:54	6:55							15	
8C	SH571	98C/04			62560	98C/04	Morning	12660	98C/04	Morning	1:00	6:55				15	
8C	SH9990			Withdrawn from service due to crew shortage			Morning	1:12	7:07								
8C	SH4110	98C/15	(Depot)			18334	98C/15	Morning	1:15	6:24							
8C	SH8451	98C/06	(Depot)			3893	98C/06	Morning	1:20	6:36							
8C	SH4110	98C/15			73334	98C/15	Morning	1:24	7:24								
8C	SH9233	98C/08	(Depot)			7234	98C/08	Morning	1:32	6:48							
8C	SH7954	98C/09	(Private)			10074	98C/09	Morning	1:34	6:35							
8C	SH8451	98C/06			73593	98C/06	Morning	1:36	7:36								
8C	SH9233	98C/08			77234	98C/08	Morning	1:48	7:48								
8C	SH9233	98C/08			73119	98C/08	Morning	1:48	7:48								
8C	SH3942	98C/03	(Depot)			7977	98C/03	Morning	1:58	6:59							
8C	SH3942	98C/03			77977	98C/03	Morning	1:59	7:59								
8C	SH4443	98C/07	(Depot)			0461	98C/07	Morning	1:00	7:09							
8C	SH4443	98C/07			70461	98C/07	Morning	1:09	8:09								
8C	SH571	98C/04			62560	98C/04	Morning	1:10	8:10								
8C	SH8404	98C/10	(Depot)			3253	98C/10	Morning	1:14	7:30							
8C	SH7944	98C/09			70074	98C/09	Morning	1:20	8:20								
8C				Withdrawn from service due to crew shortage			Morning	1:22	8:22								
8C	SH227	98C/11	(Depot)	Withdrawn from service due to crew shortage			Morning	1:25	7:41								
8C	SH8404	98C/10			63253	98C/10	Morning	1:30	8:30								
8C	SH4110	98C/15			73334	98C/15	Morning	1:34	8:34								
8C	SH227	98C/11			75263	98C/11	Morning	1:41	8:41								
8C	SH8404	98C/10			75893	98C/10	Morning	1:43	8:43								
8C	SH709	98C/01			78777	98C/01	Morning	1:51	8:51								
8C	SH9233	98C/08			77234	98C/08	Morning	1:54	8:54								

Sort by: Vehicle / Bus Length / Time

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

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	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
98C
98C
58P
58P
58M
58M

Direction
To Mei Foo
Hang Hau (North)
To Leung King
To Kwai Fong
To Tuen Mun Ferry Pier
To Tsuen Wan

Licence plate
3C2678
4A8693
CL1584
HP4367
HK5581
7B1632

Captain
77425
6528
65138
72161
1834

Working timetable (F12)

Bus	Vehicle	Duty of captain	Captain carried in	Captain carried away	Duty of captain	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	SH9990	98C/02	73119	98C/01	Morning	73119	98C/01	Morning	6:45	6:40	Hang Hau (North)	Mei Foo	15								
98C	SH9990	98C/01	Withdrawn from service due to crew shortage	98C/01	Morning	6:54	6:55	Hang Hau (North)	Hang Hau (North)												
98C	SH9990	98C/04	(Private)	Withdrawn from service due to crew shortage	98C/04	Morning	6:55	6:55	Hang Hau (North)	Mei Foo	15										
98C	SH9990	98C/05	Withdrawn from service due to crew shortage	98C/05	Morning	7:07	7:07	Hang Hau (North)	Mei Foo												
98C	SH4210	98C/15			Morning	6:24	6:24	Hang Hau (North)	Hang Hau (North)												
98C	SH461	98C/04	(Depot)		Morning	6:36	6:36	Tseung Kwan O Depot	Hang Hau (North)												
98C	SH4110	98C/15	(Depot)		Morning	7:24	7:24	XXX	Mei Foo	24											
98C	SH9233	98C/08			Morning	6:48	6:48	Hang Hau (North)	Hang Hau (North)												
98C	SH7944	98C/09	(Depot)		Morning	6:35	6:35	XXX	Hang Hau (North)												
98C	SH461	98C/06	(Private)		Morning	7:36	7:36	Hang Hau (North)	Mei Foo	12											
98C	SH9233	98C/08			Morning	7:48	7:48	Mei Foo	Hang Hau (North)												
98C	SH9233	98C/01			Morning	7:54	7:54	Hang Hau (North)	Hang Hau (North)												
98C	SH9233	98C/03			Morning	6:59	6:59	Mei Foo	Hang Hau (North)												
98C	SH9233	98C/03	(Depot)		Morning	7:59	7:59	Hang Hau (North)	Hang Hau (North)												
98C	SH4443	98C/07			Morning	7:09	7:09	Hang Hau (North)	Mei Foo	11											
98C	SH4443	98C/07	(Depot)		Morning	8:09	8:09	Tseung Kwan O Depot	Hang Hau (North)												
98C	SH9233	98C/04			Morning	6:48	6:48	Hang Hau (North)	Mei Foo	10											
98C	SH8404	98C/10			Morning	7:30	7:30	Mei Foo	Hang Hau (North)												
98C	SH7944	98C/09	(Depot)		Morning	8:20	8:20	XXX	Hang Hau (North)												
98C	SH9233	98C/05	Withdrawn from service due to crew shortage	98C/05	Morning			Hang Hau (North)	Mei Foo	11											
98C	SH9233	98C/11			Morning	7:41	7:41	Mei Foo	Hang Hau (North)												
98C	SH8404	98C/10	(Depot)		Morning	8:30	8:30	XXX	Hang Hau (North)												
98C	SH4110	98C/15			Morning	7:33	7:33	Hang Hau (North)	Mei Foo	10											
98C	SH227	98C/11			Morning	8:41	8:41	Hang Hau (North)	Mei Foo	11											
98C	SH461	98C/05			Morning	8:44	8:44	Mei Foo	Hang Hau (North)												
98C	SH709	98C/01			Morning	8:51	8:51	Hang Hau (North)	Mei Foo	10											

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	31675											
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													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	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 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)

→ Departure regulation complete

Control Center Operation

<p>Separate display for different directions</p> <p>Display only trips</p>
<p>Departure time of previous trip prior to the trip involving unavailable staff/bus</p> <p>Applicable to trip departed from : to :</p> <p>After advancing the trip involving unavailable staff/bus</p> <p><input type="checkbox"/> Departure time of next trip</p> <p>Departure time of all trips afterwards</p> <p><input type="checkbox"/> Execute</p>
<p>Apply formerly adjusted travelling time:</p> <p>58M closed with 7 buses on weekdays (Thursday, 23 October)</p> <p>58M closed with 7 buses on weekdays (Monday, 6 October)</p>

Board of Dispatcher		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	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**

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:	58M	02	60757	JU3065	ROM	12:45:00	35216
Lee Chiu	Staff unavailable	C12	05	60421	GZ4853	TOM	08:45:20	31523
Wong Tai Tung	Bus unavailable		06	65658	HR4350	TOM	08:45:20	31513
Ho Siu Ming	Not yet arrived Affecting future departure	Automatic display of the incident: overtime travelling				Wong Tai Tung		
Cheung Chi Leung	Bus breakdown					Lee Chiu	09:18:05	31608
Lee Chiu	Early leave of captain					Ho Siu Ming	08:12:16	31468
Cheung Chi Leung	Traffic accident					OCM	09:12:06	31594
Wong Tai Tung	Handling lost property – keep for future handling					Wong Tai Tung	07:45:20	31353
Wong Tai Tung	Arrival will be delayed	C39A	05	85047	LM2168		07:50:10	31381
		C43A	08	70524	MK5518		09:32:47	31668
		C48A	04	1155	RJ6184	ROM	09:28:20	31618
Lee Chiu	Deviated from driving route	C35A	04	73914	ND6181	ROM:	09:33:51	31675
Cheung Chi Leung	Late arrival without reason	C46	05	65325	KL6385	ROM		
						:		
						:		

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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



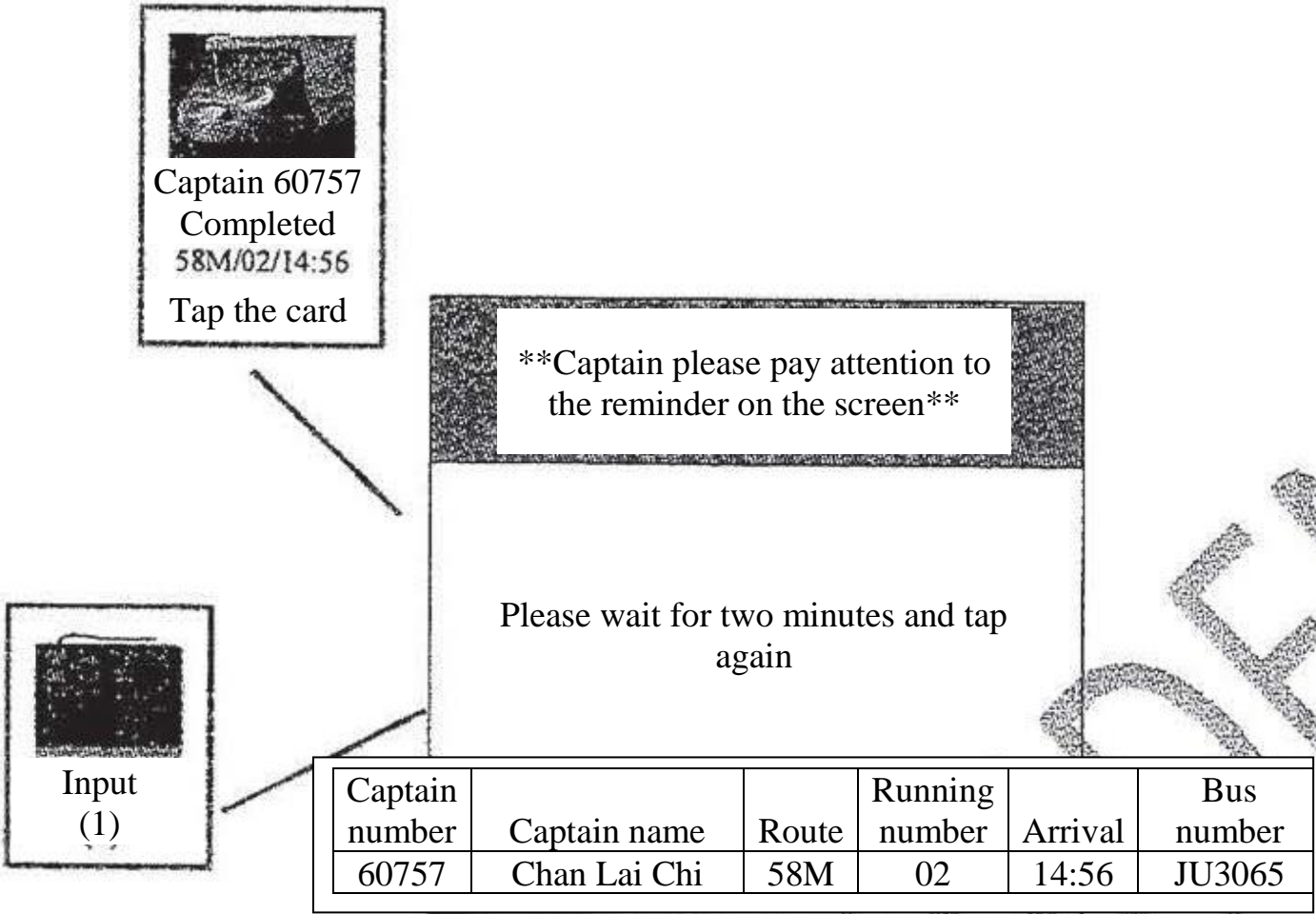
Dispatcher	Type of incident	Route	Running number	Captain number	Bus number	Departure time	Expected arrival time	Actual arrival time	Reference number	Overview of the travelling	Driving schedule	Line chart	Map	Trips affected (bus)	Running number	Departed	Trips affected (bus)	Running number	Departed
Cheung Chi Leung	Overtime travelling	1	02	60757	IU3065	13:45	14:45		31653					58M	02	14:52	58M	02	14:52
Cheung Chi Leung	Late arrival without reason	1	02	60757	IU3065	09:20	09:28	31675											
Cheung Chi Leung	Bus breakdown	Automatic display of the incident: overtime travelling				12:45		35216						6D	02	15:10	6D	02	15:10
Cheung Chi Leung	Traffic accident					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																		
		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		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
2A	Mei Foo			0/3/2	4	06	45	07	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	45	07		2/59 (3.51%)	2/59 (3.51%)	2/59 (3.51%)	2/59 (3.51%)
6	Mei Foo			2/8/0	5	03	45	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	45	07		1/51 (1.96%)	1/51 (1.96%)	1/51 (1.96%)	1/51 (1.96%)
6D	Mei Foo			3/3/2	8	09	46	02	1.87%	0/39 (0%)	0/39 (0%)	0/39 (0%)	0/39 (0%)
	Ngau Tau Kok			1/5/2	8	09	46	02		0/39 (0%)	0/39 (0%)	0/39 (0%)	0/39 (0%)
6X	Middle Road			0/4/3	-	-	33	03	0	0/8 (0%)	-	-	-
28	Mody Road			1/6/2	4	05	46	01	1.34%	2/47 (4.26%)	2/47 (4.26%)	2/47 (4.26%)	2/47 (4.26%)
	Mody Road			2/1/0	4	05	46	01		2/47 (4.26%)	2/47 (4.26%)	2/47 (4.26%)	2/47 (4.26%)
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	-	-	-	-		1/8 (0%)	1/8 (0%)	1/8 (0%)	1/8 (0%)
72	Cheung Sha Wan			3/5/1	4	05	43	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	43	09		1/29 (3.45%)	1/29 (3.45%)	1/29 (3.45%)	1/29 (3.45%)
86	Mei Foo			2/3/2	5	02	47	02	1.61%	0/36 (0%)	0/36 (0%)	0/36 (0%)	0/36 (0%)
	Wong Nai Tau			3/4/2	5	02	47	02		0/36 (0%)	0/36 (0%)	0/36 (0%)	0/36 (0%)
6C	Mei Foo			5/6/2	12	04	44	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	04	44	06		3/71 (4.23%)	3/71 (4.23%)	3/71 (4.23%)	3/71 (4.23%)

**Illustration by Examples –
Delay of Arrival + Departure Regulation**

**ROM System Proposal
Control Center Operation**

➔ 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



ROM System Proposal Control Center Operation

Departure rate of the route:

Captain Information:

(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:

Trip that cannot be departed
on time due to overtime of
travelling

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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

Date

20-08-2014

Time

99:99 - 99:99

Route

Direction

58M

58M

58P

58P

59M

59M

To Leung King

To Kwai Fong

To Leung King

To Kwai Fong

To Tuen Mun Ferry Pier

To Tsuen Wan

Licence plate

JU3065

MA8693

KL1584

HP4367

HK5581

PB1632

Captain

71425

6528

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 in	Clocked- Start point	Midway boarding station	End point	Contact OCC	Frequency
58M	JU7191	58M/01			58M/14/早	Morning	58M/07/早	Morning	14:28	14:28	0:00	15:22								
58M	JU7196	58M/02			58M/515/早	Morning	58M/514/早	Morning	14:34	14:34	0:00	14:44								
58M	JU3065	58M/03			58M/11/早	Morning	58M/11/早	Morning	14:34	14:34	0:00	14:34								
58M	KV6817	58M/03	(Depot)		58M/09/早	Morning	58M/09/早	Night	14:36	14:36	0:00	15:30								
58M	KV7491	58M/03	(Depot)		58M/514/早	Morning	58M/514/早	Morning	14:44	14:44	0:00	15:38								
58M	KV7491	58M/03	(Depot)		58M/02/早	Morning	58M/07/早	Night	14:52			15:46								
58M	KV7491	58M/03	(Depot)		58M/101/早	Night	58M/101/早	Night	14:54			15:14								
58M	KV7491	58M/03	(Depot)		58M/503/早	Morning	58M/503/早	Morning	14:58			15:08								
58M	KV7491	58M/03	(Depot)		58M/12/早	Morning	58M/08/早	Night	14:56			15:54								
58M	KV7491	58M/03	(Depot)		58M/503/早	Morning	58M/503/早	Morning	15:08			16:02								
58M	KV7491	58M/03	(Depot)		58M/102/早	Night	58M/102/早	Night	15:14			15:14								
58M	KV7491	58M/03	(Depot)		58M/504/早	Morning	58M/504/早	Morning	15:14			15:14								
58M	KV7491	58M/03	(Depot)		58M/08/早	Morning	58M/104/早	Night	15:16			16:10								
58M	KV7491	58M/03	(Depot)		58M/15/早	Morning	58M/15/早	Morning	15:24			15:44								
58M	KV7491	58M/03	(Depot)		58M/504/早	Morning	58M/504/早	Morning	15:24			15:44								
58M	KV7491	58M/03	(Depot)		58M/01/早	Morning	58M/96/早	Night	15:40			15:40								
58M	KV7491	58M/03	(Depot)		58M/104/早	Morning	58M/104/早	Morning	15:40			15:40								

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 in	Clocked- Start point	Midway boarding station	End point	Contact OCC	Frequency
58M	KV7491	58M/03			58M/10	Night	58M/10	Night	14:28	14:28	0:00	15:22								
58M	KV7491	58M/03			58M/15	Morning	58M/15	Morning	14:34	14:34	0:00	14:44								
58M	KV7491	58M/03			58M/09	Night	58M/09	Night	14:36	14:36	0:00	15:30								
58M	KV7491	58M/03			58M/514	Morning	58M/514	Morning	14:44	14:44	0:00	15:38								
58M	KV7491	58M/03			58M/02	Morning	58M/07	Night	14:52			15:46								
58M	KV7491	58M/03			58M/101	Night	58M/101	Night	14:54			15:14								
58M	KV7491	58M/03			58M/503	Morning	58M/503	Morning	14:58			15:08								
58M	KV7491	58M/03			58M/12	Morning	58M/08	Night	14:56			15:54								
58M	KV7491	58M/03			58M/503	Morning	58M/503	Morning	15:08			16:02								
58M	KV7491	58M/03			58M/102	Night	58M/102	Night	15:14			15:14								
58M	KV7491	58M/03			58M/504	Morning	58M/504	Morning	15:14			15:14								
58M	KV7491	58M/03			58M/08	Morning	58M/104	Night	15:16			16:10								
58M	KV7491	58M/03			58M/15	Morning	58M/15	Morning	15:24			15:44								
58M	KV7491	58M/03			58M/504	Morning	58M/504	Morning	15:24			15:44								
58M	KV7491	58M/03			58M/01	Morning	58M/96	Night	15:40			15:40								
58M	KV7491	58M/03			58M/104	Morning	58M/104	Morning	15:40			15:40								

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					58M	02	14:52	58M	02	14:52
Cheung Chi Leung	Bus broken	6D	02	58564	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	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

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)

46-258-19

Illustration by Examples – Delay of Arrival + Departure Regulation

➔ Manually change the 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		

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- Start in point	Midway boarding station	End point	Contact OCC	Frequency
58M	KU8269	58M/15	(Depot)	60937	58M/13/1	Morning	58M/06/1	Night	14:02	14:02	0:00	14:56	Leung King Estate	Kwai Fong Station	6						
58M	58M/511	(Depot)	60804	58M/10/1	Morning	58M/10/1	Morning	14:04	14:04	0:00	14:24	Leung King Estate	Tuen Mun (South) Depot	-							
58M	58M/13/1	Morning	58M/07/1	Morning	14:19	14:19	0:00	15:13	Leung King Estate	Kwai Fong Station	17										
58M	58M/513	(Depot)	78464	58M/513/1	Morning	58M/514/1	Morning	14:34	14:34	0:00	14:44	Leung King Estate	Kwai Fong Station	25							
58M	58M/513	(Depot)	72306	58M/11/1	Morning	58M/11/1	Morning	14:34	14:34	0:00	14:54	Leung King Estate	Tuen Mun (South) Depot	-							
58M	58M/09	(Depot)	60309	58M/09/1	Morning	58M/05/1	Morning	14:36	14:36	0:00	15:30	Leung King Estate	Kwai Fong Station	2							
58M	58M/513	(Depot)	87654	58M/513/1	Morning	58M/514/1	Morning	14:41	14:44	0:00	15:38	Leung King Estate	Kwai Fong Station	8							
58M	58M/02	(Depot)	60757	58M/02/1	Morning	58M/07/1	Night	15:00	15:00	0:00	15:00	Leung King Estate	Kwai Fong Station	15							
58M	58M/03	(Depot)	53675	58M/03/1	Night	58M/001/1	Night	14:54	14:54	0:00	15:24	Leung King Estate	Tuen Mun (South) Depot	-							
58M	58M/503	(Depot)	1180	58M/503/1	Morning	58M/503/1	Morning	14:55	14:55	0:00	15:08	Tuen Mun (South) Depot	Leung King Estate	-							
58M	58M/16	(Depot)	72494	58M/16/1	Morning	58M/08/1	Night	15:00	15:00	0:00	15:54	Leung King Estate	Kwai Fong Station	0							
58M	58M/508	(Depot)	1180	58M/508/1	Morning	58M/503/1	Morning	15:08	15:08	0:00	15:02	Leung King Estate	Kwai Fong Station	3							
58M	58M/10	(Depot)	1624	58M/10/1	Night	58M/102/1	Night	15:14	15:14	0:00	15:34	Leung King Estate	Leung King Estate	-							
58M	58M/504	(Depot)	69551	58M/504/1	Morning	58M/504/1	Morning	15:14	15:14	0:00	15:24	Tuen Mun (South) Depot	Leung King Estate	-							
58M	58M/08	(Depot)	65489	58M/08/1	Morning	58M/104/1	Night	15:16	15:16	0:00	15:16	Leung King Estate	Kwai Fong Station	8							
58M	58M/15	(Depot)	64381	58M/15/1	Morning	58M/15/1	Morning	15:24	15:24	0:00	15:44	Leung King Estate	Tuen Mun (South) Depot	-							

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- Start in point	Midway boarding station	End point	Contact OCC	Frequency
58M	58M/10	(Depot)	58M/01/1	Night	58M/01/1	Night	58M/01/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/12	(Depot)	58M/12/1	Morning	58M/12/1	Morning	58M/12/1	Morning	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/06	(Depot)	58M/06/1	Night	58M/06/1	Night	58M/06/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/12	(Depot)	58M/12/1	Morning	58M/12/1	Morning	58M/12/1	Morning	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/01	(Depot)	58M/01/1	Night	58M/01/1	Night	58M/01/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/06	(Depot)	58M/06/1	Night	58M/06/1	Night	58M/06/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/01	(Depot)	58M/01/1	Night	58M/01/1	Night	58M/01/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/01	(Depot)	58M/01/1	Night	58M/01/1	Night	58M/01/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/01	(Depot)	58M/01/1	Night	58M/01/1	Night	58M/01/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/01	(Depot)	58M/01/1	Night	58M/01/1	Night	58M/01/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/01	(Depot)	58M/01/1	Night	58M/01/1	Night	58M/01/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/01	(Depot)	58M/01/1	Night	58M/01/1	Night	58M/01/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/01	(Depot)	58M/01/1	Night	58M/01/1	Night	58M/01/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/01	(Depot)	58M/01/1	Night	58M/01/1	Night	58M/01/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/01	(Depot)	58M/01/1	Night	58M/01/1	Night	58M/01/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/01	(Depot)	58M/01/1	Night	58M/01/1	Night	58M/01/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/01	(Depot)	58M/01/1	Night	58M/01/1	Night	58M/01/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/01	(Depot)	58M/01/1	Night	58M/01/1	Night	58M/01/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/01	(Depot)	58M/01/1	Night	58M/01/1	Night	58M/01/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/01	(Depot)	58M/01/1	Night	58M/01/1	Night	58M/01/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/01	(Depot)	58M/01/1	Night	58M/01/1	Night	58M/01/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/01	(Depot)	58M/01/1	Night	58M/01/1	Night	58M/01/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/01	(Depot)	58M/01/1	Night	58M/01/1	Night	58M/01/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/01	(Depot)	58M/01/1	Night	58M/01/1	Night	58M/01/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/01	(Depot)	58M/01/1	Night	58M/01/1	Night	58M/01/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/01	(Depot)	58M/01/1	Night	58M/01/1	Night	58M/01/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/01	(Depot)	58M/01/1	Night	58M/01/1	Night	58M/01/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/01	(Depot)	58M/01/1	Night	58M/01/1	Night	58M/01/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/01	(Depot)	58M/01/1	Night	58M/01/1	Night	58M/01/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/01	(Depot)	58M/01/1	Night	58M/01/1	Night	58M/01/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/01	(Depot)	58M/01/1	Night	58M/01/1	Night	58M/01/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/01	(Depot)	58M/01/1	Night	58M/01/1	Night	58M/01/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/01	(Depot)	58M/01/1	Night	58M/01/1	Night	58M/01/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/01	(Depot)	58M/01/1	Night	58M/01/1	Night	58M/01/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/01	(Depot)	58M/01/1	Night	58M/01/1	Night	58M/01/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/01	(Depot)	58M/01/1	Night	58M/01/1	Night	58M/01/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/01	(Depot)	58M/01/1	Night	58M/01/1	Night	58M/01/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/01	(Depot)	58M/01/1	Night	58M/01/1	Night	58M/01/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/01	(Depot)	58M/01/1	Night	58M/01/1	Night	58M/01/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/01	(Depot)	58M/01/1	Night	58M/01/1	Night	58M/01/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/01	(Depot)	58M/01/1	Night	58M/01/1	Night	58M/01/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/01	(Depot)	58M/01/1	Night	58M/01/1	Night	58M/01/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/01	(Depot)	58M/01/1	Night	58M/01/1	Night	58M/01/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/01	(Depot)	58M/01/1	Night	58M/01/1	Night	58M/01/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/01	(Depot)	58M/01/1	Night	58M/01/1	Night	58M/01/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/01	(Depot)	58M/01/1	Night	58M/01/1	Night	58M/01/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/01	(Depot)	58M/01/1	Night	58M/01/1	Night	58M/01/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/01	(Depot)	58M/01/1	Night	58M/01/1	Night	58M/01/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/01	(Depot)	58M/01/1	Night	58M/01/1	Night	58M/01/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/01	(Depot)	58M/01/1	Night	58M/01/1	Night	58M/01/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/01	(Depot)	58M/01/1	Night	58M/01/1	Night	58M/01/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/01	(Depot)	58M/01/1	Night	58M/01/1	Night	58M/01/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/01	(Depot)	58M/01/1	Night	58M/01/1	Night	58M/01/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/01	(Depot)	58M/01/1	Night	58M/01/1	Night	58M/01/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/01	(Depot)	58M/01/1	Night	58M/01/1	Night	58M/01/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/01	(Depot)	58M/01/1	Night	58M/01/1	Night	58M/01/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/01	(Depot)	58M/01/1	Night	58M/01/1	Night	58M/01/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/01	(Depot)	58M/01/1	Night	58M/01/1	Night	58M/01/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/01	(Depot)	58M/01/1	Night	58M/01/1	Night	58M/01/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/01	(Depot)	58M/01/1	Night	58M/01/1	Night	58M/01/1	Night	14:01	14:01	0:00	14:14	Kwai Fong Station	Leung King Estate	-						
58M	58M/01	(Depot)	58M/01/1	Night	58M/01/1																

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

Bus unavailable

(Depot)

Staff unavailable

(Depot)

Bus unavailable

(Depot)

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	Clocked- Arrived in	Start point	Midway boarding station	End point	Contact OCC	Frequency
58M	KL8289	58M/		60957	58M/13/	Morning	368	58M/06/	Night	14:02	14:02	0:00	14:56			Leung King Estate	Kwai Fong Station			
58M	58M/10/			60864	58M/10/	Morning	304	58M/10/	Morning	14:04						Leung King Estate	Tuen Mun (South) Depot			
58M	58M/13/					Morning	382	58M/13/	Morning	14:14						Leung King Estate	Kwai Fong Station			17
58M	58M/07/					Morning	450	58M/07/	Morning	14:28						Leung King Estate	Kwai Fong Station			25
58M	58M/514/					Morning	584	58M/514/	Morning	14:34						Tuen Mun (South) Depot	Leung King Estate			
58M	58M/12/					Morning	106	58M/12/	Morning	14:34	14:34	0:00	14:54			Leung King Estate	Tuen Mun (South) Depot			
58M	58M/09/					Morning	387	58M/09/	Morning	14:36	14:36	0:00	15:30			Leung King Estate	Kwai Fong Station			
58M	58M/514/					Morning	584	58M/514/	Morning	14:44	14:44	0:00	15:38			Leung King Estate	Hung wai Fong Station			8
58M	58M/07/					Night	168	58M/07/	Night	15:00			15:38			Leung King Estate	Hung wai Fong Station			15
58M	58M/101/					Night	579	58M/101/	Night	14:54			15:34			Leung King Estate	Tuen Mun (South) Depot			
58M	58M/505/					Morning	180	58M/505/	Morning	14:58			15:38			Tuen Mun (South) Depot	Leung King Estate			
58M	58M/08/					Night	105	58M/08/	Night	15:00			15:34			Leung King Estate	Kwai Fong Station			3
58M	58M/503/					Morning	180	58M/503/	Morning	15:08			16:02			Leung King Estate	Kwai Fong Station			8
58M	58M/102/					Night	524	58M/102/	Night	15:14			15:34			Leung King Estate	Leung King Estate			
58M	58M/504/					Morning	151	58M/504/	Morning	15:24			16:24			Tuen Mun (South) Depot	Leung King Estate			
58M	58M/05/					Morning	137	58M/05/	Night	15:38			16:38			Leung King Estate	Kwai Fong Station			5
58M	58M/15/					Morning	181	58M/15/	Morning	15:24			16:44			Leung King Estate	Tuen Mun (South) Depot			

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	Clocked- Arrived in	Start point	Midway boarding station	End point	Contact OCC	Frequency
58M	58M/15/					Night			Night	15:34			16:34			Kwai Fong Station	Leung King Estate			
58M	58M/15/					Morning			Morning	15:34			16:34			Kwai Fong Station	Leung King Estate			
58M	58M/15/					Night			Night	15:34			16:34			Kwai Fong Station	Leung King Estate			
58M	58M/15/					Morning			Morning	15:34			16:34			Kwai Fong Station	Leung King Estate			
58M	58M/15/					Night			Night	15:34			16:34			Kwai Fong Station	Leung King Estate			
58M	58M/15/					Night			Night	15:34			16:34			Kwai Fong Station	Leung King Estate			
58M	58M/15/					Night			Night	15:34			16:34			Kwai Fong Station	Leung King Estate			
58M	58M/15/					Morning			Morning	15:34			16:34			Kwai Fong Station	Leung King Estate			
58M	58M/15/					Morning			Morning	15:34			16:34			Kwai Fong Station	Leung King Estate			
58M	58M/15/					Night			Night	15:34			16:34			Kwai Fong Station	Leung King Estate			
58M	58M/15/					Morning			Morning	15:34			16:34			Kwai Fong Station	Leung King Estate			
58M	58M/15/					Night			Night	15:34			16:34			Kwai Fong Station	Leung King Estate			
58M	58M/15/					Morning			Morning	15:34			16:34			Kwai Fong Station	Leung King Estate			
58M	58M/15/					Night			Night	15:34			16:34			Kwai Fong Station	Leung King Estate			
58M	58M/15/					Morning			Morning	15:34			16:34			Kwai Fong Station	Leung King Estate			
58M	58M/15/					Night			Night	15:34			16:34			Kwai Fong Station	Leung King Estate			
58M	58M/15/					Morning			Morning	15:34			16:34			Kwai Fong Station	Leung King Estate			
58M	58M/15/					Night			Night	15:34			16:34			Kwai Fong Station	Leung King Estate			
58M	58M/15/					Morning			Morning	15:34			16:34			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	C39A	05	65325	KL6385	08:25	09:20	09:28	31675					--	--	--	--	--	--
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	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

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**

→ When the BC presents the driver card again, information of next departure including departure time and location of mid-way departure will be shown

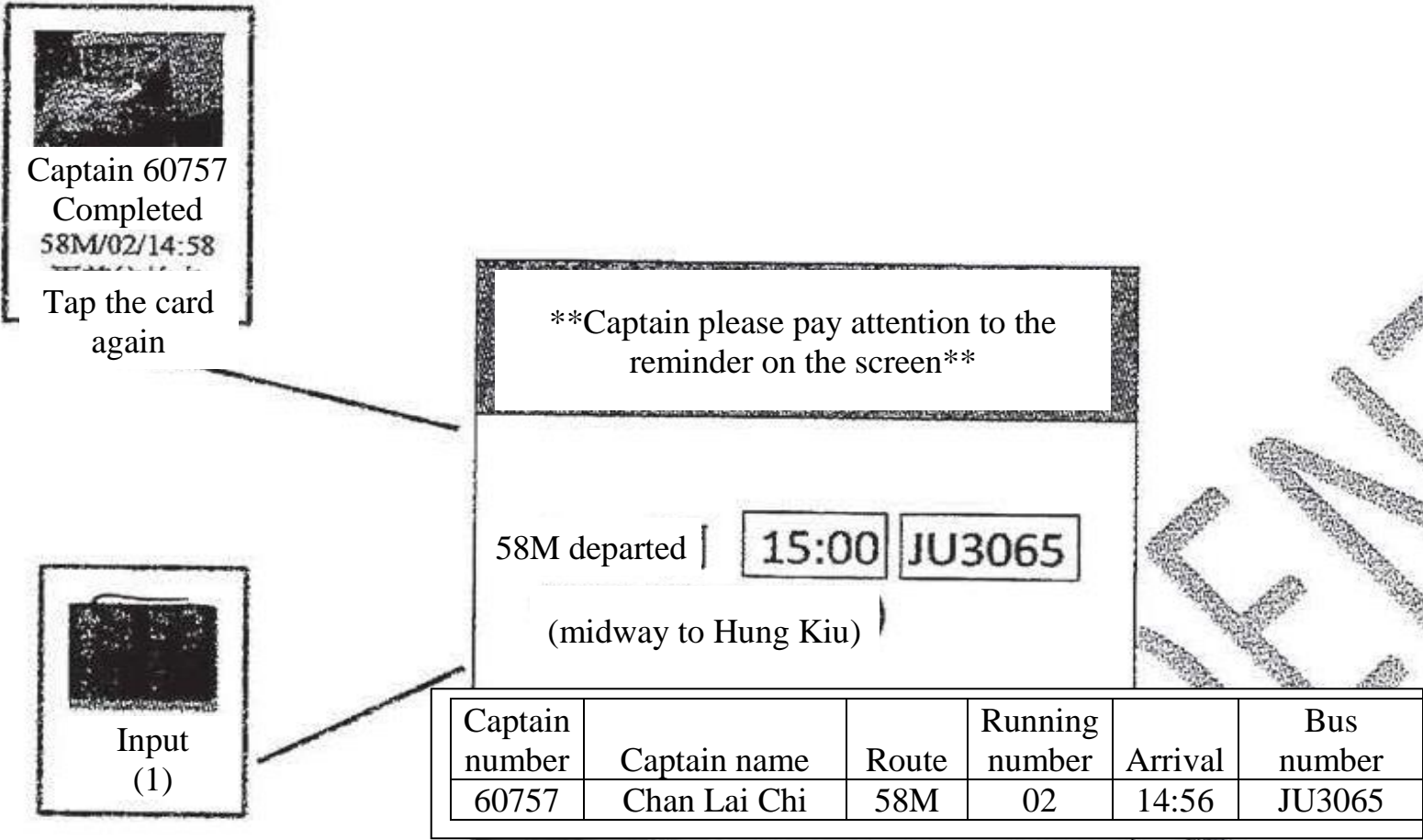


Illustration by Examples –
Delay of Arrival + Departure Regulation

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	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	05	65325	KL6385	08:25	09:20	09:28	31675											
Cheung Chi Leung	Late arrival without reason	05	62564	HY754	11:45	12:45		35216						6D	02	15:10	6D	02	15:10
Cheung Chi Leung	Bus broken	05			11:38	08:20		31353						C39A	05	08:28	C39A	10	08:35
Cheung Chi Leung	Traffic accident	05																	
Cheung Chi Leung	Overtime travelling	05																	
Cheung Chi Leung	Handling lost property – keep for future handling	05			1:00	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
2A	Mei Foo			0/3/2	-4	06	+5	105					
	Lok Wah			2/3/2	-4	06	+5	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	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			0/4/1			+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	502	1.61%	0/36 (0%)	0/36 (0%)	0/36 (0%)	0/36 (0%)
	Wong Nai Tau			1/4/2	-5	02	+7	502					
6C	Mei Foo			5/6/2	-12	504	+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	504	+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					

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9. Contingency Measures

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ROM System Proposal Contingency Measure

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

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10. Development Schedule

ROM System Proposal Development Schedule

10.1 Development Schedule and Description

ROM Phase 1 development schedule is proposed as follows:

Task	Schedule
1. Software Development	Sep 2014 – 22 nd May 2015
2. Define and Build System Interfaces	Sep 2014 – 31 st Jan 2015
3. Pre-UAT Inspection by Users	Dec 2014 – Apr 2015
4. User Training	27 th Apr 2015 – 30 th Apr 2015
5. UAT at LCK	4 th May 2015 – 12 th Jun 2015
6. Pilot Run at LCK	Start 15 th 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

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Appendix

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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

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ROM System Proposal

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:

$$\text{Priority Score} = \text{Score A} + \text{Delay Time} + \text{Score}_{\text{Acknowledgment}}$$

$$\text{Where Score A} = \text{Score}_{\text{route}} + (\text{Score}_{\text{Demand}} \times \text{Score}_{\text{Frequency}})$$

Formula of each scoring elements:

Scoring Elements	Formula
Score A	<ul style="list-style-type: none"> ➤ A score will be assigned to an incident based on its affected route ➤ $\text{Score}_{\text{route}} + (\text{Score}_{\text{Demand}} \times \text{Score}_{\text{Frequency}})$
$\text{Score}_{\text{route}}$	<ul style="list-style-type: none"> ➤ Different score will be assigned to different route category <ul style="list-style-type: none"> ○ Route category shall classified as user defined and auto detect ○ User defined route category – corresponding route shall defined and provided by user ○ 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)
$\text{Score}_{\text{Demand}}$	<ul style="list-style-type: none"> ➤ A score will be assigned to different range of demand. <ul style="list-style-type: none"> ○ Demand of a trip to be referenced by the occupancy of historical data.
$\text{Score}_{\text{Frequency}}$	<ul style="list-style-type: none"> ➤ A score will be assigned to different frequency range. <ul style="list-style-type: none"> ○ A score will be assigned to different frequency range.
Delay Time	<ul style="list-style-type: none"> ➤ Expected/Actual Time of Delay of affected Bus/BC/Duty in minutes
$\text{Score}_{\text{Acknowledgment}}$	<ul style="list-style-type: none"> ➤ 0: if incident has been acknowledged by dispatcher ➤ 50,000: if incident has not yet been acknowledged by dispatcher

Priority of Routes

Sequence	Route	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

ROM System Proposal

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

ROM System Proposal
Appendix→ Final Score = Score A + Delay Time + Score_{Acknowledgment}

Route	Demand	Frequency	Score A	Delay Time (mins)	Acknowledgment	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

Priority Score on Resources Availability

ROM System Proposal Appendix

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:

$$\text{Score}_{\text{bus}} = \text{Score}_{\text{Route}} \sum (\text{quantifier}_{\text{Route}} \times \text{weight}_{\text{Route}}) + \text{Score}_{\text{Bus}} \sum (\text{quantifier}_{\text{Bus}} \times \text{weight}_{\text{Bus}})$$

$$\text{Score}_{\text{BC}} = \text{Score}_{\text{Route}} \sum (\text{quantifier}_{\text{Route}} \times \text{weight}_{\text{Route}}) + \text{Score}_{\text{BC}} \sum (\text{quantifier}_{\text{BC}} \times \text{weight}_{\text{BC}})$$

User shall define a configurable minimum score for both categories

Shall any calculated score which under the minimum score should not be recommended

Route Constraint	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

Priority Score on Resources Availability

ROM System Proposal
Appendix

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

Working Guidelines on Bus Captain

ROM System Proposal
Appendix

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
Information Technology Department

Ref. : MM/ADD/14017

Real-time Operations Management System (ROM) Project Status

Development of ROM is underway and the progress is on schedule. Project 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
Information Technology Department

Ref. : MM/ADD/15001

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 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
Information Technology Department

Ref. : MM/ADD/15002

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 March 2015

**From : ROM Project Leader
Information Technology Department**

Ref. : MM/ADD/15004

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. Initial 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.



 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)
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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
Information Technology Department

Ref. : MM/ADD/15005

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)
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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
Information Technology Department**

Ref. : MM/ADD/15006

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.

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Mr. Terry Lo (Operations Development Department)
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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.

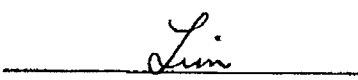
UAT stage 1 is now in progress at the Operation Control Center (OCC) in Lai Chi Kok Depot as planned. Dispatchers now use TER system to manage the operation, assisted by some ROM functions.

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
Information Technology Department

Ref. : MM/ADD/15010

Real-time Operations Management System (ROM) Project Status

User Acceptance 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 Application 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.



 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
Information Technology Department

Ref. : MM/ADD/15012

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.

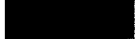
Regards,
Louisa Lam
Senior Manager, Transport



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


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)
 Chak Fung LI (23276)

Endorsed By**
 (Head of HR Department)

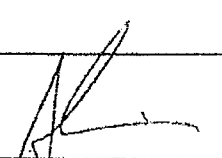
** Remark : Required for Human Resources Management / Payroll projects that relate to personal data privacy.

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

- | | | | |
|---|---|--|--|
| <input type="checkbox"/> created production group | <input type="checkbox"/> created project database | <input type="checkbox"/> created NAL App. Obj. | <input type="checkbox"/> increased DB size |
| <input type="checkbox"/> added user to production group | <input type="checkbox"/> added DB Server logins | <input type="checkbox"/> removed NAL App. Obj. | <input type="checkbox"/> associated DB server logins to DB |
| <input type="checkbox"/> deleted user from production group | <input type="checkbox"/> removed DB Server logins | <input type="checkbox"/> assigned master password holder | |

others: _____

 Date

 Handled By

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)
 Ho. Lam Siu Wai (51676)

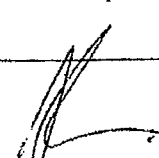
Endorsed By**
 (Head of HR Department)

** 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

- | | | | |
|---|---|--|--|
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| <input type="checkbox"/> deleted user from production group | <input type="checkbox"/> removed DB Server logins | <input type="checkbox"/> 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)

51664 Wong Yin Wai (ATS) 51652 Cheng Ka Wing (ATS)

Endorsed By**
(Head of HR Department)

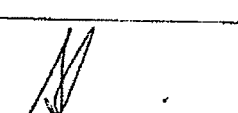
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Name:	Title:	Endorsed By (Head of Department)


Project Co-ordinator

For IT internal use only

Project Team

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- ☐ 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

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|---|---|--|--|
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| <input type="checkbox"/> deleted user from production group | <input type="checkbox"/> removed DB Server logins | <input type="checkbox"/> assigned master password holder | |

others: _____

Date

Handled By

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

Alok Jain

Ph: [REDACTED]
[REDACTED]

Your Ref: CSO/IRC-BUS/CR/7-45/9 dated 30 August 2018

10 September 2018

Mr. Peter Chan,
Secretary, Independent Review Committee on Hong Kong's Franchised Bus Service
21/F Queensway Government Offices,
66 Queensway, Hong Kong

Dear Mr. Chan,

**Further Written Submission for Consideration by the
Independent Review Committee on Hong Kong's Franchised Bus Service**

I refer to your letter dated 30 August 2018 by email, requesting for further written submission with respect to the Independent Review of Hong Kong's Franchised Bus Service.

At the outset, I would like to clarify that my statements thus far and including this one is based on pure recollection of events during my three and half years of employment at KMB. I do not have any real documentary evidence to present unless KMB or the IRC can facilitate access to a back-up of my work emails and hard drive during the time of employment. I shall be happy to then present "facts" as they stand from my point of view. Having said that I firmly stand by my statements of my involvement on the planning stages of ROM project and its objectives. In this letter, I am going to resort to circumstantial evidence and third party information to prove my point.

I read KMB's submission with dismay. Many of the assertions are either a reflection of their incompetence on the issue [REDACTED] to misguide the panel. You may wish to note that 2 out of 3 speakers (Mr. Roger Lee and Mr. Pang) were not even KMB employees at the time in question. The remaining, Mr. Leung Kin Wang, was also not involved in ROM project until end of 2014 as you can see from documents submitted by KMB.

Some of the assertions that I would like to categorically refute –

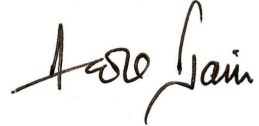
1. I cannot believe that Operations Director of a bus company in presence of the Managing Director asserts that ROM system was "about bus operations management" and had "nothing to do with driving safety" and still considered competent to carry out his job. Isn't safety a by-product of good bus operations management? You may wish to refer to the "five-year forward programme" which is submitted every year by KMB pursuant to section 12A of the Public Bus Services Ordinance (Cap. 230). During my tenure, I was responsible for coordinating this submission on behalf of KMB. If I recall correctly Chapter 4 or Chapter 5 relates to Bus Safety. This chapter used to make ample references to ROM system, driving behaviour and ECO driving (all of which related to this ROM system) as safety enhancement measures. Should I be given

access to my work emails, I would also be able to prove that in internal presentations “enhancement of safety” was indeed a defined objective.

2. Mr. Wang confirmed his understanding “totally at odds” with my evidence which considering his evidence does not surprise me at all. A simple Google search on “telematics and bus operation” would yield an entire repository of documents for anybody’s reference. I also did a search for “telematics and bus operation singapore”, a city KMB team visited (prior to me joining the company) before implementation. I am attaching three relevant articles from top 10 searches for your reference in **ANNEX A**.
3. I refer to Mr. Wang’s submission (Annex 3, Page 50, Line 17 to Page 51, Line 1; and Page 66, Line 3 to Line 17). The assertion that with ROM would require as many bus supervisors to watch over 4,000 bus captains is preposterous. The IRC should perhaps ask KMB the name of the expert providing this advice or name one city in the world where such practice is adopted. The original intent was to retrain some of the incumbent terminal supervisors to this job. In the longer run it was anticipated to save manpower and operational costs. This was precisely one of the key value drivers to justify this project.
4. I refer to Page 51, Line 14 to Page 52, Line 17, submission by Mr. Lee. “The real situation on the ground, unless you have very accurate information about the road conditions with a lot of CCTV monitoring the journey..... and the communication with bus captains would be a problem because they are already facing a lot of pressure on the road”. I fail to understand why CCTV monitoring of road conditions is needed for monitoring where buses are and how they are being driven? Two-way communication ability is designed to reduce driver stress because he or she can seek help, guidance or direction from Command Centre in case of any need. Similarly, command centre can notify him/her of any impending problems like accidents or congestion. Did KMB conduct any survey? All over the world, bus drivers have come to embrace this system due to the benefits it brings to their line operation.
5. Annex 4. The records presented by KMB are selective and [REDACTED] mislead. If I am provided the access to my email archives in KMB, I can prove the veracity and extent of my involvement in the project. I reiterate what I mentioned in my oral submission, “I was involved in early discussions for real-time operations management system, the telematics, I also led a contract, which never completed, which was about putting this data analytics platform within KMB”. I can also assert with confidence that I was nominated by Mr. Roger Lee, the managing director then until now, himself for the implementation of “Estimated Time of Arrival” system and resulting mobile app development (both of which had an interface with ROM).
6. Annex 4. KMB claims that unimplemented elements of ROM system were incorporated into ETA and FMI. This is not correct. Significant elements of ROM project were shelved for example, two-way communication ability with the drivers, operational control centre, real-time operational monitoring etc.

In light of short notice and the fact that I was out of town from 2 September until 6 September 2018 for prior business commitments, I can only cover the issues in a cursory manner in my submission. I shall be happy to provide any further information or clarification.

Yours Sincerely,

A handwritten signature in black ink, appearing to read "Alok Jain". The signature is fluid and cursive, with the first name "Alok" and the last name "Jain" clearly distinguishable.

Alok Jain

ANNEX A

Google search references for “telematics and bus operations”

1. <https://www.smmmt.co.uk/2015/06/feature-telematics-provide-fresh-insights-into-bus-operations/>
2. <https://files.eric.ed.gov/fulltext/EJ914695.pdf>
3. <https://www.busandcoachbuyer.com/telematics-making-operating-easier/>

Google search references for “telematics and bus operations singapore”

1. <https://www.straitstimes.com/singapore/transport/new-devices-on-smrt-buses-for-safer-ride>
2. <https://www.todayonline.com/singapore/device-tower-transit-buses-helps-cut-down-bad-driving-habits-accidents>
3. <https://www.channelnewsasia.com/news/singapore/digital-tools-help-bus-operators-cut-accidents-bad-driving-8989434>

香港專營巴士服務
獨立檢討委員會

香港金鐘道66號
金鐘道政府合署21樓



Independent Review Committee on
Hong Kong's Franchised Bus Service

21/F, Queensway Government Offices,
66 Queensway, Hong Kong

本函檔號 Our Ref.: CSO/IRC-BUS/CR/7-45/9

來函檔號 Your Ref.:

電話號碼 Tel No.: (852) 2867 5324

傳真號碼 Fax No.: (852) 3104 0254

18 May 2018

Ms Louisa LAM

(Email: [REDACTED])

BY EMAIL

Dear Ms LAM,

**Invitation for Written Submissions for Consideration by the
Independent Review Committee on Hong Kong's Franchised Bus Service**

On 29 March 2018, the Secretariat of the Independent Review Committee ("the Committee") was provided with a copy of a "report" on KMB sent by Mr Eric LEE to the Secretary of the Transport and Housing Bureau on 12 March 2018, which contained what was described as "testimonials from different insiders". Attached to the report was a document in Chinese characters headed, as translated into English, "Testimony from Louisa LAM, ex senior manager, Transport of Traffic Department".

We attach a copy of the document and invite you to confirm, if it is the case, that it is your statement and that it is true to the best of your knowledge and belief.

If so, we would invite you to assist the Committee by providing information to the Committee by way of answers, to the best of your knowledge and belief, to the following questions:

Employment by KMB

1. Over what period and in what positions and departments were you were employed by KMB? What were your responsibilities for each position you held as set out in the documents of appointment? What were your responsibilities as senior manager transport of traffic department?

Statement

2. In your statement you assert that:

“...in 2016... A senior officer of the Operations Division, who was a hard-core bus fan, ignored the long established ISO procedure and bypassed the computerized Duty Dispatch System (TOM) to assign his fellow bus fan part-time BC to operate on routes without relevant route training records. Sometimes these part-time BC were even deployed cross depot routes without considering their training needs.”

- a. Do you know of and are familiar with events described in that statement? If so, but only if so, please describe the “long established ISO procedure”.
- b. On what basis is it asserted that the senior officer “bypassed the computerized Duty Dispatch System (TOM)”? How are route training records made, accessed and retained? On what basis is asserted that bus captains were assigned to routes on which they had no relevant training?

We would be grateful if your response could reach the Secretariat of the Committee by **25 May 2018**. Please send the submission by soft copies to *peter_chan@irc-bus.gov.hk* or *yt_to@irc-bus.gov.hk*.

In addition to providing answers to the above questions, you may also provide information on other bus-safety related issues. In doing so, we would invite you to focus on matters of which you have personal knowledge but not on matters of which you do not have first hand knowledge.

Furthermore, please be advised that the information provided in your response will be considered by the Committee in reviewing the matters it is directed to consider under the terms of reference of the Committee and in drawing up its recommendations. If necessary, the Committee may invite you to provide supplementary written submissions and/or to give oral evidence. All written submissions (including any annexes, appendices and attachments contained therein) and oral evidence will be treated as public information and, at the discretion of the Committee, may be published on the Committee’s website.

Yours sincerely,



(CHAN Ping-fai, Peter)
Secretary, Independent Review Committee on
Hong Kong’s Franchised Bus Service

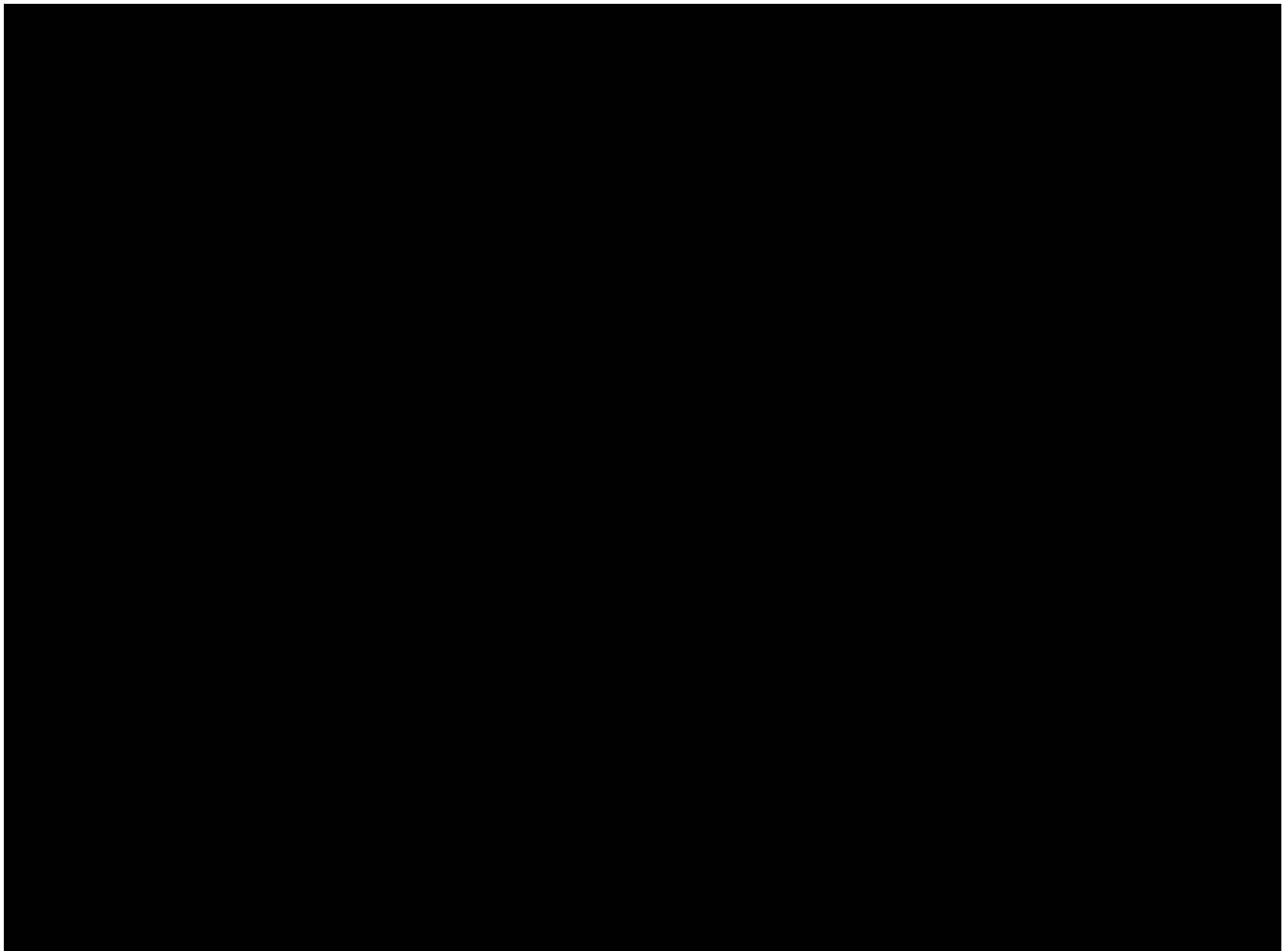
Encl

Testimony from Louisa Lam, ex-Senior Manager, Transport of Traffic Department

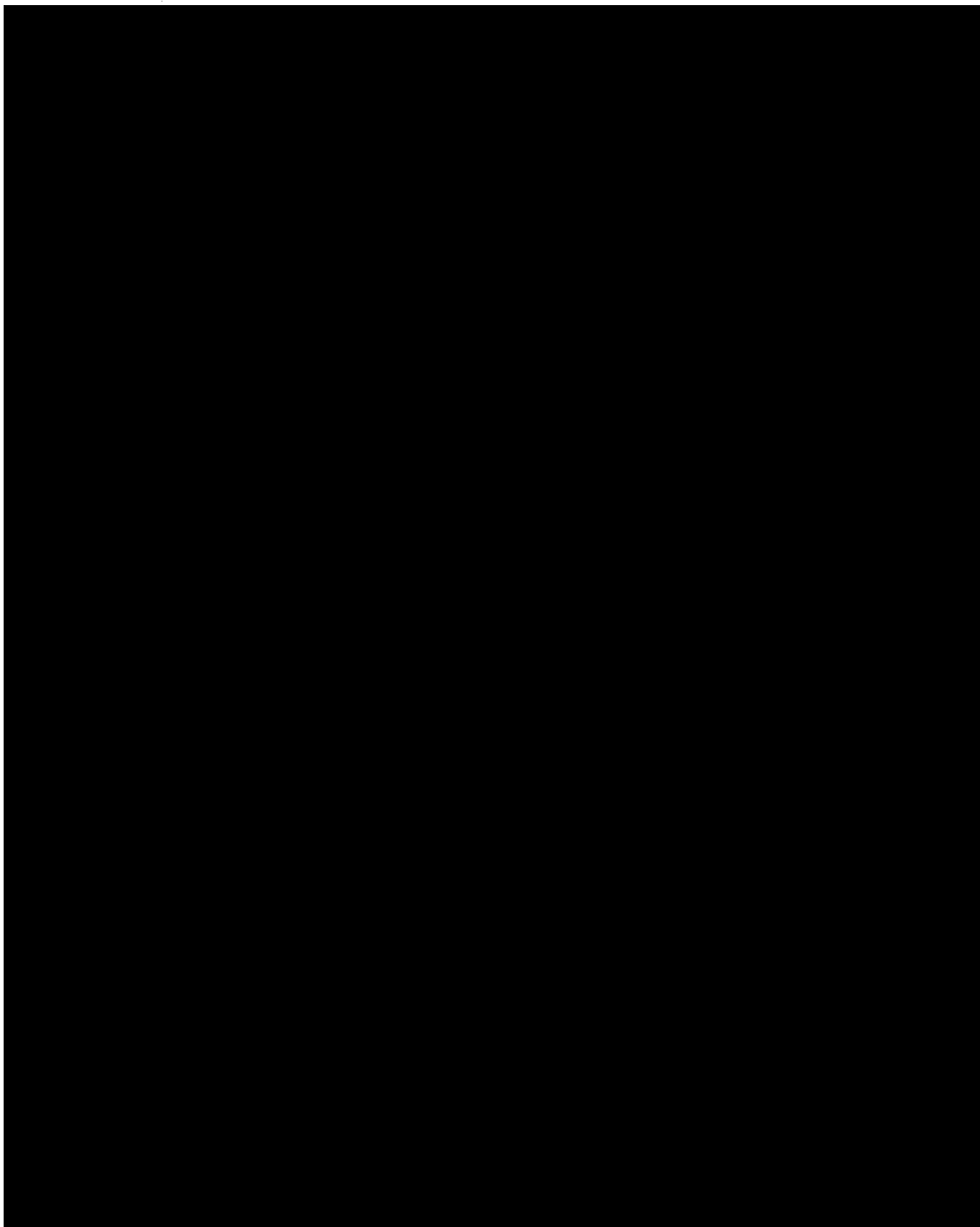
This is Louisa Lam of Traffic Department (a Department that no longer exists). I would like to quote some incidents that happened under the leadership of Roger Lee that can demonstrate his chaotic management style.

Back in 2016, under the blessings of Roger Lee, a senior officer of the Operations Division, who was a hard-core bus fan, ignored the long-established ISO procedures and bypassed the computerized Duty Dispatch System (TOM) to assign his fellow bus fan part-time BC to operate on routes without relevant route training records. Sometimes these part-time BC were even deployed to cross depot routes without considering their training needs. Such malpractice caused much confusion and difficulties to the depot supervisory staff, such as duty dispatch officers / inspectors / terminus supervisors, because of breakdown of supervision hierarchy. Some staff who disagreed to such practice chose to uncover the arrangement to the media – Oriental Daily News (ODN) and the monitoring authority of KMB – Transport Department (TD). Please refer to the below newspaper clippings for reference.

http://orientaldaily.on.cc/cnt/news/20160712/00176_060.html



http://orientaldaily.on.cc/cnt/news/20160318/00176_018.html



At first, KMB tried to defend the case as an isolated careless incident. The officer involved, instead of rectifying the situation, went so far as to cover up his wrongdoing by tampering the unfavourable training records of the part-time bus captains registered in the TOM System. Such misconduct was again disclosed by the informant to ODN and TD. After release of more and more insider information against the chaotic PTBC duty assignments by the informant, the management had no choice but to admit to ODN and TD that the arrangement was against the proper safety procedures; and promised to rectify the training records and serve a warning to the staff concerned. However, in the next couple of days after the written warning was served to the officer, Roger Lee arranged an appreciation lunch with the said officer accompanied by the Depot General Manager and other Operations Officers of the same depot. The warned officer waved the warning letter to his colleagues after the lunch saying that the letter was treated as compliments! What's more, this officer was promoted to assistant manager some 8 months later!!

Supported by the implicit approval of the malpractice by Roger Lee, the bus fans from other depots follow suit. With the help of the bus fan staff at the back office, the bus fan drivers could choose across depots the routes they like (mainly the special routes that operate on special occasions such as racecourse routes, Lunar New Year routes, Ching Ming routes, etc); and pick the buses they want (such as the bus type about to retire, buses with special bus body liveries) to create "special scenes" (特見 – a special bus fan term) for other bus fans to chase the buses to take pictures, sometimes in the middle of the road. Some examples are quoted below:

- To ignore the warning message prompted from TOM and deploy the pre-Euro IV white buses (白板車) to the cross-harbour tunnel routes that operate via the low emission zones;
- To dispatch the Chinese Zodiac animal bus (生肖巴士) to a route not belonged to the assigned depot of the bus.



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112月半交收102件:

2y Like Reply 5

載通:有車,真係唔坐?

2y Like Reply 13

View 2 previous replies

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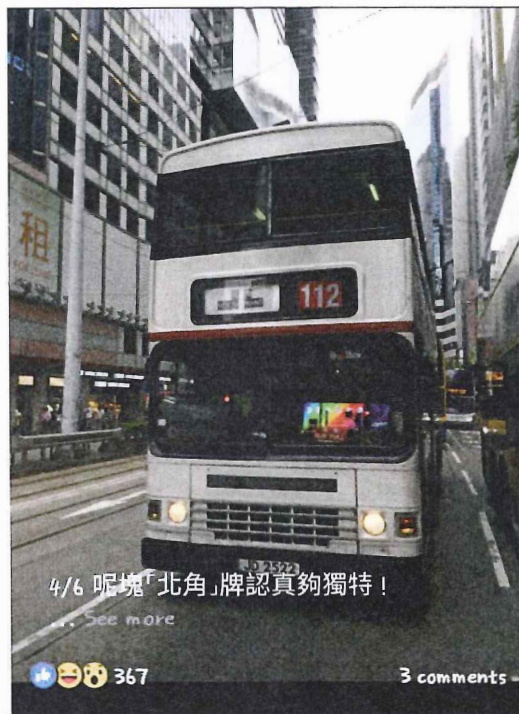
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荔廠真係咩都做得出..

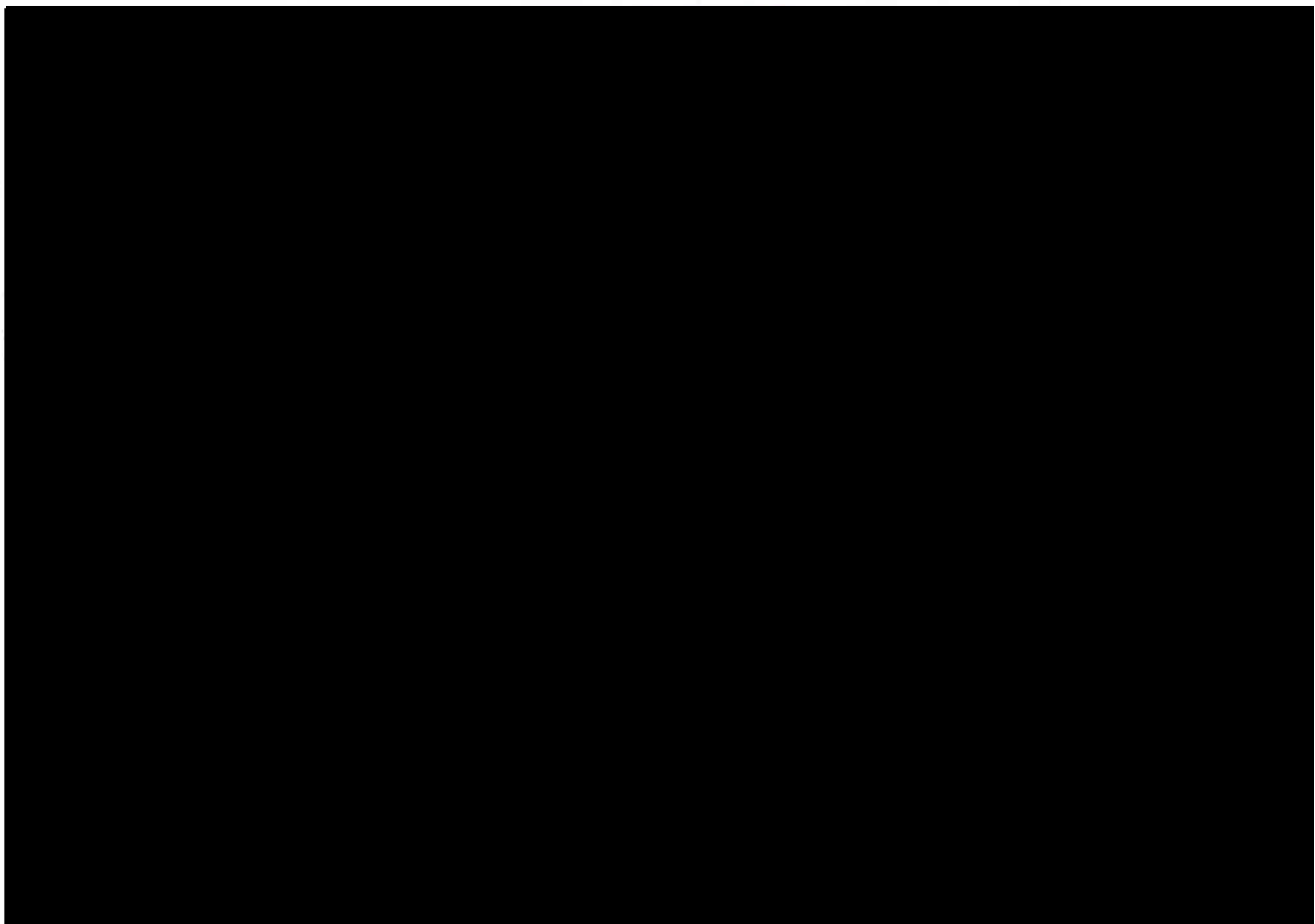
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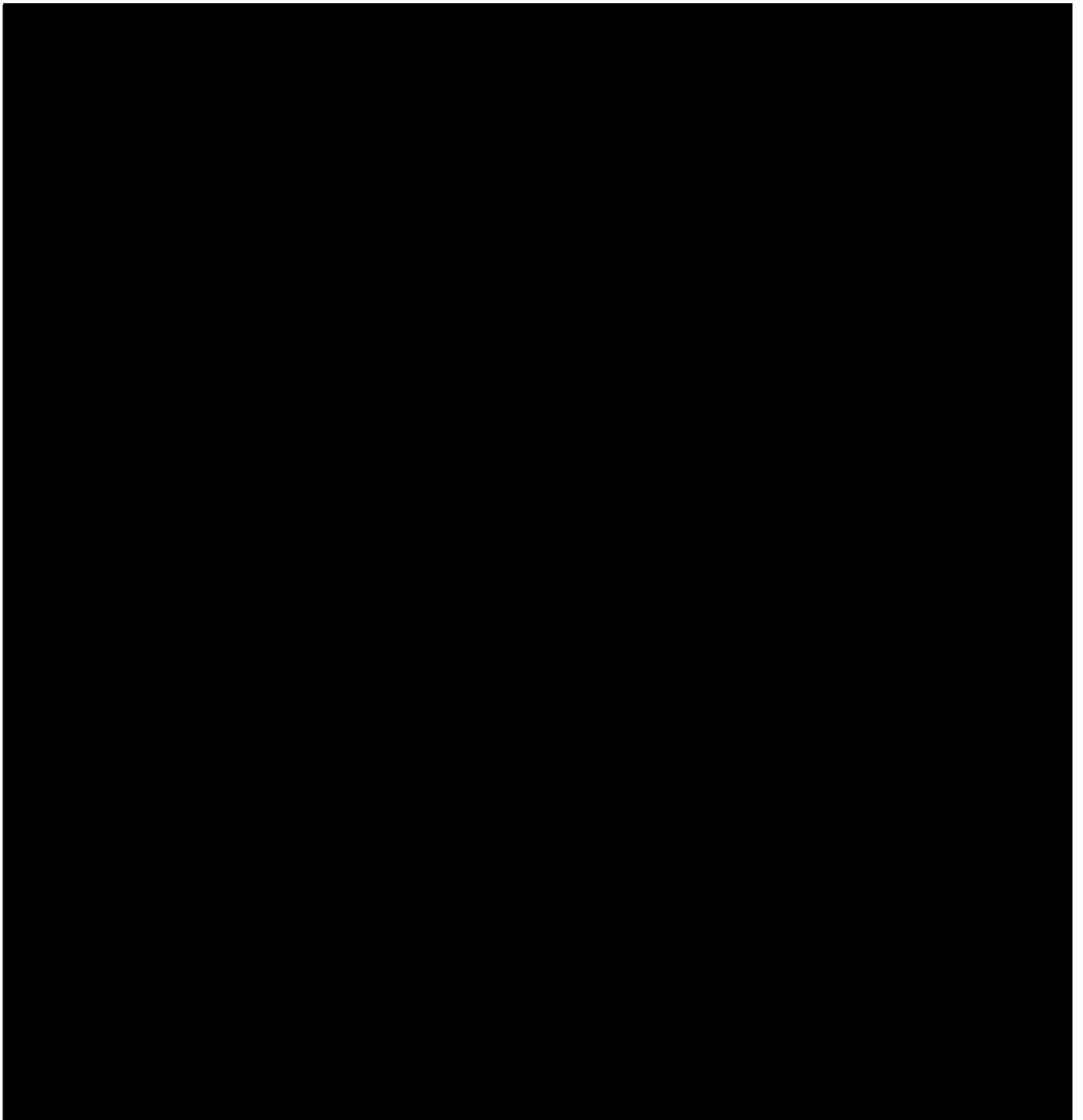


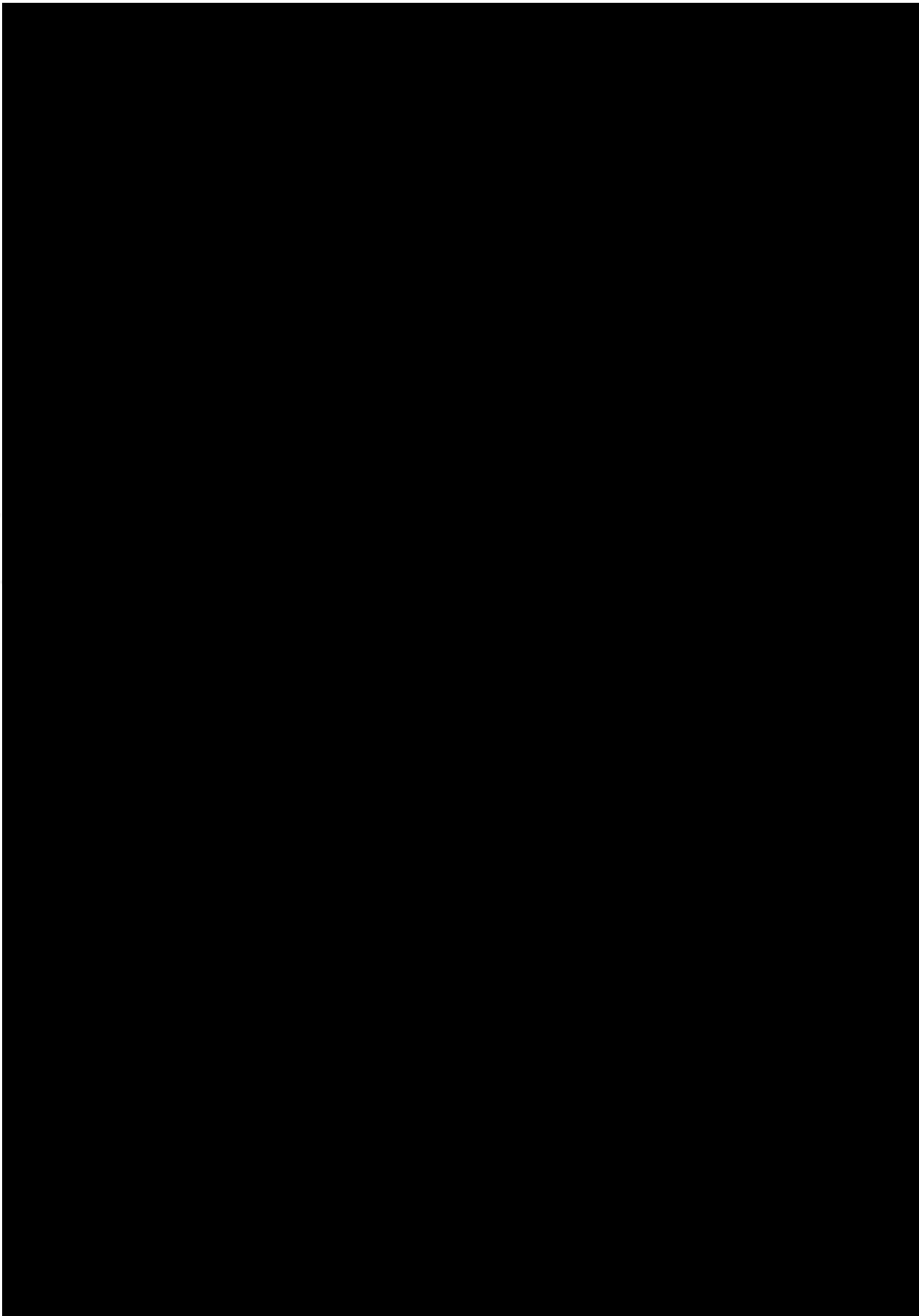


The above-said phenomenon is further elaborated in below news report:

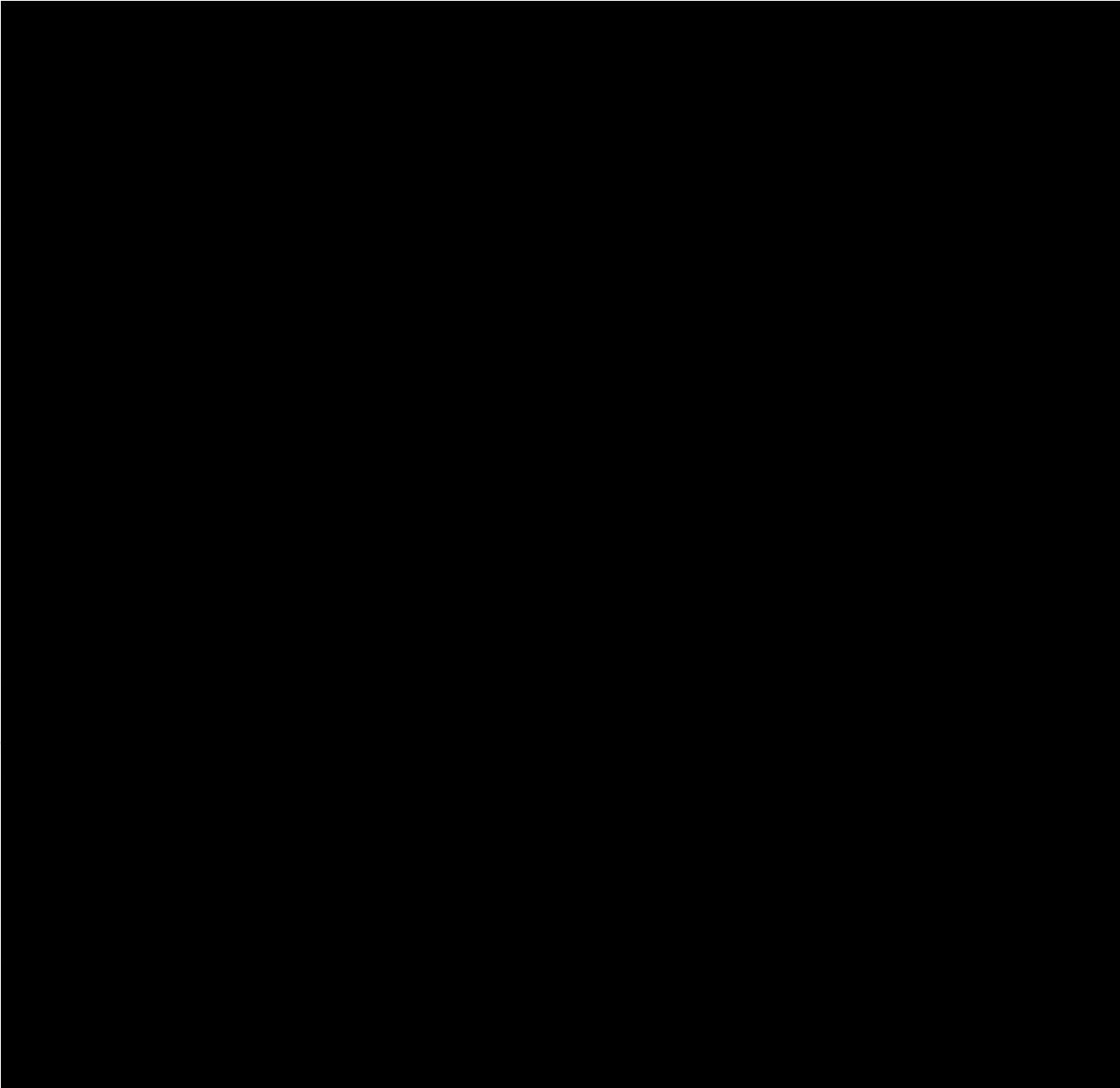
<http://www.inmediahk.net/node/1055136>











As a matter of fact, the hiring of part-time bus captains and bus fans into the KMB driver force is a sensible strategy to ease the manpower shortage problem and to arouse enthusiasm among staff members if proper control is in place. The other bus companies in Hong Kong also employ such policy. However, under the ignorant management of Roger Lee, a prudent policy turned into disaster.

It was a pity that some fanatics treated an ISO accredited company as a bus fan club 巴士迷俱樂部. The bus fan was so spoilt that he ignored the instructions from supervisors, challenged the established procedures of the company, took revenge against complaints from passengers, and caused tragedy that took away 19 lives and injured 60.

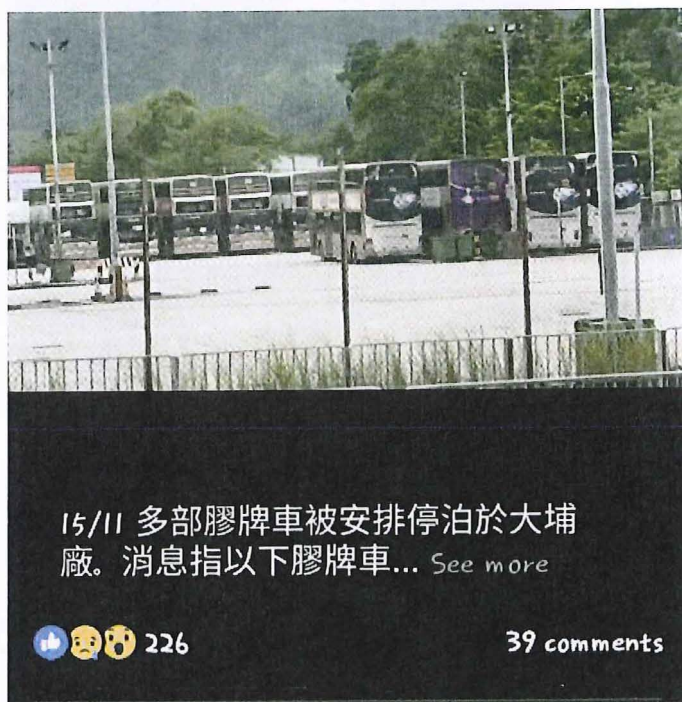
Another incident was the sudden order from Roger Lee to abandon the use of plastic route number and destination plates, when there were still a number of buses not yet equipped with electronic destination displays. The unsightly look of the buses was mercilessly teased by the netizens, not to mention the breach of the Public Bus Services Regulations for proper display of the route numbers and destinations to the intending passengers.

To cover up this silly policy, those buses that need the plastic plates were not dispatched for service but to arrange for advance scrapping! However, scrapping of buses cannot completely eliminate the problems resulted from the silly decision. Buses still need the plastic plates in case of faulty electronic destination display.

How can such a stupid decision be made in a company that possesses more than 80 years of bus operation experience?

Where are the transport professionals?

Why nobody in the Company dare raise a different opinion for such a ridiculous instruction?





Testimony from Louisa Lam, ex-Senior Manager, Transport of Traffic Department

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http://orientaldaily.on.cc/cnt/news/20160318/00176_018.html

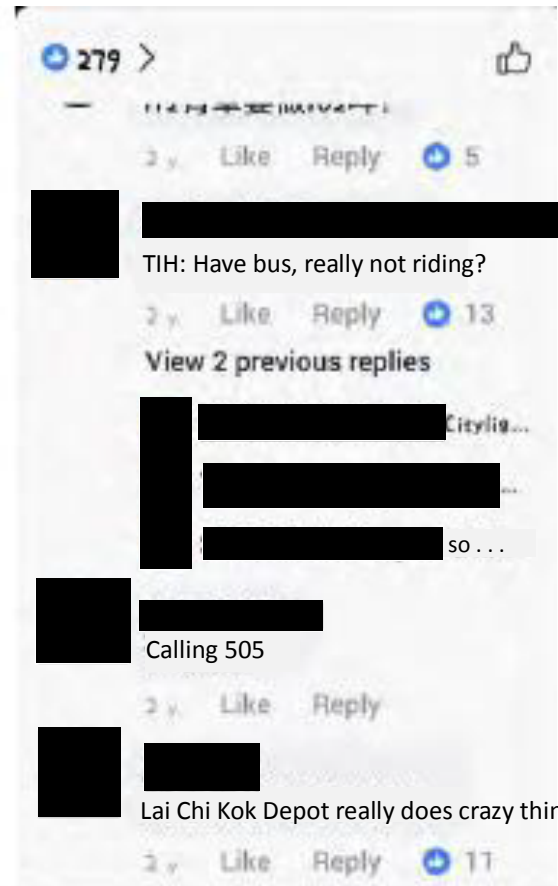
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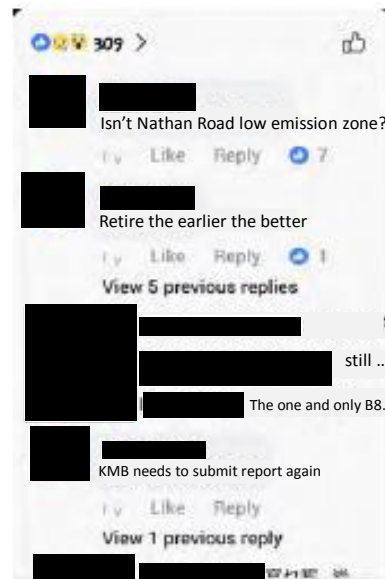
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16/11 The sequelae of large-scale retrieval of plastic destination plates by KMB are gradually emerging. ... See more

👍 😏 😡 245

26 comments

28 May 2018

Dear Mr To,

**Invitation for Written Submissions for Consideration by the
Independent Review Committee on Hong Kong's Franchised Bus Services**

Thank you for your invitation for written submissions to the caption Committee on the subject matter. I would like to confirm that the document attached to your letter was the testimony prepared by me and it is true to the best of my knowledge and belief. My inputs to the follow up information requested is provided below:

Employment by KMB

- 1 I was employed by KMB as Transport Officer of the Traffic Department in September 1984. I was gradually promoted to the post of Senior Manager, Traffic Administration during my tenure at Traffic Department. In or around April 2015, Traffic Department was renamed to Operations Development Department ("ODD") after the restructuring of the Traffic Department and my post was retitled as Senior Manager, Transport. When I left KMB in September 2017, my title was Senior Manager, Transport of Operations Director's Office ("ODO") following a further restructuring of the Operations Division.

I list in Annex 1 attached my responsibilities at the position of Senior Manager, Traffic Administration in Traffic Department / Senior Manager, Transport in ODD and ODO. My responsibilities for other positions held before my promotion to Senior Manager were to assist my superior to achieve the Key Result Areas and Key Objectives as stated in Annex 1.

Statement

- 2a. I know of and are familiar with the events described in the statement quoted in Item 2 as
 - i. I was the one directly handling this complaint case with the official of Transport Department;
 - ii. I had been the Deputy Management Representative of the ISO 9001 System for Operations Office and Depots since the introduction of ISO 9001 Quality Management System for bus service delivery in 1997; and
 - iii. Traffic Department/ODD/ODO as the project owner of the computerized Duty Dispatch System (TOM), I was appointed the Project Coordinator and management representative of TOM System from project development to project production until I left KMB.

It was the management's instruction and it has been clearly stated in the ISO documents (Quality Instructions) that bus captains ("BC") should only be assigned to operate on routes with valid route training records.

2b. Route Training Validation in TOM

If a staff intends to dispatch a BC to a route without valid route training record, the TOM System will prompt a warning message to alert the duty dispatch staff to make alternative arrangements. If the duty dispatch staff purposely override

the warning message, TOM System will automatically log the irregularities for the management staff, ie the Operations Officers, to take follow up/disciplinary action. In the said complaint case, some part-time BC were repeatedly assigned to routes without valid route training records but no monitoring or disciplinary action was taken.

Route Training Records

After a BC has successfully completed a formal route training conducted by the driving instructors (“DI”) of the Bus Captain Training School (“BCTS”), the staff of BCTS will enter the training record into the Human Resources Management System (“HRMS”). These records will then be posted from HRMS to TOM System automatically as valid HR route training records for validation in the duty dispatch process.

There are other “recognized” route training records entered directly into TOM System by the Operations staff for routes that HR Department considers trainings by DI not required. These “trainings” are conducted by asking the BC to take bus rides themselves on the bus routes to be trained. Bus rides completed, as confirmed by the terminus supervisors, will be recognized as operations route training.

On that particular complaint, the complainant could provide evidence to Oriental Daily that no trainings were provided, or training records were made up in TOM prior to the route assignment. KMB had later admitted to Transport Department that the BC concerned were assigned to routes without prior route trainings.

Other Bus-safety Related Issue

Another bus-safety related issue that I wish to raise (which is also under my area of responsibility) is the drastic reduction of route trainings that ought to be conducted by the BCTS. To contain training costs, some route trainings that were originally conducted by the BCTS were replaced by operation training, i.e. asking the BC to take bus rides on the route to be trained, without any briefings or advices from the DI. For instance, the complicated cross harbour tunnel routes, overnight routes, routes operated on special occasions only such as Ching Ming routes or Lunar New Year routes, or special routes which operate only a few trips a day only. In fact, it is difficult for a BC to take bus rides for an overnight route or a route that operates one trip a day in the morning peak only. To my understanding, there were only about 50 routes short-listed for BCTS training out of more than 400 routes in KMB (including the special routes or temporary routes not in the Route Order) when I left KMB. I am of the opinion that such arrangement puts a training burden on the BC on the one hand and poses a hazard on safe bus operation on the other.

I hope my above statement could be of use to the Committee.

Best Regards,
Louisa Lam

Operations Director's Office

Transport Section

Key Result Areas:

- Setting operational standards and procedures
- Monitoring operational performance against standards
- Regulatory reporting
- Liaison with Government agencies
- Resources allocation (crew and buses)
- On-board facilities
- Wages variation administration
- External engagement activities reporting

Key Objectives:

The roles and responsibilities are related to bus operation support services including:

1. **Regulatory compliance** (Franchise, Public Bus Services Ordinance/Regulations, other statutory requirements, voluntary guidelines)
 - To ensure alignment in business objectives and operational practices among Depots (Operations) in compliance to current regulatory requirements and guidelines
 - To establish and maintain close relationship with relevant government authorities, influence continuing development of regulatory policies in line with best practices
2. **Provision of operations information**
 - To consolidate, manage and maintain operations information for
 - i. Submission to Transport Department
 - ii. Necessary analysis/review to assess performance, take prompt remedial measures whenever necessary
3. **Resources planning and allocation**
 - To monitor and adjust the level of bus captains and fleet in depots to ensure they could meet operational targets
4. **Technology review and improvement of equipment/systems**
 - To work closely with vendors, contractors, Engineering Office, Information Technology Department and Depots for development or further improvements in performance, reliability, meeting customer needs and operations requirement
 - To provide logistic support to Depots (Operations) for efficient bus service delivery

香港專營巴士服務
獨立檢討委員會

香港金鐘道 66 號
金鐘道政府合署 21 樓



Independent Review Committee on
Hong Kong's Franchised Bus Service

21/F, Queensway Government Offices,
66 Queensway, Hong Kong

本函檔號 Our Ref.: CSO/IRC-BUS/CR/7-45/9

來函檔號 Your Ref.:

電話號碼 Tel No.: (852) 2867 5324

傳真號碼 Fax No.: (852) 3104 0254

1 June 2018

Mr James LOUEY

(Email: [REDACTED])

BY EMAIL

Dear Mr LOUEY,

**Invitation for Written Submissions for Consideration by the
Independent Review Committee on Hong Kong's Franchised Bus Service**

On 18 May 2018, the Secretariat of the Independent Review Committee ("the Committee") wrote to Miss Lelia WONG, a former employee of the Kowloon Motor Bus Company (1933) Limited ("KMB"), raising questions on various issues relating to the safety of franchised bus services and the operation of KMB. In response to the Committee's letter, Miss WONG provided a letter of reply to the Committee dated 25 May 2018, a copy of which is attached as the **Annex** to this letter.

The Committee notes that in Miss WONG's reply of 25 May 2018, there is a statement saying concerning the replies to Questions 3 to 6 raised by the Committee, saying that "...Mr. James Louey, my ex-Commercial Director was in charge of the said project. Mr. Louey has rendered his assistance in providing the following clarification". Further, the Committee notes that the replies to Questions 7 and 8 are described in the reply as being "jointly answered by Ms Lelia Wong and Mr James Louey", and the replies to both questions included the sub-heading "Mr James Louey:" to indicate that part of the replies are provided by you.

In connection with the above, we are writing to invite you to confirm, if it is the case, that the replies for Questions 3 to 6 from Miss WONG were prepared with your assistance while the parts attributed to you in the replies for Questions 7 and 8 are your statements, and that these replies and statements are true to the best of your knowledge and belief.

If so, we would invite you to assist the Committee by providing information to the Committee by way of answers, to the best of your knowledge and belief, to the following questions:

Employment by KMB

1. Over what period, in what positions and in which departments were you employed by KMB? What were your responsibilities for each position you held as set out in the documents of appointment? In particular, Miss Wong stated that, in sequence, you were employed at KMB as the Head of Human Resources, in which position you were in charge of bus captain training, and subsequently as Commercial Director. If that is the case, please describe your responsibilities in those two positions? Further, if that information is correct, please describe how the training of bus captains evolved and changed during your employment by KMB.

Bus simulators

2. Do you have any personal knowledge of the procurement, use, maintenance or discontinuation of the use of bus simulators by KMB? If so, and if known to you, please describe the reasons why the bus simulators were procured, their subsequent use and maintenance. How useful or otherwise were they in training bus captains?

The discontinuation of the use of bus simulators

3. In response to the Committee's question raised in its letter of 18 May 2018 regarding the circumstances that KMB discontinued the use of bus simulators, the following response was provided by Miss Wong:

"The simulators were used for almost 10 years. The supplier, L3 did mention that they were unable to continue to provide annual maintenance service because the hardware PC equipment and Operating System were no longer the current edition and therefore they would not be able to source parts for KMB. We were told that the newer version of the simulator was much more powerful in terms of functional capability and better screen resolution to address those who felt dizzy watching the screens."

- a. Why did KMB discontinue the use of the bus simulators in training bus captains? Was the fact that the supplier would not be able to continue providing annual maintenance service without the migration to a new version of the bus simulator a key consideration leading to the discontinuation of the simulators? Were there discussions within the management regarding the issue? If so, what were the considerations of the management?
- b. Did the supplier indicate a date beyond which they would not be able to continue to provide the annual maintenance service? Did they indicate the possibility of or had KMB made any attempts to source the maintenance service and/or replacement parts for the simulators from other third party sources?

- c. What was the enhanced functional capability of the newer version simulators?
- d. Were there any indications on the cost of adopting the newer version of the bus simulator?

We would be grateful if your response could reach the Secretariat of the Committee by **8 June 2018**. Please send the submission by soft copies to *peter_chan@irc-bus.gov.hk* or *yt_to@irc-bus.gov.hk*.

In addition to providing answers to the above questions, you may also provide information on other bus-safety related issues. In doing so, we would invite you to focus on matters of which you have personal knowledge but not on matters of which you do not have first hand knowledge.

Furthermore, please be advised that the information provided in your response will be considered by the Committee in reviewing the matters it is directed to consider under the terms of reference of the Committee and in drawing up its recommendations. If necessary, the Committee may invite you to provide supplementary written submissions and/or to give oral evidence. All written submissions (including any annexes, appendices and attachments contained therein) and oral evidence will be treated as public information and, at the discretion of the Committee, may be published on the Committee's website.

Yours sincerely,



(CHAN Ping-fai, Peter)
Secretary, Independent Review Committee on
Hong Kong's Franchised Bus Service

Encl

Lelia WONG
[REDACTED]

Independent Review Committee on
Hong Kong's Franchised Bus Service
21/F, Queensway Government Offices,
66 Queensway, Hong Kong

By Email:

peter_chan@irc-bus.gov.hk
yt_to@irc-bus.gov.hk

25th May 2018

Dear Mr. Chan,

Re: Invitation for Written Submissions for Consideration by the
Independent Review Committee ("IRC") on Hong Kong's Franchised Bus Service

Thank you for your letter dated 18th May 2018 sent via email regarding the captioned invitation. As per your request, below please find my answers to your questions which are furnished in the best of my knowledge. Should there be any discrepancy on my provided information, in particular, figures or date of event, etc. compared with your actual finding, please pardon such discrepancy as all information furnished below is from my memory.

Answer to Question 1

I was under the employment of The Kowloon Motor Bus Company (1933) Limited ("KMB") during 22nd February 1993 – 1st July 2017 at the following capacity in Purchasing Department.

Period	Position
Jan 1998 – Jul 2017	Assistant Manager, Procurement Administration
Mar 1995 – Dec 1997	Purchasing Officer
Feb 1994 – Feb 1995	Purchasing Officer II
Feb 1993 – Jan 1994	Executive Officer II

Purchasing Department was renamed to Purchasing Section in March 2016 and Procurement Department since May 2017.

My core duties during my tenure with KMB include:

- Sourcing and procurement for bus spare parts and other categories comprising of bus tyres, retread materials and retreading services, advertising service, etc.
- Quality audit compliance for new buses
- Contract and project management
- Vendor management
- Departmental administration
- Staff recruitment / training and appraisal
- Asset Control and Departmental Budget
- Claims management
- Quality Audit

Since I worked at KMB Purchasing in February 1993, the departmental mission and emphasis are to strive for the best deal for the company – procure the right product / service according to specifications at the right time and competitive price.

For safety critical products such as spare parts for brake system, it is both engineering and procurement's effort and consistency to procure products which must be fully complied with specifications without sacrificing on safety. Moreover, the department's core focus is on Total cost of Ownership ("TCO") but not only cost evaluation. In addition, trial exercise will be conducted to ascertain product's on-the-road performance. Products such as battery, tyres and retread materials are typical examples which trial exercise must be proceeded before inviting potential supplier to participate in a tender.

From what I observed since Mr. Roger Lee took over the leadership of KMB since January 2015, the concept of TCO and safety aspect seems no longer exist. My testimony citing bus purchase and tyre purchase reflected my observation.

Answer to Question 2

I was not involved in the procurement of the 4 bus simulators or their maintenance service. They were respectively handled by my ex. colleagues, Mr. Lo and Mr. Chan who are still working at KMB. Without their consent, I could not provide the IRC their contact details for furnishing further information on the aforesaid procurement duties. However, I could assist in contacting my ex. colleagues to render assistance to the IRC provided that both Mr. Lo and Mr. Chan will not be threatened by KMB for harming their current employment by voicing out their testimonies as supportive information. Could the IRC by any means protect them in terms of their job security at KMB?

As for the use and maintenance of the 4 bus simulators, the end-user was in fact Human Resources Department and the colleague who handled maintenance service requirement, Mr. Lee was forced to resign in October 2017. I have the contact details of Mr. Lee and could assist the IRC to contact him for providing further information on the bus simulators' maintenance, even though I am uncertain whether Mr. Lee would be willing to assist.

In respect of the discontinuation of the use of 4 bus simulators, my ex. colleague, Mr. Chan asked for my advice on the renewal of maintenance service contract for the 4 bus simulators dated back in May 2015. The last maintenance service contract for the 4 bus simulators was issued to a supplier namely L3 in May 2014 with an annual maintenance fee of USD20,000. A requisition for the purchase of the aforesaid maintenance service was raised by Human Resources Department with approval from Head of Human Resources, Ms. Susanna Wong. Since the annual service maintenance fee was over HKD100,000, additional approval on the said purchase must be obtained from its divisional director, in the case of Human Resources Department, Managing Director is its divisional director (according to Authorisation Guideline of Procurement of Products / Services). However, Mr. Roger Lee, Managing Director did not approve to purchase the said annual maintenance service.

Even though without annual maintenance service, it was of my opinion that the 4 bus simulators could still be in use as part of the bus captain driving training program as long as they are not mal-functioned. However, the discontinuation and scrapping of the 4 bus simulators was informed by Human Resources Department in end July 2015. It is KMB's practice that scrapping of any used company's equipment, obsolete spare parts and retired buses must be handled via scrap sale which is also a duty at Procurement Department. My ex. colleague, Mr. Lau who is still working at KMB was responsible for scrap sales tender.

However, the 4 bus simulators could not be disposed-off via scrap sales but must be diminished within a very short period of time. I noted that all KMB logos of the 4 bus simulators were stripped off with an aim to hide its identity. The contractor was instructed to destroy the 4 bus simulators at Training School, Shatin Depot on a Saturday and dispose-off all bits and pieces in a dumping site similar to treatment of garbage.

<Question 3 to 6>

For the subsequent questions from Q3 to Q6, I was not involved in the procurement duty of the 4 bus simulator and Mr. James Louey, my ex-Commercial Director was in charge of the said project. Mr. Louey has rendered his assistance in providing the following clarification.

Answer to Question 3

The bus driving simulator was first proposed by the Commercial Director, Mr James Louey dated back in 2006. He proposed the plan of purchasing the 4 bus simulators from L3 Training and Simulation, a US company specialises in customising simulators from fire engines to ambulances. It was approved by the Managing Director then Mr. John Chan.

Mr. Louey, the Head of Human Resources prior to his appointment as Commercial Director was in charge of Bus Captain Training for over 15 years. He tried to introduce an exceptional circumstances driving training to the bus captain driving school because he saw the need for existing bus captains and bus captain trainees to be trained to deal with extraordinary driving situations like wheels skidding, sudden blown tyre, person or pets rushing onto the street, sudden side wind gusts that may occur in places like the Tsing Ma Bridge, etc. It was too expensive or impossible to set up these kinds of training in a real driving situation because of the risk of endangering training staff. It was noted that bus simulators were not purchased to replace on-road based training. It was used to complement the existing driver training programme.

Flight simulators and train driving simulators have been around for decades. The price of bus driving simulator has become reasonable enough to consider. Mr. Louey went over to Salt Lake City, USA to test the simulator. The results were promising. After benchmarking with other suppliers and negotiation with L3, which L3's offer was the most cost effective and their simulators were the most applicable one for KMB's needs, he proceeded to order 4 units for KMB in 2007. The engineers of L3 came over to study the street conditions and the main landmarks to put inside the simulator. Historical accidents were also programmed into the system, so instructors can teach bus captains how to react under similar circumstances.

Answer to Question 4

KMB has not purchased other simulators apart from these 4 units from the supplier namely L3.

Answer to Question 5

As far as we know, the simulators were managed by the Bus Captain Training School under Human Resources Department. They use it for both new bus captain training and refresher training. Prior to them being scrapped, every bus captain would have been trained at least once a year using these simulators. It was well advertised in KMB's in-house magazine and annual report.

Answer to Question 6

There were no formal assessment made on the simulators as such because it was an integrated part of new bus captain training and refresher training. Common sense tells us that it is also better to train more and prepare our bus captains more than to prepare them less. If we

benchmark other industries, pilots are required by law to be trained for no less than 76 hours before they can walk aboard a plane. Quote by Tim Hibbetts, Naval Aviator, Airline Pilot, Aerospace Eng Maj. <https://www.quora.com/How-many-hours-of-simulation-training-does-a-pilot-have-to-go-through-before-flying-an-airliner>

A bus captain has to drive as many as 150 passengers in 1 bus and deploy more than 10 such trips a day. He is ultimately responsible for thousands of passenger lives each day and numerous other road users lives too. We can only imagine KMB should consider adding more effective training tools like simulator.

<Question 7 and 8 are jointly answered by Ms. Lelia Wong and Mr. James Louey>

Answer to Question 7

Mr. James Louey:

The simulators had an annual maintenance agreement with L3 to ensure the equipment was in operational condition.

Ms. Lelia Wong:

As I have clarified in Question 2, my ex. colleague, Mr. Chan who handled the purchase of maintenance service could provide official document for IRC to comprehend the annual maintenance service scope. From my memory, during the validity of maintenance service contract, a hotline was available for end-user to troubleshoot any problems encountered.

Answer to Question 8

Mr. James Louey:

The simulators were used for almost 10 years. The supplier, L3 did mention that they were unable to continue to provide annual maintenance service because the hardware PC equipment and Operating System were no longer the current edition and therefore they would not be able to source parts for KMB. We were told that the newer version of the simulator was much more powerful in terms of functional capability and better screen resolution to address those who felt dizzy watching the screens.

Ms. Lelia Wong:

Mr. Louey was due to make a business visit to the supplier, L3 in June 2015. However, the business trip was cancelled since Mr. Roger Lee did not approve it.

For details of the discontinuation and scrapping of the 4 bus simulators, clarification is furnished in my answer to Question 2 above.

With regard to other bus-safety related issues, I would like to inform the IRC that my ex. colleague, Mr. Raymond Cheng, ex-Senior Manager, Safety and Service Quality Department has furnished his testimony for reporting to the IRC. His testimony will be submitted by my ex. colleague, Mr. Eric Lee, ex-Head of Purchasing Department in due course.

I sincerely hope that the above information is of useful to you in your investigation further. Thank you.

Yours sincerely,
Lelia Wong
(Lelia Wong)

Question 1

I joined KMB in 1990. My first role was Senior Systems Analyst at the Information Technology Department. At the time, it was called the Data Processing Department. I was transferred to the Human Resources Department in 1992 and promoted to Assistant Human Resources Manager to help automate the department. I was promoted to Head of Human Resources Department in 1993. I worked for 13 years from 1993 to 2006. I was further promoted to Commercial Director in 2006. I worked in that role till 2015. I was reassigned as Head of Advertising Business from 2015 to 2017.

Please note that the following happened quite a while ago. I will try to answer in the best of my memory.

As Head of Human Resources, Bus Captain's selection, employment, training, management, disciplinary actions and remuneration all fell under the Daily Rated management section. I was also in charge of the Bus Driver Training School.

I made it very clear to my department colleagues as well as other division colleagues that passenger safety, road users safety is our primary training target. One life lost is already one too many. The MD at the time agreed with my direction and allowed me to structure all the rules and guidelines in order to achieve better safety.

Our team of driving instructors were selected from the pool of the finest Bus Captains. They must possess qualities like immaculate safety record, good service behaviour and good teaching skills. We had another team of "mystery passengers" who were also driving instructors deployed to check on the Bus Captains.

The Bus Captain driving training course for all potential candidates were about 30 days. 20 days of driving skills training to acquire the Franchised Bus license and 10 days of classroom training on road regulations, bus safety and service delivery attitude and route training. We did not shorten training days to any driver who already has a bus license. Our instructors needed to spend the 20 days observing the student's driving behaviour and decide whether to recommend his admittance into the company. There were many instances where drivers were considered to be unsafe and were not employed by the company even if they had a bus license or successfully passed his driving test with Transport Department.

I was very determined on rule that new Bus Captain should only be trained on 2 to 3 routes in his first 6 months. There were many accidents in the past made by drivers who were new to the job and unfamiliar with the route he was deployed. I believe our Operations TOM system and TER system were developed based on this so new bus captains or even experienced drivers could not be asked to drive unfamiliar routes.

Over the course of 13 years, I had many discussions with my Operations colleagues about the number of training days, the training content and I never compromised on the 30 days of training. I was constantly looking for better ways to equip our drivers with skills to avoid traffic accidents. There was a time when there were many accidents involving bus tire skidding with our Toyota Coaster model. We looked at driving simulators as early 2000 but they were inhibitive expensive. We looked at building a "skid pan" - a slippery road surface prepared for drivers to practise control of skidding. That was expensive and required a large flat road and could endanger our instructor staff.

Before the formation of the Safety and Service Improvement Department, my training team and myself often worked closely with colleagues of Insurance Department as they came across accidents of a similar certain nature. We would try to deduce the root causes and prepare Bus Captains how to remain safe under those circumstances.

I also looked at Bus Captains' safety record. Those who were involved in too many minor accidents were classified as accident prone and was red flagged for review. If they were involved in too many incidents, they might one day cause a major accident so we do have a system of removing those we thought were not fit to be Bus Captain.

Our salary system was designed to provide incentive for better safety and service delivery. There was a safety bonus component in the pay that is 25% of the complete take home pay. If the Bus Captain had a liable accident, this bonus would be deducted. I believe this was changed recently and all the bonuses were added to the basic pay so giving up control over their incentive to reduce accident.

Training and management of Bus Captains remained the same for the entire duration of me as Head of HR and the subsequent 10 years as Commercial Director. Back in 2004 - 2005, I heard of a US simulator company called L3 that was selling reasonable fire truck and ambulance simulators. I wrote a recommendation to the Senior Management and was given the budget to order 4 simulators for KMB.

After my promotion as Commercial Director, I was managing 4 departments - Information Technology, Purchasing, Insurance and Commercial and Facilities Management. I was overseeing safety from the Insurance department. The accident investigators reported on the accident black spots of our routes and they communicate with Bus Captain Training School on where and what to lookout for. We also had accident accessors to look into new bus interior designs and KMB street facilities to ensure they are safe for passengers.

Question 2

As I mentioned in my previous answer, I placed the order and received it while I was Head of HR. We even redesigned a part of our training classroom in Shatin Depot to accommodate the 4 simulators.

My original idea of the simulator was a training tool for traffic accident avoidance skills. We were able to re-create severe accident scenes and hazardous driving situations like sudden blown tire, bus skidding out of control because of locked brakes or wet surface like in a rain, people or animals running into the street near the bus.... Our Training Instructors learnt to program the accident sequences into the simulator so Bus Captains could familiarise with the proper driving procedures under those situations.

The simulator was never intended to replace normal on road training in actual buses. It was a supplement tool to hone in on certain skills. Simulator training was integrated in the 30 days of new Bus Captains training program as well as annual refresher training where Bus Captains were asked to come back to the Driving School for a few days in a year.

As far as I knew, the simulators worked well. I was not in charge of it in my new job capacity. Purchasing Department under my management continued to help HR renew the annual maintenance contract every year. The simulators were the pride of our training

school. The photos of the simulator studio appeared in every annual report representing our modern training facility.

We did not measure the success of the simulators as the data scientifically as we didn't have the proper baseline data for a conclusive scientific comparison. One thing I know for sure is that more training is always better than less training. If our Bus Captains are better prepared for any kind of unforeseen event, their chance of minimising the injury and loss of life to passengers are considerably higher.

I personally thought they were very effective as the figures of tire skidding accidents were almost completely eliminated. Accident figures during my era were steadily going downwards. I could say this because our reputation was well known in the industry. For the passengers carried and the mileage our buses travel, our accident rate was the lowest among all the operators.

I searched up some scientific study by other transit authorities.

"Our data collection spoke for itself, a decrease of 69.23% in accidents for those operators trained on the simulator." — Zerry L. Hogan, LYNX Central Florida Regional Transportation Authority

One study found that professional drivers who received simulator training had 22% fewer crashes compared to a control group who only practiced with real cars (Heinrich and Wieland, 1997). Haworth and Symmons (2001) report on two studies that found that ecodrive training resulted in crash rate reductions of 35%.

Evidence of Driving Simulator Training Benefits by Pierro Hirsch PhD Virage Simulation July 2015

Question 3

The 4 simulators were due for replacement after 10 years of use. The plasma flat screens were from an older technology and were no longer in production. The Operating System of the networked PCs forming the brain of each simulator was no longer supported by Microsoft. The CPU and other components were obsolete and hard to replace. The supplier L3 did inform us in writing that they will no longer provide annual maintenance for our simulators. I was not aware of the full details of the annual maintenance agreement with the vendor. I assume it was possible to continue the simulators by asking our in-house IT Department to do the maintenance.

I proposed to replace the 4 simulators with newer models. There were many new features that were not found in our older system.

1. More realistic driving environments - improved graphics to train drivers how to recognise and anticipate hazardous driving situations
2. Multiple display and field-of-view arrangements are available (180° standard) with full HD resolution (1920x1080) and refresh rates. (Reduce disorientation experienced by some drivers)
3. High refresh and update rates provide smooth image flow during any drive at common speeds, creating a comfortable training environment for transit operators.
4. Glass dash in the simulator adds greater flexibility in replicating various types of vehicle gauges.

5. The Glass Console allows the instructor control of the simulator via touch screen at the Operators Console (OpCon) and gives operators simple and quick control to change vehicle type.
6. Transit operator training environment; seat, steering wheel, brake, clutch and accelerator pedals, enhancing retention and application to the road.

Roger Lee did not let me replace the simulators. He was not supportive of this kind of training. Roger said some Bus Captains told him that the simulator training was not useful. He said he did not want to spend money in areas that were not able to generate income.

I did not have a chance to visit the supplier or request them to submit a price for the new simulators.

香港專營巴士服務
獨立檢討委員會

香港金鐘道 66 號
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Independent Review Committee on
Hong Kong's Franchised Bus Service

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18 May 2018

Mr Gary WONG

(Email: [REDACTED])

BY EMAIL

Dear Mr WONG,

**Invitation for Written Submissions for Consideration by the
Independent Review Committee on Hong Kong's Franchised Bus Service**

On 29 March 2018, the Secretariat of the Independent Review Committee ("the Committee") was provided with a copy of a "report" on KMB sent by Mr Eric LEE to the Secretary of the Transport and Housing Bureau on 12 March 2018, which contained what was described as "testimonials from different insiders". Attached to the report was a document headed "Testimony from Gary WONG, ex-Head of Safety and Service Quality Department".

We attach a copy of the latter document and invite you to confirm that it is your statement and that it is true to the best of your knowledge and belief.

If so, we would invite you to assist the Committee by providing information to the Committee by way of answers, to the best of your knowledge and belief, to the following questions:

Employment by KMB

1. Over what period and in what positions where you were employed by KMB, in particular were you employed in the Safety and Service Quality Department? What were your job responsibilities for each position you held as set out in the relevant appointment documents?
2. If so, at the time you were employed in the Safety and Service Quality Department:
 - a. What were its responsibilities and how did it interface with other departments on the issue of bus safety? Was that reflected in any internal documentation specifying the role of the Department, in particular in respect of bus safety? If so, please identify and describe those documents.

- b. What were your positions in that department and what were your responsibilities? In discharging those responsibilities did you have contact with those fellow employees of KMB responsible for the recruitment, training and performance monitoring of bus captains? If so, did you come to know of and become familiar with the processes of their respective departments?

Recruitment and Training

3. Do you know of and are familiar with the process by which bus captains were recruited by KMB during your employment? If so:
 - a. Please describe that process and any changes in the process during your employment.
 - b. What means, if any, were deployed to ensure that newly recruited bus captains had a suitable personality and temperament to deal with the stresses of driving in congested streets with passengers some of whom might be rude or abusive?
 - c. Was there any difference in the process of recruitment of full-time and part-time bus captains? If so, what were those differences and were there any changes in the process of recruitment during your employment?
 - d. Has there been any increase in recent years in the recruitment of part-time bus captains? If so, what, in broad terms, was the size of that increase and when did it occur?
 - e. When were KMB engineering staff members first recruited to be part-time bus captains? Were any measures taken to ensure that part-time bus captains, including KMB engineering staff members, were not fatigued when they began their bus driving duties? If so, please describe those measures.
4. Do you know of and are familiar with the process of training of bus captains during your employment? If so:
 - a. Please describe that process and any changes in the process during your employment, providing information as to the time of any such changes and of the reasons given by the management of KMB for any such changes. If there had been changes during your employment, when and by whom were they given?
 - b. Was there a system by which a bus captain's competence to drive a particular model of bus or route was assessed and validated? If so, how was that done and how was it recorded? Were there changes to that system? If there had been changes during your employment, what were those changes and when did they occur? Were any reasons given by the management of KMB for any such changes? If so, what were those reasons and when and by whom were they given?

Performance monitoring

5. In your statement, you state “the frequency of telematics checking and the strategy for speed monitoring was not implemented.” You also state that “IT department responsible for the maintenance of telematics system was laid off.”

In discharging your responsibilities in the Safety and Service Quality Department did you have contact with your fellow employees in the IT department of KMB? If so, did you come to know of and become familiar with the instalment and use of the telematics system? If so,

- a. Please describe the strategy and when and by whom it was identified and considered, but not implemented.
- b. Were any reasons given by the management of KMB for not implementing the strategy? If so, what were those reasons and when and by whom were they given?
- c. Over what period was there a reduction in personnel employed for the maintenance of the telematics system in the IT department? What was the size of that reduction, in particular in relation to the size of the IT department? Were any reasons given by the management of KMB for that reduction in personnel? If so, what were those reasons and when and by whom were they given?

Safety awareness

6. In your statement, you state that photographs of “black spots” were displayed at each bus depot, that the exact location of “sharp bends” on different routes were identified by depot managers and that engineers were assigned “to calculate the safe speed for all identified sharp bends”.

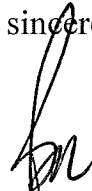
In discharging your responsibilities in the Safety and Service Quality Department did you have contact with depot managers, in particular in respect of matters concerning bus safety? If so, did you come to know of and become familiar with the manner in which the issues of “black spots” and “sharp bends” were addressed by them and the engineers who assisted them? If so, please describe the period over which that system was operated and how, if at all, the resulting information was communicated to bus captains.

We would be grateful if your response could reach the Secretariat of the Committee by **25 May 2018**. Please send the submission by soft copies to peter_chan@irc-bus.gov.hk or yt_to@irc-bus.gov.hk.

In addition to providing answers to the above questions, you may also provide information on other bus-safety related issues. In doing so, we would invite you to focus on matters of which you have personal knowledge but not on matters of which you do not have first hand knowledge.

Furthermore, please be advised that the information provided in your response will be considered by the Committee in reviewing the matters it is directed to consider under the terms of reference of the Committee and in drawing up its recommendations. If necessary, the Committee may invite you to provide supplementary written submissions and/or to give oral evidence. All written submissions (including any annexes, appendices and attachments contained therein) and oral evidence will be treated as public information and, at the discretion of the Committee, may be published on the Committee's website.

Yours sincerely,



(CHAN Ping-fai, Peter)
Secretary, Independent Review Committee on
Hong Kong's Franchised Bus Service

Encl

Testimony from Gary Wong – ex-Head of Safety and Service Quality Department

1. Training and Assessment

a. Verification and Validation

Currently when a bus captain (either full time or part-time) was assigned to drive a new bus route, it is no longer necessary for bus captain to be assessed by a driving instructor.

Instead, the bus captain only needed to sign a declaration that he is familiar with the road conditions and bus routing. For road safety, this is not good practice as there are no qualified or experienced staff to verify and validate whether the concerned bus captains are competent to carry out the driving duty for new routes

b. 30-day Training Programs was allocated to new bus captains prior to 2015. However, the duration was reduced to 18 days 2 years ago. I hear the recent bus captain training program is further reduced to 15 days but bus captains may not have driving skills due to the short training program. A comprehensive review should be conducted whether 15/18 days training for new bus captains are sufficient. Also "psychological analysis" shall be incorporated at employment of all bus captains.

c. I also doubt whether sufficient training is provided to part-time bus captains. Also, engineering staff will act as part-time bus captain during public holidays. It is not suitable for engineering staff to carry out driving duty because they are already exhausted after a full day's work.

2. Performance Monitoring

- a. Plain Cloth - 3 years ago each bus captain will be monitored by plain cloth on board 3 times per year. I do not know whether this practice is still maintained.
- b. Telematic - IT department responsible for the maintenance of telematic system was laid off. The accuracy of today's system is doubtful. In addition, the frequency of telematic checking and the strategy for speed monitoring was not implemented.
- c. Laser Gun - the frequency and strategy for speed monitoring by laser guns. I do not know if they still carry this out.
- d. Sharp Bends - Safe speeds and locations of sharp bends are not identified. Bus captains do not know the exact locations and safe speed. We used to assign depot managers to identify the exact locations of sharp bends according to all bus routes and assign engineers to calculate the safe speed for all identified sharp bends; to validate all identified sharp bends and work out safe speed for each identified sharp bend. I do not know if this is still carried out.

3. Safety Awareness

- 1. Black Spots were updated from time to time and photos were also displayed at each depot for general awareness. I do not know whether this good practice is maintained.
- 2. Safety posters focus on traffic safety and occupation safety were compiled and distributed to all bus terminus once every month. I do not know whether this good practice is still maintained.

4. Brain Drain from Safety Professional - Head of Safety & Service Quality and Occupational Safety Manager were laid off.

Conclusion

I think the continuous lack of frontline resources, the shrinking number of full time bus captains and their lack of retraining is the key issue that caused the tragedy. It proves that Roger's business strategy is completely wrong!

Employment by KMB

Q1

I was employed by KMB (1933) Ltd. as Head of Safety & Service Quality between 28 Sep 2010 and 2 Mar 2015. My main responsibilities of staff members were listed as follows:

1) Job Description of Head of Safety and Service Quality

- Establish, implement, maintain and monitor a fit-for-purpose safety management system and ensure safety management is delivered effectively and efficiently, and as an integral part of business strategy.
- Set out a strategic approach to risk management as a key element in all safety management activities such that safety risks are controlled to a reasonably low level appropriate to the nature of business.
- Formulate and implement proactive strategies in seeking continual improvement in safety performance and adopting best practices in the implementation of safety management.
- Foster a safety-first culture to provide a safe transportation service for passengers and a safe working environment for workforce.
- Formulate and implement proactive strategies in seeking continual improvement in service quality performance and adopting best practices in the implementation of customer service quality.
- Formulate strategic safety plan to address key challenges for ensuring safe operation of bus transportation in the local environment.
- Organize and conduct management reviews to address the improvement opportunities for effective management of safety and service quality.
- Provide expert support and tactical direction to enhance initiatives on safety and service quality.

Q2

- a) Basically, we had regular meetings such as Operations Safety Committee and Management Review to identify improvement opportunities on bus safety with Depot Operations and Insurance Department.

Job responsibilities of other staff members of Safety & Service Quality were summarized as follows:

1) Job Description of Senior Manager, Customer Service Quality

- Set customer service standards to maintain a consistently high performance in customer service quality.
- Identify customer needs and expectations and formulate action plans to continually strive for breakthrough improvements in all aspects of the customer service quality.
- Analyze and evaluate service quality processes and identify opportunities in which the Company can continue to improve customer service quality.
- Enhance customer satisfaction by creating a customer-focused environment and establish promotion programmes to improve customer service quality.
- Establish and implement effective measures to enhance the ability of staff members to manage customer service quality in a consistent, systematic and responsive manner.
- Conduct trend analysis for reviewing customer service performance and adopt proactive approach to ensure continual improvement.
- Make continual efforts to benchmark service quality performance and processes with leading organizations.
- Provide guidance to facilitate the continual improvement of the customer service based on feedback from customers and other interested parties.

2) Job Description of Manager, Standards, Risk Control & Documentation

- Set safety standards to maintain a consistently high performance in operations and occupational safety.
- Establish, maintain and implement risk control procedures for the registration, modification and endorsement of identified hazards in Operations Division.
- Manage the risk management program and provide guidance on overall risk management process, including the identification of foreseeable hazards related to bus operations and maintenance activities, evaluation of hazards identified and implementation of risk control measures to minimize the safety risks in a cost-effective manner.
- Develop and maintain documentation system at Operations Division level for the effective implementation of safety management system.

- Formulate and maintain operating rules and procedures to safeguard the bus operations and maintenance activities.
- Evaluate the impacts of amended/new legislation on operations and occupational safety and devise strategies to ensure legal compliance.
- Develop, implement, maintain and monitor safety auditing system on operations and occupational safety, review safety performance and make recommendations for continual improvement.
- Make continual efforts to benchmark safety performance and processes with leading organizations.

3) Job Description of Assistant Manager, Operations Safety

- Plan, organize and conduct safety inspections and audits, make recommendations for continual improvement and evaluate the effectiveness of actions taken to minimize safety risks arising from operations.
- Assist senior management to conduct root cause analysis for traffic accidents and to verify the effectiveness of follow-up actions.
- Review the establishment, implementation and effectiveness of Incident Management and identify areas for improvement.
- Conduct trend analysis for reviewing performance on operations safety and identify the areas for improvement.
- Plan and implement safety improvement initiatives to manage operations safety in a systematic and professional manner.
- Review the adequacy and suitability of hazard identification and risk assessment processes, and evaluate the effectiveness of risk control measures so as to minimize safety risks arising from operations.
- Work in conjunction with Human Resources Department to review training materials and the effectiveness of operations safety training.
- Establish and implement safety promotion programmes to arouse safety awareness of staff at all levels.

4) Job Description of Safety Inspector

- Carry out occupational safety inspections and recommend corrective and/or preventive actions to ensure that relevant safety legislation, safety procedures and work instructions are complied with.
- Assist line management to review and monitor the effectiveness of risk control measures so as to improve occupational safety in their operations.
- Assist line management to review the adequacy and suitability of in-house rules and procedures related to occupational safety.

- Analyze causes of occupational accidents and monitor accident trends.
- Develop, organize and conduct in-house occupational safety training.
- Contribute to safety promotion activities to arouse safety awareness of staff at all levels.

The role of Safety & Service Department could be reflected by the following documents:

- 1) Safety Management Manual (see attached);
 - 2) Safety Management Procedures (see attached);
 - 3) Quality Procedures “Safety & Service Quality Process” (see attached); and
 - 4) Bus captain Safe Driving Handbook (see attached).
- b) For recruitment, training and performance monitoring of bus captains, Training Manager of HR Department was the key staff for communication. We had conducted a study with Bus Captain Training School to conduct gap analysis so as to identify the rooms for improvement on bus captain safety training.

Recruitment and Training

Q3

- a) There was 18-day training for new bus captains with vehicle driving license Class 1 & 2. As I heard from ex-colleagues, more than 18-day training was conducted to new Bus Captains before.
- b) As far as I understood, some sort of work stress training was applied to terminal supervisors and inspectors only.
- c) As far as I could remember, driving test would be conducted to full-time bus captains by Driving Instructors of HR Department as a pre-requisite before they were recruited, and further training were conducted by driving instructors of Bus Captain Training School. However, I am not sure whether this practice was applied to the part-time bus captains.
- d) It had better to check the recruitment records with HR Department at KMB as they are the right position to handle recruitment of part-time bus captains.
- e) It had better to check the records with HR Department and Depot Maintenance Departments at KMB as they are the right positions to handle staff of engineering departments for the employment of part-time bus captains.

Q4

- a) It had better to check the recruitment records with HR Department at KMB as this department is the right position to handle the training of bus captains.
- b) As far as I could remember, there was no formal mechanism to assess the competence of bus captains for the changes of bus models and new bus routes. Moreover, no special trainings were conducted to bus captains for the changes of new bus routes. KMB only requested all concerned bus captains to declare that they were familiar with the new bus routes and signed on a standard form for record purposes.

Performance monitoring

Q5

- a) For the turnover of IT staff who was responsible for the maintenance of telematics, it had better to consult HR and IT Departments as they kept the full records.

Safety awareness

Q6

- a) We had monthly Operations Safety meetings with and Depot Managers to review bus safety issues.

In 2014, Safety & Quality Department with 4 Depot General Managers jointly identified 29 sharp bends with the following information in excel format:

- 1) exact locations;
- 2) safe speed;
- 3) bus routes involved;
- 4) fleet size;
- 5) individual sharp bend curves;
- 6) travelling speeds records by BOM;
- 7) field test results (conducted by driving instructors of Bus Captain Training School);
- 8) calculated safe speeds conducted by Engineering Office;
- 9) suggested safe speed for identified sharp bends which mutual agreed by Depot General Managers, Principal Engineer of Engineering Office, Training Manager of Bus Captain Training School and Head of Safety & Service Quality Department;
- 10) related photos; and
- 11) training video for all identified sharp bends.

Also, small cards with exact locations of sharp bends and safe speeds were printed and readily available to be issued to all concerned bus captains. However, the implementation plan was banned by Roger Li due to unknown reasons.

香港專營巴士服務
獨立檢討委員會

香港金鐘道 66 號
金鐘道政府合署 21 樓



Independent Review Committee on
Hong Kong's Franchised Bus Service

21/F, Queensway Government Offices,
66 Queensway, Hong Kong

本函檔號 Our Ref.: CSO/IRC-BUS/CR/7-45/9

來函檔號 Your Ref.:

電話號碼 Tel No.: (852) 2867 5324

傳真號碼 Fax No.: (852) 3104 0254

7 June 2018

Mr Raymond CHENG

(Email [REDACTED])

BY EMAIL

Dear Mr CHENG,

**Invitation for Written Submissions for Consideration by the
Independent Review Committee on Hong Kong's Franchised Bus Service**

On 6 June 2018, the Secretariat of the Independent Review Committee on Hong Kong's Franchised Bus Service ("Committee") received an email from Mr Eric Lee to which was attached what was described as a report in your name, a copy of which is attached to this letter at the **Annex**.

We attach a copy of the report and invite you to confirm, if it is the case, that it is your statement and that it is true to the best of your knowledge and belief.

If so, we would invite you to assist the Committee by providing information to the Committee by way of answers, to the best of your knowledge and belief, to the following questions:

Employment by KMB

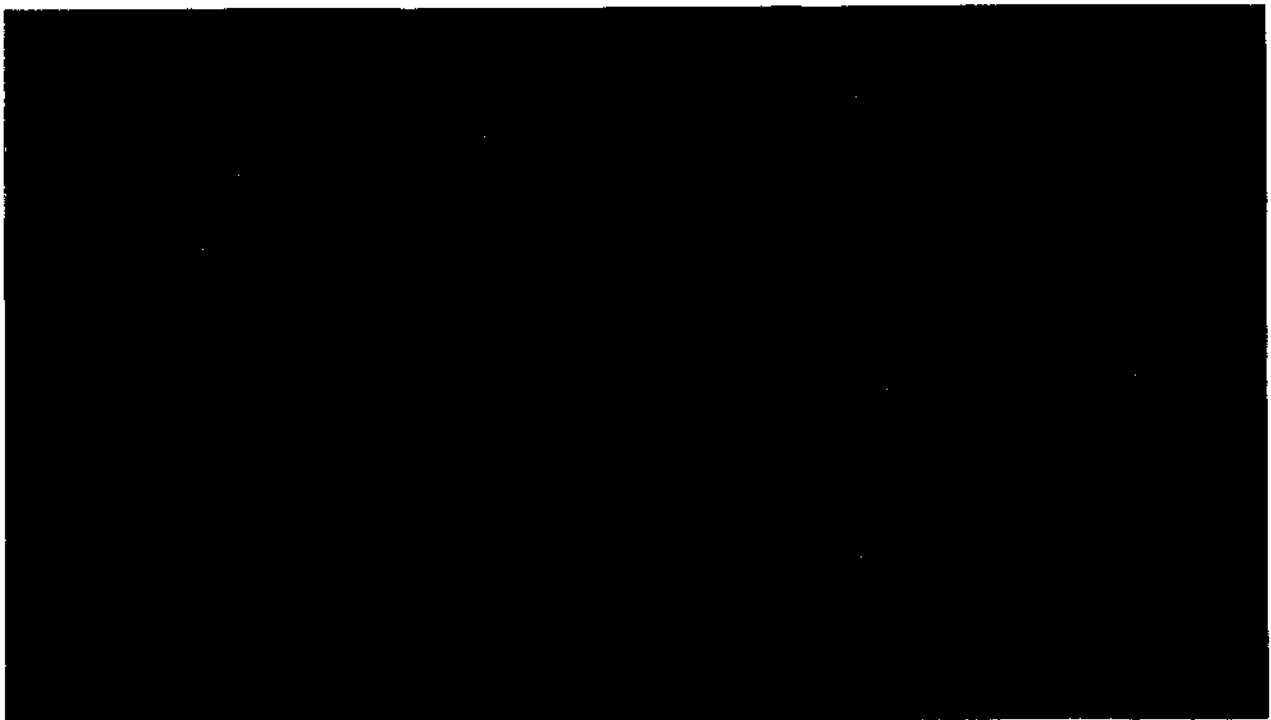
1. Please describe the period over which you were employed by The Kowloon Motor Bus Co. (1933) Ltd ("KMB") and the positions that you occupied, in which departments, prior to your retirement on 12 September 2014.
2. In the statement it is asserted that:
"We were able to produce a safety booklet for Bus Captains detailing each potentially dangerous turns' exact location, direction, and road nature, road condition, past record, related photos or diagrams from transport departments documents or passenger complaints... There were 31 safety driving suggestions from a study of 1500 studies."

Mr Edmond Ho, our previous Managing Director was very supportive to the study and on how it was communicated to all Bus Captains."

3. Regarding the safety booklet:
 - (a) Do you know if copies of the safety booklet, in whatever form, exist? If so, please describe where they can be found.
 - (b) Were the safety booklets distributed to bus captains? If so, please describe how, when and by whom that was done.
 - (c) Did the safety booklet detail a suggested speed at which the turns were to be negotiated by franchised buses safely? If so, were all or any of the suggested speeds lower than the prevailing statutory speed limit? If not all, please describe how many there were and the range of speeds lower than the statutory speed limit suggested in the safety booklet.

Oral statements and decisions attributed to Mr Roger Lee

4. The Committee notes that in the statement, various oral statements are attributed to Mr Roger Lee.
5. Regarding these oral statements:
 - (a) Please confirm, if it is case that you had retired before Mr Roger Lee joined KMB on 1 January 2015. If so, had you met Mr Roger Lee whilst you were employed by KMB? If not, have you ever met Mr Roger Lee?
 - (b) Were you present on the occasion(s) at which the oral statements attributed to Mr Roger Lee were spoken? If so, please describe the circumstances in which Mr Roger Lee made the statements attributed to him, in particular to whom, where and when they were made. If not, please describe on what basis you attribute those oral statements to Mr Roger Lee. If the source of your knowledge is someone who claimed to have direct personal knowledge of the oral statements, please identify that person(s) and, if known to you, please provide contact details of that person(s).



[REDACTED]

We would be grateful if your response could reach the Secretariat of the Committee by **14 June 2018**. Please send the submission by soft copies to *peter_chan@irc-bus.gov.hk* or *yt_to@irc-bus.gov.hk*.

In addition to providing answers to the above questions, you may also provide information on other bus-safety related issues. In doing so, we would invite you to focus on matters of which you have personal knowledge but not on matters of which you do not have first hand knowledge.

Furthermore, please be advised that the information provided in your response will be considered by the Committee in reviewing the matters it is directed to consider under the terms of reference of the Committee and in drawing up its recommendations. If necessary, the Committee may invite you to provide further supplementary written submissions and/or to give oral evidence. All written submissions (including any annexes, appendices and attachments contained therein) and oral evidence will be treated as public information and, at the discretion of the Committee, may be published on the Committee's website.

Yours sincerely,



(CHAN Ping fai, Peter)
Secretary, Independent Review Committee on
Hong Kong's Franchised Bus Service

Encl

Input for special investigative committee

Raymond Cheng, Senior Manager - Safety and Service Quality Department
Retired on 12-09-2014

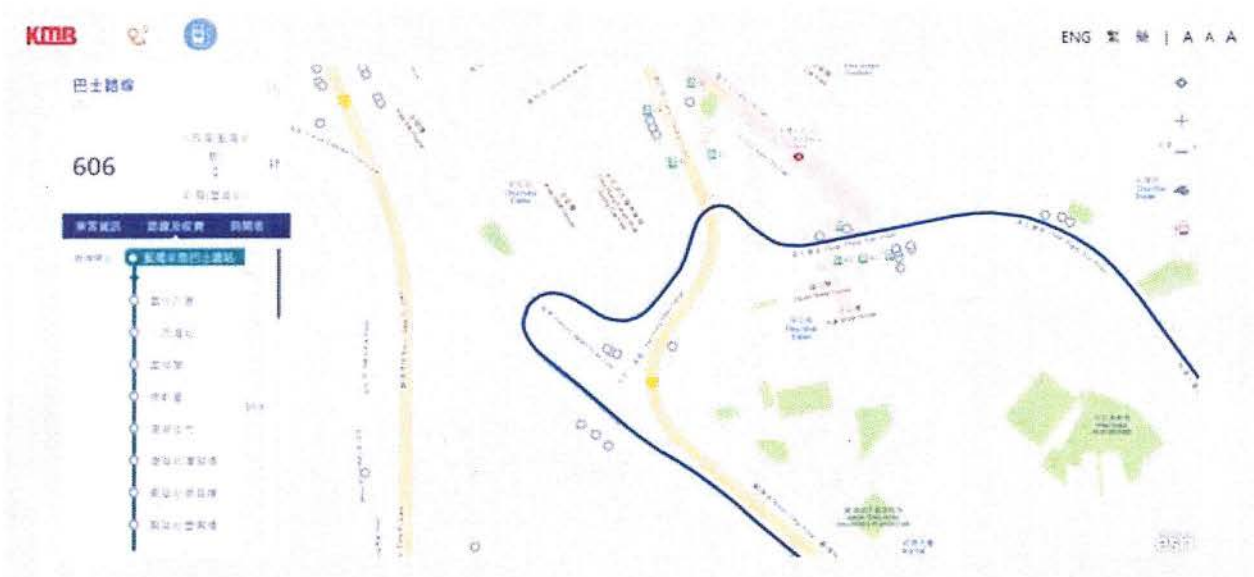
Part 1

There was a serious bus overturned accident in Tseung Kwan O in 2009 on route 692 causing 2 deaths and 34 injuries. Mr. Edmond Ho, the Managing Director at the time, formed the Safety and Service Quality Department tasked to study the company's day to day operational safety and service quality and to make improvements accordingly.

Buses can overturn easily

Transport Department of the Hong Kong SAR Government has set legal speed limits on all roads and turns. However, due to the height of double deck buses causing the centre of gravity to shift upwards, a bus may overturn in narrow and windy roads even if the driver is driving within the legal speed limit. As a rule of thumb, double deck buses must negotiate turns at much lower speed than private cars to be safe. This is especially important in rainy condition and when bus is fully loaded with passengers. Whenever there is a double deck bus overturning, it is 99% certain that the bus is turning too fast. Bus overturning is the number 2 most disastrous of all bus incidents, number 1 is bus fire.

I started the study of safe driving in the sharp turns back in 2013. The Safety and Quality Service Department invited the 4 Depot Managers, the representatives from Bus Captain Training School and bus maintenance section of Service Department to form a study group looking deeply into all the sharp turns within our bus route network. The study collected thousands of daily bus turning data and formulated hundreds of potentially dangerous turns within the network. We then narrowed it down to top 29 corner turns that may cause serious overturning accidents. To name a few of these turns : 將軍澳車禍廣明道迴旋處、茶果嶺道北行左轉鯉魚門道西行、大老山公路北行落石門及上馬鞍山方向彎位，以及觀塘道西行轉上清水灣道急彎。



Below are 5 of the 29 most dangerous corner turns being studied

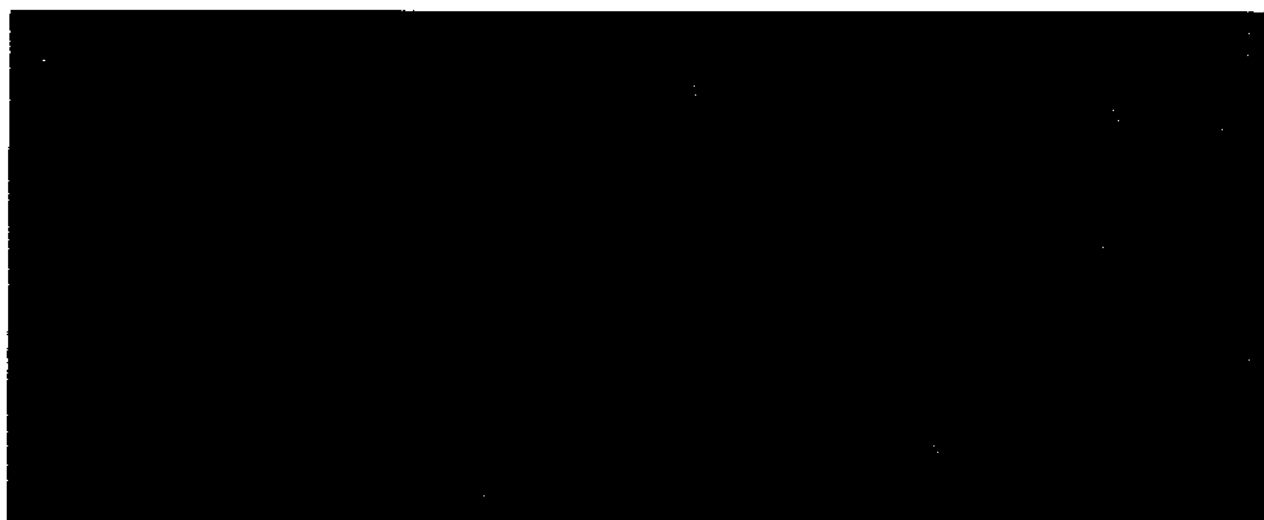


The colleagues from the Safety and Service Quality Department accompanied all the colleagues from the study group to test all the 29 turns in different road conditions, different speeds, different passenger load conditions and video-recorded the whole study for future reference. Each of the 29 corner turns was tested multiple times with different speeds, braking patterns and loading simulating the actual driving conditions. Important data was collected from these experiments to come up with a set of safety guidelines.

$$\text{Overturning Speed, } v = \sqrt{\frac{dgr}{2h}}$$

轉名	途經此處的巴士路線	過去十年交通意外宗數*
將軍澳道落茶果嶺道，北行左轉鯉魚門道西行	23、40、80、11B、11C、11D、11X、69C、74D、74P、74X、80X、83X、89C、93A、268C、269C、274X、T277、16、98A	220
將軍澳寶順道轉入唐明街東行	692、893、93M、296A、296C、296D、296M、296P、N293、N691	無數據
大老山公路北行落石門	43P、74D、74P、82C	30
大老山公路北行人馬鞍山	99R、274P	無數據
觀塘道西行轉上清水灣道	606、606A	22

From the study, we were able to produce a safety booklet for Bus Captains detailing each potentially dangerous turns' exact location, direction, and road nature, road condition, past record, related photos or diagrams from Transport Department's document or passenger complaints... There were 31 safety driving suggestions from a study of over 1500 studies.



☐ Urgent ☐ Return receipt ☐ Sign ☐ Encrypt ☐ Mark Subject Restricted ☐ Expand personal&public groups



To:
Cc:
Bcc:
Subject: RC Reply to IRC

raymondcheng78

Dear Mr CHAN,

Invitation for Written S...

14/06/2018 20:44:39

From: [REDACTED]
To: peter_chan@irc-bus.gov.hk,
Cc: yt_to@irc-bus.gov.hk
Date: 14/06/2018 20:44
Subject: RC Reply to IRC

Dear Mr CHAN,

Invitation for Written Submissions for Consideration by the
Independent Review Committee on Hong Kong's Franchised Bus Service

Thank you for your letter dated 7 June 2018 sent to me via email regarding the subject invitation. I would like to furnish my answers to your questions in the best of my knowledge. Should there be any discrepancy on my provided information, in particular, date of event compared with your findings, please pardon me as such furnished information are from my memory.

Answer to Q1

I was employed as Senior Manager in Safety & Quality Department ("SSQ") by The Kowloon Motor Bus Co.(1933) Ltd. ("KMB") on 01/05/2010 prior to my retirement on 12/09/2014.

Answer to Q2

SSQ with 4 Depot General Managers jointly identified 29 sharp bends with the following information in an excel format (not safety booklet) for internal analysis and then submitted the recommendations to the top management for consideration and implementation, if adopted:-

- 1) exact locations;
- 2) safe speed;
- 3) bus routes involved;
- 4) fleet size;
- 5) individual sharp bend curves;
- 6) travelling speeds records by BOM;
- 7) field test results (BC Training School);
- 8) calculated safe speeds conducted by the Engineering Office;
- 9) suggested safe speed for identified sharp bends;
- 10) related photos; and
- 11) training video for all identified sharp bends.

Answer to Q3 and Q6

For the safe of passenger safety, small reminding cards (not safety booklet) with exact locations of sharp bends and safe speeds were printed and readily available to be issued to all concerned routes' bus captains.

In some occasions I had been told by Mr Gary Wong, my supervisor of SSQ, that the plan was banned by Mr Roger Lee at around 2016 due to unknown reasons.

Answer to Q4

Yes.

Answer to Q5a

Yes.

I did not meet Mr Roger Lee whilst I was working in KMB.

However, I had been working with him at the Park Island Transport Company Ltd. as I was the Bus Operation Manager (01/04/2002 to 28/02/2008) and General Manager (01/03/2008 to 30/04/ 2010) and he was one of Director of the company at that time.

Answer to Q5b

No.

I was told by my supervisor Mr Gary Wong of SSQ . He could be reached by email [REDACTED]

Answer to Q7

I was very disappointed upon hearing that SSQ study on sharp bends had been terminated in 2016. In fact, passenger safety was the most top priority when Mr Edmond Ho was the in-time KMB Managing Director. To some extents, suggested safe speeds to be applied to all identified sharp bends may likely prolong the bus journey time a little bit and cause a slight traffic congestion to other road users. However, I am quite sure that it would make a worthwhile contribution to passenger safety as human life is invaluable.

Source : please refer to my answer to Q5b

Answer to Q8 and Q 9

The employment of Mr Gary Wong, ex-head of SSQ was terminated in March 2015 as of a sudden. As far as I know, the termination of his employment service was not due to performances as well as other 4 management staff of SSQ was made to leave KMB. I guess the top management intended to save staff cost no matter how important for SSQ contributed to the daily bus operations safety.

Source : please refer to my answer to Q5b

Should you require any further information, please feel free to contact me via email as I am in UK at the moment.

Best Regards
Raymond Cheng

從我的 iPad 傳送

Written Submission is enclosed

8th May 2018

Secretariat to the Independent Review Committee
on Hong Kong's Franchised Bus Service,
21/F, Queensway Government Offices,
66 Queensway, Admiralty, Hong Kong

Dear Sir/Madam,

We refer to the Testimonies submitted by various ex-management and operation staff of KMB (adduced as Item 4 and 5 of the Bundle for Miscellaneous) was being published to the public through IRC's website.

A letter written by Zone Heads of KMB and Long Win Bus Operations is attached for IRC's consideration. This letter was submitted to the Board of Directors of KMB on 18 March 2018 regarding the aforementioned Testimonies.

As we understand that this letter may be inserted into the bundle for the IRC hearing, and may probably be uploaded to the IRC website which is accessible by the general public, we humbly request that the names of the uploaded version would be redacted for privacy reason.

In February 2018, as known from media, a group of ex-staff of KMB alleged the current management on compromising safety for more profit, on poor management which leads to low morale & confusion in the company, and on unreasonable dismissal of experienced staff. We found the allegations to be untrue and groundless. Being a current member of staff in the company, we have written the attached letter to express our view and support to our management. This letter was only sent to the Board but not to the IRC as we regarded the allegations mentioned in the ex-staff report were solely internal matters and were nothing related to safety.

To our surprise, the report was being uploaded and disclosed to the public by the IRC yesterday. In response to this, we must stand up for the company and the management about the unfair and untrue allegations. We have to provide a clear picture to the IRC as well as to the public about the recent changes in KMB, which we see positive, to the Company, passengers and shareholders. Therefore, we have decided to submit our letter.

|

We have to point out that operating a franchise bus business is not easy. Nevertheless, our management is passionate and committed to serving KMB and the general public. They have been working very hard to improve KMB's bus service and, at the same time, to take care of all staff member in the company. Their courage is what the society should cherish rather than to criticize.

Thank you for your attention.

Yours sincerely,
KMB and LWB Zone Heads

致九龍巴士(一九三三)有限公司董事局主席及全體董事局成員：

最近公司成為傳媒焦點，有關九巴的新聞一則接一則，其中多份報章及媒體刊登了關於一班離職九巴員工的報導。文章指他們對公司相當不滿並對管理層作出各樣指控，管理層在記者及這班舊員工筆下好像成為了「十惡不赦」的罪人。究竟他們做錯了什麼？外界對公司的了解只靠片面之詞，對我們公平嗎？

他們已離職一段時間，並隻字不提公司近年的最新情況，原因是他們根本完全不了解我們所艱辛努力做的事情。作為公司的現職員工，突然覺得有責任發表我們的意見及對管理層表達支持。然而，我們不願浪費筆墨及時間評論報導的真確性，我們只想說出親眼所見的事實。

車務組是公司與前線同事的重要橋樑，我們留意到前線同事比以前開心了，工作環境的改善是主要原因。以前公司忽略了很多前線同事基本的需要，現屆管理層上任後，其中最迫切的任務是完善站頭設施，現在大部份已完成。同事在站頭有更理想的休息環境，對安全駕駛也有幫助。

以前，前線同事總覺得管理層高高在上，亦很少有機會與他們接觸。現屆管理層風格截然不同，他們親民並時常到車廠及站頭探望同事，聽取需要及意見。對於同事的需要，能配合的管理層一定盡力配合，前線同事完全感受被公司尊重及重視。

這幾年，我們親身見證著公司的轉變，現在的成就是我們一步一步努力的成績，的確是得來不易。無可否認，現在的工作量是比以前繁忙，我們卻覺得更有意義。因為大家的目標明確，亦知道管理層正與我們一同努力，希望公司成功。

要改變舊人事、舊制度、舊作風、舊方法，從來並非易事，而且「吃力不討好」，我們佩服一班管理層的勇氣及毅力。我們會繼續支持公司，努力工作。這是我們的一點點心聲，亦希望董事局能給予管理層更多的支持，謝謝！

九巴/龍運各區車務主管

荔枝角廠 -
九龍灣廠 -
九龍灣廠 -
沙田廠 -
屯門廠 -
屯門廠 -
龍運巴士 -

18-03-2018

Attn: Chairman of the Board of Directors and all Board Members of The Kowloon Motor Bus Company (1933) Limited

The company has recently become the media focus, and news about the KMB comes one after another. A number of newspapers and media published the news reports about a group of ex-staff of KMB. It is stated in the reports that the ex-staff members were very discontented with the company and made various accusations to the management. Based on the words of the press and these ex-staff members, the management team seems to have become a group of unpardonably wicked sinners. After all, what have they done wrong? The outsiders learn about the company merely through the words of one party. Is it fair to us?

They have resigned from the company for a substantial period of time, and they have not mention a word about the company's latest situation in recent years. The reason is that they do not understand our hard work at all. As the company's current staff members, we suddenly feel obliged to voice our opinions and to show support to the management. However, we do not want to waste our efforts and time for commenting on the authenticity of the news reports. We just want to tell the truth we have witnessed.

The Vehicle Group is an indispensable bridge connecting the company and the frontline colleagues. We notice that the frontline colleagues are happier than before, while the improvement of the work environment being the main reason. In the past, the company neglected the basic needs of many frontline colleagues. Since the current management took office, the most urgent mission is to advance the facilities at the stations, which have mostly been completed. The colleagues can now enjoy better environment for taking rest, which is also helpful for safe driving.

In the past, the frontline colleagues often found the management superior and they rarely had a chance to get in touch with them. On the other hand, the current management have a totally different style. They are amiable and often go to the depots and stop flags to visit the colleagues. They listen to our needs and opinions. They try their best to make accommodations to meet up to the colleagues' demands. The frontline colleagues feel totally respected and valued by the company.

Throughout these years, we have witnessed the changes of the company. The accomplishment that we have now is the result of our persistent hard work. It is indeed a hard-earned achievement. Undoubtedly, the current workload is heavier than before but we

find it more meaningful. Because we now have a clear goal and we know the management are working with us. We all hope for the company's success.

It is never easy to change the existing personnel, system, practice and procedures. It could be arduous but fruitless. We admire the courage and persistence of the management. We will continue to support the company and work hard. This is what we have in mind, and we hope the Board can give more support to the management. Thank you.

████████████████████	Operation Supervisors of Various
████████████████████	Districts of KMB/LWB
████████████████████	Lai Chi Kok Depot – ██████████
████████████████████	Kowloon Bay Depot – ██████████
████████████████████	Kowloon Bay Depot – ██████████
████████████████████	Shatin Depot – ██████████
████████████████████	Tuen Mun Depot – ██████████
████████████████████	Tuen Mun Depot – ██████████
	LWB – ██████████

18-03-2018

香港專營巴士服務
獨立檢討委員會

香港金鐘道66號
金鐘道政府合署21樓



Independent Review Committee on
Hong Kong's Franchised Bus Service

21/F, Queensway Government Offices,
66 Queensway, Hong Kong

本函檔號 Our Ref.: CSO/IRC-BUS/CR/7-45/9

來函檔號 Your Ref.:

電話號碼 Tel No.: (852) 2867 5324

傳真號碼 Fax No.: (852) 3104 0254

4 June 2018

Mr MAK Shing-bong (麥成邦先生)
Operations-in-Charge
Kowloon Motor Bus Kowloon Bay Depot
1 Lam Wah Street
Kowloon Bay

PERSONAL

Dear Mr MAK,

**Invitation for Written Submissions for Consideration by the
Independent Review Committee on Hong Kong's Franchised Bus Service**

On 9 May 2018, the Secretariat of the Independent Review Committee ("the Committee") received via facsimile a letter addressed to the Committee ("letter to the Committee") from "KMB and LWB Zone Heads". Attached to the letter was another letter ("the attached letter") addressed to the Chairman and Board Members of the Kowloon Motor Bus Company (1933) Limited ("KMB") and signed off by seven operations-in-charge of KMB and the Long Win Bus Company Limited.

We attach at the Annex a copy of the letters and invite you to confirm, if it is the case, that: (i) the letter to the Committee was sent out by you; and (ii) the attached letter is your statement and that both the letter to the Committee and the attached letter are true to the best of your knowledge and belief.

If so, we would invite you to indicate whether you will be willing to assist the Committee further in its work by providing further written submissions and/or attend hearing to deliver oral evidence with regard to the two letters mentioned above.

In addition to providing the response to the Committee, you may also provide information on other bus-safety related issues, including, for example, details and further elaborations on the improvements to facilities at bus stations, about which reference was made in the attached letter, and how such improvements helped with bus safety. In doing so, we would invite you to focus on matters of which you have personal knowledge but not on matters of which you do not have first hand knowledge.

We would be grateful if your response could reach the Secretariat of the Committee by **11 June 2018**. Please send the submission to:

By post: Secretariat to the Independent Review Committee on Hong Kong's Franchised Bus Service, 21/F, Queensway Government Offices, 66 Queensway, Admiralty, Hong Kong (*with the envelope specifying that the written submission is enclosed*); or

Via email: secretariat@irc-bus.gov.hk (*with the email heading specifying that the written submission is enclosed*)

Please be advised that the information provided in your response will be considered by the Committee in reviewing the matters it is directed to consider under the terms of reference of the Committee and in drawing up its recommendations. If necessary, the Committee may invite you to provide supplementary written submissions and/or to give oral evidence. All written submissions (including any annexes, appendices and attachments contained therein) and oral evidence will be treated as public information and, at the discretion of the Committee, may be published on the Committee's website.

Yours sincerely,



(CHAN Ping-fai, Peter)
Secretary, Independent Review Committee on
Hong Kong's Franchised Bus Service

Encl

香港專營巴士服務
獨立檢討委員會

香港金鐘道 66 號
金鐘道政府合署 21 樓



Independent Review Committee on
Hong Kong's Franchised Bus Service

21/F, Queensway Government Offices,
66 Queensway, Hong Kong

本函檔號 Our Ref.: CSO/IRC-BUS/CR/7-45/9

來函檔號 Your Ref.:

電話號碼 Tel No.: (852) 2867 5324

傳真號碼 Fax No.: (852) 3104 0254

(中文譯本)

九龍灣臨華街 1 號
九龍巴士九龍灣車廠
車務主管
麥成邦先生

私人信件

麥先生:

邀請你向香港專營巴士服務獨立檢討委員會提供書面意見

於 2018 年 5 月 9 日，香港專營巴士服務獨立檢討委員會（下稱“委員會”）的秘書處透過傳真接獲一份由“KMB and LWB Zone Heads”交予委員會的信函（下稱“給委員會的信函”）。有關信函夾附了另一份交予九龍巴士（一九三三）有限公司（下稱“九巴”）主席及董事局成員的信函（下稱“夾附的信函”），並由七位九巴及龍運巴士有限公司的車務主管簽署。

我們於本函附件附上了上述信函的副本，並邀請你確認以下陳述是否真確：（一）給委員會的信函是由你交予委員會；及（二）夾附的信函的內容是由你所作出的陳述，而且就你所知所信，給委員會的信函和夾附的信函的內容，均實真確。

如你確認以上陳述屬實，我們邀請你確認是否樂意就與上述兩份信函相關的事宜向委員會提供協助，包括進一步提供書面意見及／或出席聽證會以提供口述證供。

除了回應上述事宜外，你亦可就其他與巴士安全相關的事宜向委員會提供資料，例子包括夾附的信函中提及的站頭設施改善，以及有關改善如何對巴士安全有幫助。在向委員會提供資料時，我們邀請你集中於你曾親身經歷的事宜，而非你沒有第一手資料的事宜。

請於 **2018年6月11日**或之前向委員會秘書處提供你的回應，
並以下列方式將有關回應交予秘書處：

郵遞： 香港金鐘金鐘道 66 號
金鐘道政府合署 21 樓
香港專營巴士服務獨立檢討委員會秘書處
(請於信封上註明郵件為予委員會的書面意見)；
或

電子郵件： secretariat@irc-bus.gov.hk(請於電子郵件的標題
上註明郵件為予委員會的書面意見)

請注意委員會將會考慮書面意見所提供的資料，以按照其職權範圍檢視各項事宜及制訂建議。如有需要，委員會或會邀請貴工會以書面及／或口頭方式提供進一步資料。所有書面意見(包括書面意見中的任何附件、附錄及其他夾附的文件)以及口述證供均會被視作公開資料，而委員會或會將有關資料上載至委員會網頁。

(陳炳輝 )

香港專營巴士服務獨立檢討委員會秘書

2018 年 6 月 4 日

連附件

Annex 附件

Written Submission is enclosed

8th May 2018

Secretariat to the Independent Review Committee
on Hong Kong's Franchised Bus Service,
21/F, Queensway Government Offices,
66 Queensway, Admiralty, Hong Kong

Dear Sir/Madam,

We refer to the Testimonies submitted by various ex-management and operation staff of KMB (adduced as Item 4 and 5 of the Bundle for Miscellaneous) was being published to the public through IRC's website.

A letter written by Zone Heads of KMB and Long Win Bus Operations is attached for IRC's consideration. This letter was submitted to the Board of Directors of KMB on 18 March 2018 regarding the aforementioned Testimonies.

As we understand that this letter may be inserted into the bundle for the IRC hearing, and may probably be uploaded to the IRC website which is accessible by the general public, we humbly request that the names of the uploaded version would be redacted for privacy reason.

In February 2018, as known from media, a group of ex-staff of KMB alleged the current management on compromising safety for more profit, on poor management which leads to low morale & confusion in the company, and on unreasonable dismissal of experienced staff. We found the allegations to be untrue and groundless. Being a current member of staff in the company, we have written the attached letter to express our view and support to our management. This letter was only sent to the Board but not to the IRC as we regarded the allegations mentioned in the ex-staff report were solely internal matters and were nothing related to safety.

To our surprise, the report was being uploaded and disclosed to the public by the IRC yesterday. In response to this, we must stand up for the company and the management about the unfair and untrue allegations. We have to provide a clear picture to the IRC as well as to the public about the recent changes in KMB, which we see positive, to the Company, passengers and shareholders. Therefore, we have decided to submit our letter.

We have to point out that operating a franchise bus business is not easy. Nevertheless, our management is passionate and committed to serving KMB and the general public. They have been working very hard to improve KMB's bus service and, at the same time, to take care of all staff member in the company. Their courage is what the society should cherish rather than to criticize.

Thank you for your attention.

Yours sincerely,
KMB and LWB Zone Heads

致九龍巴士(一九三三)有限公司董事局主席及全體董事局成員：

最近公司成為傳媒焦點，有關九巴的新聞一則接一則，其中多份報章及媒體刊登了關於一班離職九巴員工的報導。文章指他們對公司相當不滿並對管理層作出各樣指控，管理層在記者及這班舊員工筆下好像成為了「十惡不赦」的罪人。究竟他們做錯了什麼？外界對公司的了解只靠片面之詞，對我們公平嗎？

他們已離職一段時間，並隻字不提公司近年的最新情況，原因是他們根本完全不了解我們所艱辛努力做的事情。作為公司的現職員工，突然覺得有責任發表我們的意見及對管理層表達支持。然而，我們不願浪費筆墨及時間評論報導的真確性，我們只想說出親眼所見的事實。

車務組是公司與前線同事的重要橋樑，我們留意到前線同事比以前開心了，工作環境的改善是主要原因。以前公司忽略了很多前線同事基本的需要，現屆管理層上任後，其中最迫切的任務是完善站頭設施，現在大部份已完成。同事在站頭有更理想的休息環境，對安全駕駛也有幫助。

以前，前線同事總覺得管理層高高在上，亦很少有機會與他們接觸。現屆管理層風格截然不同，他們親民並時常到車廠及站頭探望同事，聽取需要及意見。對於同事的需要，能配合的管理層一定盡力配合，前線同事完全感受被公司尊重及重視。

這幾年，我們親身見證著公司的轉變，現在的成就是我們一步一步努力的成績，的確是得來不易。無可否認，現在的工作量是比以前繁忙，我們卻覺得更有意義。因為大家的目標明確，亦知道管理層正與我們一同努力，希望公司成功。

要改變舊人事、舊制度、舊作風、舊方法，從來並非易事，而且「吃力不討好」，我們佩服一班管理層的勇氣及毅力。我們會繼續支持公司，努力工作。這是我們的一點點心聲，亦希望董事局能給予管理層更多的支持，謝謝！

九巴/龍運各區車務主管

荔枝角廠 -
九龍灣廠 -
九龍灣廠 -
沙田廠 -
屯門廠 -
屯門廠 -
龍運巴士 -

18-03-2018

Attn: Chairman of the Board of Directors and all Board Members of The Kowloon Motor Bus Company (1933) Limited

The company has recently become the media focus, and news about the KMB comes one after another. A number of newspapers and media published the news reports about a group of ex-staff of KMB. It is stated in the reports that the ex-staff members were very discontented with the company and made various accusations to the management. Based on the words of the press and these ex-staff members, the management team seems to have become a group of unpardonably wicked sinners. After all, what have they done wrong? The outsiders learn about the company merely through the words of one party. Is it fair to us?

They have resigned from the company for a substantial period of time, and they have not mention a word about the company's latest situation in recent years. The reason is that they do not understand our hard work at all. As the company's current staff members, we suddenly feel obliged to voice our opinions and to show support to the management. However, we do not want to waste our efforts and time for commenting on the authenticity of the news reports. We just want to tell the truth we have witnessed.

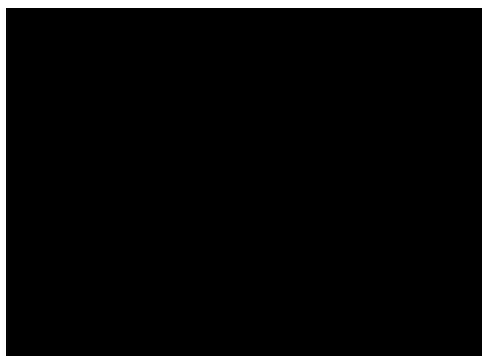
The Vehicle Group is an indispensable bridge connecting the company and the frontline colleagues. We notice that the frontline colleagues are happier than before, while the improvement of the work environment being the main reason. In the past, the company neglected the basic needs of many frontline colleagues. Since the current management took office, the most urgent mission is to advance the facilities at the stations, which have mostly been completed. The colleagues can now enjoy better environment for taking rest, which is also helpful for safe driving.

In the past, the frontline colleagues often found the management superior and they rarely had a chance to get in touch with them. On the other hand, the current management have a totally different style. They are amiable and often go to the depots and stop flags to visit the colleagues. They listen to our needs and opinions. They try their best to make accommodations to meet up to the colleagues' demands. The frontline colleagues feel totally respected and valued by the company.

Throughout these years, we have witnessed the changes of the company. The accomplishment that we have now is the result of our persistent hard work. It is indeed a hard-earned achievement. Undoubtedly, the current workload is heavier than before but we

find it more meaningful. Because we now have a clear goal and we know the management are working with us. We all hope for the company's success.

It is never easy to change the existing personnel, system, practice and procedures. It could be arduous but fruitless. We admire the courage and persistence of the management. We will continue to support the company and work hard. This is what we have in mind, and we hope the Board can give more support to the management. Thank you.



Operation Supervisors of Various
Districts of KMB/LWB

Lai Chi Kok Depot – [REDACTED]

Kowloon Bay Depot – [REDACTED]

Kowloon Bay Depot – [REDACTED]

Shatin Depot – [REDACTED]

Tuen Mun Depot – [REDACTED]

Tuen Mun Depot – [REDACTED]

LWB – [REDACTED]

18-03-2018



予香港專營巴士服務獨立檢討委員會的書面意見

11.06.2018 17:51

From: Douglas Mak KB [REDACTED]
To: "secretariat@irc-bus.gov.hk" <secretariat@irc-bus.gov.hk>,

致香港專營巴士服務獨立檢討委員會

本人麥成邦，為九巴九龍灣廠襄理，現確認下列信函的內容，均實真確：

1. 於2018年3月18日與其他6名車務主管聯署一份交予九龍巴士(1933)有限公司主席及董事局成員的信函所作出的陳述。
2. 於2018年5月8日給香港專營巴士服務獨立檢討委員會的信函所作出的陳述。

本人樂意以書面提供意見。

自2002年11月入職九巴，本人於近年確實見到公司管理層積極改善車長工作環境及增加與前線車長，站長及督察溝通，並經常指示各車廠必須以 "人性化" 態度處理車長問題：

1. 公司已於2012年按照運輸署指引，將車長用膳時間由最少45分鐘增至最少60分鐘，相連工作日之間最少要有10小時休息時間。
2. 九龍灣廠管轄的大部份巴士總站均設有員工休息室(共47個)及洗手間，部份總站更設有多於1個休息室，例如將軍澳坑口(北)。
3. 各休息室或站長室均設有飲用水機、空調、雪櫃及微波爐，如空間許可更設有電視機、食物/飲品自動售賣機、儲物櫃。
4. 當有新總站落成使用時，必須配備上述設施及電力供應，例如2015年3月新路線290/290A之將軍澳彩明總站，2016年6月新路線213M之安達臣安達總站，2017年7月新總站安達臣安泰邨、安泰(西)及安泰(南)總站。
5. 以往新總站落成使用時由於房屋署，領展或運輸署不配合，往往令公司未能及時申請電力供應令車長及站長未能於舒適環境下工作及休息。其中房屋署對九巴申請總站員工休息室態度不合作，例如樂華總站，在申請休息室接近10年仍然未獲批准下，公司於2017年8月自行於樂華安裝休息室，隨即被下令移除，導致工會到場示威並成為社會關注事件。
6. 於2015年，公司於九龍灣廠派更組內提供車長休息室、睡眠室、茶聚地方及用膳區，讓車長有地方休息。此外，九龍灣廠更設有員工健身室，理髮室及購物優惠商店。
7. 以上措施讓車長可於一個舒適環境下工作及休息，於平和的工作環境下減低駕駛時心浮氣燥，有助提升駕駛安全。
8. 公司管理層要求車廠總經理或襄理每月到訪轄區各總站，巡查各項設施，如有損壞立即要求相關部門安排維修。同時向前線員工了解日常工作困難及需要，作出改善。公司管理層每季亦到各車廠總站巡查設施，並向前線員工了解日常工作情況。
9. "人性化"安排同樣適用於車長崗位安排，每位新車長於入職最少3個月內均只會獲安排駕駛1-2條較簡單路線，讓新人適應工作環境及累積駕駛經驗。
10. 每位車長亦可因應個人意願，向公司申請調動更份或休息日，或增加/減少返特別更日數。

車長亦可以選擇OT時數長短，但需事先向公司提出OT時數長短要求，由公司安排合適路線及崗位。沒有事先向公司提出OT時數長短要求者，則按公司編更安排，輪流於所屬路線崗位工作。

11. 公司滿足及遷就車長對更份，崗位，休息日調休之要求。增強車長歸屬感，減少離職數目，改善工作安排及營做優質休息環境，從而提升駕駛安全。

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Written Submission to the Independent Review Committee of Hong Kong's Franchised Bus Service

11.06.2018 17:51

From: Douglas Mak KB [REDACTED]
To: "secretariat@irc-bus.gov.hk" <secretariat@irc-bus.gov.hk>,

To the Independent Review Committee of Hong Kong's Franchised Bus Service

I, Mak Shing Bong, the Assistant Manager at KMB Kowloon Bay Depot, hereby confirm the content of the letters as stated below are true:

1. The statement made on 18 March 2018 jointly with the other 6 zone heads to the Chairman and members of the Board of Directors of KMB.
2. The Statement made on 8 May 2018 to the Independent Review Committee of Hong Kong's Franchised Bus Service.

I am happy to provide my written submission.

Since I joined KMB in November 2002, I have seen that in recent years the management have actively improved the working environment of bus captains and have increased the communication with frontline bus captains, terminus supervisors and inspectors, and have always indicated to each bus depots that a "humanize" approach should be used when dealing with issues in relation to bus captains.

1. In 2012, according to the Guidelines of the Transport Department, the Company increased the meal break of bus captains from at least 45 minutes to at least 60 minutes, and there must be a minimum of 10 hours rest time between consecutive work days.
2. Most of the bus terminuses managed by Kowloon Bay Depot have staff resting room (47 in total) and washrooms. Some bus terminuses even have more than 1 resting room, such as Tseung Kwan O Hang Hau (North).
3. Each resting room or room for terminus supervisor has drinking water machines, air conditioners, refrigerators and microwaves, if space allows, there might also have televisions, vending machines for food/drinks, lockers.
4. When a new bus terminus is built, it must have the abovementioned facilities and have power supply, for instance Tseung Kwan O Choi Ming Bus Terminus with the new route 290/290A since March 2015, Anderson [Road] On Tat Bus Terminus with new route 213M since June 2016, New Bus Terminus at Anderson [Road] On Tai Estate, On Tai (West) and On Tai (South) Bus Terminus.
5. In the past, when the new terminus was completed, as there were issues with the co-operation between the Housing Bureau, Link REIT or Transport Department, this often prevented the Company from applying for power supply in a timely manner and the bus captains and terminus supervisor could not work and rest in a comfortable environment. Among them, the Housing Bureau's attitude toward KMB's application for the staff resting room does not seem forthcoming. For instance, for Lok Wah Bus Terminus, the application for a resting room has been made for nearly 10 years but still it

has not been approved. The Company then built its own resting room in August 2017, but there was an order requesting for the immediate removal of the same. The removal led to the demonstration of the union and had become a social concern.

6. In 2015, the Company provided a bus captain resting room, bedroom, tea break gathering place and dining area in the Shift Arrangement Group of Kowloon Bay Depot in order to provide a place for bus captains to rest. In addition, the Kowloon Bay Depot also has a staff gym room, a hair salon and discount store for shopping.
7. The above measures allow bus captains to work and rest in a comfortable environment. This helps to reduce the chance of bus captains being in short-temper while under a peaceful working environment and helps improving driving safety.
8. The management of the Company requires General Manager or Assistant Manager of Depots or to visit each bus terminus within their district on a monthly basis to inspect all facilities, and immediately request relevant departments to arrange maintenance, if any. At the same time, to understand the difficulties and needs of the frontline staff during their daily work and to make improvements. The Company's management also visits the bus terminuses every quarter to inspect the facilities and learn the daily work situation of frontline staff.
9. The "humanize" arrangement is also applicable to the bus captains' job arrangement. Each new bus captain will only be arranged to drive 1-2 simple routes within at least 3 months of his/her employment, in order to allow the newcomers to adapt to the working environment and accumulate driving experience.
10. Each bus captain could also base on his/her wishes, to make applications to the Company to change their shifts or rest days, or to increase/reduce the number of special shift duty. Bus captains could also choose their hours of overtime work, but he/she must make a request to the Company in relation to their hours of overtime work in advance, and the Company will arrange a suitable route and duty. Persons who have not made any prior request in relation to their hours of overtime work shall follow the shifts arranged by the Company, and taking up duties at the routes that they belong to by shift.
11. The Company has satisfied and accommodated the request of bus captains in relation to their shifts, duties, changing of rest days. To enhance the sense of belonging of bus captains, to reduce the number of people who resign, to improve the working arrangement and to create a quality resting environment, in order to enhance driving safety.

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香港專營巴士服務
獨立檢討委員會

香港金鐘道66號
金鐘道政府合署21樓



Independent Review Committee on
Hong Kong's Franchised Bus Service

21/F, Queensway Government Offices,
66 Queensway, Hong Kong

本函檔號 Our Ref.: CSO/IRC-BUS/CR/7-45/9

來函檔號 Your Ref.:

電話號碼 Tel No.: (852) 2867 5324

傳真號碼 Fax No.: (852) 3104 0254

九龍灣臨華街1號
九龍巴士九龍灣車廠
車務主管
麥成邦先生
(電郵: [REDACTED])

私人信件

麥先生:

邀請向香港專營巴士服務獨立檢討委員會提供書面意見

2018年6月11日的電郵收悉，我代表香港專營巴士服務獨立檢討委員會（委員會）感謝你確認委員會於2018年5月9日收到「KMB and LWB Zone Heads」的書面意見是就你所知所信作出真確無訛的陳述，以及向委員會提供進一步資料。

2. 你於2018年6月11日給委員會的意見書中第2段提及：

「九龍灣廠管轄的大部份巴士總站均設有員工休息室（共47個）及洗手間，部份總站更設有多於1個休息室，例如將軍澳坑口（北）。」

[附註：隨函夾附上述電郵的副本以供參考。]

3. 你於意見書中第5段進一步提及：

「以往新總站落成使用時由於房屋署，領展或運輸署不配合，往往令公司未能及時申請電力供應令車長及站長未能於舒適環境下工作及休息。其中房屋署對九巴申請總站員工休息室態度不合作」

4. 你於同一段落中列舉以下例子：

「例如樂華總站，在申請休息室接近10年仍然未獲批准下，公司於2017年8月自行於樂華安裝休息室，隨即被下令移除，導致工會到場示威並成為社會關注事件。」

5. 為協助委員會的檢討工作，請你就以上表述提交進一步資料，以回應下列問題：

- (a) 九龍巴士(1933)有限公司（九巴）曾否發出任何有關在巴士總站須為巴士車長提供休息設施的現行標準或指引？如有，請提供現行標準或指引的詳情。你是否得悉由運輸署發出任何有關設置此類設施的指引？如有，請詳述。
- (b) 現時九龍灣車廠的職權或管理範圍下有多少個巴士總站？
- (c) 在上述（b）項提及的巴士總站中，不論根據九巴發出的任何標準或指引而定，又或據巴士車長或工會稱，目前是否有任何巴士總站為巴士車長提供的休息設施是不足？如有，請列明是哪個巴士總站，特別是提供給九巴聘任的特別更次巴士車長及／或那些在特別更次中需在總站作不少於連續三小時休息的巴士車長作休息之用。是否有計劃於這些總站設置休息設施？
- (d) 於樂華邨巴士總站設置休息設施的最新情況如何？在樂華邨巴士總站設置休息設施時，九巴在過往或現時面對什麼困難？樂華邨巴士總站是否一個供九巴聘任的特別更次巴士車長休息及／或那些巴士車長在特別更次中需作不少於連續三小時休息的總站？九巴於2017年8月設立的休息室為何遭清拆及是誰發出清拆令？

6. 除了回應上述問題外，委員會現正考慮邀請你及其他已應允進一步協助委員會工作的分區車務主管，以群組形式出席聽證會，向委員會提供口述證供。經委員會初步考慮，有關聽證會暫定於2018年7月14、16或17日舉行。就此，請告知你能否於這三個日期中任何一天出席聽證會。

7. 就上述第 5 段及第 6 段事項，請於 2018 年 7 月 5 日 或之前以下列方式將有關回覆交予委員會秘書處：

郵遞： 香港金鐘金鐘道 66 號
金鐘道政府合署 21 樓
香港專營巴士服務獨立檢討委員會秘書處
(請於信封上註明郵件為予委員會的書面回覆)；或

電子郵件： secretariat@irc-bus.gov.hk (請於電子郵件的標題上註明郵件為予委員會的書面回覆)

8. 除了向委員會提供回覆外，你亦可就其他有關巴士安全事項提交資料。如提交資料，請集中那些你個人所知的事宜，而並非那些從他人獲知的資料。

9. 委員會將會考慮書面意見所提供的資料，以按照其職權範圍檢視各項事宜及制訂建議。如有需要，委員會或會邀請你以書面及／或口頭方式提供進一步資料。請注意所有書面意見（包括書面意見中的任何附件、附錄及其他夾附的文件）以及口述證供均會被視作公開資料，而委員會或會將有關資料上載至委員會網頁。

(陳炳輝 )

香港專營巴士服務獨立檢討委員會秘書

2018 年 6 月 28 日

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予香港專營巴士服務獨立檢討委員會的書面意見

11.06.2018 17:51

From: Douglas Mak KB [REDACTED]
To: "secretariat@irc-bus.gov.hk" <secretariat@irc-bus.gov.hk>,

致香港專營巴士服務獨立檢討委員會

本人麥成邦，為九巴九龍灣廠襄理，現確認下列信函的內容，均實真確：

1. 於2018年3月18日與其他6名車務主管聯署一份交予九龍巴士(1933)有限公司主席及董事局成員的信函所作出的陳述。
2. 於2018年5月8日給香港專營巴士服務獨立檢討委員會的信函所作出的陳述。

本人樂意以書面提供意見。

自2002年11月入職九巴，本人於近年確實見到公司管理層積極改善車長工作環境及增加與前線車長，站長及督察溝通，並經常指示各車廠必須以 "人性化" 態度處理車長問題：

1. 公司已於2012年按照運輸署指引，將車長用膳時間由最少45分鐘增至最少60分鐘，相連工作日之間最少要有10小時休息時間。
2. 九龍灣廠管轄的大部份巴士總站均設有員工休息室(共47個)及洗手間，部份總站更設有多於1個休息室，例如將軍澳坑口(北)。
3. 各休息室或站長室均設有飲用水機、空調、雪櫃及微波爐，如空間許可更設有電視機、食物/飲品自動售賣機、儲物櫃。
4. 當有新總站落成使用時，必須配備上述設施及電力供應，例如2015年3月新路線290/290A之將軍澳彩明總站，2016年6月新路線213M之安達臣安達總站，2017年7月新總站安達臣安泰邨、安泰(西)及安泰(南)總站。
5. 以往新總站落成使用時由於房屋署，領展或運輸署不配合，往往令公司未能及時申請電力供應令車長及站長未能於舒適環境下工作及休息。其中房屋署對九巴申請總站員工休息室態度不合作，例如樂華總站，在申請休息室接近10年仍然未獲批准下，公司於2017年8月自行於樂華安裝休息室，隨即被下令移除，導致工會到場示威並成為社會關注事件。
6. 於2015年，公司於九龍灣廠派更組內提供車長休息室、睡眠室、茶聚地方及用膳區，讓車長有地方休息。此外，九龍灣廠更設有員工健身室，理髮室及購物優惠商店。
7. 以上措施讓車長可於一個舒適環境下工作及休息，於平和的工作環境下減低駕駛時心浮氣燥，有助提升駕駛安全。
8. 公司管理層要求車廠總經理或襄理每月到訪轄區各總站，巡查各項設施，如有損壞立即要求相關部門安排維修。同時向前線員工了解日常工作困難及需要，作出改善。公司管理層每季亦到各車廠總站巡查設施，並向前線員工了解日常工作情況。
9. "人性化"安排同樣適用於車長崗位安排，每位新車長於入職最少3個月內均只會獲安排駕駛1-2條較簡單路線，讓新人適應工作環境及累積駕駛經驗。
10. 每位車長亦可因應個人意願，向公司申請調動更份或休息日，或增加/減少返特別更日數。

車長亦可以選擇OT時數長短，但需事先向公司提出OT時數長短要求，由公司安排合適路線及崗位。沒有事先向公司提出OT時數長短要求者，則按公司編更安排，輪流於所屬路線崗位工作。

11. 公司滿足及遷就車長對更份，崗位，休息日調休之要求。增強車長歸屬感，減少離職數目，改善工作安排及營做優質休息環境，從而提升駕駛安全。

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香港專營巴士服務
獨立檢討委員會

香港金鐘道66號
金鐘道政府合署21樓



Independent Review Committee on
Hong Kong's Franchised Bus Service

21/F, Queensway Government Offices,
66 Queensway, Hong Kong

本函檔號 Our Ref.: CSO/IRC-BUS/CR/7-45/9

電話號碼 Tel No.: (852) 2867 5324

來函檔號 Your Ref.:

傳真號碼 Fax No.: (852) 3104 0254

28 June 2018

Mr MAK Shing-bong, Douglas
Operations-in-Charge
Kowloon Motor Bus Kowloon Bay Depot
1 Lam Wah Street
Kowloon Bay
Kowloon
(Email: [REDACTED])

PERSONAL

Dear Mr MAK,

**Invitation for Written Submissions for Consideration by the
Independent Review Committee on Hong Kong's Franchised Bus Service**

The Committee thanks you for your reply dated 11 June 2018 confirming that the written submission received by the Committee on 9 May 2018 from "KMB and LWB Zone Heads" is your statement and that the statement is true to the best of your knowledge and belief, as well as provide further written submissions to the Committee.

2. In your written submission to the Committee dated 11 June 2018, paragraph 2 states that:

"Most of the bus terminuses managed by Kowloon Bay Depot have staff resting room (47 in total) and washrooms. Some bus terminuses even have more than 1 resting room, such as Tseung Kwan O Hang Hau (North)"

[Note: a copy of the letter is attached for reference.]

3. Paragraph 5 of the submission further states that:

"In the past, when the new terminus was completed, as there were issues with the co-operation between the Housing Bureau, Link REIT or Transport Department, this often prevented the Company from applying for

power supply in a timely manner and the bus captains and terminus supervisor could not work and rest in a comfortable environment. Among them, the Housing Bureau's attitude toward KMB's application for the staff resting room does not seem forthcoming."

4. An example was then given in the same paragraph:

"For instance, for Lok Wah Bus Terminus, the application for a resting room has been made for nearly 10 years but still it has not been approved. The Company then built its own resting room in August 2017, but there was an order requesting for the immediate removal of the same. The removal led to the demonstration of the union and had become a social concern."

5. The Committee would be assisted if you could provide further information regarding the above statement by addressing the following questions:

- (a) Are there any existing standards or guidelines issued by the Kowloon Motor Bus Company (1933) Limited (KMB) on the resting facilities for bus captains that should be provided at bus terminii? If so, please provide details of the existing standards or guidelines. Are you aware of any guidelines issued by the Transport Department on the provision of such facilities? If so, please describe them.
- (b) How many bus terminii are currently under the purview or management of the Kowloon Bay Depot?
- (c) Of the bus stations mentioned in (b) above, are there currently any bus terminii that are considered to have insufficient resting facilities, as determined under any standards or guidelines issued by KMB or as alleged by bus captains or unions otherwise, for bus captains? If so, please identify them, *in particular those at which bus captains employed by KMB operating on special shifts commence and/or spend their rest breaks* of no less than three or more consecutive hours in the course of working a special shift. Are there plans to provide resting facilities at these bus terminii?
- (d) What is the latest position of the provision of resting facilities at the Lok Wah Bus Terminus? What are/were the difficulties faced by KMB in providing resting facilities at the Lok Wah Bus Terminus? Is the Lok Wah Bus Terminus a bus terminus at which bus captains employed by KMB operating on special shifts commence and/or spend their rest breaks of no less than three or more consecutive hours in the course of working a special shift? What was the reason for the removal of the resting room built by KMB in August 2017 and by whom the removal order was issued?

6. In addition to addressing the questions above, the Committee is also considering inviting you and other Zone Heads who have agreed to provide further assistance to the Committee to one of the coming hearings to deliver oral evidence to the Committee as a group. The tentative dates being considered by the Committee

are 14, 16 or 17 July 2018. In this connection, the Committee would like to invite you to indicate whether you will be available to attend a hearing on one of these three days.

7. I should be grateful if the response to paragraphs 5 and 6 above could reach the Secretariat of the Committee by **5 July 2018**. Please send the submission to:

By post: Secretariat to the Independent Review Committee on Hong Kong's Franchised Bus Service, 21/F, Queensway Government Offices, 66 Queensway, Admiralty, Hong Kong (*with the envelope specifying that the written submission is enclosed*); or

Via email: secretariat@irc-bus.gov.hk (*with the email heading specifying that the written submission is enclosed*)

8. In addition to providing the response to the Committee, you may also provide information on other bus-safety related issues. If you do so, we would invite you to focus on matters of which you have personal knowledge but not on matters of which you do not have first hand knowledge.

9. Please be advised that the information provided in your response will be considered by the Committee in reviewing the matters it is directed to consider under the terms of reference of the Committee and in drawing up its recommendations. If necessary, the Committee may invite you to provide supplementary written submissions and/or to give oral evidence. All written submissions (including any annexes, appendices and attachments contained therein) and oral evidence will be treated as public information and, at the discretion of the Committee, may be published on the Committee's website.

Yours sincerely,

(CHAN Ping-fai, Peter)
Secretary, Independent Review Committee on
Hong Kong's Franchised Bus Service

Encl

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予香港專營巴士服務獨立檢討委員會的書面回覆

02.07.2018 13:22

From: Douglas Mak KB [REDACTED]
To: "secretariat@irc-bus.gov.hk" <secretariat@irc-bus.gov.hk>,
1 attachment



VID-20180630-WA0014.mp4

致香港專營巴士服務獨立檢討委員會

本人麥成邦，為九巴九龍灣廠襄理，現就獨立檢討委員會於2018年6月28日向本人發出之信件，提交進一步資料如下：

5(a) 自2013年起，公司管理層要求為主要總站向各有關政府部門(運輸署或房屋署)申請加裝休息室，並需要提供飲用水機、空調、雪櫃及微波爐。每個休息室同時可供**5-6**名車長使用。部份總站如車長人數眾多，可申請加裝多於一個休息室，例如將軍澳坑口(北)總站共設有兩個休息室供車長使用。如空間許可更設有電視機、食物/飲品自動售賣機、儲物櫃，例如觀塘碼頭總站。

本人從未知悉運輸署有發出有關設置此類設施的指引。事實上，現時新落成屋邨的巴士總站基本設施並不一定包括電力供應，於規劃圖積時亦不一定預留位置設置站長室及車長休息室，導致公司需透過運輸署向房屋署申請(或爭取)上述設施。然而房屋署基於要趕及本身屋邨建築進度，往往將上述申請處理放於次位，但運輸署同時又要求九巴需於新落成屋邨接近完成建築前提供巴士服務，讓市民可提早到屋邨視察，導致公司近年於新落成屋邨巴士總站尋找電力供應，以便設置站長室及車長休息室遇到重重困難。

舉例2017年7月新總站安達臣安泰邨、安泰(西)及安泰(南)總站，規劃圖積時沒有預留電力供應、亦沒有預留位置設置站長室及車長休息室，九巴需委託中電申請掘路接駁電力。但房屋署建築商當時要趕及將部分樓宇及道路完成建築，以便交相關政府部門，反對掘路。相反，如果待建築商將樓宇(交房屋署)及附近道路(交路政署)後，基於新建道路於一年內不獲批掘路許可，造成中電必須於道路完成建築、交路政署前完成掘路工程。

面對上述兩難情況，經過接近半年冗長商議，結果由房屋署建築商接駁臨時電力予九巴站長室及休息室。

5(b) 現時九龍灣車廠共管理55個巴士總站。

5(c) 上述55個巴士總站中，只有6個仍然未設置休息室如下：

德福花園總站: 已獲運輸署批准，2018年7月將設置休息室

廣播道總站: 已向運輸署申請設置休息室，審批中

牛頭角總站: 已向運輸署申請設置休息室，審批中

慈雲山(南)總站: 只在早上繁忙時段提供班次，不會有特別更次車長在總站作不少於連續三小時休息

啟德郵輪碼頭總站: 只於星期六/日提供服務，特別更次車長編定於九龍灣車廠及觀塘碼頭總站作不少於連續三小時休息

清水灣總站: 特別更次車長編定於鑽石山總站作不少於連續三小時休息

本人認為公司於過去數年積極改善車長工作地點的休息設施，除個別總站仍然處於運輸署審批程序外，其他總站車長休息設施足夠應付需要。

5(d) 2017年8月9日，公司於未獲房屋署批准下，自行於樂華總站安裝休息室。房屋署隨即於2017年8月10日將休息室圍封，要求於48小時內移走休息室，導致工會到場示威並成為社會關注事件，詳情見下列報導：

http://hk.on.cc/hk/bkn/cnt/news/20170810/mobile/bkn-20170810202440668-0810_00822_001.html

<https://www.hk01.com/%E7%A4%BE%E5%8D%80%E5%B0%88%E9%A1%8C/112218/%E5%9C%9F%E5%9C%B0%E5%95%8F%E9%A1%8C-%E7%89%9B%E9%A0%AD%E8%A7%92%E9%80%BE80%E5%B7%B4%E5%A3%AB%E5%8F%B8%E6%A9%9F%E5%85%B1%E7%94%A8%E4%B8%80%E5%80%8B%E7%AB%99%E9%95%B7%E5%AE%A4-%E8%A2%AB%E8%BF%AB%E8%B8%8E%E8%A1%97%E9%A3%9F%E9%A3%AF>

<https://www.hk01.com/01%E8%A7%80%E9%BB%9E/111371/01%E8%A7%80%E9%BB%9E-%E5%B7%B4%E5%A3%AB%E7%AB%99%E4%BC%91%E6%81%AF%E5%AE%A4%E8%A2%AB%E5%9C%8D%E5%B0%81-%E7%9B%A1%E8%A6%8B%E6%88%BF%E7%BD%B2%E5%AE%98%E5%83%9A%E4%BD%9C%E9%A2%A8>

<https://www.hk01.com/%E7%A4%BE%E6%9C%83%E6%96%B0%E8%81%9E/114578/%E6%88%90%E5%8A%9F%E7%88%AD%E5%8F%96-%E6%A8%82%E8%8F%AF%E5%B7%B4%E5%A3%AB%E7%AB%99%E8%BB%8A%E9%95%B7%E4%BC%91%E6%81%AF%E5%AE%A4%E6%9A>

[%AB%E7%8D%B2%E6%88%BF%E5%B1%8B%E7%BD%B2%E6%89%B9%E5%87%86](#)



汽車交通運輸業總工會

九巴分會靜坐抗議房屋署不人道
成功爭取擱置搬走車長休息室

汽車交通運輸業總工會九巴分會在
2017年8月11日於觀塘樂華邨巴士總站發

起靜坐行動，強烈不滿房屋署四年來對九巴車長的休息室需求完全無動於衷，罔顧巴士司機的休息及行車安全問題。工聯會立法會議員陸頌雄和何啟明，以及勞工顧問委員會勞方代表鄧家彪亦到場聲援。



樂華巴士總站的巴士線經常面對塞車問



題，因此司機在開工埋站期間，需要於站內設置簡單的車長休息室，讓他們有一些空間休息，以維持安全的行駛。九巴公司

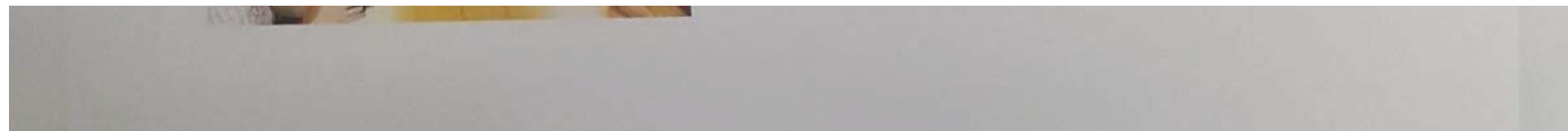
亦理解員工的情況，一直要求增設休息室，但房屋署不近人情，更在8月9日報警要求九巴公司於48小時內撤走車長休息室。

在靜坐行動結束後，分會代表隨即前往房屋署的樂華邨辦事處舉行抗議，並派出代表與署方人員舉行會議。在分會代表的努力爭取下，署方人員表示會擱置撤走休息室的決定，而署方也會在總部舉行緊急會議，商討向地政總署申請豁免，長遠地解決這個休息室的問題。



汽車交通運輸業總工會
九龍巴士分會

2017年8月11日



樂華總站有特別更次車長在總站作不少於連續三小時休息，上址休息室一直擺放及使用至2018年6月，並於同月正式獲批准使用。

6. 本人不會出席聽證會。

From: secretariat@irc-bus.gov.hk [<mailto:secretariat@irc-bus.gov.hk>]

Sent: Thursday, June 28, 2018 4:37 PM

To: Douglas Mak KB

Subject: 邀請向香港專營巴士服務獨立檢討委員會提供書面意見

麥先生：

就標題所述事宜，請見夾附信件，謝謝！

香港專營巴士服務獨立檢討委員會秘書處

Written reply to the Independent Review Committee on Hong Kong's Franchised Bus Service

02.07.2018 13:22

From: Douglas Mak KB <[REDACTED]>

To: secretariat@irc-bus.gov.hk <secretariat@irc-bus.gov.hk>

1 attachment: VID-20180630-WA0014.mp4

To the Independent Review Committee on Hong Kong's Franchised Bus Service

I, Mak Shing-bong, am a manager of the Kowloon Bay Bus Depot of KMB. In respect of the letter dated 28 June 2018 issued to me by the Independent Review Committee, I provide further information as follows:-

5(a) Since 2013, the management of the Company has made requests to the relevant government departments (the Transport Department or the Housing Authority) for applications for installation of common rooms and provision of water machines, air conditioners, fridges and microwave ovens at the main bus termini. Each common room can accommodate 5 to 6 bus captains for use simultaneously. If there is a large number of bus captains in some bus termini, applications for installing more than one common room can be made, for example, 2 common rooms are available for bus captains' use at Tseung Kwan O Hang Hau (North) Terminal. If the space allows, there will also be televisions, food and beverage vending machines, lockers available, e.g. the Kwun Tong Pier Terminal.

I never know that the Transport Department has issued any guideline on the installation of similar facilities. In fact, the basic facilities of the bus termini at the newly built housing estates do not necessarily include electricity supply and space may not be reserved for installing kiosks or common rooms for bus captains at the time of designing the floor plans, leading to the necessity of the bus company's applications (or urges) with the Transport Department or the Housing Authority for the above facilities. However, since the Housing Authority would need to catch up with the progress of constructing the housing estates, the above said applications are often put in the second place. However, the Transport Department at the same time requires KMB to provide bus services when the newly built housing estate is close to completion of construction, so that residents can inspect at the housing estate in advance. This has caused the bus company facing great difficulties in seeking for electricity supply at bus termini at the newly built housing estates for installing kiosks and common rooms for bus captains.

For example, in July 2017, KMB had to instruct China Light and Power Co Ltd to conduct road-digging in order to connect electricity supply at the new bus termini at Anderson Road On Tai Estate, On Tai (West) and On Tai (South) since the floor plan at the time of design did not reserve electricity supply and space for installing kiosks and common rooms for bus captains. However, the architects for the Housing Authority opposed to the road-digging since they were in rush to complete the construction work of certain buildings and roads, so that they could be handed over to the relevant government departments. On the contrary, since the newly built roads cannot be granted permission for road-digging work after the buildings are handed over (to the Housing Authority) by the architects and the adjacent roads (to the Highways Department), CLP must complete road-digging work before the handing over of the completed roads to the Highways Department.

Facing the above said controversial situations, after discussing for nearly half a year, in the end, provisional electricity supply was provided by the architects for the Housing Authority to the KMB kiosks and common rooms.

5(b) Currently, the Kowloon Bay Bus Depot manages 55 bus termini.

5(c) In respect of the above stated 55 bus depots, only 6 of them left are not installed with common rooms:-

Telford Garden Terminal: Already approved by the Transport Department, the common room will be installed in July 2018

Broadcast Drive Terminal: Applied to the Transport Department for installing the common room, under approval

Ngau Tau Kok Terminal: Applied to the Transport Department for installing the common room, under approval

Tsz Wan Shan Terminal (South) Terminal: Bus services are only provided during morning peak hours. No bus captains for the special services will stay at the terminal for not less than three hours' rest.

Kai Tak Cruise Terminal: Only provide services during Saturdays/ Sundays, bus captains for special services are allocated to rest for not less than 3 hours at Kowloon Bay Bus Depot and Kwun Tong Pier Terminal.

Clearwater Bay Terminal: I consider that the company has actively improved the rest facilities at the work locations of bus captains in the past few years. Except that certain

termini are still under the approval process of the Transport Department, rest facilities at other termini are sufficient for use.

5(d) On 9 August 2017, without the approval of the Housing Authority, the bus company installed a common room at Lok Wah Terminal. Subsequently, the common room was seized by the Housing Authority and was requested to be removed in 48 hours, leading to the protes by the Trade Union on site becoming a socially concerned incident. Details can be obtained from the following reports:-

http://hk.on.cc/hk/bkn/cnt/news/20170810/bkn-20170810202440668-0810_00822_001.html

<https://www.hk01.com/%E7%A4%BE%E5%8D%80%E5%B0%88%E9%A1%8C/112218/%E5%9C%9F%E5%9C%B0%E5%9C%B0%E5%95%8F%E9%A1%8C-%E7%89%9B%E9%A0%AD%E8%A7%92%E9%80%BE80%E5%B7%B4%E5%A3%AB%E5%8F%B8%E6%A9%9F%E5%85%B1%E7%94%A8%E4%B8%80%E5%80%8B%E7%AB%99%E9%95%B7%E5%AE%A4-%E8%A2%AB%E8%BF%AB%E8%B8%8E%E8%A1%97%E9%A3%9F%E9%A3%AF>

<https://www.hk01.com/01%E8%A7%80%E9%BB%9E/111371/01%E8%A7%80%E9%BB%9E-%E5%B7%B4%E5%B7%B4%E5%A3%AB%E7%AB%99%E4%BC%91%E6%81%AF%E5%AE%A4%E8%A2%AB%E5%9C%8D%E5%B0%81-%E7%9B%A1%E8%A6%8B%E6%88%BF%E7%BD%B2%E5%AE%98%E5%83%9A%E4%BD%9C%E9%A2%A8>

<https://hk01.com/%E7%A4%BE%E6%9C%83%E6%96%B0%E8%81%9E/114578/%E6%88%90%E5%8A%9F%E7%88%AD%E5%8F%96-%E6%A8%82%E8%8F%AF%E5%B7%B4%E5%A3%AB%E7%AB%99%E8%BB%8A%E9%95%B7%E4%BC%91%E6%81%AF%E5%AE%A4%E6%9A%AB%E7%8D%B2%E6%88%BF%E5%B1%8B%E7%BD%B2%E6%89%B9%E5%87%86>



Motor Transport Workers General Union

Kowloon Motor Bus Branch's silent protest opposing to and successfully setting aside the inhumane measure of the Housing Department to remove the bus captains' rest kiosk

On 11 August 2017, the Kowloon Motor Bus Branch of the Motor Transport Workers General Union commenced silent protest at Kwun Tong Lok Wah Estate Bus Terminus in strong opposition against the inaction by the Housing Department in the past 4 years towards the needs of the bus captains of Kowloon Bus for rest kiosk, disregarding the problems of the rest of bus captains and the safety of operation. Mr. Luk Chung-hung and Mr. Ho Kai-ming, Legislative Council Members of the Hong Kong Federation of Trade Unions, and Mr Tang Ka-piu, Bill, Employee Representative of the Labour Advisory Board, came to the scene in support.



The bus routes from the Lok Wah Estate Bus Terminus often face the problem of traffic congestion. Therefore when the bus captains are at the terminus when they are on duty, they need to have kiosk to take some rest by installing rest kiosk with basic structure at the terminus, to ensure safety of operation of the vehicle. Kowloon Motor Bus Company Limited also understands the situation with their employees and have been requesting for addition of rest kiosk. But the Housing Department is being unreasonable and has even

reported the case to the police on 9 August and requested Kowloon Motor Bus Company Limited to remove the bus captains' rest kiosk within 48 hours.

After the silent protest, representatives of the Branch then proceeded to the Housing Department's Lok Wah Estate Office to protest, and sent representatives to hold meeting with officers of the Department. After the strenuous effort of the representatives of the Branch, officers of the Department said that they would suspend the decision in removing the rest kiosk, and the Department would also hold an urgent meeting at its headquarter to discuss on applying to the Lands Department for exemption and to resolve the issues of the rest kiosk in the long term.



*[Stamp of the Motor Transport Workers
General Union K.M.B. BCH.]*

Motor Transport Workers General Union

KMB Branch

11 August 2017

There are bus captains with special shift having not less than a continuous 3-hour rest at the Lok Wah Terminus, the said rest kiosk had been placed and used until June 2018 and was officially approved for use in the same month.

6. I will not attend the hearing.

From: secretariat@irc-bus.gov.hk [<mailto:secretariat@irc-bus.gov.hk>]

Sent: Thursday, June 28, 2018 4:37 PM

To: Douglas Mak KB

Subject: Invitation of written submissions to the Independent Review Committee on Hong Kong's Franchised Bus Service

Dear Mr. Mak,

Please see the attached letter regarding the captioned matter. Thank you!

Secretariat, Independent Review Committee on Hong Kong's Franchised Bus Service

[This is a video]

[Link](#)

香港專營巴士服務
獨立檢討委員會

香港金鐘道66號
金鐘道政府合署21樓



Independent Review Committee on
Hong Kong's Franchised Bus Service

21/F, Queensway Government Offices,
66 Queensway, Hong Kong

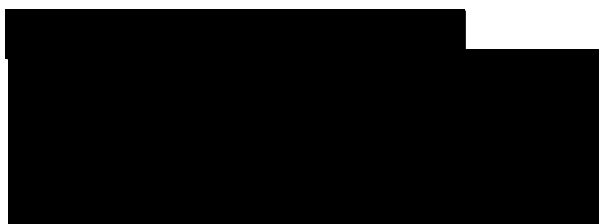
本函檔號 Our Ref.: CSO/IRC-BUS/CR/7-45/9

來函檔號 Your Ref.:

電話號碼 Tel No.: (852) 2867 5324

傳真號碼 Fax No.: (852) 3104 0254

4 June 2018



PERSONAL

Dear [REDACTED]

**Invitation for Written Submissions for Consideration by the
Independent Review Committee on Hong Kong's Franchised Bus Service**

On 9 May 2018, the Secretariat of the Independent Review Committee ("the Committee") received via facsimile a letter addressed to the Committee ("letter to the Committee") from "KMB and LWB Zone Heads". Attached to the letter was another letter ("the attached letter") addressed to the Chairman and Board Members of the Kowloon Motor Bus Company (1933) Limited ("KMB") and signed off by seven operations-in-charge of KMB and the Long Win Bus Company Limited.

We attach at the Annex a copy of the letters and invite you to confirm, if it is the case, that: (i) the letter to the Committee was sent out by you; and (ii) the attached letter is your statement and that both the letter to the Committee and the attached letter are true to the best of your knowledge and belief.

If so, we would invite you to indicate whether you will be willing to assist the Committee further in its work by providing further written submissions and/or attend hearing to deliver oral evidence with regard to the two letters mentioned above.

In addition to providing the response to the Committee, you may also provide information on other bus-safety related issues, including, for example, details and further elaborations on the improvements to facilities at bus stations, about which reference was made in the attached letter, and how such improvements helped with bus safety. In doing so, we would invite you to focus on matters of which you have personal knowledge but not on matters of which you do not have first hand knowledge.

We would be grateful if your response could reach the Secretariat of the Committee by **11 June 2018**. Please send the submission to:

By post: Secretariat to the Independent Review Committee on Hong Kong's Franchised Bus Service, 21/F, Queensway Government Offices, 66 Queensway, Admiralty, Hong Kong (*with the envelope specifying that the written submission is enclosed*); or

Via email: secretariat@irc-bus.gov.hk (*with the email heading specifying that the written submission is enclosed*)

Please be advised that the information provided in your response will be considered by the Committee in reviewing the matters it is directed to consider under the terms of reference of the Committee and in drawing up its recommendations. If necessary, the Committee may invite you to provide supplementary written submissions and/or to give oral evidence. All written submissions (including any annexes, appendices and attachments contained therein) and oral evidence will be treated as public information and, at the discretion of the Committee, may be published on the Committee's website.

Yours sincerely,



(CHAN Ping-fai, Peter)
Secretary, Independent Review Committee on
Hong Kong's Franchised Bus Service

Encl

香港專營巴士服務
獨立檢討委員會

香港金鐘道 66 號
金鐘道政府合署 21 樓



Independent Review Committee on
Hong Kong's Franchised Bus Service

21/F, Queensway Government Offices,
66 Queensway, Hong Kong

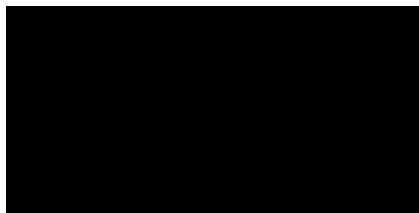
本函檔號 Our Ref.: CSO/IRC-BUS/CR/7-45/9

電話號碼 Tel No.: (852) 2867 5324

來函檔號 Your Ref.:

傳真號碼 Fax No.: (852) 3104 0254

(中文譯本)



私人信件



邀請你向香港專營巴士服務獨立檢討委員會提供書面意見

於 2018 年 5 月 9 日，香港專營巴士服務獨立檢討委員會（下稱“委員會”）的秘書處透過傳真接獲一份由“KMB and LWB Zone Heads”交予委員會的信函（下稱“給委員會的信函”）。有關信函夾附了另一份交予九龍巴士（一九三三）有限公司（下稱“九巴”）主席及董事局成員的信函（下稱“夾附的信函”），並由七位九巴及龍運巴士有限公司的車務主管簽署。

我們於本函附件附上了上述信函的副本，並邀請你確認以下陳述是否真確：（一）給委員會的信函是由你交予委員會；及（二）夾附的信函的內容是由你所作出的陳述，而且就你所知所信，給委員會的信函和夾附的信函的內容，均實真確。

如你確認以上陳述屬實，我們邀請你確認是否樂意就與上述兩份信函相關的事宜向委員會提供協助，包括進一步提供書面意見及／或出席聽證會以提供口述證供。

除了回應上述事宜外，你亦可就其他與巴士安全相關的事宜向委員會提供資料，例子包括夾附的信函中提及的站頭設施改善，以及有關改善如何對巴士安全有幫助。在向委員會提供資料時，我們邀請你集中於你曾親身經歷的事宜，而非你沒有第一手資料的事宜。

請於 **2018年6月11日**或之前向委員會秘書處提供你的回應，
並以下列方式將有關回應交予秘書處：

郵遞： 香港金鐘金鐘道 66 號
金鐘道政府合署 21 樓
香港專營巴士服務獨立檢討委員會秘書處
(請於信封上註明郵件為予委員會的書面意見)；
或

電子郵件： secretariat@irc-bus.gov.hk(請於電子郵件的標題
上註明郵件為予委員會的書面意見)

請注意委員會將會考慮書面意見所提供的資料，以按照其職權範圍檢視各項事宜及制訂建議。如有需要，委員會或會邀請貴工會以書面及／或口頭方式提供進一步資料。所有書面意見(包括書面意見中的任何附件、附錄及其他夾附的文件)以及口述證供均會被視作公開資料，而委員會或會將有關資料上載至委員會網頁。

(陳炳輝 )

香港專營巴士服務獨立檢討委員會秘書

2018 年 6 月 4 日

連附件

Annex 附件

Written Submission is enclosed

8th May 2018

Secretariat to the Independent Review Committee
on Hong Kong's Franchised Bus Service,
21/F, Queensway Government Offices,
66 Queensway, Admiralty, Hong Kong

Dear Sir/Madam,

We refer to the Testimonies submitted by various ex-management and operation staff of KMB (adduced as Item 4 and 5 of the Bundle for Miscellaneous) was being published to the public through IRC's website.

A letter written by Zone Heads of KMB and Long Win Bus Operations is attached for IRC's consideration. This letter was submitted to the Board of Directors of KMB on 18 March 2018 regarding the aforementioned Testimonies.

As we understand that this letter may be inserted into the bundle for the IRC hearing, and may probably be uploaded to the IRC website which is accessible by the general public, we humbly request that the names of the uploaded version would be redacted for privacy reason.

In February 2018, as known from media, a group of ex-staff of KMB alleged the current management on compromising safety for more profit, on poor management which leads to low morale & confusion in the company, and on unreasonable dismissal of experienced staff. We found the allegations to be untrue and groundless. Being a current member of staff in the company, we have written the attached letter to express our view and support to our management. This letter was only sent to the Board but not to the IRC as we regarded the allegations mentioned in the ex-staff report were solely internal matters and were nothing related to safety.

To our surprise, the report was being uploaded and disclosed to the public by the IRC yesterday. In response to this, we must stand up for the company and the management about the unfair and untrue allegations. We have to provide a clear picture to the IRC as well as to the public about the recent changes in KMB, which we see positive, to the Company, passengers and shareholders. Therefore, we have decided to submit our letter.

We have to point out that operating a franchise bus business is not easy. Nevertheless, our management is passionate and committed to serving KMB and the general public. They have been working very hard to improve KMB's bus service and, at the same time, to take care of all staff member in the company. Their courage is what the society should cherish rather than to criticize.

Thank you for your attention.

Yours sincerely,
KMB and LWB Zone Heads

致九龍巴士(一九三三)有限公司董事局主席及全體董事局成員：

最近公司成為傳媒焦點，有關九巴的新聞一則接一則，其中多份報章及媒體刊登了關於一班離職九巴員工的報導。文章指他們對公司相當不滿並對管理層作出各樣指控，管理層在記者及這班舊員工筆下好像成為了「十惡不赦」的罪人。究竟他們做錯了什麼？外界對公司的了解只靠片面之詞，對我們公平嗎？

他們已離職一段時間，並隻字不提公司近年的最新情況，原因是他們根本完全不了解我們所艱辛努力做的事情。作為公司的現職員工，突然覺得有責任發表我們的意見及對管理層表達支持。然而，我們不願浪費筆墨及時間評論報導的真確性，我們只想說出親眼所見的事實。

車務組是公司與前線同事的重要橋樑，我們留意到前線同事比以前開心了，工作環境的改善是主要原因。以前公司忽略了很多前線同事基本的需要，現屆管理層上任後，其中最迫切的任務是完善站頭設施，現在大部份已完成。同事在站頭有更理想的休息環境，對安全駕駛也有幫助。

以前，前線同事總覺得管理層高高在上，亦很少有機會與他們接觸。現屆管理層風格截然不同，他們親民並時常到車廠及站頭探望同事，聽取需要及意見。對於同事的需要，能配合的管理層一定盡力配合，前線同事完全感受被公司尊重及重視。

這幾年，我們親身見證著公司的轉變，現在的成就是我們一步一步努力的成績，的確是得來不易。無可否認，現在的工作量是比以前繁忙，我們卻覺得更有意義。因為大家的目標明確，亦知道管理層正與我們一同努力，希望公司成功。

要改變舊人事、舊制度、舊作風、舊方法，從來並非易事，而且「吃力不討好」，我們佩服一班管理層的勇氣及毅力。我們會繼續支持公司，努力工作。這是我們的一點點心聲，亦希望董事局能給予管理層更多的支持，謝謝！

九巴/龍運各區車務主管

荔枝角廠 -
九龍灣廠 -
九龍灣廠 -
沙田廠 -
屯門廠 -
屯門廠 -
龍運巴士 -

18-03-2018

Attn: Chairman of the Board of Directors and all Board Members of The Kowloon Motor Bus Company (1933) Limited

The company has recently become the media focus, and news about the KMB comes one after another. A number of newspapers and media published the news reports about a group of ex-staff of KMB. It is stated in the reports that the ex-staff members were very discontented with the company and made various accusations to the management. Based on the words of the press and these ex-staff members, the management team seems to have become a group of unpardonably wicked sinners. After all, what have they done wrong? The outsiders learn about the company merely through the words of one party. Is it fair to us?

They have resigned from the company for a substantial period of time, and they have not mention a word about the company's latest situation in recent years. The reason is that they do not understand our hard work at all. As the company's current staff members, we suddenly feel obliged to voice our opinions and to show support to the management. However, we do not want to waste our efforts and time for commenting on the authenticity of the news reports. We just want to tell the truth we have witnessed.

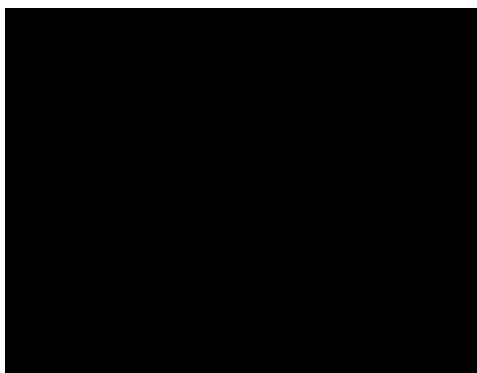
The Vehicle Group is an indispensable bridge connecting the company and the frontline colleagues. We notice that the frontline colleagues are happier than before, while the improvement of the work environment being the main reason. In the past, the company neglected the basic needs of many frontline colleagues. Since the current management took office, the most urgent mission is to advance the facilities at the stations, which have mostly been completed. The colleagues can now enjoy better environment for taking rest, which is also helpful for safe driving.

In the past, the frontline colleagues often found the management superior and they rarely had a chance to get in touch with them. On the other hand, the current management have a totally different style. They are amiable and often go to the depots and stop flags to visit the colleagues. They listen to our needs and opinions. They try their best to make accommodations to meet up to the colleagues' demands. The frontline colleagues feel totally respected and valued by the company.

Throughout these years, we have witnessed the changes of the company. The accomplishment that we have now is the result of our persistent hard work. It is indeed a hard-earned achievement. Undoubtedly, the current workload is heavier than before but we

find it more meaningful. Because we now have a clear goal and we know the management are working with us. We all hope for the company's success.

It is never easy to change the existing personnel, system, practice and procedures. It could be arduous but fruitless. We admire the courage and persistence of the management. We will continue to support the company and work hard. This is what we have in mind, and we hope the Board can give more support to the management. Thank you.



Operation Supervisors of Various
Districts of KMB/LWB

Lai Chi Kok Depot – [REDACTED]

Kowloon Bay Depot – [REDACTED]

Kowloon Bay Depot – [REDACTED]

Shatin Depot – [REDACTED]

Tuen Mun Depot – [REDACTED]

Tuen Mun Depot – [REDACTED]

LWB – [REDACTED]

18-03-2018

回覆香港專營巴士服務獨立檢討委員會秘書處提供書面意見之邀請

茲收到 貴會秘書處於 6 月 4 日的信件，有關本人較早前與另外六位九龍巴士（一九三三）有限公司（下稱“九巴”）及龍運巴士有限公司的車務主管一同所簽署，並交予九巴主席及董事局成員的信函；及其後將之夾附於給香港專營巴士服務獨立檢討委員會（下稱“委員會”）的信函之真確性。

本人謹此確認（一）給委員會的信函是由我們七位車務主管商議後再寄予委員會；及（二）夾附的信函的內容是本人所作出的陳述，而且就本人所知所信，給委員會的信函與夾附的信函的內容全屬真確無誤。同時，本人亦願意提供以下親身經歷作補充，唯九巴的內部運作實屬個別公司的營運管理事宜，如非牽涉到來函所要關於改善站頭設施及巴士安全的幫助資料，本人定當適當省略。

本人在職公共運輸行業期間正值油價高企，亦備受政府“以鐵路為骨幹”（即所謂保鐵政策）的公共交通政策所影響，九巴及龍運公司的營運景況艱難。當時九巴在任的董事總經理亦促成各新部門，其大方向就是削減資源。正如其他曾任職九巴職員的函件揭示，當時成立了安全及質量部（至今仍然存在並重組至培訓及服務質素管理部），部門只包括幾位行政人員，主要負責聯絡各廠的安全事宜。個人而言，該部門只負責拍攝了一兩段宣傳音樂錄影片段，與及參與日常安全會議等行政工作而已（各廠的安全會議其實一直存在），真正落實執行日常安全的監察工作，當然仍屬各廠的車務主管及運作部同事。

在我看來，過去九巴的施政方針及各部門各自為政的文化，才衍生至九巴一度積弱，亦左右了改善車長行車安全的發展進程。其中前任董事總經理曾設立車務及車輛配置部（該部門已“隨李澤昌先生到任後被解散”），部門的首要工作就是要配合區域性重組，重整各路線的行車與車長工作的時間表，在於有效地運用各路線的資源。事與願違，當時政府並未能決心解決公共交通資源錯配的問題，區域性重組各方案就因各地區人仕阻撓亦逐一被擱置。車務及車輛配置部的工作亦只能在不影響行走班次的情況下，透過路線之間的調配與重組，削減行走巴士的數目，從而達至減少油費與人手要求。當時主政的管理層也外聘不同國籍的專才效力該部，以求多方面爭取“減車”數字。部門亦會每月檢討各組員“減車”數目，每成功減免一部行走巴士，組員會更可獲得一部模型巴士作獎勵；先勿論外地的所謂專才對本港民生與交通的熟悉程度，在上述工作風氣低下，就每每出現因過度削減行車時間而導致行車時間不足、又或側重於減省車輛但增加了車長駕駛路線等。凡此種種，除混亂了車務及安全的主導性，更的而且確的影響車長的駕駛工作及安全。

在此，本人特別強調以車務運作部門為首的重要性，原因在於日常車務運作實在影響數千部每時每刻在路行走的巴士安危，也左右數千名車長每日面對的工作環境以至作息等問題。就以近年九巴堅持設置與更新各總站的員工休息室為例，實實在在給予車長一個每車程之間的休息空間放鬆精神，比起口號式提醒小心駕駛更為有效；又如站頭提供洗手間、增加總站的泊車數目也可減少車長額外的步行或交通時間，保留足夠精神和體力駕駛；著運輸署研究改善道路交通各種問題更好過事後檢討車長的行駛表現；而鼓勵車務管理職員多到總站與車長直接對話，亦好過埋首枱頭的行政工作...這些改革來得徹底，亦做得實際利落。

然而，本人真誠相信，香港專營巴士的服務的營運其實十分艱難，以上區域性重組的失敗例子亦只是冰山一角。運輸署甚或運房局每每採取被動的態度實在令公共運輸行業難以健康發展，更甚的是間接影響巴士行車安全：諸如在巴士總站設置員工休息室、在巴士總站設立巴士過夜泊車位置、擴闊路面巴士站的路面長度、增加/延長巴士專綫、調整行車時間而減少班次等等有利改善車長工作的措施，往往皆被地區諮詢制度所拖垮。“有幸”被傳媒報導過的樂華巴士總站的休息室如非因各方人士的發聲，最終都會因循式等候運輸署、房屋署、或地政署先釐清權責，再多番追討才有部門肯負責處理申請、然後又再經地區諮詢允許下才能安然放置。這樣區區一個員工休息室，便動輒幾年時間去處理申請；其他在報導之外大大小小的站頭設施改善措施，其實到最後早已不了了之。

相比之下，署方卻又不停收緊營辦商的靈活度，最新巴士失班率統計便是一例：以往失班率的計算方法乃全日所欠班次的總和所佔全日班次總和的百分比，但近年已收緊至全日劃分為四時段（即早上繁忙時段、繁忙時段之間、下午繁忙時段與下午繁忙時段後的時段）各佔的百分比。無疑，署方尤其對專營巴士業的監管角色日漸增強了，但改善巴士日常運作的舉措卻捉襟見肘，其運輸政策以至日常的行政制度早已倒退得老遠。說白一點，政府欲求商營企業的資源效率化去管理公共運輸服務是明智的，但背後的弱勢管治力量又不能駕馭專營巴士行業所需要的發展配套，到最後，就苦了每一位活在這制度底下的專營巴士業從業員。

誠如覆函開端表明，九巴的內部運作原屬個別公司的營運管理事宜，倘若 貴會認為本人的經歷尚有其他資料可供輔助，本人亦樂意以書面提供相關第一手資料予 貴會。

In reply to the Invitation of the Secretariat of the Independent Review Committee of Hong Kong's Franchised Bus Services to provide Written Submissions

I have received a letter dated 4 June from the Secretariat of the Committee in relation to the authenticity of the joint letter signed by myself and the other 6 operations-in-charge of Kowloon Motor Bus (1933) Limited ("KMB") and Long Win Bus Company Limited and delivered to the Chairman and Members of the Board of Directors of KMB; and the subsequent letter to the Independent Review Committee of Hong Kong's Franchised Bus Service (the "Committee") attaching the same.

I hereby confirm that (a) the letter to the Committee is sent to the Committee after the discussion between us, the 7 operations-in-charge; and (b) the contents of the letter attached therein are statements made by me, and to the best of my knowledge and belief. The letter to the Committee and the contents of the letter attached therein are true and correct. At the same time, I would also like to provide the following personal experience as supplemental information. Nevertheless, as the internal operations of KMB are matters in relation to the operation and management of an individual company, if it is not help information in relevant to the enhancement of facilities at the bus terminus and bus safety as stated in [the Committee's letter], I shall omit the same accordingly.

The operating conditions of KMB and LWB are difficult, as while I was being employed within the public transportation industry, it was the time when the oil price is on high, and it was also affected by the Government's public transportation policy, whereby it announced "to use railways as the backbone" (the so-called Railways Preservation policy). At that time, the incumbent Managing Director of KMB had set up various new departments, and the general direction was to cut cost. Just as revealed in the letters of other ex-employees of KMB, the Safety and Service Quality Department was established at that time (it still exists and is reorganized to be the Training and Service Quality Management Department), and the Department only had several administrative staff and was mainly responsible for liaising with the depots in relation to safety issues. From my personal point of view, the Department was only responsible for filming one or two promotional video clips, and participating in daily safety meetings and other administrative tasks (the depots safety meetings have always existed), and they would still have to rely on the operations-in-charge of each depot and staff of the operations department to conduct day-to-day safety inspections work.

From my personal point of view, the administration policy of KMB in the past and the culture where each department only minded their own business, led to KMB being weak. It had also affected the progress of development in improving the driving safety of bus captains. Among

them, the former Managing Director once set up the Operations and Bus Allocation Department (this Department has been dissolved after Mr. Roger Lee took office), and the primary task of the Department was to coordinate for regional reorganization and restructuring of bus routes and working hours of bus captains on each route, for the purpose effectively using the resources of each route. It had been counter-productive. At that time, the Government was not determined in resolving the problem of misallocation of public transport resources. Regional reorganization plans were shelved one by one because of the obstruction of people in various districts. The Operations and Bus Allocation Department can only reduce the number of buses to be used through the deployment and reorganization between routes without affecting the number of trips to be operated, thereby reducing fuel costs and manpower. At that time, the head of the management had employed various foreign experts of different nationalities to serve in the Department in order to strive to "reduce number of buses". The Department would also review the number of "reduction of buses" of each team member on a monthly basis. If a bus is successfully reduced or exempted from service, members of the team will be rewarded with a model bus; Not to mention how familiar the so-called professionals from foreign countries would be with the people's livelihood and transport in Hong Kong, but to work under the abovementioned low morale environment, it often happens that due to the excessive reduction of driving time, the driving time is insufficient, or the emphasis had been placed in reducing the number of buses but had increased the bus captain's driving routes, etc. All these did not only cause confusion of the dominance between operations and safety, but have also affected the driving duty and safety of bus captains.

Here, I particularly emphasize the importance of treating Bus Operations Department as the lead. The reason is that the daily operation of the bus service actually affects the safety of thousands of buses on the road at all times, and also affects working environment that thousands of bus captains have to face daily and the issue of rest, etc. For instance, in recent years KMB insisted on setting up or renewing the staff resting room in various bus terminuses, , it indeed provides the bus captains with space to relax between bus trips, which is more effective than any slogan that reminds bus captains to drive carefully; providing washrooms and increasing the number of parking spaces at the terminus can also reduce the extra walking or travel time for bus captains, so that they can have energy, mental and physical, to drive; it is better to urge the Transport Department to conduct study to improve various issues in relation to road traffic than to review the driving performance of the bus captains; and it is better to encourage the bus operations management staff to go to the bus terminus to directly talk to the bus captains than just focusing on their administrative work... These reforms have been done thoroughly and they have been done neatly in practice.

However, I verily believe that the operation of franchised bus services in Hong Kong is actually

very difficult. The failure of the aforesaid regional reorganization cases is only the tip of an iceberg. The passive attitude adopted by the Transport Department or even the Transport and Housing Bureau each time has made it difficult for the public transport industry to develop healthily, and worse still, it has indirectly affected bus safety. Improvement measures for the work of bus captains: such as the setting-up of employee resting rooms and overnight parking space at bus terminus, the widening of road length at bus stations on the road, the increase/extension of specified bus routes, the adjustment of the travel time and consequently the reduction of the frequencies etc., are often dragged down by the district consultation system. But for different sectors of people voicing out for the resting rooms of Lok Wah Bus Terminus which had been “luckily” reported by the press, we would have to wait for the Transport Department, the Housing Department, or the Lands Department to clarify their rights and responsibilities and would need to make repeated claims before a department would assume responsibility for processing the application, following which approval is required from district consultation in order for the resting rooms to be set up. As such, it will require several years to deal with an application for an employee resting room alone. Other unreported measures for the improvement of station facilities, whether large or small, may end up unattended.

On the contrary, the Administration has continuously tightened the operators’ flexibility. The latest statistics on the rate of lost trips are one example: the rate of lost trips in the past was calculated by the percentage of the total number of lost trips in the entire day. However, in recent years, it has been tightened to calculate the percentage of each of the four periods divided within a whole day (i.e. morning peak hours, between peak hours, afternoon peak hours and after afternoon peak hours). Undoubtedly, the Administration’s supervisory role on the franchised bus industry has been increasing, but measures to improve the daily operation of buses have been scarce. The transport policies and even the day-to-day administrative system have long been regressed. To be frank, it is wise for the government to seek to manage public transport services by adopting the resource efficiency model of commercial enterprises. However, its weak governing power cannot handle the development support required by the franchised bus industry. And in the end, the practitioners of franchised buses under this system will suffer.

As stated in the beginning of this reply letter, the internal operations of KMB are originally the operation and management matters of an individual company. If you consider that my experience may offer further information for assistance, I would be happy to provide the relevant first-hand information to you in writing.

香港專營巴士服務
獨立檢討委員會

香港金鐘道66號
金鐘道政府合署21樓



Independent Review Committee on
Hong Kong's Franchised Bus Service

21/F, Queensway Government Offices,
66 Queensway, Hong Kong

本函檔號 Our Ref.: CSO/IRC-BUS/CR/7-45/9

來函檔號 Your Ref.:

電話號碼 Tel No.: (852) 2867 5324

傳真號碼 Fax No.: (852) 3104 0254

[Redacted]
(電郵: [Redacted])

私人信件

[Redacted]:

邀請向香港專營巴士服務獨立檢討委員會提供書面意見

2018年6月11日的電郵收悉，我代表香港專營巴士服務獨立檢討委員會（委員會）感謝你確認委員會於2018年5月9日收到「KMB and LWB Zone Heads」的書面意見是就你所知所信作出真確無訛的陳述，以及向委員會提供進一步資料。

2. 你於2018年6月11日給委員會的意見書中第4段提及有關專營巴士行車時間的事項：

「…就每每出現因過度削減行車時間而導致行車時間不足、又或側重於減省車輛但增加了車長駕駛路線等。」
[註：隨函夾附上述電郵的副本以供參考。]

3. 意見書第5段亦提及休息設施的事項如下：

「就以近年九巴堅持設置與更新各總站的員工休息室為例，實實在在給予車長一個每車程之間的休息空間放鬆精神，比起口號式提醒小心駕駛更為有效；」

4. 接著於意見書第6段列舉以下例子：

「諸如在巴士總站設置員工休息室、在巴士總站設立巴士過夜泊車位置、擴闊路面巴士站的路面長度、增加／延長巴士專線、調整行車時間而減少班次等等有利改善車長工作的措施，往往皆被地區諮詢制度所拖垮。“有幸”被傳媒報導過的樂華巴士總站的休息室如非因各方人士的發聲，最終都會因循式等候運輸署、房屋署、或地政署先釐清權責，再多番追討才有部門肯負責處理申請、然後又再經地區諮詢允許下才能安然放置。這樣區區一個員工休息室，便動輒幾年時間去處理申請；其他在報導之外大大小小的站頭設施改善措施，其實到最後早已不了了之。」

5. 為協助委員會的檢討工作，請你就以上表述提交進一步資料，以回應下列問題：

專營巴士行車時間

- (a) 由九龍巴士(1933)有限公司（九巴）營運及九龍灣車廠管理的專營巴士路線中，請列明哪些曾出現「過度削減行車時間」、「行車時間不足」或「側重於減省車輛但增加了車長駕駛路線」。
- (b) 「過度削減行車時間」、「行車時間不足」或「側重於減省車輛但增加了車長駕駛路線」等情況有否對行車安全構成顯著隱憂，例如促使巴士車長超速駕駛；又或安排巴士車長駕駛更多條路線，但對熟習不同路線的培訓不足？如有，請舉例說明。

為巴士車長提供的休息設施

- (c) 就於巴士總站須為巴士車長提供的休息設施，九巴是否有任何現行標準或指引？如有，請提供現行標準或指引的詳情。你是否得悉由運輸署發出任何有關設置此類設施的指引？如有，請詳述。
- (d) 現時在九龍灣車廠的職權或管理範圍下有多少個巴士總站？

(e) 在上述 (d) 項提及的巴士總站中，不論根據九巴發出的任何標準或指引而定，又或據巴士車長或工會稱，目前是否有任何巴士總站為巴士車長提供的休息設施是不足？如有，請列明是哪個巴士總站，特別是提供給九巴聘任的特別更次巴士車長及／或那些在特別更次中需在總站作不少於連續三小時休息的巴士車長作休息之用。是否計劃於這些總站設置休息設施？

(f) 於樂華邨巴士總站設置休息設施的最新情況如何？在樂華邨巴士總站設置休息設施時，九巴在過往或現時面對什麼困難？「地區諮詢制度」如何對設置休息設施的建議構成負面影響？樂華邨巴士總站是否一個供九巴聘任的特別更次巴士車長休息及／或那些巴士車長在特別更次中需作不少於連續三小時休息的總站？

6. 除了回應上述問題外，委員會現正考慮邀請你及其他已應允進一步協助委員會工作的分區車務主管，以群組形式出席聽證會，向委員會提供口述證供。經委員會初步考慮，有關聽證會暫定於2018年7月14、16或17日舉行。就此，請告知你能否於這三個日期中任何一天出席聽證會。

7. 就上述第5段及第6段事項，請於 **2018年7月5日** 或之前以下列方式將有關回覆交予委員會秘書處：

郵遞： 香港金鐘金鐘道 66 號
金鐘道政府合署 21 樓
香港專營巴士服務獨立檢討委員會秘書處
(請於信封上註明郵件為予委員會的書面回覆)；或

電子郵件： secretariat@irc-bus.gov.hk (請於電子郵件的標題上註明郵件為予委員會的書面回覆)

8. 除了向委員會提供回覆外，你亦可就其他有關巴士安全事項提交資料。如提交資料，請集中那些你個人所知的事宜，而並非那些從他人獲知的資料。

9. 委員會將會考慮書面意見所提供的資料，以按照其職權範圍檢視各項事宜及制訂建議。如有需要，委員會或會邀請你以書面及／或口頭方式提供進一步資料。請注意所有書面意見（包括書面意見中的任何附件、附錄及其他夾附的文件）以及口述證供均會被視作公開資料，而委員會或會將有關資料上載至委員會網頁。

(陳炳輝 )

香港專營巴士服務獨立檢討委員會秘書

2018 年 6 月 28 日

☐ Urgent ☐ Return receipt ☐ Sign ☐ Encrypt ☐ Mark Subject Restricted ☐ Expand personal&public groups



有關回覆香港專營巴士服務獨立檢討委員會秘書處提供書面意見邀請 (來函檔號：CSO/IRC-BUS/CR/7-45/9)

11.06.2018 18:53

From:

To:

"secretariat@irc-bus.gov.hk" <secretariat@irc-bus.gov.hk>,

1 attachment



回覆香港專營巴士服務獨立檢討委員會秘書處提供書面意見之邀請.docx

香港專營巴士服務獨立檢討委員會秘書
陳炳輝先生：

上述檔號的來函已收悉，有關本人的詳細回覆請見附件。

本人明白附件中意見或會被視作公開資料，但本人要求保密此電郵、本人姓名與電郵地址等資料。謝謝！



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回覆香港專營巴士服務獨立檢討委員會秘書處提供書面意見之邀請

茲收到 貴會秘書處於 6 月 4 日的信件，有關本人較早前與另外六位九龍巴士（一九三三）有限公司（下稱“九巴”）及龍運巴士有限公司的車務主管一同所簽署，並交予九巴主席及董事局成員的信函；及其後將之夾附於給香港專營巴士服務獨立檢討委員會（下稱“委員會”）的信函之真確性。

本人謹此確認（一）給委員會的信函是由我們七位車務主管商議後再寄予委員會；及（二）夾附的信函的內容是本人所作出的陳述，而且就本人所知所信，給委員會的信函與夾附的信函的內容全屬真確無誤。同時，本人亦願意提供以下親身經歷作補充，唯九巴的內部運作實屬個別公司的營運管理事宜，如非牽涉到來函所要關於改善站頭設施及巴士安全的幫助資料，本人定當適當省略。

本人在職公共運輸行業期間正值油價高企，亦備受政府“以鐵路為骨幹”（即所謂保鐵政策）的公共交通政策所影響，九巴及龍運公司的營運景況艱難。當時九巴在任的董事總經理亦促成各新部門，其大方向就是削減資源。正如其他曾任職九巴職員的函件揭示，當時成立了安全及質量部（至今仍然存在並重組至培訓及服務質素管理部），部門只包括幾位行政人員，主要負責聯絡各廠的安全事宜。個人而言，該部門只負責拍攝了一兩段宣傳音樂錄影片段，與及參與日常安全會議等行政工作而已（各廠的安全會議其實一直存在），真正落實執行日常安全的監察工作，當然仍屬各廠的車務主管及運作部同事。

在我看來，過去九巴的施政方針及各部門各自為政的文化，才衍生至九巴一度積弱，亦左右了改善車長行車安全的發展進程。其中前任董事總經理曾設立車務及車輛配置部（該部門已“隨李澤昌先生到任後被解散”），部門的首要工作就是要配合區域性重組，重整各路線的行車與車長工作的時間表，在於有效地運用各路線的資源。事與願違，當時政府並未能決心解決公共交通資源錯配的問題，區域性重組各方案就因各地區人仕阻撓亦逐一被擱置。車務及車輛配置部的工作亦只能在不影響行走班次的情況下，透過路線之間的調配與重組，削減行走巴士的數目，從而達至減少油費與人手要求。當時主政的管理層也外聘不同國籍的專才效力該部，以求多方面爭取“減車”數字。部門亦會每月檢討各組員“減車”數目，每成功減免一部行走巴士，組員會更可獲得一部模型巴士作獎勵；先勿論外地的所謂專才對本港民生與交通的熟悉程度，在上述工作風氣低下，就每每出現因過度削減行車時間而導致行車時間不足、又或側重於減省車輛但增加了車長駕駛路線等。凡此種種，除混亂了車務及安全的主導性，更的而且確的影響車長的駕駛工作及安全。

在此，本人特別強調以車務運作部門為首的重要性，原因在於日常車務運作實在影響數千部每時每刻在路行走的巴士安危，也左右數千名車長每日面對的工作環境以至作息等問題。就以近年九巴堅持設置與更新各總站的員工休息室為例，實實在在給予車長一個每車程之間的休息空間放鬆精神，比起口號式提醒小心駕駛更為有效；又如站頭提供洗手間、增加總站的泊車數目也可減少車長額外的步行或交通時間，保留足夠精神和體力駕駛；著運輸署研究改善道路交通各種問題更好過事後檢討車長的行駛表現；而鼓勵車務管理職員多到總站與車長直接對話，亦好過埋首枱頭的行政工作...這些改革來得徹底，亦做得實際利落。

然而，本人真誠相信，香港專營巴士的服務的營運其實十分艱難，以上區域性重組的失敗例子亦只是冰山一角。運輸署甚或運房局每每採取被動的態度實在令公共運輸行業難以健康發展，更甚的是間接影響巴士行車安全：諸如在巴士總站設置員工休息室、在巴士總站設立巴士過夜泊車位置、擴闊路面巴士站的路面長度、增加/延長巴士專線、調整行車時間而減少班次等等有利改善車長工作的措施，往往皆被地區諮詢制度所拖垮。“有幸”被傳媒報導過的樂華巴士總站的休息室如非因各方人士的發聲，最終都會因循式等候運輸署、房屋署、或地政署先釐清權責，再多番追討才有部門肯負責處理申請、然後又再經地區諮詢允許下才能安然放置。這樣區區一個員工休息室，便動輒幾年時間去處理申請；其他在報導之外大大小小的站頭設施改善措施，其實到最後早已不了了之。

相比之下，署方卻又不停收緊營辦商的靈活度，最新巴士失班率統計便是一例：以往失班率的計算方法乃全日所欠班次的總和所佔全日班次總和的百分比，但近年已收緊至全日劃分為四時段（即早上繁忙時段、繁忙時段之間、下午繁忙時段與下午繁忙時段後的時段）各佔的百分比。無疑，署方尤其對專營巴士業的監管角色日漸增強了，但改善巴士日常運作的舉措卻捉襟見肘，其運輸政策以至日常的行政制度早已倒退得老遠。說白一點，政府欲求商營企業的資源效率化去管理公共運輸服務是明智的，但背後的弱勢管治力量又不能駕馭專營巴士行業所需要的發展配套，到最後，就苦了每一位活在這制度底下的專營巴士業從業員。

誠如覆函開端表明，九巴的內部運作原屬個別公司的營運管理事宜，倘若 貴會認為本人的經歷尚有其他資料可供輔助，本人亦樂意以書面提供相關第一手資料予 貴會。

28 June 2018

香港專營巴士服務
獨立檢討委員會

香港金鐘道66號
金鐘道政府合署21樓



Independent Review Committee on
Hong Kong's Franchised Bus Service

21/F, Queensway Government Offices,
66 Queensway, Hong Kong

本函檔號 Our Ref.: CSO/IRC-BUS/CR/7-45/9

電話號碼 Tel No.: (852) 2867 5324

來函檔號 Your Ref.:

傳真號碼 Fax No.: (852) 3104 0254

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
(Email: [REDACTED])

PERSONAL

Dear Mr [REDACTED]

**Invitation for Written Submissions for Consideration by the
Independent Review Committee on Hong Kong's Franchised Bus Service**

The Committee thanks you for your reply dated 11 June 2018 confirming that the written submission received by the Committee on 9 May 2018 from "KMB and LWB Zone Heads" is your statement and that the statement is true to the best of your knowledge and belief, as well as provide further written submissions to the Committee.

2. In your written submission to the Committee dated 11 June 2018, paragraph 4 mentions issues relating to the journey time for franchised buses:

"...it often happens that due to the excessive reduction of driving time, the driving time is insufficient, or the emphasis had been placed in reducing the number of buses but had increased the bus captain's driving routes, etc."

[Note: a copy of the letter is attached for reference.]

3. The submission also discusses the issue of resting facilities in paragraph 5 which states that:

"For instance, in recent years KMB insisted on setting up or renewing the staff resting room in various bus terminuses, it indeed provides the bus captains with space to relax between bus trips, which is more effective than any slogan that reminds bus captains to drive carefully."

4. An example was then given in the paragraph 6:

“Improvement measures for the work of bus captains: such as the setting-up of employee resting rooms and overnight parking space at bus terminus, the widening of road length at bus stations on the road, the increase/extension of specified bus routes, the adjustment of the travel time and consequently the reduction of the frequencies etc, are often dragged down by the district consultation system. But for different sectors of people voicing out for the resting rooms of Lok Wah Bus Terminus which had been “luckily” reported by the press, we would have to wait for the Transport Department, the Housing Department, or the Lands Department to clarify their rights and responsibilities and would need to make repeated claims before a department would assume responsibility for processing the application, following which approval is required from district consultation in order for the resting rooms to be set up. As such, it will require several years to deal with an application for an employee resting room alone. Other unreported measures for the improvement of station facilities, whether large or small, may end up unattended.”

5. The Committee would be assisted if you could provide further information regarding the above statement by addressing the following questions:

On journey time for franchised buses

- (a) Please identify the franchised bus routes operated by the Kowloon Motor Bus Company (1933) Limited (KMB) and under the management of the Kowloon Bay Depot where there has been “excessive reduction of driving time” or where “the driving time is insufficient” or “the emphasis had been placed in reducing the number of buses but had increased the bus captain's driving routes”.
- (b) Have the issues of “excessive reduction of driving time”, “the driving time is insufficient” or “the emphasis had been placed in reducing the number of buses but had increased the bus captain's driving routes” led to any discernable safety concerns, for example bus captains being incentivised to overspeed or bus captains receiving insufficient route training as they had to drive on an increased number of routes? If so, please provide examples.

On resting facilities for bus captains

- (c) Are there any existing standards or guidelines issued by KMB on the resting facilities for bus captains that should be provided at bus stations? If so, please provide details of the existing standards or guidelines. Are you aware of any guidelines issued by the Transport Department on the provision of such facilities? If so, please describe them.

- (d) How many bus stations are currently under the purview or management of the Kowloon Bay Depot?
- (e) Of the bus stations mentioned in (d) above, are there currently any bus terminii that are considered to have insufficient resting facilities, as determined under any standards or guidelines issued by KMB or as alleged by bus captains or unions otherwise, for bus captains? If so, please identify them, *in particular those at which bus captains employed by KMB operating on special shifts commence and/or spend their rest breaks* of no less than three or more consecutive hours in the course of working a special shift. Are there plans to provide resting facilities at these bus stations?
- (f) What is the latest position of the provision of resting facilities at the Lok Wah Bus Terminus? What are/were the difficulties faced by KMB in providing resting facilities at the Lok Wah Bus Terminus? How was the proposal for provision of resting facilities negatively affected by “the district consultation system”? Is the Lok Wah Bus Terminus a bus terminus at which bus captains employed by KMB operating on special shifts commence and/or spend their rest breaks of no less than three or more consecutive hours in the course of working a special shift?

6. In addition to addressing the questions above, the Committee is also considering inviting you and other Zone Heads who have agreed to provide further assistance to the Committee to one of the coming hearings to deliver oral evidence to the Committee as a group. The tentative dates being considered by the Committee are 14, 16 or 17 July 2018. In this connection, the Committee would like to invite you to indicate whether you will be available to attend a hearing on one of these three days.

7. I should be grateful if the response to paragraphs 5 and 6 above could reach the Secretariat of the Committee by **5 July 2018**. Please send the submission to:

By post: Secretariat to the Independent Review Committee on Hong Kong’s Franchised Bus Service, 21/F, Queensway Government Offices, 66 Queensway, Admiralty, Hong Kong (*with the envelope specifying that the written submission is enclosed*); or

Via email: secretariat@irc-bus.gov.hk (*with the email heading specifying that the written submission is enclosed*)

8. In addition to providing the response to the Committee, you may also provide information on other bus-safety related issues. If you do so, we would invite you to focus on matters of which you have personal knowledge but not on matters of which you do not have first hand knowledge.

9. Please be advised that the information provided in your response will be considered by the Committee in reviewing the matters it is directed to consider under the terms of reference of the Committee and in drawing up its recommendations. If necessary, the Committee may invite you to provide supplementary written submissions and/or to give oral evidence. All written submissions (including any annexes, appendices and attachments contained therein) and oral evidence will be treated as public information and, at the discretion of the Committee, may be published on the Committee's website.

Yours sincerely,

(CHAN Ping-fai, Peter)
Secretary, Independent Review Committee on
Hong Kong's Franchised Bus Service

Encl

就獨立檢討委員會於 2018 年 6 月 28 日向本人發出之信件，本人謹進一步提交資料如下：

有關專營巴士行車時間

綜觀而言，個別路線即使編制上出現行車時間不足的情況，九巴的營運部門或當值站長、督察級職員亦會按實際的行車狀況去調整班次，從而盡量給予車長足夠的休息時間。事實上，香港的汽車道路交通一直欠缺長遠規劃，每日每條路線的行車時間亦因為各式道路擠塞問題出現很大的落差。換而言之，編制上的行車時間足夠與否其實並非絕對影響行車安全；相反，運輸署對各路線失班率的寬容度則成為重要的因素。誠如早前回覆所述，政府加緊失班率統計方法便阻止了我們外勤人員靈活地去調整班次(因在各細分時段內的班次必要開出，否則便當失班論)，繼而影響車長休息時間。

此外，過往改善行車時間的建議亦曾因為運輸署的反對而擱置，其一例子便是近年九巴 9 號路線的改道建議。九巴 9 號路線過往連接坪石至尖沙咀碼頭，因應新公營房屋(彩福邨)落成，9 號路線便在 2011 年增設特別班次由彩福邨開往尖沙咀碼頭。當時九巴已預備彩福邨全數入伙後，將 9 號路線重組並延長至彩福巴士總站，有效服務當區居民外亦期望減少停駛使用率低的分站及路段，縮短不必要的行車時間。事與願為，運輸署最後因應地方諮詢結果在 2018 年批准的方案竟是：延長該路線至彩福邨同時並不能減少停駛的分站及路段，更不可減少服務班次！當然各地區代表確實有權為所屬群體發聲，但運輸署毫無責任感的決定便將原有的改善方案被扭曲成非失班就減少行車時間的兩難局面。

為巴士車長提供的休息設施

據本人理解，運輸署對提供予車長的休息設施並沒有任何標準或指引。惟在有電力供應的情況下，九巴都會提供飲用水機、空調、雪櫃及微波爐等標準設施。其實在空間許可的情況下，我們都希望能進一步提供睡眠區域(如觀頭碼巴士總站)予車長作安靜休息。

現時全九龍灣車廠共管理 55 個巴士總站，當中有 3 個總站即德福花園、廣播道及牛頭角仍有需要設置休息室，其中德福花園將會 7 月內安裝(無需運輸署審批)、另外 2 個則待運輸署審批。

就樂華巴士總站而言，因該站亦有特別更次車長在總站作不少於連續三小時休息，所以在未獲房屋署批准下，我們早於 2017 年 8 月 9 日自行在樂華巴士總站安裝休息室供車長使用。可惜隨即便被房屋署於翌日將休息室圍封，並要求於 48 小時內將之移走。最後，該休息室一直擺放及使用至 2018 年 6 月始獲正式批准。

作為車務管理人員，我們非常清楚車長們駕駛一部乘載過百人巴士所承受的壓力。可幸的是現屆管理層矢志改善各總站的設施，在過去三年間車長的待遇與工作環境亦已漸漸改善。即便如此，要徹底改善車長工作環境亦必定要運輸署政策所配合，更要重新檢視署方無論在決策、與其超然於個別群體利益的身份作出裁判的責任。否則，所有有關改善車長工作環境、甚或改善交通的方案，都只會成為署方所否決的工作記錄而已。

In response to the letter dated 28 June 2018 from the Independent Review Committee, I hereby submit further information as follow.

Regarding the Journey Time of Franchised Buses

Generally speaking, even in the case of insufficient journey time of individual bus routes under the existing establishment, operation department, bus regulators on duty or inspectors of KMB will redeploy the bus trips in accordance with the actual traffic conditions in order to give bus captains sufficient rest time as far as possible. In fact, the land transport in Hong Kong has all long been lacking long-term planning, and the journey time of each route varies greatly everyday due to different traffic congestion problems. In other words, whether the established journey time is sufficient would not absolutely have implications for driving safety. In contrast, the Transport Department's high tolerance for the rate of lost trips for each bus route is the crucial factor. As stated in my earlier submission, the Government has tightened the calculation of the rate of lost trips of buses and this prevents our field staff from flexibly redeploying the bus trips (since the bus trips at different time frames must proceed accordingly, otherwise it will be treated as lost trip), thereby affecting the rest time of bus captains.

In addition, some suggestions for the improvement of journey time were shelved due to objection by the Transport Department and one example was the proposed change of route for KMB Route No. 9 in recent years. In the past, KMB Route No. 9 route connected Ping Shek to Star Ferry Bus Terminus. To tie in with the completion of a new public housing estate (Choi Fook Estate), special bus trips from Choi Fook Estate to Star Ferry Bus Terminus had been added to Route No. 9 in 2011. At that time, KMB had a plan that upon completion of intake for the entire Choi Fook Estate, it would rationalise Route No. 9 and extend its journey to Choi Fook Bus Terminus in order to serve the residents at that region effectively and to reduce/exclude those bus stops and road sections with low utilisation rates for shortening the journey time. Nonetheless, the final arrangement approved by the Transport Department in 2018 based on the results in district consultation was to extend the bus route to Choi Fook Bus Terminus but at the same time to keep the coverage of bus stops and road sections as well as the number of bus trips unchanged! Local representatives of course had the right to voice out their views on behalf of their represented parties, but the Transport Department's irresponsible decision did distort the original improvement plan and lead to a dilemma between lost trips or reduction in journey time.

Provision of Rest Facilities for Bus Captains

According to my understanding, the Transport Department has not set any standards or guidelines on the rest facilities provided for bus captains. Nevertheless, if electricity supply is available, KMB will provide water dispenser, air-conditioning, refrigerator, microwave oven, etc. as standard facilities. In fact, if there is sufficient space, we also hope that sleeping area (such as in Kwun Tong Ferry Bus Terminus) can be further provided for bus captains to rest quietly.

Currently, the Kowloon Bay Depot manages 55 bus termini, and it is required to provide rest room at three these termini (i.e. Telford Gardens, Broadcast Drive and Ngau Tau Kok Termini). The rest room for the Telford Gardens Terminus will be set up in July 2018 (Transport Department's approval is not required), while the other two are pending the Transport

Department's approval.

For the Lok Wah Bus Terminus, since there are special shift bus captains who need to rest in the terminus for not less than three consecutive hours, we set up a rest room for bus captains at the Lok Wah Bus Terminus on 9 August 2017 by ourselves without the Housing Department's approval. Unfortunately, the Housing Department immediately enclosed the rest room on the next day and requested its removal within 48 hours. Finally, the rest room has continued to remain there and be used before formal approval was obtained in June 2018.

As a bus operation management staff, we fully understand the pressure faced by bus captains when driving a bus carrying more than 100 passengers. Fortunately, the current management are determined to improve the facilities of bus termini and the treatment as well as working environment of bus captains improved progressively in the past three years. Even so, any fundamental improvement in bus captains' working environment should be matched by the Transport Department's policy. Moreover, the Transport Department's responsibilities for making decisions and judgements in a position detached from individual groups' interests should be reviewed. Otherwise, all the plans for improving the working environment of bus captains or the road traffic will only become the Department's work records of rejected proposals.

香港專營巴士服務
獨立檢討委員會

香港金鐘道 66 號
金鐘道政府合署 21 樓



Independent Review Committee on
Hong Kong's Franchised Bus Service

21/F, Queensway Government Offices,
66 Queensway, Hong Kong

本函檔號 Our Ref.: CSO/IRC-BUS/CR/7-45/9

來函檔號 Your Ref.:

電話號碼 Tel No.: (852) 2867 5324

傳真號碼 Fax No.: (852) 3104 0254

4 June 2018

Mr Yeung Chun-wai (楊晉瑋先生)
Operations-in-Charge
Kowloon Motor Bus Tuen Mun Depot
1 Kin Wing Street
Tuen Mun

PERSONAL

Dear Mr YEUNG,

**Invitation for Written Submissions for Consideration by the
Independent Review Committee on Hong Kong's Franchised Bus Service**

On 9 May 2018, the Secretariat of the Independent Review Committee ("the Committee") received via facsimile a letter addressed to the Committee ("letter to the Committee") from "KMB and LWB Zone Heads". Attached to the letter was another letter ("the attached letter") addressed to the Chairman and Board Members of the Kowloon Motor Bus Company (1933) Limited ("KMB") and signed off by seven operations-in-charge of KMB and the Long Win Bus Company Limited.

We attach at the Annex a copy of the letters and invite you to confirm, if it is the case, that: (i) the letter to the Committee was sent out by you; and (ii) the attached letter is your statement and that both the letter to the Committee and the attached letter are true to the best of your knowledge and belief.

If so, we would invite you to indicate whether you will be willing to assist the Committee further in its work by providing further written submissions and/or attend hearing to deliver oral evidence with regard to the two letters mentioned above.

In addition to providing the response to the Committee, you may also provide information on other bus-safety related issues, including, for example, details and further elaborations on the improvements to facilities at bus stations, about which reference was made in the attached letter, and how such improvements helped with bus safety. In doing so, we would invite you to focus on matters of which you have personal knowledge but not on matters of which you do not have first hand knowledge.

We would be grateful if your response could reach the Secretariat of the Committee by **11 June 2018**. Please send the submission to:

By post: Secretariat to the Independent Review Committee on Hong Kong's Franchised Bus Service, 21/F, Queensway Government Offices, 66 Queensway, Admiralty, Hong Kong (*with the envelope specifying that the written submission is enclosed*); or

Via email: secretariat@irc-bus.gov.hk (*with the email heading specifying that the written submission is enclosed*)

Please be advised that the information provided in your response will be considered by the Committee in reviewing the matters it is directed to consider under the terms of reference of the Committee and in drawing up its recommendations. If necessary, the Committee may invite you to provide supplementary written submissions and/or to give oral evidence. All written submissions (including any annexes, appendices and attachments contained therein) and oral evidence will be treated as public information and, at the discretion of the Committee, may be published on the Committee's website.

Yours sincerely,



(CHAN Ping-fai, Peter)
Secretary, Independent Review Committee on
Hong Kong's Franchised Bus Service

Encl

香港專營巴士服務
獨立檢討委員會

香港金鐘道 66 號
金鐘道政府合署 21 樓



Independent Review Committee on
Hong Kong's Franchised Bus Service

21/F, Queensway Government Offices,
66 Queensway, Hong Kong

本函檔號 Our Ref.: CSO/IRC-BUS/CR/7-45/9

來函檔號 Your Ref.:

電話號碼 Tel No.: (852) 2867 5324

傳真號碼 Fax No.: (852) 3104 0254

(中文譯本)

屯門建榮街 1 號
九龍巴士屯門車廠
車務主管
楊晉瑋先生

私人信件

楊先生:

邀請你向香港專營巴士服務獨立檢討委員會提供書面意見

於 2018 年 5 月 9 日，香港專營巴士服務獨立檢討委員會（下稱“委員會”）的秘書處透過傳真接獲一份由“KMB and LWB Zone Heads”交予委員會的信函（下稱“給委員會的信函”）。有關信函夾附了另一份交予九龍巴士（一九三三）有限公司（下稱“九巴”）主席及董事局成員的信函（下稱“夾附的信函”），並由七位九巴及龍運巴士有限公司的車務主管簽署。

我們於本函附件附上了上述信函的副本，並邀請你確認以下陳述是否真確：（一）給委員會的信函是由你交予委員會；及（二）夾附的信函的內容是由你所作出的陳述，而且就你所知所信，給委員會的信函和夾附的信函的內容，均實真確。

如你確認以上陳述屬實，我們邀請你確認是否樂意就與上述兩份信函相關的事宜向委員會提供協助，包括進一步提供書面意見及／或出席聽證會以提供口述證供。

除了回應上述事宜外，你亦可就其他與巴士安全相關的事宜向委員會提供資料，例子包括夾附的信函中提及的站頭設施改善，以及有關改善如何對巴士安全有幫助。在向委員會提供資料時，我們邀請你集中於你曾親身經歷的事宜，而非你沒有第一手資料的事宜。

請於 **2018年6月11日** 或之前向委員會秘書處提供你的回應，
並以下列方式將有關回應交予秘書處：

郵遞： 香港金鐘金鐘道 66 號
金鐘道政府合署 21 樓
香港專營巴士服務獨立檢討委員會秘書處
(請於信封上註明郵件為予委員會的書面意見)；
或

電子郵件： secretariat@irc-bus.gov.hk (請於電子郵件的標題
上註明郵件為予委員會的書面意見)

請注意委員會將會考慮書面意見所提供的資料，以按照其職權範圍檢視各項事宜及制訂建議。如有需要，委員會或會邀請貴工會以書面及／或口頭方式提供進一步資料。所有書面意見（包括書面意見中的任何附件、附錄及其他夾附的文件）以及口述證供均會被視作公開資料，而委員會或會將有關資料上載至委員會網頁。

(陳炳輝



)

香港專營巴士服務獨立檢討委員會秘書

2018 年 6 月 4 日

連附件

Annex 附件

Written Submission is enclosed

8th May 2018

Secretariat to the Independent Review Committee
on Hong Kong's Franchised Bus Service,
21/F, Queensway Government Offices,
66 Queensway, Admiralty, Hong Kong

Dear Sir/Madam,

We refer to the Testimonies submitted by various ex-management and operation staff of KMB (adduced as Item 4 and 5 of the Bundle for Miscellaneous) was being published to the public through IRC's website.

A letter written by Zone Heads of KMB and Long Win Bus Operations is attached for IRC's consideration. This letter was submitted to the Board of Directors of KMB on 18 March 2018 regarding the aforementioned Testimonies.

As we understand that this letter may be inserted into the bundle for the IRC hearing, and may probably be uploaded to the IRC website which is accessible by the general public, we humbly request that the names of the uploaded version would be redacted for privacy reason.

In February 2018, as known from media, a group of ex-staff of KMB alleged the current management on compromising safety for more profit, on poor management which leads to low morale & confusion in the company, and on unreasonable dismissal of experienced staff. We found the allegations to be untrue and groundless. Being a current member of staff in the company, we have written the attached letter to express our view and support to our management. This letter was only sent to the Board but not to the IRC as we regarded the allegations mentioned in the ex-staff report were solely internal matters and were nothing related to safety.

To our surprise, the report was being uploaded and disclosed to the public by the IRC yesterday. In response to this, we must stand up for the company and the management about the unfair and untrue allegations. We have to provide a clear picture to the IRC as well as to the public about the recent changes in KMB, which we see positive, to the Company, passengers and shareholders. Therefore, we have decided to submit our letter.

We have to point out that operating a franchise bus business is not easy. Nevertheless, our management is passionate and committed to serving KMB and the general public. They have been working very hard to improve KMB's bus service and, at the same time, to take care of all staff member in the company. Their courage is what the society should cherish rather than to criticize.

Thank you for your attention.

Yours sincerely,
KMB and LWB Zone Heads

致九龍巴士(一九三三)有限公司董事局主席及全體董事局成員：

最近公司成為傳媒焦點，有關九巴的新聞一則接一則，其中多份報章及媒體刊登了關於一班離職九巴員工的報導。文章指他們對公司相當不滿並對管理層作出各樣指控，管理層在記者及這班舊員工筆下好像成為了「十惡不赦」的罪人。究竟他們做錯了什麼？外界對公司的了解只靠片面之詞，對我們公平嗎？

他們已離職一段時間，並隻字不提公司近年的最新情況，原因是他們根本完全不了解我們所艱辛努力做的事情。作為公司的現職員工，突然覺得有責任發表我們的意見及對管理層表達支持。然而，我們不願浪費筆墨及時間評論報導的真確性，我們只想說出親眼所見的事實。

車務組是公司與前線同事的重要橋樑，我們留意到前線同事比以前開心了，工作環境的改善是主要原因。以前公司忽略了很多前線同事基本的需要，現屆管理層上任後，其中最迫切的任務是完善站頭設施，現在大部份已完成。同事在站頭有更理想的休息環境，對安全駕駛也有幫助。

以前，前線同事總覺得管理層高高在上，亦很少有機會與他們接觸。現屆管理層風格截然不同，他們親民並時常到車廠及站頭探望同事，聽取需要及意見。對於同事的需要，能配合的管理層一定盡力配合，前線同事完全感受被公司尊重及重視。

這幾年，我們親身見證著公司的轉變，現在的成就是我們一步一步努力的成績，的確是得來不易。無可否認，現在的工作量是比以前繁忙，我們卻覺得更有意義。因為大家的目標明確，亦知道管理層正與我們一同努力，希望公司成功。

要改變舊人事、舊制度、舊作風、舊方法，從來並非易事，而且「吃力不討好」，我們佩服一班管理層的勇氣及毅力。我們會繼續支持公司，努力工作。這是我們的一點點心聲，亦希望董事局能給予管理層更多的支持，謝謝！

九巴/龍運各區車務主管

荔枝角廠 -
九龍灣廠 -
九龍灣廠 -
沙田廠 -
屯門廠 -
屯門廠 -
龍運巴士 -

18-03-2018

Attn: Chairman of the Board of Directors and all Board Members of The Kowloon Motor Bus Company (1933) Limited

The company has recently become the media focus, and news about the KMB comes one after another. A number of newspapers and media published the news reports about a group of ex-staff of KMB. It is stated in the reports that the ex-staff members were very discontented with the company and made various accusations to the management. Based on the words of the press and these ex-staff members, the management team seems to have become a group of unpardonably wicked sinners. After all, what have they done wrong? The outsiders learn about the company merely through the words of one party. Is it fair to us?

They have resigned from the company for a substantial period of time, and they have not mention a word about the company's latest situation in recent years. The reason is that they do not understand our hard work at all. As the company's current staff members, we suddenly feel obliged to voice our opinions and to show support to the management. However, we do not want to waste our efforts and time for commenting on the authenticity of the news reports. We just want to tell the truth we have witnessed.

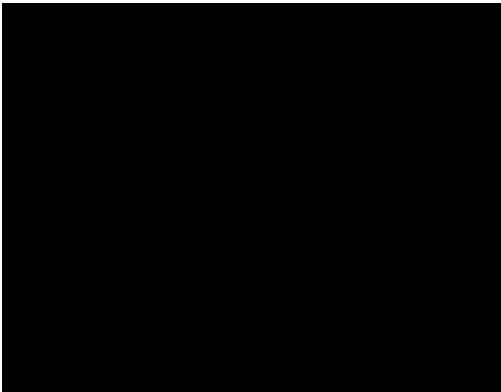
The Vehicle Group is an indispensable bridge connecting the company and the frontline colleagues. We notice that the frontline colleagues are happier than before, while the improvement of the work environment being the main reason. In the past, the company neglected the basic needs of many frontline colleagues. Since the current management took office, the most urgent mission is to advance the facilities at the stations, which have mostly been completed. The colleagues can now enjoy better environment for taking rest, which is also helpful for safe driving.

In the past, the frontline colleagues often found the management superior and they rarely had a chance to get in touch with them. On the other hand, the current management have a totally different style. They are amiable and often go to the depots and stop flags to visit the colleagues. They listen to our needs and opinions. They try their best to make accommodations to meet up to the colleagues' demands. The frontline colleagues feel totally respected and valued by the company.

Throughout these years, we have witnessed the changes of the company. The accomplishment that we have now is the result of our persistent hard work. It is indeed a hard-earned achievement. Undoubtedly, the current workload is heavier than before but we

find it more meaningful. Because we now have a clear goal and we know the management are working with us. We all hope for the company's success.

It is never easy to change the existing personnel, system, practice and procedures. It could be arduous but fruitless. We admire the courage and persistence of the management. We will continue to support the company and work hard. This is what we have in mind, and we hope the Board can give more support to the management. Thank you.



Operation Supervisors of Various
Districts of KMB/LWB

Lai Chi Kok Depot – [REDACTED]

Kowloon Bay Depot – [REDACTED]

Kowloon Bay Depot – [REDACTED]

Shatin Depot – [REDACTED]

Tuen Mun Depot – [REDACTED]

Tuen Mun Depot – [REDACTED]

LWB – [REDACTED]

18-03-2018

☐ Urgent ☐ Return receipt ☐ Sign ☐ Encrypt ☐ Mark Subject Restricted ☐ Expand personal&public groups



**RE: Invitation for Written Submissions for Consideration by the
Independent Review Committee on Hong Kong's Franchised Bus Service**

12.06.2018 00:20

From: Kelvin Yeung TM [REDACTED]
To: "secretariat@irc-bus.gov.hk" <secretariat@irc-bus.gov.hk>,

Dear Mr. Chan,

Further to your letter dated 4 June 2018 with your ref. CSO/IRC-BUS/CR/7-45/9, I hereby confirm that the submission to the Committee with the attached letter addressed to the Chairman and Board of Directors of KMB was sent by the 7 Zone Heads of KMB/LWB and I am one of them. I also certify that both of the letters are true to the best of my knowledge and belief.

The reason of sending the letter to the Board and the Committee was to express our view about the unfair comments towards our Management after the Tai Po accident in February 2018. Being a company with 85 year of history, certainly there were a lot of outdated and unpractical practices in KMB. Our current management which heads by Mr. Roger Lee has carried out measures to reform KMB aiming to remediate the company's past practice. With the recent improvements in KMB, the practices are proven to be effective.

Operating a Franchise Bus Service in Hong Kong is not as easy as what Hong Kong citizens would have thought. The business model of Hong Kong Bus company is, in any case, the worst compare to other countries and regions such as London, Singapore, Taiwan, etc. The introduction of "railway as backbone policy" by the HKSAR Government had made the business and operation of bus companies even more difficult. KMB is a privately owned company, but at the same time under heavy regulation by the Government, which is not an appropriate business structure in any case.

Labour is also a problem for franchised bus company in Hong Kong. After the tragic Tai Po accident in February, there were Labour unions from different bus companies initiating petitions, industrial actions and even strike to fight for their own benefit. Their requests were relatively simple - reducing the driving hours while increasing the take home salary, which is a perfect reasonable request from a worker of any working industry. Nevertheless, I do not see any correlated reasons between the occurrence of the tragedy and the salary package and fringe benefit of a bus captain. Such industrial actions had been transformed to political issues and bus captains were taking advantages from the tragedy and using the current messy political circumstance as their bargaining chips for their own benefit.

As a transportation professional, I welcome the Committee to look into the matters relating to Hong Kong Franchised Bus Service and I am looking forward to the result of this Review which should be constructive and be able to improve the Franchised Bus system in Hong Kong. Last but not the least, may I also take this opportunity to suggest the Committee to compare the overall transportation system between Hong Kong and some other countries and regions.

If necessary and upon your request, I will consider to provide further information to the Committee to facilitate the review.

Regards,
Kelvin Yeung

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香港專營巴士服務
獨立檢討委員會

香港金鐘道 66 號
金鐘道政府合署 21 樓



Independent Review Committee on
Hong Kong's Franchised Bus Service

21/F, Queensway Government Offices,
66 Queensway, Hong Kong

本函檔號 Our Ref.: CSO/IRC-BUS/CR/7-45/9

來函檔號 Your Ref.:

電話號碼 Tel No.: (852) 2867 5324

傳真號碼 Fax No.: (852) 3104 0254

28 June 2018

Mr YEUNG Chun-wai, Kelvin
Operations-in-Charge
Kowloon Motor Bus Tuen Mun Depot
1 Kin Wing Street
Tuen Mun
New Territories

PERSONAL

Dear Mr YEUNG,

**Invitation for Written Submissions for Consideration by the
Independent Review Committee on Hong Kong's Franchised Bus Service**

The Committee thanks you for your reply dated 12 June 2018 confirming that the written submission received by the Committee on 9 May 2018 from "KMB and LWB Zone Heads" is your statement and that the statement is true to the best of your knowledge and belief.

2. In the letter addressed to the Chairman of the Board of Directors and all Board Members of the Kowloon Motor Bus Company (1933) Limited (KMB) dated 18 March 2018 that was attached to your written submission to the Committee of 9 May 2018, paragraph 3 states that:

"Since the current management took office, the most urgent mission is to advance the facilities at the stations, which have mostly been completed."

[Note: a copy of the letter is attached for reference.]

3. The Committee would be assisted if you could provide further information regarding the above statement by addressing the following questions:

- (a) Are there any existing standards or guidelines issued by KMB on the resting facilities for bus captains that should be provided at bus stations? If so, please provide details of the existing standards or guidelines. Are you aware of any guidelines issued by the Transport Department on the provision of such facilities? If so, please describe them.

- (b) How many bus stations are currently under the purview or management of the Tuen Mun Depot?
- (c) Of the bus stations mentioned in (b) above, are there currently any bus stations that are considered to have insufficient resting facilities, as determined under any standards or guidelines, if any, of KMB or as alleged by bus captains or unions? If so, please identify them, *in particular those at which bus captains employed by KMB operating on special shifts commence and/or spend their rest breaks* of no less than three or more consecutive hours in the course of working a special shift.
- (d) Are there plans to provide resting facilities at the bus stations identified in (c) above? Have there been difficulties in providing or improving the resting facilities at these bus stations? If so, what are these difficulties and has the assistance been sought from the Transport Department or other relevant government departments?
- (e) Please provide examples of the advancements to resting facilities at bus stations that have been made since “the current management took office”.

4. In addition to addressing the questions above, the Committee is also considering inviting you and other Zone Heads who have agreed to provide further assistance to the Committee to one of the coming hearings to deliver oral evidence to the Committee as a group. The tentative dates being considered by the Committee are 14, 16 or 17 July 2018. In this connection, the Committee would like to invite you to indicate whether you will be available to attend a hearing on one of these three days.

5. I should be grateful if the response to paragraphs 3 and 4 above could reach the Secretariat of the Committee by **5 July 2018**. Please send the submission to:

By post: Secretariat to the Independent Review Committee on Hong Kong's Franchised Bus Service, 21/F, Queensway Government Offices, 66 Queensway, Admiralty, Hong Kong (*with the envelope specifying that the written submission is enclosed*); or

Via email: secretariat@irc-bus.gov.hk (*with the email heading specifying that the written submission is enclosed*)

6. In addition to providing the response to the Committee, you may also provide information on other bus-safety related issues. If you do so, we would invite you to focus on matters of which you have personal knowledge but not on matters of which you do not have first hand knowledge.

7. Please be advised that the information provided in your response will be considered by the Committee in reviewing the matters it is directed to consider under the terms of reference of the Committee and in drawing up its recommendations. If necessary, the Committee may invite you to provide supplementary written submissions and/or to give oral evidence. All written submissions (including any annexes, appendices and attachments contained therein) and oral evidence will be treated as public information and, at the discretion of the Committee, may be published on the Committee's website.

Yours sincerely,



(CHAN Ping-fai, Peter)
Secretary, Independent Review Committee on
Hong Kong's Franchised Bus Service

Encl

Written Submission is enclosed

8th May 2018

Secretariat to the Independent Review Committee
on Hong Kong's Franchised Bus Service,
21/F, Queensway Government Offices,
66 Queensway, Admiralty, Hong Kong

Dear Sir/Madam,

We refer to the Testimonies submitted by various ex-management and operation staff of KMB (adduced as Item 4 and 5 of the Bundle for Miscellaneous) was being published to the public through IRC's website.

A letter written by Zone Heads of KMB and Long Win Bus Operations is attached for IRC's consideration. This letter was submitted to the Board of Directors of KMB on 18 March 2018 regarding the aforementioned Testimonies.

As we understand that this letter may be inserted into the bundle for the IRC hearing, and may probably be uploaded to the IRC website which is accessible by the general public, we humbly request that the names of the uploaded version would be redacted for privacy reason.

In February 2018, as known from media, a group of ex-staff of KMB alleged the current management on compromising safety for more profit, on poor management which leads to low morale & confusion in the company, and on unreasonable dismissal of experienced staff. We found the allegations to be untrue and groundless. Being a current member of staff in the company, we have written the attached letter to express our view and support to our management. This letter was only sent to the Board but not to the IRC as we regarded the allegations mentioned in the ex-staff report were solely internal matters and were nothing related to safety.

To our surprise, the report was being uploaded and disclosed to the public by the IRC yesterday. In response to this, we must stand up for the company and the management about the unfair and untrue allegations. We have to provide a clear picture to the IRC as well as to the public about the recent changes in KMB, which we see positive, to the Company, passengers and shareholders. Therefore, we have decided to submit our letter.

We have to point out that operating a franchise bus business is not easy. Nevertheless, our management is passionate and committed to serving KMB and the general public. They have been working very hard to improve KMB's bus service and, at the same time, to take care of all staff member in the company. Their courage is what the society should cherish rather than to criticize.

Thank you for your attention.

Yours sincerely,
KMB and LWB Zone Heads

致九龍巴士(一九三三)有限公司董事局主席及全體董事局成員：

最近公司成為傳媒焦點，有關九巴的新聞一則接一則，其中多份報章及媒體刊登了關於一班離職九巴員工的報導。文章指他們對公司相當不滿並對管理層作出各樣指控，管理層在記者及這班舊員工筆下好像成為了「十惡不赦」的罪人。究竟他們做錯了什麼？外界對公司的了解只靠片面之詞，對我們公平嗎？

他們已離職一段時間，並隻字不提公司近年的最新情況，原因是他們根本完全不了解我們所艱辛努力做的事情。作為公司的現職員工，突然覺得有責任發表我們的意見及對管理層表達支持。然而，我們不願浪費筆墨及時間評論報導的真確性，我們只想說出親眼所見的事實。

車務組是公司與前線同事的重要橋樑，我們留意到前線同事比以前開心了，工作環境的改善是主要原因。以前公司忽略了很多前線同事基本的需要，現屆管理層上任後，其中最迫切的任務是完善站頭設施，現在大部份已完成。同事在站頭有更理想的休息環境，對安全駕駛也有幫助。

以前，前線同事總覺得管理層高高在上，亦很少有機會與他們接觸。現屆管理層風格截然不同，他們親民並時常到車廠及站頭探望同事，聽取需要及意見。對於同事的需要，能配合的管理層一定盡力配合，前線同事完全感受被公司尊重及重視。

這幾年，我們親身見證著公司的轉變，現在的成就是我們一步一步努力的成績，的確是得來不易。無可否認，現在的工作量是比以前繁忙，我們卻覺得更有意義。因為大家的目標明確，亦知道管理層正與我們一同努力，希望公司成功。

要改變舊人事、舊制度、舊作風、舊方法，從來並非易事，而且「吃力不討好」，我們佩服一班管理層的勇氣及毅力。我們會繼續支持公司，努力工作。這是我們的一點點心聲，亦希望董事局能給予管理層更多的支持，謝謝！

九巴/龍運各區車務主管

荔枝角廠 -
九龍灣廠 -
九龍灣廠 -
沙田廠 -
屯門廠 -
屯門廠 -
龍運巴士 -

18-03-2018

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**RE: Invitation for Written Submissions for Consideration by the
Independent Review Committee on Hong Kong 's Franchised Bus Service**

09.07.2018 20:33

From: Kelvin Yeung TM [REDACTED]
To: "secretariat@irc-bus.gov.hk" <secretariat@irc-bus.gov.hk>,

Dear Sir / Madam,

In response to your letter dated 28 June 2018 regarding "Invitation for Written Submissions for Consideration by the Independent Review Committee on Hong Kong's Franchised Bus Service", I hereby submit the following information for your reference.

3(a)

I am not aware of any guidelines issued by the Transport Department on the provision of rest facilities for bus captains. Nevertheless, KMB has established its own standard and guideline for rest facilities, details are listed as follows:

Size:

There are two types of standard rest kiosk for bus captains

Type A: 1.10m x 1.46m = 1.606 sq.m (or 17 sq. ft.)

Type B: 1.88m x 2.46m = 4.62 sq.m (or 50 sq.ft.)

Besides, KMB would also tailor-made kiosks to cater special need of individual bus terminus.

Standard provisions:

Each kiosk is equipped with table, chairs, air-conditioner, refrigerator, microwave, drinking water, USB Charger and Mosquito Killer Light (if applicable)

KMB does not have the autonomy in placing rest kiosks in bus termini. The provision of rest kiosks is subject to the approval of relevant Government authorities or the landlord if it is located in a private place.

3(b)

Tuen Mun Depot is responsible for the bus operations of Tuen Mun, Yuen Long and Tin Shui Wai. There are 31 bus termini with full day bus services currently under the management of Tuen Mun Depot.

3(c)

For Tuen Mun Depot, the following locations required improvement on resting facilities,

- So Kwut Wat Bus Terminus: newly introduced on 25 June 2018, provision of a Type A kiosk and chemical toilet is needed. (application to TD is pending since 13

June 2018)

- Po Tin Estate – in order to cater more bus captains for resting, conversions of a Type A Kiosk to Type B Kiosk is necessary (Application to Housing Authority is pending since 24 Nov 2014)
- Lung Mun Oasis: in order to cater more bus captains for resting, conversion of a Type A Kiosk to Type B Kiosk is necessary (Application to GPA is pending since 12 July 2017)

3(d)

As the Zone Head for Tuen Mun Depot, I understand that having rest facilities in bus terminus is vital to all our bus captains. Unfortunately, as an operator and user of the terminus, we do not have the autonomy and direct control on the provision of such resting facilities. The provision is entirely subject to the approval of Government authorities or the landlord if it is located in a private place. For example, the rest kiosk at the new Bus Terminus in So Kwun Wat (as mentioned in 3c) will be provided after obtaining the approval from Transport Department and connecting the electricity by CLP. In the meantime, KMB had placed a temporary kiosk and chemical toilet near the bus terminus for the sake of bus captains' needs.

The most difficult situation which KMB encounters is that the applications usually required an unreasonable period of time for approval. According to the past record, the lead time for application of provision of kiosk can be more than 5 years. Below are the some examples for IRC's reference.

- Yau Oi (South) – placement of a new Type B Kiosk
Application Date: 16 July 2010
Approval Date: 5 August 2015
- Kin Sang – conversion of Type A Kiosk to Type B
Application Date: 4 September 2015
Approval Date: 29 September 2017
- Po Tin Estate – conversion of Type A Kiosk to Type B
Application Date: 24 Nov 2014
Approval Date: Pending
- Lung Mun Oasis – conversion of Type A Kiosk to Type B
Application Date: 12 July 2017
Approval Date: Pending

3(e)

As mentioned in 3(a), standard provisions in rest kiosks including table, chairs, air-conditioner, refrigerator, microwave, drinking water, USB Charger and Mosquito

Killer Light. USB charger and mosquito killer light are newly added provisions by the current management. Yet, the additional provisions in rest kiosks are not the key achievements of the current management that I wanted to point out. In fact, since our current management in office, KMB had increased the number of rest kiosks and staff toilets in our bus termini, which was highly appreciated and welcomed by bus captains.

In the past, the management had rarely paid attention to staff rest facilities, most of the bus termini had substandard or even no rest facilities and toilets for bus captains. Getting the kiosks and toilets approved was never an easy task for KMB as it involves prolonged application procedures. Nevertheless, the current management is determined and believed that such facilities are essential to our bus captains. As far as I know, under the current management, KMB had set up over 80 new kiosks, renovated over 40 old kiosks and upgrades nearly 50 toilets in bus terminus of different districts between 2015 and 2018.

Being in the company for nearly 10 years, I have gone through the time of both old and new management, I could tell that KMB is progressing in a positive direction. The current management is taking KMB on a right track. Indeed, before the Tai Po accident, numerous of Hong Kong Citizens and KMB staff agreed that our service has improved; hence this is not fair to discredit the company by a single incident. We have to admit, as a company with over 85 years of history, there are problems in KMB that yet to be resolved. I believe with the strong determination and execution ability of our current management, KMB will continue to improve and to better serve the Hong Kong Community.

Once again, as a transportation professional, I am looking forward to the result of the Committee. Should the Committee would like to have additional information from me, I am happy to attend the hearing section. I believe the Committee will be able to provide valuable insight to enhance Franchised Bus Service in Hong Kong.

Regards,
Kelvin Yeung

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The Independent Review Committee on Hong Kong 's Franchised Bus Service - Provision of Further Information 📎

04.09.2018 10:50

From: Secretariat/IRC-BUS/HKSARG
To: Kelvin Yeung TM [REDACTED],
Bcc: Peter PF CHAN/IRC-BUS/HKSARG@CSO, Justin YT TO/IRC-BUS/HKSARG@CSO, Iris MK YU/IRC-BUS/HKSARG@CSO, Lawrence KT CHUNG/IRC-BUS/HKSARG@CSO, Anna SM AU/IRC-BUS/HKSARG@CSO

Dear Kelvin,

Thanks for attending the hearing on 1 August 2018 and giving oral evidence to the Committee in respect of safety-related matters pertaining to the franchised bus service in Hong Kong.

As requested by the Committee at the above hearing, I should be grateful if you would provide us with further information on those matters as set out below -

- (a) Sample of report in Tuen Mun Depot recording the bus captain's driving behaviour [page 69 lines 8-10 and page 73 lines 9-23 of the transcript of the hearing held on 1 August (www.irc-bus.gov.hk/eng/pdf/transcript20180801.pdf)]; and
- (b) The timetable of driving duty in relation to bus route no. 258D, in particular the start time, the rest time, the end time of the split shift duty [page 96 lines 1-14 of the hearing held on 1 August (www.irc-bus.gov.hk/eng/pdf/transcript20180801.pdf)].

Your response by 10 September 2018 (Monday) will be much appreciated. Thank you.

Secretariat, Independent Review Committee on Hong Kong's Franchised Bus Service

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To:

Cc:

Bcc:

Subject: Fw: IRC - Provision of Further Information (LGD Ref: 4429)

----- Forwarded by Justin YT TO/IRC-BUS/HKSARG on 10/09/2018 12:01 -----

From: Henry Leung LGD [REDACTED]
To: "yt_to@irc-bus.gov.hk" <yt_to@irc-bus.gov.hk>,
Cc: Kelvin Yeung TM [REDACTED]
Date: 10/09/2018 11:58
Subject: IRC - Provision of Further Information (LGD Ref: 4429)

Dear Justin,

We refer to IRC's email below to Mr. Kelvin Yeung dated 4 September 2018.

As discussed in our earlier phone conversation today, since the documents requested in your email below are internal documents of the company, we are now submitting the same to you for and on behalf of the company, in the capacity of Mr. Yeung's employer:-

(a) Speeding/Acceleration/Harsh Braking reports generated for the week of 10 July 2018 for Tuen Mun Depot (with the filed under "Employee No." redated); and

(b) Active Duty Sheets of Bus Route No. 258D

Thank you.

Best regards,
Henry Leung
Head of Legal Department
The Kowloon Motor Bus Company (1933) Ltd.
Direct [REDACTED]

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Sudden Acceleration (accumulated more than 60 mins)				10.7.18 - 16.7.18 (both dates inclusive)
No.	Employee No.	Depot	Sudden Acceleration accumulated (Acceleration > 4kph/s)	No. of appearance since 28.3.2017
13		屯門廠	61 mins	1

This English translation is for reference only. In the event of any discrepancy between the Chinese original and this English translation, the Chinese original shall prevail.

本英文譯本僅供參考。如英文譯本與中文原文有任何差異，以中文原文為準。

Sudden Acceleration (accumulated more than 60 mins)				10.7.18 - 16.7.18 (both dates inclusive)
No.	Employee No.	Depot	Sudden Acceleration accumulated (Acceleration > 4kph/s)	No. of appearance since 28.3.2017
13		Tuen Mun Depot	61 mins	1

Harsh Brake (accumulated more than 4 mins)				10.7.18 - 16.7.18 (both dates inclusive)
No.	Employee No.	Depot	Harsh Brake accumulated (Deceleration > 8kph/s)	No. of appearance since 28.3.2017
18		屯門廠	4 mins	1
39		屯門廠	4 mins	6

This English translation is for reference only. In the event of any discrepancy between the Chinese original and this English translation, the Chinese original shall prevail.

本英文譯本僅供參考。如英文譯本與中文原文有任何差異，以中文原文為準。

Harsh Brake (accumulated more than 4 mins)				10.7.18 - 16.7.18 (both dates inclusive)
No.	Employee No.	Depot	Harsh Brake accumulated (Deceleration > 8kph/s)	No. of appearance since 28.3.2017
18		Tuen Mun Depot	4 mins	1
39		Tuen Mun Depot	4 mins	6

Speeding (accumulated more than 4 mins)

10.7.18 - 16.7.18 (both dates inclusive)

No.	Employee No.	Depot	Speeding accumulated (speed > 75kph)	No. of appearance since 28.3.2017
1		屯門廠	29 mins	34
2		屯門廠	15 mins	30
3		屯門廠	14 mins	15
6		屯門廠	12 mins	26
9		屯門廠	9 mins	13
10		屯門廠	9 mins	19
12		屯門廠	9 mins	6
13		屯門廠	8 mins	8
15		屯門廠	8 mins	11
16		屯門廠	8 mins	20
17		屯門廠	8 mins	16
18		屯門廠	8 mins	6
22		屯門廠	7 mins	19
23		屯門廠	7 mins	7
24		屯門廠	7 mins	8
28		屯門廠	6 mins	1
29		屯門廠	6 mins	11
30		屯門廠	6 mins	9
33		屯門廠	6 mins	10
36		屯門廠	5 mins	1
37		屯門廠	5 mins	4
38		屯門廠	5 mins	6
39		屯門廠	5 mins	23
40		屯門廠	5 mins	8
41		屯門廠	5 mins	2
43		屯門廠	5 mins	2
44		屯門廠	4 mins	2
45		屯門廠	4 mins	9
46		屯門廠	4 mins	2
47		屯門廠	4 mins	6
48		屯門廠	4 mins	4
49		屯門廠	4 mins	1
50		屯門廠	4 mins	7
51		屯門廠	4 mins	3
52		屯門廠	4 mins	15
53		屯門廠	4 mins	3
54		屯門廠	4 mins	4
55		屯門廠	4 mins	7
57		屯門廠	4 mins	5
59		屯門廠	4 mins	3
60		屯門廠	4 mins	2
62		屯門廠	4 mins	2
65		屯門廠	4 mins	8

This English translation is for reference only. In the event of any discrepancy between the Chinese original and this English translation, the Chinese original shall prevail.

本英文譯本僅供參考。如英文譯本與中文原文有任何差異，以中文原文為準。

Speeding (accumulated more than 4 mins)		10.7.18 - 16.7.18 (both dates inclusive)		
No.	Employee No.	Depot	Speeding accumulated (speed > 75kph)	No. of appearance since 28.3.2017
1		Tuen Mun Depot	29 mins	34
2		Tuen Mun Depot	15 mins	30
3		Tuen Mun Depot	14 mins	15
6		Tuen Mun Depot	12 mins	26
9		Tuen Mun Depot	9 mins	13
10		Tuen Mun Depot	9 mins	19
12		Tuen Mun Depot	9 mins	6
13		Tuen Mun Depot	8 mins	8
15		Tuen Mun Depot	8 mins	11
16		Tuen Mun Depot	8 mins	20
17		Tuen Mun Depot	8 mins	16
18		Tuen Mun Depot	8 mins	6
22		Tuen Mun Depot	7mins	19
23		Tuen Mun Depot	7 mins	7
24		Tuen Mun Depot	7 mins	8
28		Tuen Mun Depot	6 mins	1
29		Tuen Mun Depot	6 mins	11
30		Tuen Mun Depot	6 mins	9
33		Tuen Mun Depot	6 mins	10
36		Tuen Mun Depot	5 mins	1
37		Tuen Mun Depot	5 mins	4
38		Tuen Mun Depot	5 mins	6
39		Tuen Mun Depot	5 mins	23
40		Tuen Mun Depot	5 mins	8
41		Tuen Mun Depot	5 mins	2
43		Tuen Mun Depot	5 mins	2
44		Tuen Mun Depot	4 mins	2
45		Tuen Mun Depot	4 mins	9
46		Tuen Mun Depot	4 mins	2
47		Tuen Mun Depot	4 mins	6
48		Tuen Mun Depot	4 mins	4
49		Tuen Mun Depot	4 mins	1
50		Tuen Mun Depot	4 mins	7
51		Tuen Mun Depot	4 mins	3
52		Tuen Mun Depot	4 mins	15
53		Tuen Mun Depot	4 mins	3
54		Tuen Mun Depot	4 mins	4
55		Tuen Mun Depot	4 mins	7
57		Tuen Mun Depot	4 mins	5
59		Tuen Mun Depot	4 mins	3
60		Tuen Mun Depot	4 mins	2
62		Tuen Mun Depot	4 mins	2
65		Tuen Mun Depot	4 mins	8

九龍巴士(一九三三)有限公司

<工作表>: 258D

星期一至五

生效日期:30/07/2018

車長崗位	258D-20-1	258D-20-2	258D-21-1	258D-21-2	258D-22-1	258D-22-2	258D-23-1	258D-23-2	258D-24-1	258D-24-2	258D-01-1	258D-01-2
屬廠	九龍灣廠	九龍灣廠	九龍灣廠	九龍灣廠	九龍灣廠	九龍灣廠	九龍灣廠	九龍灣廠	九龍灣廠	九龍灣廠	屯門廠	屯門廠
開工	九廠0505	藍鐵1636	九廠0525	藍鐵1510	九廠0525	藍鐵1540	九廠0559	藍鐵1610	九廠0554	廣田1515	屯廠0455	寶田1200

[illegible]

收工	藍鐵1636	藍鐵0209	藍鐵1510	藍鐵0141	藍鐵1540	藍鐵0124	藍鐵1610	九廠0108	廣田1440	九廠0048	寶田1509	屯廠2202
工時(補水仔數)	1131(7.5)	0933(3.5)	0945(4.0)	1031(5.5)	1015(5.0)	0944(4.0)	1011(5.0)	0858(2.0)	0846(2.0)	0933(3.5)	1014(5.0)	1002(4.5)

九龍巴士(一九三三)有限公司

星期一至五

生效日期:30/07/2018

車長崗位	258D-02-1	258D-02-2	258D-03-1	258D-03-2	258D-04-1	258D-04-2	258D-05-1	258D-05-2	258D-06-1	258D-06-2	258D-L01-2	258D-L02-2
屬廠	屯門廠	屯門廠	屯門廠	屯門廠	屯門廠	屯門廠	屯門廠	屯門廠	屯門廠	屯門廠	屯門廠	屯門廠
開工	屯廠0515	寶田1509	屯廠0505	南廠1510	屯廠0525	寶田1624	屯廠0515	寶田1545	屯廠0535	南廠1625	寶田1430	南廠1545

[illegible]

收工	寶田1430	南廠0109	寶田1545	南廠0139	寶田1705	屯廠0151	寶田1624	寶田0157	寶田1613	總天0230	南廠0007	南廠0054
工時(補水仔數)	0915(3.0)	1000(4.0)	1040(5.5)	1029(5.0)	1140(7.5)	0927(3.0)	1109(6.5)	1012(5.0)	1038(5.5)	1005(4.5)	0937(3.5)	0909(2.5)

九龍巴士(一九三三)有限公司

<工作表>: 258D

星期一至五

生效日期:30/07/2018

車長崗位	258D-L03-2	258D-L04-2	258D-L90-2	258D-L91-2	258D-S01-1	258D-S02-1	258D-S03-1	258D-S04-1	258D-S05-1	258D-S06-1	258D-S07-1	258D-S08-1
屬廠	屯門廠	屯門廠	屯門廠	屯門廠	屯門廠	屯門廠	屯門廠	屯門廠	屯門廠	屯門廠	屯門廠	屯門廠
開工	南廠1440	寶田1613	寶田1930	屯廠1915	屯廠0608	屯廠0555	屯廠0625	屯廠0615	屯廠0650	屯廠0715	屯廠0720	屯廠0730

[illegible]

收工	屯廠0049	寶田2348	寶田2215	總天2208	屯廠1915	洪福1932	寶田1945	寶田2012	南廠2015	南廠2114	屯廠2117	寶田2100
工時 (補水仔數)	1009(4.5)	0735(0.0)	0245(0.0)	0253(0.0)	0946(4.0)	1019(5.0)	1118(7.0)	1032(5.5)	1108(6.5)	0925(3.0)	1006(4.5)	1053(6.0)

九龍巴士(一九三三)有限公司

<工作表>: 258D

星期一至五

生效日期:30/07/2018

車長崗位	258D-S09-1	258D-S10-1	258D-W50-1	258D-W50-2								
屬廠	屯門廠	屯門廠	屯門廠	屯門廠								
開工	屯廠0747	屯廠0800	屯廠0645	九廠1729								

[illegible]

收工	屯廠2132	屯廠2147	九廠0925	南廠1951								
工時(補水仔數)	1140(7.5)	0807(0.5)	0240(0.0)	0222(0.0)								

九龍巴士(一九三三)有限公司

<工作表>: 258D

星期一至五

生效日期:30/07/2018

- (1) 1,3,S1車改泊位
 (2) 1早取消做工程車
 (3) 更改1,3,5早, L1,L4,L91夜及S1工時
 (4) 早更往寶田取車請改乘502工程車

屬廠	崗位	開工	收工	工時	總工時	補水時間(仔數)	備註
九龍灣廠	258D-20-1	九廠 0505	藍鐵 1636	1131	1131	3.75(7.5)	乘 5:10 工程車往 藍鐵
九龍灣廠	258D-20-2	藍鐵 1636	藍鐵 0209	0933	0933	1.75(3.5)	
九龍灣廠	258D-21-1	九廠 0525	藍鐵 1510	0945	0945	2.00(4.0)	乘 5:30 工程車往 藍鐵
九龍灣廠	258D-21-2	藍鐵 1510	藍鐵 0141	1031	1031	2.75(5.5)	
九龍灣廠	258D-22-1	九廠 0525	藍鐵 1540	1015	1015	2.50(5.0)	乘 5:30 工程車往 藍鐵
九龍灣廠	258D-22-2	藍鐵 1540	藍鐵 0124	0944	0944	2.00(4.0)	
九龍灣廠	258D-23-1	九廠 0559	藍鐵 1610	1011	1011	2.50(5.0)	
九龍灣廠	258D-23-2	藍鐵 1610	九廠 0108	0858	0858	1.00(2.0)	
九龍灣廠	258D-24-1	九廠 0554	廣田 1440	0846	0846	1.00(2.0)	
九龍灣廠	258D-24-2	廣田 1515	九廠 0048	0933	0933	1.75(3.5)	
屯門廠	258D-01-1	屯廠 0455	寶田 1509	1014	1014	2.50(5.0)	乘 5:00 工程車往 寶田
屯門廠	258D-01-2	寶田 1200	屯廠 2202	1002	1002	2.25(4.5)	
屯門廠	258D-02-1	屯廠 0515	寶田 1430	0915	0915	1.50(3.0)	乘 5:20 工程車往 南廠
屯門廠	258D-02-2	寶田 1509	南廠 0109	1000	1000	2.00(4.0)	
屯門廠	258D-03-1	屯廠 0505	寶田 1545	1040	1040	2.75(5.5)	乘 5:10 工程車往 南廠
屯門廠	258D-03-2	南廠 1510	南廠 0139	1029	1029	2.50(5.0)	
屯門廠	258D-04-1	屯廠 0525	寶田 1705	1140	1140	3.75(7.5)	乘 5:30 工程車往 南廠
屯門廠	258D-04-2	寶田 1624	屯廠 0151	0927	0927	1.50(3.0)	
屯門廠	258D-05-1	屯廠 0515	寶田 1624	1109	1109	3.25(6.5)	乘 5:20 工程車往 寶田
屯門廠	258D-05-2	寶田 1545	寶田 0157	1012	1012	2.50(5.0)	
屯門廠	258D-06-1	屯廠 0535	寶田 1613	1038	1038	2.75(5.5)	乘 5:40 工程車往 南廠
屯門廠	258D-06-2	南廠 1625	總天 0230	1005	1005	2.25(4.5)	
屯門廠	258D-L01-2	寶田 1430	南廠 0007	0937	0937	1.75(3.5)	
屯門廠	258D-L02-2	南廠 1545	南廠 0054	0909	0909	1.25(2.5)	
屯門廠	258D-L03-2	南廠 1440	屯廠 0049	1009	1009	2.25(4.5)	
屯門廠	258D-L04-2	寶田 1613	寶田 2348	0735	0735	0.00(0.0)	
屯門廠	258D-L90-2	寶田 1930	寶田 2215	0245	0245	0.00(0.0)	
屯門廠	258D-L91-2	屯廠 1915	總天 2208	0253	0253	0.00(0.0)	
屯門廠	258D-S01-1	屯廠 0608	屯廠 1257	0649	0946	2.00(4.0)	
		屯廠 1618	屯廠 1915	0257			
屯門廠	258D-S02-1	屯廠 0555	南廠 1317	0722	1019	2.50(5.0)	乘 6:00 工程車往 南廠
		南廠 1635	洪福 1932	0257			
屯門廠	258D-S03-1	屯廠 0625	屯廠 1448	0823	1118	3.50(7.0)	乘 6:30 工程車往 南廠
		屯廠 1650	寶田 1945	0255			

九龍巴士(一九三三)有限公司

<工作表>: 258D

星期一至五

生效日期:30/07/2018

- (1) 1,3,S1車改泊位
 (2) 1早取消做工程車
 (3) 更改1,3,5早, L1,L4,L91夜及S1工時
 (4) 早更往寶田取車請改乘502工程車

屬廠	崗位	開工	收工	工時	總工時	補水時間(仔數)	備註
屯門廠	258D-S04-1	屯廠 0615	屯廠 1120	0505	1032	2.75(5.5)	
		屯廠 1445	寶田 2012	0527			
屯門廠	258D-S05-1	屯廠 0650	南廠 1343	0653	1108	3.25(6.5)	1600 乘街車 南廠 往 寶田
		寶田 1600	南廠 2015	0415			
屯門廠	258D-S06-1	屯廠 0715	南廠 1206	0451	0925	1.50(3.0)	1640 乘街車 南廠 往 寶田
		寶田 1640	南廠 2114	0434			
屯門廠	258D-S07-1	屯廠 0720	南廠 1358	0638	1006	2.25(4.5)	1749 乘街車 南廠 往 洪福
		洪福 1749	屯廠 2117	0328			
屯門廠	258D-S08-1	屯廠 0730	南廠 1425	0655	1053	3.00(6.0)	
		南廠 1702	寶田 2100	0358			
屯門廠	258D-S09-1	屯廠 0747	南廠 1440	0653	1140	3.75(7.5)	1645 乘街車 南廠 往 寶田
		寶田 1645	屯廠 2132	0447			
屯門廠	258D-S10-1	屯廠 0800	寶田 1300	0500	0807	0.25(0.5)	
		寶田 1840	屯廠 2147	0307			
屯門廠	258D-W50-1	屯廠 0645	九廠 0925	0240	0240	0.00(0.0)	乘 6:50 工程車往 南廠
屯門廠	258D-W50-2	九廠 1729	南廠 1951	0222	0222	0.00(0.0)	

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The Kowloon Motor Bus Co. (1933) Ltd

<Work Schedule>:258D

Monday to Friday

Effective Date: 30/07/2018

Duty of Bus Captain	258D-20-1	258D-20-2	258D-21-1	258D-21-2	258D-22-1	258D-22-2	258D-23-1	258D-23-2	258D-24-1	258D-24-2	258D-01-1	258D-01-2
Depot	Kowloon Bay Depot	Kowloon Bay Depot	Kowloon Bay Depot	Kowloon Bay Depot	Kowloon Bay Depot	Kowloon Bay Depot	Kowloon Bay Depot	Kowloon Bay Depot	Kowloon Bay Depot	Kowloon Bay Depot	Tuen Mun Depot	Tuen Mun Depot
On Duty	Kowloon Bay Depot 0505	Lam Tin MTR Station 1636	Kowloon Bay Depot 0525	Lam Tin MTR Station 1510	Kowloon Bay Depot 0525	Lam Tin MTR Station 1540	Kowloon Bay Depot 0559	Lam Tin MTR Station 1610	Kowloon Bay Depot 0554	Kwong Tin 1515	Tuen Mun Depot 0455	Po Tin 1200
	(258D-20)	(258D-20)	(258D-21)	(258D-21)	(258D-22)	(258D-22)	(258D-23)	(258D-23)	(258D-24)	(258D-24)	(258D-01)	(258D-S10)
	R.258D	R.258D	R.258D	R.258D	R.258D	R.258D	Kowloon Bay Depot > Lam Tin MTR Station	R.258D	Kowloon Bay Depot > Po Tin	R.215X	R.258D	R.260X
	Lam Tin MTR Station 0545	Lam Tin MTR Station 1636	Lam Tin MTR Station 0557	Lam Tin MTR Station 1510	Lam Tin MTR Station 0609	Lam Tin MTR Station 1540	R. 258D	Lam Tin MTR Station 1610	R. 258D	Kwong Tin 1515e	Po Tin 0525	Po Tin 1200

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	Po Tin 0708	Po Tin 1805	Po Tin 0715	Po Tin 1648	Po Tin 0722	Po Tin 1710	Lam Tin MTR Station 0619	Po Tin> Lam Tin MTR Station	Po Tin 0654	Kowloon Bay MTR Station 1628e	Lam Tin MTR Station 0639	Hung Hom MTR Station 1330
	Lam Tin MTR Station 0855	Lam Tin MTR Station 1955	Lam Tin MTR Station> Po Tin	Lam Tin MTR Station 1820	(meal break)	Lam Tin MTR Station 1852	Po Tin 0738	Lam Tin MTR Station 1844	Lam Tin MTR Station > Kwong Tin	Kwong Tin > Lam Tin MTR Station	Po Tin 0812	Po Tin > Lam Tin MTR Station
	(meal break)	(meal break)	Po Tin 1000	(meal break)	Lam Tin MTR Station 1010	(meal break)	(meal break)	(meal break)	R.215X	R.258D	(meal break)	(meal break)
	Po Tin 1215	Po Tin 2230	(meal break)	Po Tin 2115	Po Tin 1130	Po Tin 2145	Lam Tin MTR Station 1040	Po Tin 2130	Kwong Tin 0842	Lam Tin MTR Station 1756	Lam Tin MTR Station 1110	R.258D
	Lam Tin MTR Station 1340	Lam Tin MTR Station 2355	Lam Tin MTR Station 1225	Lam Tin MTR Station 2240	Lam Tin MTR Station 1255	Lam Tin MTR Station 2310	Po Tin 1200	Lam Tin MTR Station 2255	Kowloon Bay MTR Station 0955e	Po Tin > South Depot	Po Tin 1230	Lam Tin MTR Station 1650
	Po Tin 1515	Po Tin> Lam Tin MTR Station	Po Tin 1345	Po Tin 0005	Po Tin 1430	Po Tin> Lam Tin MTR Station	Lam Tin MTR Station 1325	Po Tin> Kowloon Bay Depot	(meal break)	(meal break)	Lam Tin MTR Station 1355	Po Tin 1820
				Lam Tin MTR Station >			Po Tin 1445		Kwong Tin 1215e	South Depot > Kowloon		R.258P

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				Lam Tin MTR Station						Bay MTR Station		
									Kowloon Bay MTR Station 1335e	R.215X		Lam Tin MTR Station 2000
										Kowloon Bay MTR Station 2137		Hung Fuk > Tuen Mun Depot
										Kwong Tin > Kowloon Bay MTR Station		
										Kowloon Bay MTR Station 2330		
										Kwong Tin > Kowloon Bay Depot		

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Off Duty	Lam Tin MTR Station 1636	Lam Tin MTR Station 0209	Lam Tin MTR Station 1510	Lam Tin MTR Station 0141	Lam Tin MTR Station 1540	Lam Tin MTR Station 0124	Lam Tin MTR Station 1610	Kowloon Bay Depot 0108	Kwong Tin 1440	Kowloon Bay Depot 0048	Po Tin 1509	Tuen Mun Depot 2202
Working Hour (units of overtime)	1131(7.5)	0933(3.5)	0945(4.0)	1031(5.5)	1015(5.0)	0944(4.0)	1011(5.0)	0858(2.0)	0846(2.0)	0933(3.5)	1014(5.0)	1002(4.5)

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The Kowloon Motor Bus Co. (1933) Ltd

<Work Schedule>:258D

Monday to Friday

Effective Date: 30/07/2018

Duty of Bus Captain	258D-02-1	258D-02-2	258D-03-1	258D-03-2	258D-04-1	258D-04-2	258D-05-1	258D-05-2	258D-06-1	258D-06-2	258D-L01-2	258D-L02-2
Depot	Tuen Mun Depot	Tuen Mun Depot	Tuen Mun Depot	Tuen Mun Depot	Tuen Mun Depot	Tuen Mun Depot	Tuen Mun Depot	Tuen Mun Depot	Tuen Mun Depot	Tuen Mun Depot	Tuen Mun Depot	Tuen Mun Depot
On Duty	Tuen Mun Depot 0515	Po Tin 1509	Tuen Mun Depot 0505	South Depot 1510	Tuen Mun Depot 0525	Po Tin 1624	Tuen Mun Depot 0515	Po Tin 1545	Tuen Mun Depot 0535	South Depot 1625	Po Tin 1430	South Depot 1545
	(258D-02)	(258D-01)	(258D-03)	(258D-S05)	(258D-04)	(258D-05)	(258D-05)	(258D-03)	(258D-06)	(258D-S06)	(258D-02)	(258D-S07)
	South Depot> Lam Tin MTR Station	Po Tin > Lam Tin MTR Station	South Depot> Po Tin	South Depot> Po Tin	South Depot> Po Tin	R.258D	R.258D	R.258D	South Depot> Po Tin	South Depot> Lam Tin MTR Station	R.258D	South Depot > Lam Tin MTR Station
	R.258D	R.258P	R.258D	R.258D	R.258D	Po Tin 1624	Po Tin 0555	Po Tin 1545	R.258D	R.258D	Po Tin 1430	R.258P
	Lam Tin MTR Station 0629	Lam Tin MTR Station 1620	Po Tin 0545	Po Tin 1530	Po Tin 0605	Lam Tin MTR Station 1802	Lam Tin MTR Station 0713	Lam Tin MTR Station 1717	Po Tin 0617	Lam Tin MTR Station 1730	Lam Tin MTR Station 1555	Lam Tin MTR Station 1650
	Po Tin 0754	Hung Fuk > Lam Tin MTR	Lam Tin MTR Station	Lam Tin MTR Station	Lam Tin MTR Station	(meal break)	Po Tin 0838	(meal break)	Lam Tin MTR Station	(meal break)	(meal break)	(meal break)

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		Station	0701	1700	0727				0740			
	Lam Tin MTR Station > Po Tin	[Tuen Mun Road]	Po Tin 0825	(meal break)	Po Tin 0851	(258D-S0 8)	Lam Tin MTR Station > Choi Hung	(258D-05)	Po Tin 0915	(258D-S0 4)	(258D-03)	(258D-S0 2)
	(meal break)	R.258D	(meal break)	(258D-S0 3)	Lam Tin MTR Station > Choi Hung	Po Tin 2100	(meal break)	Po Tin 2000	(meal break)	Po Tin 2030	Po Tin 1900	Hung Fuk > Hung Hom MTR Station
	Po Tin 1145	Lam Tin MTR Station 1908	Lam Tin MTR Station 1140	Po Tin 1945	(meal break)	Lam Tin MTR Station 2225	Choi Hung > Lam Tin MTR Station	Lam Tin MTR Station 2125	Lam Tin MTR Station 1210	Lam Tin MTR Station 2155	Lam Tin MTR Station 2025	[Tuen Mun Road]
	Lam Tin MTR Station 1310	(meal break)	Po Tin 1300	Lam Tin MTR Station 2110	Choi Hung > Lam Tin MTR Station	Po Tin 2345	Lam Tin MTR Station 1155	Po Tin 2300	Po Tin 1330	Po Tin 2330	Po Tin > Hung Hom MTR Station	R.260X
		(258D-06)	Lam Tin MTR Station 1425	Po Tin 2245	Lam Tin MTR Station 1240	Lam Tin MTR Station > Tuen Mun Depot	Po Tin 1315	Lam Tin MTR Station > Mong Kok East	Lam Tin MTR Station 1455	Lam Tin MTR Station > Lei Yue	R. 260X	Hung Hom MTR Station 2034
		Po Tin 2215		Lam Tin MTR Station	Po Tin 1400		Lam Tin MTR Station	R.58X		R. 259D	Hung Hom MTR	Po Tin 2215

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				0010			1440				Station 2232	
		Lam Tin MTR Station 2340		Po Tin> South Depot	Lam Tin MTR Station 1525			Mong Kok East 0040		Lei Yue 0100	Po Tin > South Depot	Hung Hom MTR Station 2324
		Po Tin> South Depot						Leung King > Po Tin		Lung Mun Oasis> Chung Tin		Po Tin > South Depot
Off Duty	Po Tin 1430	South Depot	Po Tin 1545	South Depot	Po Tin 1705	Tuen Mun Depot	Po Tin 1624	Po Tin 0157	Po Tin 1613	Chung Tin 0230	South Depot	South Depot

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		0109		0139		0151					0007	0054
Working Hour (units of overtime)	0915(3.0)	1000(4.0)	1040(5.5)	1029(5.0)	1140(7.5)	0927(3.0)	1109(6.5)	1012(5.0)	1038(5.5)	1005(4.5)	0937(3.5)	0909(2.5)

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Issued at 09:03 on 23.07.18 Schedule 258D : Page No. 2

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The Kowloon Motor Bus Co. (1933) Ltd

<Work Schedule>:258D

Monday to Friday

Effective Date: 30/07/2018

Duty of Bus Captain	258D-L03-2	258D-L04-2	258D-L90-2	258D-L91-2	258D-S01-1	258D-S02-1	258D-S03-1	258D-S04-1	258D-S05-1	258D-S06-1	258D-S07-1	258D-S08-1
Depot	Tuen Mun Depot	Tuen Mun Depot	Tuen Mun Depot	Tuen Mun Depot	Tuen Mun Depot	Tuen Mun Depot	Tuen Mun Depot	Tuen Mun Depot	Tuen Mun Depot	Tuen Mun Depot	Tuen Mun Depot	Tuen Mun Depot
On Duty	South Depot 1440	Po Tin 1613	Po Tin 1930	Tuen Mun Depot 1915	Tuen Mun Depot 0608	Tuen Mun Depot 0555	Tuen Mun Depot 0625	Tuen Mun Depot 0615	Tuen Mun Depot 0650	Tuen Mun Depot 0715	Tuen Mun Depot 0720	Tuen Mun Depot 0730
	(258D-S09)	(258D-06)	(258D-06)	(258D-S01)	(258D-S01)	(258D-S02)	(258D-S03)	(258D-S04)	(258D-S05)	(258D-S06)	(258D-S07)	(258D-S08)
	South Depot> Po Tin	Po Tin> Lam Tin MTR Station	Po Tin 1930	Tuen Mun Depot> Sam Shing	Tin Terminus> Po Tin	South Depot> Po Tin	South Depot> Hung Fuk	Tin Terminus> Hung Fuk	Tuen Mun Depot> Hung Fuk	Tuen Mun> Po Tin	Tuen Mun> Po Tin	Tuen Mun> Hung Fuk
	R.258D	R. 258P	Lam Tin MTR Station 2055	R. 261	R. 258D	R. 258D	R. 258P	R. 258P	R. 258A	R. 258D	R. 258X	R. 258P
	Po Tin	Lam Tin		Sam Shing	Po Tin	Po Tin	Hung Fuk	Hung Fuk	Hung Fuk	Po Tin	Po Tin	Hung

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	1500	MTR Station 1720		1930	0628	0638	0714	0650	0720	0730	0735	Fuk 0800
	Lam Tin MTR Station 1623	Hung Fuk> Po Tin		Tin Ping 2040	Lam Tin MTR Station 0755	Lam Tin MTR Station 0810	R. 258D	R. 258D	Lam Tin MTR Station> Po Tin	Lam Tin MTR Station 0925	Kwun Tong Pier> Po Tin	Lam Tin MTR Station > Po Tin
	(meal break)	(meal break)		Sam Shing> Tin Terminus	Po Tin 0930	Po Tin 0945	Lam Tin MTR Station 0910	Lam Tin MTR Station 0840	R. 258D	Po Tin> South Depot	R. 258D	R. 258D
	(258D-S0 6)	(258D-01)			(meal break)	(meal break)	Po Tin 1045	Po Tin> Tuen Mun Depot	Po Tin 1015	(interim break)	Po Tin 1030	Po Tin 1100
	Po Tin 1915	R. 258D			Lam Tin MTR Station> Tuen Mun Depot	Lam Tin MTR Station> South Depot	(break)	(interim break)	Lam Tin MTR Station> South Depot	(258D-02)	Lam Tin MTR Station> South Depot	Lam Tin MTR Station > South Depot
	Lam Tin MTR Station 2040	Po Tin 2045			(interim break)	(interim break)	Lam Tin MTR Station> Tuen Mun Depot	Tuen Mun Depot> Lam Tin MTR Station	(interim break)	Po Tin 1735	(interim break)	(interim break)
	Po Tin	Lam Tin			Tuen Mun	South	(interim break)	R. 258P	(258D-04)	Lam Tin	Hung	South

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	2200	MTR Station 2210			Depot> Lam Tin MTR Station	Depot> Lam Tin MTR Station	break)			MTR Station 1924	Fuk> Lam Tin MTR Station	Depot> Po Tin
	Lam Tin MTR Station 2325	Po Tin> Po Tin			Lam Tin MTR Station 1723	R. 258P	Tuen Mun Depot> Lam Tin MTR Station	Lam Tin MTR Station 1550	Po Tin> Kwun Tong Pier	Po Tin> South Depot	[Tuen Mun Road]	Po Tin 1722
	Po Tin> Tuen Mun Depot				Po Tin> Lam Tin MTR Station	Lam Tin MTR Station 1740	Lam Tin MTR Station 1750	Hung Fuk> Lam Tin MTR Station	R. 258P		Lam Tin MTR Station 1940	R. 258P
								Tuen Mun Road	Kwun Tong Pier 1805		Po Tin> Tuen Mun Depot	Lam Tin MTR Station 1900
								R. 258D	Po Tin> South Depot			Hung Fuk > Po Tin
								Lam Tin MTR Station 1828				

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Off Duty	Tuen Mun Depot 0049	Po Tin 2348	Po Tin 2215	Tin Terminus 2208	Tuen Mun Depot 1915	Hung Fuk 1932	Po Tin 1945	Po Tin 2012	South Depot 2015	South Depot 2114	Tuen Mun Depot 2117	Po Tin 2100
Working Hour (units of overtime)	1009(4.5)	0735(0.0)	0245(0.0)	0253(0.0)	0946(4.0)	1019(5.0)	1118(7.0)	1032(5.5)	1108(6.5)	0925(3.0)	1006(4.5)	1053(6.0)

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Issued at 09:03 on 23.07.18 Schedule 258D : Page No. 3

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The Kowloon Motor Bus Co. (1933) Ltd

<Work Schedule>:258D

Monday to Friday

Effective Date: 30/07/2018

Duty of Bus Captain	258D-S09-1	258D-S10-1	258D-W50-1	258D-W50-2								
Depot	Tuen Mun Depot	Tuen Mun Depot	Tuen Mun Depot	Tuen Mun Depot								
On Duty	Tuen Mun Depot 0747	Tuen Mun Depot 0800	Tuen Mun Depot 0645	Kowloon Bay Depot 1729								
	(258D-S09)	(258D-S10)	(258D-W50)	(258D-W50)								
	Tuen Mun Depot> Po Tin	Tuen Mun Depot> Hung Fuk	South Depot> Po Tin									
	R. 258D	R. 258P	R. 258D	R. 258D								
	Po Tin 0802	Hung Fuk 0830	Po Tin 0720e	Lam Tin MTR Station 1749e								
	Lam Tin MTR Station 0955	R. 258D	Lam Tin MTR Station> Kowloon Bay Depot	Po Tin> South Depot								
	Po Tin 1115	Lam Tin										

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		MTR Station 1025										
	Lam Tin MTR Station> South Depot	(interim break)										
	(interim break)	(258D-S05)										
	Po Tin 1750	Po Tin 1840										
	R. 258P	Lam Tin MTR Station 2010										
	Lam Tin MTR Station 1930	Po Tin> Tuen Mun Depot										
	Hung Fuk> Tuen Mun Depot											

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Off Duty	Tuen Mun Depot 2132	Tuen Mun Depot 2147	Kowloon Bay Depot 0925	South 1951								
Working Hour (units of overtime)	1140(7.5)	0807(0.5)	0240(0.0)	0222(0.0)								

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Issued at 09:03 on 23.07.18 Schedule 258D : Page No. 4

The Kowloon Motor Bus Co. (1933) Ltd

<Work Schedule>:258D

Monday to Friday

Effective Date: 30/07/2018

1. Buses 1, 3, S1 change to parking
2. Morning 1 is cancelled to be recovery vehicle
3. Change the working hour of Morning 1,3,5, Night 1-5 and S1,S5
4. Morning shift to Po Tin to take the bus please take recovery vehicle 502

Depot	Duty	On Duty	Off Duty	Working Hour	Total Working Hour	Overtime (units))	Remarks
Kowloon Bay Depot	258D-20-1	Kowloon Bay Depot 0505	Lam Tin MTR Station 1636	1131	1131	3.75(7.5)	Take 5:10 recovery vehicle to Lam Tin MTR Station
Kowloon Bay Depot	258D-20-2	Lam Tin MTR Station 1636	Lam Tin MTR Station 0209	0933	0933	1.75(3.5)	
Kowloon Bay Depot	258D-21-1	Kowloon Bay Depot 0525	Lam Tin MTR Station 1510	0945	0945	2.00(4.0)	Take 5:30 recovery vehicle to Lam Tin

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							MTR Station
Kowloon Bay Depot	258D-21-2	Lam Tin MTR Station 1510	Lam Tin MTR Station 0141	1031	1031	2.75(5.5)	
Kowloon Bay Depot	258D-22-1	Kowloon Bay Depot 0525	Lam Tin MTR Station 1540	1015	101	2.50(5.0)	Take 5:50 recovery vehicle to Lam Tin MTR Station
Kowloon Bay Depot	258D-22-2	Lam Tin MTR Station 1540	Lam Tin MTR Station 0124	0944	0944	2.00(4.0)	
Kowloon Bay Depot	258D-23-1	Kowloon Bay Depot 0559	Lam Tin MTR Station 1610	1011	1011	2.50(5.0)	
Kowloon Bay Depot	258D-23-2	Lam Tin MTR Station 1610	Kowloon Bay Depot 0108	0858	0858	1.00(2.0)	
Kowloon Bay Depot	258D-24-1	Kowloon Bay Depot 0554	Kwong Tin 1440	0846	0846	1.00(2.0)	
Kowloon Bay Depot	258D-24-2	Kwong Tin 1515	Kowloon Bay Depot 0048	0933	0933	1.75(3.5)	
Tuen Mun Depot	258D-01-1	Tuen Mun Depot 0455	Po Tin 1509	1014	1014	2.50(5.0)	Take 5:00 recovery vehicle to

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Tuen Mun Depot	258D-01-2	Po Tin 1200	Tuen Mun Depot 2202	1002	1002	2.25(4.5)	Po Tin
Tuen Mun Depot	258D-02-1	Tuen Mun Depot 0515	Po Tin 1430	0915	0915	1.50(3.0)	Take 5:20 recovery vehicle to South Depot
Tuen Mun Depot	258D-02-2	Po Tin 1509	South Depot 0109	1000	1000	2.00(4.0)	
Tuen Mun Depot	258D-03-1	Tuen Mun Depot 0505	Po Tin 1545	1040	1040	2.75(5.5)	Take 5:10 recovery vehicle to South Depot
Tuen Mun Depot	258D-03-2	South Depot 1510	South Depot 0139	1029	1029	2.50(5.0)	
Tuen Mun Depot	258D-04-1	Tuen Mun Depot 0525	Po Tin 1705	1140	1140	3.75(7.5)	Take 5:30 recovery vehicle to South Depot
Tuen Mun	258D-04-2	Po Tin 1624	Tuen Mun Depot 0151	0927	0927	1.50(3.0)	

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Depot							
Tuen Mun Depot	258D-05-1	Tuen Mun Depot 0515	Po Tin 1624	1109	1109	3.25(6.5)	Take 5:20 recovery vehicle to Po Tin
Tuen Mun Depot	258D-05-2	Po Tin 1545	Po Tin 0157	1012	1012	2.5(5.0)	
Tuen Mun Depot	258D-06-1	Tuen Mun Depot 0535	Po Tin 1613	1038	1038	2.75(5/5)	Take 5:40 recovery vehicle to South Depot
Tuen Mun Depot	258D-06-2	South Depot 1625	Chung Tin 0230	1005	1005	2.25(4.5)	
Tuen Mun Depot	258D-L01-2	Po Tin 1430	South Depot 0007	0937	0937	1.75(3.5)	
Tuen Mun Depot	258D-L02-2	South Depot 1545	South Depot 0054	0909	0909	1.25(2.5)	
Tuen Mun Depot	258D-L03-2	South Depot 1440	Tuen Mun Depot 0049	1009	1009	2.25(4.5)	
Tuen Mun Dpot	258D0L04-2	Po Tin 1613	Po Tin 2348	0735	0735	0.00(0.0)	
Tuen Mun	258D-L90-2	Po Tin 1930	Po Tin 2215	0245	0245	0.00(0.0)	

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Depot							
Tuen Mun	258D-L91-2	Tuen Mun Depot 1915	Chung Tin 2208	0253	0253	0.00(0.0)	
Depot							
Tuen Mun	258D-S01-1	Tuen Mun Depot 0608	Tuen Mun Depot 1257	0649	0946	2.00(4.0)	
Depot							
		Tuen Mun Depot 1618	Tuen Mun Depot 1915	0257			
Tuen Mun	258D-S02-1	Tuen Mun Depot 0555	South Depot 1317	0722	1019	2.50(5.0)	Take 6:00
Depot							recovery
							vehicle to
							South
							Depot
		South Depot 1635	Hung Fuk 1932	0257			
Tuen Mun	258D-S03-1	Tuen Mun Depot 0625	Tuen Mun Depot 1448	0823	1118	3.50(7.0)	Take 6:30
Depot							recovery
							vehicle to
							South
							Depot
		Tuen Mun 1650	Po Tin 1945	0255			

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Issued at 09:03 on 23.07.18 Schedule 258D : Page No. 5

The Kowloon Motor Bus Co. (1933) Ltd

<Work Schedule>:258D

Monday to Friday

Effective Date: 30/07/2018

1. Buses 1, 3, S1 change to parking
2. Morning 1 is cancelled to be recovery vehicle
3. Change the working hour of Morning 1,3,5, Night 1-5 and S1,S5
4. Morning shift to Po Tin to take the bus please take recovery vehicle 502

Depot	Duty	On Duty	Off Duty	Working Hour	Total Working Hour	Overtime (units))	Remarks
Tuen Mun Depot	258D-S04-1	Tuen Mun Depot 0615	Tuen Mun Depot 1120	0505	1032	2.75(5.5)	
		Tuen Mun Depot 1445	Po Tin 2012	0527			
Tuen Mun Depot	258D-S05-1	Tuen Mun Depot 0650	South Depot 1343	0653	1108	3.25(6.5)	1600 take street car South Depot to Po Tin
		Po Tin 1600	South Depot 2015	0415			
Tuen Mun Depot	258D-S06-1	Tuen Mun Depot 0715	South Depot 1206	0451	0925	1.5(3.0)	1640 take street car South

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		Po Tin 1640	South Depot 2114	0434			Depot to Po Tin
Tuen Mun Depot	258D-S07-1	Tuen Mun Depot 0720	South Depot 1358	0638	1006	2.25(4.5)	1749 take street car South Depot to Hung Fuk
		Hung Fuk 1749	Tuen Mun Depot 2117	0328			
Tuen Mun Depot	258D-S08-1	Tuen Mun Depot 0730	South Depot 1425	0655	1053	3.00(6.0)	
		South Depot 1702	Po Tin 2100	0358			
Tuen Mun Depot	258D-S09-1	Tuen Mun Depot 0747	South Depot 1440	0653	1140	3.75(7.5)	1645 take street car South Depot to Po Tin
		Po Tin 1645	Tuen Mun Depot 2132	0447			
Tuen Mun Depot	258D-S10-1	Tuen Mun Depot 0800	Po Tin 1300	0500	0807	0.25(0.5)	
		Po Tin 1840	Tuen Mun Depot 2147	0307			
Tuen Mun Depot	258D-W50-1	Tuen Mun Depot 0645	Kowloon Bay Depot 0925	0240	0240	0.00(0.0)	Take 6:50 recovery

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vehicle to
South
Depot

Tuen Mun Depot	258D-W50-2	Kowloon Bay Depot 1729	South Depot 1951	0222	0222	0.00(0.0)
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Issued at 09:03 on 23.07.18 Schedule 258D : Page No. 6

九龍巴士(一九三三)有限公司

星期六

生效日期:28/07/2018

車長崗位	258D-20-1	258D-20-2	258D-21-1	258D-21-2	258D-22-1	258D-22-2	258D-23-1	258D-23-2	258D-24-1	258D-24-2	258D-01-1	258D-01-2
屬廠	九龍灣廠	九龍灣廠	九龍灣廠	九龍灣廠	九龍灣廠	九龍灣廠	九龍灣廠	九龍灣廠	九龍灣廠	九龍灣廠	屯門廠	屯門廠
開工	九廠0505	藍鐵1525	九廠0525	藍鐵1540	九廠0545	藍鐵1555	九廠0610	藍鐵1610	九廠0531	藍鐵1440	屯廠0455	南廠1440

[illegible]

收工	藍鐵1525	藍鐵0143	藍鐵1540	藍鐵0119	藍鐵1555	藍鐵0127	藍鐵1610	九廠0137	藍鐵1440	九廠0052	南廠1504	屯廠0005
工時 (補水仔數)	1020(5.0)	1018(5.0)	1015(5.0)	0939(3.5)	1010(4.5)	0932(3.5)	1000(4.0)	0927(3.0)	0909(2.5)	1012(5.0)	1009(4.5)	0925(3.0)

九龍巴士(一九三三)有限公司

<工作表>: 258D

星期六

生效日期:28/07/2018

車長崗位	258D-02-1	258D-02-2	258D-03-1	258D-03-2	258D-04-1	258D-04-2	258D-05-1	258D-05-2	258D-06-1	258D-06-2	258D-L01-2	258D-L02-2
屬廠	屯門廠	屯門廠	屯門廠	屯門廠	屯門廠	屯門廠	屯門廠	屯門廠	屯門廠	屯門廠	屯門廠	屯門廠
開工	屯廠0505	寶田1515	屯廠0515	南廠1540	屯廠0535	南廠1525	屯廠0535	寶田1648	屯廠0605	南廠1657	寶田1245	寶田1300

[illegible]

收工	寶田1515	寶田0112	寶田1514	南廠0157	寶田1636	總天0127	寶田1245	南廠0203	寶田1648	屯廠0230	寶田2231	南廠2334
工時 (補水仔數)	1010(4.5)	0957(4.0)	0959(4.0)	1017(5.0)	1101(6.5)	1002(4.5)	0710(0.0)	0915(3.0)	1043(6.0)	0933(3.5)	0946(4.0)	1034(5.5)

九龍巴士(一九三三)有限公司

星期六

生效日期:28/07/2018

車長崗位	258D-S01-1	258D-S02-1	258D-S03-1	258D-S04-1	258D-S05-1	258D-S06-1	258D-S07-1	258D-S08-1	258D-S09-1	258D-S10-1		
屬廠	屯門廠	屯門廠	屯門廠	屯門廠	屯門廠	屯門廠	屯門廠	屯門廠	屯門廠	屯門廠		
開工	屯廠0625	屯廠0635	屯廠0645	屯廠0705	屯廠0727	屯廠0740	屯廠0742	屯廠0810	屯廠0840	屯廠0910		

[illegible]

收工	寶田1945	南廠2009	南廠1939	總天2105	屯廠2126	屯廠2039	寶田2100	南廠2131	屯廠2156	屯廠2156		
工時(補水仔數)	1014(5.0)	1012(5.0)	0929(3.0)	1035(5.5)	1114(7.0)	1059(6.0)	1106(6.5)	0906(2.5)	1012(5.0)	0946(4.0)		

九龍巴士(一九三三)有限公司

<工作表>: 258D

星期六

生效日期:28/07/2018

- (1) 1,3,S1車改泊位
- (2) 1早取消做工程車
- (3) 更改1,3,5早, 1-5夜及S1,S5工時
- (4) 早更往寶田取車請改乘502工程車
- (5) W50早夜星期六返後備

屬廠	崗位	開工	收工	工時	總工時	補水時間(仔數)	備註
九龍灣廠	258D-20-1	九廠 0505	藍鐵 1525	1020	1020	2.50(5.0)	乘 5:10 工程車往 藍鐵
九龍灣廠	258D-20-2	藍鐵 1525	藍鐵 0143	1018	1018	2.50(5.0)	
九龍灣廠	258D-21-1	九廠 0525	藍鐵 1540	1015	1015	2.50(5.0)	乘 5:30 工程車往 藍鐵
九龍灣廠	258D-21-2	藍鐵 1540	藍鐵 0119	0939	0939	1.75(3.5)	
九龍灣廠	258D-22-1	九廠 0545	藍鐵 1555	1010	1010	2.25(4.5)	乘 5:50 工程車往 藍鐵
九龍灣廠	258D-22-2	藍鐵 1555	藍鐵 0127	0932	0932	1.75(3.5)	
九龍灣廠	258D-23-1	九廠 0610	藍鐵 1610	1000	1000	2.00(4.0)	
九龍灣廠	258D-23-2	藍鐵 1610	九廠 0137	0927	0927	1.50(3.0)	
九龍灣廠	258D-24-1	九廠 0531	藍鐵 1440	0909	0909	1.25(2.5)	
九龍灣廠	258D-24-2	藍鐵 1440	九廠 0052	1012	1012	2.50(5.0)	
屯門廠	258D-01-1	屯廠 0455	南廠 1504	1009	1009	2.25(4.5)	乘 5:00 工程車往 寶田
屯門廠	258D-01-2	南廠 1440	屯廠 0005	0925	0925	1.50(3.0)	
屯門廠	258D-02-1	屯廠 0505	寶田 1515	1010	1010	2.25(4.5)	乘 5:10 工程車往 南廠
屯門廠	258D-02-2	寶田 1515	寶田 0112	0957	0957	2.00(4.0)	
屯門廠	258D-03-1	屯廠 0515	寶田 1514	0959	0959	2.00(4.0)	乘 5:20 工程車往 南廠
屯門廠	258D-03-2	南廠 1540	南廠 0157	1017	1017	2.50(5.0)	
屯門廠	258D-04-1	屯廠 0535	寶田 1636	1101	1101	3.25(6.5)	乘 5:40 工程車往 南廠
屯門廠	258D-04-2	南廠 1525	總天 0127	1002	1002	2.25(4.5)	
屯門廠	258D-05-1	屯廠 0535	寶田 1245	0710	0710	0.00(0.0)	乘 5:40 工程車往 寶田
屯門廠	258D-05-2	寶田 1648	南廠 0203	0915	0915	1.50(3.0)	
屯門廠	258D-06-1	屯廠 0605	寶田 1648	1043	1043	3.00(6.0)	乘 6:10 工程車往 南廠
屯門廠	258D-06-2	南廠 1657	屯廠 0230	0933	0933	1.75(3.5)	
屯門廠	258D-L01-2	寶田 1245	寶田 2231	0946	0946	2.00(4.0)	
屯門廠	258D-L02-2	寶田 1300	南廠 2334	1034	1034	2.75(5.5)	
屯門廠	258D-S01-1	屯廠 0625	寶田 1330	0705	1014	2.50(5.0)	
		寶田 1636	寶田 1945	0309			
屯門廠	258D-S02-1	屯廠 0635	屯廠 1350	0715	1012	2.50(5.0)	乘 6:40 工程車往 南廠
		屯廠 1712	南廠 2009	0257			
屯門廠	258D-S03-1	屯廠 0645	南廠 1317	0632	0929	1.50(3.0)	乘 6:50 工程車往 南廠
		南廠 1642	南廠 1939	0257			
屯門廠	258D-S04-1	屯廠 0705	南廠 1339	0634	1035	2.75(5.5)	
		南廠 1704	總天 2105	0401			
屯門廠	258D-S05-1	屯廠 0727	南廠 1410	0643	1114	3.50(7.0)	1655 乘街車 南廠 往 寶田
		寶田 1655	屯廠 2126	0431			

九龍巴士(一九三三)有限公司

<工作表>: 258D

星期六

生效日期:28/07/2018

- (1) 1,3,S1車改泊位
- (2) 1早取消做工程車
- (3) 更改1,3,5早, 1-5夜及S1,S5工時
- (4) 早更往寶田取車請改乘502工程車
- (5) W50早夜星期六返後備

屬廠	崗位	開工	收工	工時	總工時	補水時間(仔數)	備註
屯門廠	258D-S06-1	屯廠 0740 南廠 1354	南廠 1154 屯廠 2039	0414 0645	1059	3.00(6.0)	
屯門廠	258D-S07-1	屯廠 0742 寶田 1514	南廠 1302 寶田 2100	0520 0546	1106	3.25(6.5)	1107 乘街車 南廠 往 寶田
屯門廠	258D-S08-1	屯廠 0810 寶田 1720	南廠 1305 南廠 2131	0455 0411	0906	1.25(2.5)	1720 乘街車 南廠 往 寶田
屯門廠	258D-S09-1	屯廠 0840 屯廠 1449	屯廠 1145 屯廠 2156	0305 0707	1012	2.50(5.0)	
屯門廠	258D-S10-1	屯廠 0910 南廠 1620	南廠 1320 屯廠 2156	0410 0536	0946	2.00(4.0)	

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The Kowloon Motor Bus Co. (1933) Ltd

<Work Schedule>:258D

Saturday

Effective Date: 28/07/2018

Duty of Bus Captain	258D-20-1	258D-20-2	258D-21-1	258D-21-2	258D-22-1	258D-22-2	258D-23-1	258D-23-2	258D-24-1	258D-24-2	258D-01-1	258D-01-2
Depot	Kowloon Bay Depot	Kowloon Bay Depot	Kowloon Bay Depot	Kowloon Bay Depot	Kowloon Bay Depot	Kowloon Bay Depot	Kowloon Bay Depot	Kowloon Bay Depot	Kowloon Bay Depot	Kowloon Bay Depot	Tuen Mun Depot	Tuen Mun Depot
On Duty	Kowloon Bay Depot 0505	Lam Tin MTR Station 1525	Kowloon Bay Depot 0525	Lam Tin MTR Station 1540	Kowloon Bay Depot 0545	Lam Tin MTR Station 1555	Kowloon Bay Depot 0610	Lam Tin MTR Station 1610	Kowloon Bay Depot 0531	Lam Tin MTR Station 1440	Tuen Mun Depot 0455	South Depot 1440
	(258D-20)	(258D-20)	(258D-21)	(258D-21)	(258D-22)	(258D-22)	(258D-23)	(258D-23)	(258D-24)	(258D-24)	(258D-01)	(258D-S05)
	R.258D	R.258D	R.258D	R.258D	R.258D	R.258D	Kowloon Bay Depot > Lam Tin MTR Station	R.258D	Kowloon Bay Depot > Po Tin	R.258D	R.258D	South Depot > Po Tin
	Lam Tin MTR Station 0545	Lam Tin MTR Station 1525	Lam Tin MTR Station 0600	Lam Tin MTR Station 1540	Lam Tin MTR Station 0615	Lam Tin MTR Station 1555	R. 258D	Lam Tin MTR Station 1610	R. 258D	Lam Tin MTR Station 1440	Po Tin 0525	R.258D

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	Po Tin 0707	Po Tin 1700	Po Tin 0721	Po Tin 1712	Po Tin 0735	Po Tin 1736	Lam Tin MTR Station 0630	Po Tin 1748	Po Tin 0631	Po Tin 1612	Lam Tin MTR Station 0645	Po Tin 1500
	Lam Tin MTR Station 0830	Lam Tin MTR Station 1840	(meal break)	Lam Tin MTR Station 1855	(meal break)	Lam Tin MTR Station 1910	Po Tin 0750	Lam Tin MTR Station 1940	Lam Tin MTR Station 0800	Lam Tin MTR Station 1740	Po Tin 0805	Lam Tin MTR Station 1625
	(meal break)	(meal break)	Lam Tin MTR Station 0945	(meal break)	Lam Tin MTR Station 1000	(meal break)	(meal break)	(meal break)	Po Tin 0920	(meal break)	(meal break)	(meal break)
	Po Tin 1100	Po Tin 2115	Po Tin 1115	Po Tin 2130	Po Tin 1130	Po Tin 2145	Lam Tin MTR Station 1014	Po Tin 2200	(meal break)	Po Tin 2015	Lam Tin MTR Station 1042	(258D-S0 7)
	Lam Tin MTR Station 1225	Lam Tin MTR Station 2243	Lam Tin MTR Station 1240	Lam Tin MTR Station 2255	Lam Tin MTR Station 1255	Lam Tin MTR Station 2310	Po Tin 1145	Lam Tin MTR Station 2325	Lam Tin MTR Station 1155	Lam Tin MTR Station 2143	Po Tin 1200	Po Tin 1845
	Po Tin 1400	Po Tin 0005	Po Tin 1415	Po Tin> Lam Tin MTR Station	Po Tin 1430	Po Tin> Lam Tin MTR Station	Lam Tin MTR Station 1310	Po Tin> Kowloon Bay Depot	Po Tin 1315	Po Tin 2315	Lam Tin MTR Station 1325	Lam Tin MTR Station 2010
		Lam Tin MTR Station> Lam Tin MTR					Po Tin 1445			Lam Tin MTR Station> Kowloon Bay	Po Tin> South Depot	Po Tin> Lam Tin MTR Station

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		Station								Depot		
												Lam Tin MTR Station 2231
												Po Tin> Tuen Mun Depot
Off Duty	Lam Tin MTR Station 1525	Lam Tin MTR Station 0143	Lam Tin MTR Station 1540	Lam Tin MTR Station 0119	Lam Tin MTR Station 1555	Lam Tin MTR Station 0127	Lam Tin MTR Station 1610	Kowloon Bay Depot 0137	Lam Tin MTR Station 1440	Kowloon Bay Depot 0052	South Depot 1504	Tuen Mun Depot 0005

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Working Hour (units of overtime)	1020(5.0)	1018(5.0)	1015(5.0)	0939(3.5)	1010(4.5)	0932(3.5)	1000(4.0)	0927(3.0)	0909(2.5)	1012(5.0)	1009(4.5)	0925(3.0)
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The Kowloon Motor Bus Co. (1933) Ltd

<Work Schedule>:258D

Saturday

Effective Date: 28/07/2018

Duty of Bus Captain	258D-02-1	258D-02-2	258D-03-1	258D-03-2	258D-04-1	258D-04-2	258D-05-1	258D-05-2	258D-06-1	258D-06-2	258D-L0 1-2	258D-L0 2-2
Depot	Tuen Mun Depot	Tuen Mun Depot	Tuen Mun Depot	Tuen Mun Depot	Tuen Mun Depot	Tuen Mun Depot	Tuen Mun Depot	Tuen Mun Depot	Tuen Mun Depot	Tuen Mun Depot	Tuen Mun Depot	Tuen Mun Depot
On Duty	Tuen Mun Depot 0505	Po Tin 1515	Tuen Mun Depot 0515	South Depot 1540	Tuen Mun Depot 0535	South Depot 1525	Tuen Mun Depot 0535	Po Tin 1648	Tuen Mun Depot 0605	South Depot 1657	Po Tin 1245	Po Tin 1300
	(258D-02)	(258D-02)	(258D-03)	(258D-01)	(258D-04)	(258D-S0 7)	(258D-05)	(258D-06)	(258D-06)	(258D-S0 8)	(258D-05)	(258D-04)
	South Depot> Po Tin	R.258D	South Depot> Po Tin	South Depot> Po Tin	South Depot> Po Tin	South Depot> Po Tin	R.258D	R.258D	South Depot> Po Tin	South Depot> Lam Tin MTR Station	R.258D	R.258D
	R.258D	Po Tin 1515	R.258D	R.258D	R.258D	R.258D	Po Tin 0607	Po Tin 1648	R.258D	R.258D	Po Tin 1245	Po Tin 1300
	Po Tin 0540	Lam Tin MTR Station 1640	Po Tin 0555	Po Tin 1600	Po Tin 0619	Po Tin 1545	Lam Tin MTR Station 0730	Lam Tin MTR Station 1825	Po Tin 0643	Lam Tin MTR Station 1802	Lam Tin MTR Station 1410	Lam Tin MTR Station 1425
	Lam Tin	(meal	Lam Tin	Lam Tin	Lam Tin	Lam Tin	Po Tin	(meal	Lam Tin	(meal	Po Tin>	Po Tin>

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	MTR Station 0700	break)	MTR Station 0715	MTR Station 1732	MTR Station 0745	MTR Station 1717	0850	break)	MTR Station 0815	break)	Lam Tin MTR Station	Lam Tin MTR Station
	Po Tin 0820	(258D-01)	Po Tin 0835	(meal break)	Po Tin 0905	(meal break)	(meal break)	(258D-03)	Po Tin 0935	Po Tin 2045	(meal break)	(meal break)
	(meal break)	Po Tin 1915	(meal break)	(258D-06)	(meal break)	(258D-S0 1)	Lam Tin MTR Station 1125	Po Tin 2100	(meal break)	Lam Tin MTR Station 2207	R. 258P	R. 258P
	Lam Tin MTR Station 1056	Lam Tin MTR Station 2040	Lam Tin MTR Station 1100	Po Tin> Lam Tin MTR Station	Lam Tin MTR Station 1140	Po Tin 1945		Lam Tin MTR Station 2219	Lam Tin MTR Station 1210	Po Tin 2330	Lam Tin MTR Station 1730	Lam Tin MTR Station 1800
	Po Tin 1215	Po Tin 2215	Po Tin 1230	Lam Tin MTR Station 2131	(258D-S0 1)	Lam Tin MTR Station 2107		Po Tin 2345	Po Tin 1345	Lam Tin MTR Station> Lei Yue	Hung Fuk> Po Tin	Hung Fuk> Po Tin
	Lam Tin MTR Station 1340	Lam Tin MTR Station 2340	Lam Tin MTR Station 1355	Po Tin 2300	Po Tin 1330	Po Tin 2230		Lam Tin MTR Station> South Depot	Lam Tin MTR Station 1510	R. 259D	R. 258D	R. 258D
		Po Tin> Po Tin		Lam Tin MTR Station 0030	Lam Tin MTR Station 1455	Lam Tin MTR Station 2355				Lei Yue 0100	Po Tin 1930	Po Tin 2030
				Po Tin> South Depot		Po Tin> Tin Terminus				Lung Mun Oasis>	Lam Tin MTR Station	Lam Tin MTR Station

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										Tuen Mun Depot	2055	2155
											Po Tin> Po Tin	Po Tin> South Depot
Off Duty	Po Tin 1515	Po Tin 0112	Po Tin 1514	South Depot 0157	Po Tin 1636	Tin Terminus 0127	Po Tin 1245	South Depot 0203	Po Tin 1648	Tuen Mun 0230	Po Tin 2231	South Depot 2334
Working Hour (units of overtime)	1010(4.5)	0957(4.0)	0959(4.0)	1017(5.0)	1101(6.5)	1002(4.5)	0710(0.0)	0915(3.0)	1043(6.0)	0933(3.5)	0946(4.0)	1034(5.5)

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The Kowloon Motor Bus Co. (1933) Ltd

<Work Schedule>:258D

Saturday

Effective Date: 28/07/2018

Duty of Bus Captain	258D-S01-1	258D-S02-1	258D-S03-1	258D-S04-1	258D-S05-1	258D-S06-1	258D-S07-1	258D-S08-1	258D-S09-1	258D-S10-1		
Depot	Tuen Mun Depot	Tuen Mun Depot	Tuen Mun Depot	Tuen Mun Depot	Tuen Mun Depot	Tuen Mun Depot	Tuen Mun Depot	Tuen Mun Depot	Tuen Mun Depot	Tuen Mun Depot		
On Duty	Tuen Mun Depot 0625	Tuen Mun Depot 0635	Tuen Mun Depot 0645	Tuen Mun Depot 0705	Tuen Mun Depot 0727	Tuen Mun Depot 0740	Tuen Mun Depot 0742	Tuen Mun Depot 0810	Tuen Mun Depot 0840	Tuen Mun Depot 0910		
	(258D-S01)	(258D-S02)	(258D-S03)	(258D-S04)	(258D-S05)	(258D-S06)	(258D-S07)	(258D-S08)	(258D-S09)	(258D-S10)		
	Tin Terminus > Hung Fuk	South Depot> Hung Fuk	South Depot> Po Tin	Tin Terminus > Hung Fuk	Tuen Mun Depot > Po Tin	Tuen Mun Depot > Hung Fuk	Tuen Mun Depot > Po Tin	Tuen Mun Depot > Hung Fuk	Tuen Mun Depot > Hung Fuk	Tuen Mun Depot > Hung Fuk		
	R. 258P	R. 258P	R. 258D	R. 258P	R. 258D	R. 258P	R. 258D	R. 258P	R. 258P	R. 258P		
	Hung Fuk 0700	Hung Fuk 0720	Po Tin 0728	Hung Fuk 0740	Po Tin 0742	Hung Fuk 0810	Po Tin 0757	Hung Fuk 0840	Hung Fuk 0910	Hung Fuk 0940		
	R. 258D	R. 258D	Lam Tin MTR Station> Po Tin	Lam Tin MTR Station> Po Tin	Lam Tin MTR Station 0915	Lam Tin MTR Station> South	Lam Tin MTR Station 0930	R. 258D	Lam Tin MTR Station> Tuen Mun	Lam Tin MTR Station> South		

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						Depot			Depot	Depot		
	Lam Tin MTR Station 0845	Lam Tin MTR Station 0900	Po Tin 0950	R. 258D	Po Tin 1045	(interim break)	Po Tin> South Depot	Lam Tin MTR Station 1028	(interim break)	(interim break)		
	Po Tin 1002	Po Tin 1030	Po Tin> South Depot	Po Tin 1015	Lam Tin MTR Station> South Depot	South Depot> Lam Tin MTR Station	(interim break)	Po Tin> South Depot	Tuen Mun Depot> Lam Tin MTR Station	South Depot> Lam Tin MTR Station		
	(meal break)	(meal break)	(interim break)	Lam Tin MTR Station> South Depot	(interim break)	(break)	(258D-03)	(interim break)	(meal break)	R. 258D		
	Lam Tin MTR Station> Po Tin	Lam Tin MTR Station> Tuen Mun Depot	South Depot> Lam Tin MTR Station	(interim break)	Po Tin 1800	Lam Tin MTR Station 1600	Po Tin> Lam Tin MTR Station	(258D-02)	R. 258D	Lam Tin MTR Station 1725		
	(interim break)	(interim break)	Lam Tin MTR Station 1747	South Depot> Po Tin	R. 258P	Hung Fuk> Lam Tin MTR Station	R. 258P	Po Tin 1815	Lam Tin MTR Station 1655	Po Tin 1900		
	Po Tin 1636	Tuen Mun Depot> Lam Tin MTR	Po Tin> South Depot	Po Tin 1724	Lam Tin MTR Station 1930	[Tuen Mun Road]	Lam Tin MTR Station 1630	Lam Tin MTR Station 1955	Po Tin 1830	Lam Tin MTR Station 2025		

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181-55

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Off Duty	Po Tin 1945	South Depot 2009	South Depot 1939	Tin Terminus 2105	Tuen Mun Depot 2126	Tuen Mun 2039	Po Tin 2100	South Depot 2131	Tuen Mun 2156	Tuen Mun Depot 2156		
Working Hour (units of overtime)	1014(5.0)	1012(5.0)	0929(3.0)	1035(5.5)	1114(7.0)	1059(6.0)	1106(6.5)	0906(2.5)	1012(5.0)	0946(4.0)		

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Issued at 09:37 on 23.07.18 Schedule 258D : Page No. 3

The Kowloon Motor Bus Co. (1933) Ltd

<Work Schedule>:258D

Saturday

Effective Date: 28/07/2018

1. Buses 1, 3, S1 change to parking
2. Morning 1 is cancelled to be recovery vehicle
3. Change the working hour of Morning 1,3,5, Night 1-5 and S1,S5
4. Morning shift to Po Tin to take the bus please take recovery vehicle 502
5. W50 Morning, Night Saturday being stand-by

Depot	Duty	On Duty	Off Duty	Working Hour	Total Working Hour	Overtime (units))	Remarks
Kowloon Bay Depot	258D-20-1	Kowloon Bay Depot 0505	Lam Tin MTR Station 1525	1020	1020	2.50(5.0)	Take 5:10 recovery vehicle to Lam Tin MTR Station
Kowloon Bay Depot	258D-20-2	Lam Tin MTR Station 1525	Lam Tin MTR Station 0143	1018	1018	2.50(5.0)	
Kowloon Bay Depot	258D-21-1	Kowloon Bay Depot 0525	Lam Tin MTR Station 1540	1015	1015	2.50(5.0)	Take 5:30 recovery vehicle to

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							Lam Tin MTR Station
Kowloon Bay Depot	258D-21-2	Lam Tin MTR Station 1540	Lam Tin MTR Station 0119	0939	0939	1.75(3.5)	
Kowloon Bay Depot	258D-22-1	Kowloon Bay Depot 0545	Lam Tin MTR Station 1555	1010	1010	2.25(4.5)	Take 5:50 recovery vehicle to Lam Tin MTR Station
Kowloon Bay Depot	258D-22-2	Lam Tin MTR Station 1555	Lam Tin MTR Station 0127	0932	0932	1.75(3.5)	
Kowloon Bay Depot	258D-23-1	Kowloon Bay Depot 0610	Lam Tin MTR Station 1610	1000	1000	2.00(4.0)	
Kowloon Bay Depot	258D-23-2	Lam Tin MTR Station 1610	Kowloon Bay Depot 0137	0927	0927	1.50(3.0)	
Kowloon Bay Depot	258D-24-1	Kowloon Bay Depot 0531	Lam Tin MTR Station 1440	0909	0909	1.25(2.5)	
Kowloon Bay Depot	258D-24-2	Lam Tin MTR Station 1440	Kowloon Bay Depot 0052	1012	1012	2.50(5.0)	
Tuen Mun Depot	258D-01-1	Tuen Mun Depot 0455	South Depot 1504	1009	1009	2.25(4.5)	Take 5:00 recovery

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							vehicle to Po Tin
Tuen Mun Depot	258D-01-2	South Depot 1440	Tuen Mun Depot 0005	0925	0925	1.50(3.0)	
Tuen Mun Depot	258D-02-1	Tuen Mun Depot 0505	Po Tin 1515	1010	1010	2.25(4.5)	Take 5:10 recovery vehicle to South Depot
Tuen Mun Depot	258D-02-2	Po Tin 1515	Po Tin 0112	0957	0957	2.00(4.0)	
Tuen Mun Depot	258D-03-1	Tuen Mun Depot 0515	Po Tin 1514	0959	0959	2.00(4.0)	Take 5:20 recovery vehicle to South Depot
Tuen Mun Depot	258D-03-2	South Depot 1540	South Depot 0157	1017	1017	2.50(5.0)	
Tuen Mun Depot	258D-04-1	Tuen Mun Depot 0535	Po Tin 1636	1101	1101	3.25(6.5)	Take 5:30 recovery vehicle to South Depot

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Tuen Mun Depot	258D-04-2	South Depot 1525	Tin Terminus 0127	1002	1002	2.25(4.5)	
Tuen Mun Depot	258D-05-1	Tuen Mun Depot 0535	Po Tin 1245	0710	0710	0.00(0.0)	Take 5:40 recovery vehicle to Po Tin
Tuen Mun Depot	258D-05-2	Po Tin 1648	South Depot 0203	0915	0915	1.50(3.0)	
Tuen Mun Depot	258D-06-1	Tuen Mun Depot 0605	Po Tin 1648	1043	1043	3.00(6.0)	Take 6:10 recovery vehicle to South Depot
Tuen Mun Depot	258D-06-2	South Depot 1657	Tuen Mun Depot 0230	0933	0933	1.75(3.5)	
Tuen Mun Depot	258D-L01-2	Po Tin 1245	Po Tin 2231	0946	0946	2.00(4.0)	
Tuen Mun Depot	258D-L02-2	Po Tin 1300	South Depot 2334	1034	1034	2.75(5.5)	
Tuen Mun Depot	258D-S01-1	Tuen Mun Depot 0625	Po Tin 1330	0705	1014	2.50(5.0)	
		Po Tin 1636	Po Tin 1945	0309			
Tuen Mun	258D-S02-1	Tuen Mun Depot 0635	Tuen Mun Depot 1350	0715	1012	2.50(5.0)	Take 6: 40

Depot							recovery vehicle to South Depot
Tuen Mun Depot	258D-S03-1	Tuen Mun Depot 1712 Tuen Mun Depot 0645	South Depot 2009 South Depot 1317	0257 0632	0929	1.50(3.0)	Take 6:50 recovery vehicle to South Depot
Tuen Mun Depot	258D-S04-1	South Depot 1642 Tuen Mun Depot 0705	South Depot 1939 South Depot 1339	0257 0634	1035	2.75(5.5)	
Tuen Mun Depot	258D-S05-1	South Depot 1704 Tuen Mun Depot 0727	Tin Terminus 2105 South Depot 1410	0401 0643	1114	3.50(7.0)	1655 take street car South Depot to Po Tin
		Po Tin 1655	Tuen Mun Depot 2126	0431			

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The Kowloon Motor Bus Co. (1933) Ltd

<Work Schedule>:258D

Saturday

Effective Date: 28/07/2018

1. Buses 1, 3, S1 change to parking
2. Morning 1 is cancelled to be recovery vehicle
3. Change the working hour of Morning 1,3,5, Night 1-5 and S1,S5
4. Morning shift to Po Tin to take the bus please take recovery vehicle 502
5. W50 Morning, Night Saturday being stand-by

Depot	Duty	On Duty	Off Duty	Working Hour	Total Working Hour	Overtime (units))	Remarks
Tuen Mun Depot	258D-S06-1	Tuen Mun Depot 0740	South Depot 1154	0414	1059	3.00(6.0)	
		South Depot 1354	Tuen Mun Depot 2039	0645			
Tuen Mun Depot	258D-S07-1	Tuen Mun Depot 0742	South Depot 1302	0520	1106	3.25(6.5)	1107 take street car South Depot to Po Tin
		Po Tin 1514	Po Tin 2100	0546			

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Tuen Mun Depot	258D-S08-1	Tuen Mun Depot 0810	South Depot 1305	0455	0906	1.25(2.5)	1720 take street car South Depot to Po Tin
		Po Tin 1720	South Depot 2131	0411			
Tuen Mun Depot	258D-S09-1	Tuen Mun Depot 0840	Tuen Mun Depot 1145	0305	1012	2.50(5.0)	
		Tuen Mun Depot 1449	Tuen Mun Depot 2156	0707			
Tuen Mun Depot	258D-S10-1	Tuen Mun Depot 0910	South Depot 1320	0410	0946	2.00(4.0)	
		South Depot 1620	Tuen Mun Depot 2156	0536			

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Issued at 09:37 on 23.07.18 Schedule 258D : Page No. 5

九龍巴士(一九三三)有限公司

<工作表>: 258D

假日

生效日期:29/07/2018

車長崗位	258D-20-1	258D-20-2	258D-21-1	258D-21-2	258D-22-1	258D-22-2	258D-01-1	258D-01-2	258D-02-1	258D-02-2	258D-03-1	258D-03-2
屬廠	九龍灣廠	九龍灣廠	九龍灣廠	九龍灣廠	九龍灣廠	九龍灣廠	屯門廠	屯門廠	屯門廠	屯門廠	屯門廠	屯門廠
開工	九廠0505	藍鐵1425	九廠0525	藍鐵1525	九廠0545	藍鐵1555	屯廠0455	寶田1450	屯廠0505	寶田1520	屯廠0515	寶田1535

[illegible]

收工	藍鐵1425	藍鐵0045	藍鐵1525	藍鐵0130	藍鐵1555	藍鐵0150	南廠1412	屯廠0050	寶田1520	寶田0108	寶田1450	屯廠0117
工時 (補水仔數)	0920(3.0)	1020(5.0)	1000(4.0)	1005(4.5)	1010(4.5)	0955(4.0)	0917(3.0)	1000(4.0)	1015(5.0)	0948(4.0)	0935(3.5)	0942(4.0)

九龍巴士(一九三三)有限公司

假日

生效日期:29/07/2018

車長崗位	258D-04-1	258D-04-2	258D-05-1	258D-05-2	258D-06-1	258D-06-2	258D-L01-2	258D-L02-2	258D-L03-2	258D-L60-2	258D-S01-1	258D-S03-1
屬廠	屯門廠	屯門廠	屯門廠	屯門廠	屯門廠	屯門廠	屯門廠	屯門廠	屯門廠	屯門廠	屯門廠	屯門廠
開工	屯廠0535	寶田1605	屯廠0555	南廠1609	屯廠0625	寶田1617	寶田1405	寶田1435	寶田1505	南廠1430	屯廠0635	屯廠0720

[illegible]

收工	寶田1505	屯廠0132	南廠1512	南廠0140	寶田1535	屯廠0146	南廠0000	屯廠0020	總天0040	寶田2334	寶田1617	寶田1930
工時 (補水仔數)	0930(3.0)	0927(3.0)	0917(3.0)	0931(3.5)	0910(2.5)	0929(3.0)	0955(4.0)	0945(4.0)	0935(3.5)	0904(2.5)	0942(4.0)	0946(4.0)

九龍巴士(一九三三)有限公司

假日

生效日期:29/07/2018

車長崗位	258D-S05-1	258D-S07-1	258D-S08-1	258D-S09-1								
屬廠	屯門廠	屯門廠	屯門廠	屯門廠								
開工	屯廠0750	屯廠0820	寶田1014	屯廠0835								

[illegible]

收工	寶田2015	寶田2030	寶田2100	南廠2058								
工時 (補水仔數)	0934(3.5)	0934(3.5)	1046(6.0)	1003(4.5)								

九龍巴士(一九三三)有限公司

<工作表>: 258D

假日

生效日期:29/07/2018

- (1) 1,3,S1車改泊位
 (2) 1早取消做工程車
 (3) 更改1,3,5早, 5,L3,L60夜及S1工時
 (4) 早更往寶田取車請改乘502工程車
 (5) 23早夜,24早夜,S2,S4,S6,S10,W50假日返後備

屬廠	崗位	開工	收工	工時	總工時	補水時間(仔數)	備註
九龍灣廠	258D-20-1	九廠 0505	藍鐵 1425	0920	0920	1.50(3.0)	乘 5:10 工程車往 藍鐵
九龍灣廠	258D-20-2	藍鐵 1425	藍鐵 0045	1020	1020	2.50(5.0)	
九龍灣廠	258D-21-1	九廠 0525	藍鐵 1525	1000	1000	2.00(4.0)	乘 5:30 工程車往 藍鐵
九龍灣廠	258D-21-2	藍鐵 1525	藍鐵 0130	1005	1005	2.25(4.5)	
九龍灣廠	258D-22-1	九廠 0545	藍鐵 1555	1010	1010	2.25(4.5)	乘 5:50 工程車往 藍鐵
九龍灣廠	258D-22-2	藍鐵 1555	藍鐵 0150	0955	0955	2.00(4.0)	
屯門廠	258D-01-1	屯廠 0455	南廠 1412	0917	0917	1.50(3.0)	乘 5:00 工程車往 寶田
屯門廠	258D-01-2	寶田 1450	屯廠 0050	1000	1000	2.00(4.0)	
屯門廠	258D-02-1	屯廠 0505	寶田 1520	1015	1015	2.50(5.0)	乘 5:10 工程車往 南廠
屯門廠	258D-02-2	寶田 1520	寶田 0108	0948	0948	2.00(4.0)	
屯門廠	258D-03-1	屯廠 0515	寶田 1450	0935	0935	1.75(3.5)	乘 5:20 工程車往 南廠
屯門廠	258D-03-2	寶田 1535	屯廠 0117	0942	0942	2.00(4.0)	
屯門廠	258D-04-1	屯廠 0535	寶田 1505	0930	0930	1.50(3.0)	乘 5:40 工程車往 南廠
屯門廠	258D-04-2	寶田 1605	屯廠 0132	0927	0927	1.50(3.0)	
屯門廠	258D-05-1	屯廠 0555	南廠 1512	0917	0917	1.50(3.0)	乘 6:00 工程車往 寶田
屯門廠	258D-05-2	南廠 1609	南廠 0140	0931	0931	1.75(3.5)	
屯門廠	258D-06-1	屯廠 0625	寶田 1535	0910	0910	1.25(2.5)	屯門廠取士啤車出廠
屯門廠	258D-06-2	寶田 1617	屯廠 0146	0929	0929	1.50(3.0)	
屯門廠	258D-L01-2	寶田 1405	南廠 0000	0955	0955	2.00(4.0)	
屯門廠	258D-L02-2	寶田 1435	屯廠 0020	0945	0945	2.00(4.0)	
屯門廠	258D-L03-2	寶田 1505	總天 0040	0935	0935	1.75(3.5)	
屯門廠	258D-L60-2	南廠 1430	寶田 2334	0904	0904	1.25(2.5)	
屯門廠	258D-S01-1	屯廠 0635	寶田 1617	0942	0942	2.00(4.0)	
屯門廠	258D-S03-1	屯廠 0720	寶田 1114	0354	0946	2.00(4.0)	屯門廠取士啤車出廠
		寶田 1338	寶田 1930	0552			
屯門廠	258D-S05-1	屯廠 0750	寶田 1438	0648	0934	1.75(3.5)	
		寶田 1729	寶田 2015	0246			
屯門廠	258D-S07-1	屯廠 0820	寶田 1505	0645	0934	1.75(3.5)	
		寶田 1741	寶田 2030	0249			
屯門廠	258D-S08-1	寶田 1014	寶田 2100	1046	1046	3.00(6.0)	
屯門廠	258D-S09-1	屯廠 0835	寶田 1535	0700	1003	2.25(4.5)	
		寶田 1755	南廠 2058	0303			

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The Kowloon Motor Bus Co. (1933) Ltd

<Work Schedule>:258D

Holiday

Effective Date: 29/07/2018

Duty of Bus Captain	258D-20-1	258D-20-2	258D-21-1	258D-21-2	258D-22-1	258D-22-2	258D-01-1	258D-01-2	258D-02-1	258D-02-2	258D-03-1	258D-03-2
Depot	Kowloon Bay Depot	Kowloon Bay Depot	Kowloon Bay Depot	Kowloon Bay Depot	Kowloon Bay Depot	Kowloon Bay Depot	Tuen Mun Depot	Tuen Mun Depot	Tuen Mun Depot	Tuen Mun Depot	Tuen Mun Depot	Tuen Mun Depot
On Duty	Kowloon Bay Depot 0505	Lam Tin MTR Station 1425	Kowloon Bay Depot 0525	Lam Tin MTR Station 1525	Kowloon Bay Depot 0545	Lam Tin MTR Station 1555	Tuen Mun Depot 0455	Po Tin 1450	Tuen Mun Depot 0505	Po Tin 1520	Tuen Mun Depot 0515	Po Tin 1535
	(258D-20)	(258D-20)	(258D-21)	(258D-21)	(258D-22)	(258D-22)	(258D-01)	(258D-03)	(258D-02)	(258D-02)	(258D-03)	(258D-06)
	R.258D	R.258D	R.258D	R.258D	R.258D	R.258D	R.258D	R.258D	South Depot> Po Tin	R.258D	South Depot> Po Tin	R.258D
	Lam Tin MTR Station 0545	Lam Tin MTR Station 1425	Lam Tin MTR Station 0605	Lam Tin MTR Station 1525	Lam Tin MTR Station 0625	Lam Tin MTR Station 1555	Po Tin 0525	Po Tin 1450	R.258D	Po Tin 1520	R.258D	Po Tin 1535
	Po Tin 0707	Po Tin 1550	Po Tin 0720	Po Tin 1653	Po Tin 0750	Po Tin 1717	Lam Tin MTR Station	Lam Tin MTR Station	Po Tin 0540	Lam Tin MTR Station	Po Tin 0555	Lam Tin MTR Station

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							0645	1623		1649		1702
	Lam Tin MTR Station 0825	Lam Tin MTR Station 1715	Lam Tin MTR Station 0840	Lam Tin MTR Station 1819	Lam Tin MTR Station 0910	Lam Tin MTR Station 1843	(meal break)	(meal break)	Lam Tin MTR Station 0705	(meal break)	Lam Tin MTR Station > Po Tin	(meal break)
	(meal break)	(meal break)	(meal break)	(meal break)	(meal break)	(meal break)	Po Tin 0905	(258D-S0 3)	Po Tin 0820	(258D-05)	(meal break)	(258D-S0 5)
	Po Tin 1038	Po Tin 2000	Po Tin 1102	Po Tin 2045	Po Tin 1126	Po Tin 2115	Lam Tin MTR Station 1025	Po Tin 1855	Lam Tin MTR Station 0940	Po Tin 1915	Po Tin 0920	Po Tin 1930
	Lam Tin MTR Station > Po Tin	Lam Tin MTR Station 2125	Lam Tin MTR Station 1225	Lam Tin MTR Station 2210	Lam Tin MTR Station 1255	Lam Tin MTR Station 2240	Po Tin 1150	Lam Tin MTR Station 2025	(meal break)	Lam Tin MTR Station 2040	Lam Tin MTR Station 1040	Lam Tin MTR Station 2055
	Po Tin 1302	Po Tin 2300	Po Tin 1350	Po Tin 2345	Po Tin 1420	Po Tin 0005	Lam Tin MTR Station> South Depot	Po Tin 2200	Po Tin 1226	Po Tin 2215	Po Tin 1202	Po Tin 2230
		Lam Tin MTR Station> Lam Tin MTR Station		Po Tin> Lam Tin MTR Station		Lam Tin MTR Station > Lam Tin MTR Station		Lam Tin MTR Station 2325	Lam Tin MTR Station 1355	Lam Tin MTR Station 2340	Lam Tin MTR Station 1325	Lam Tin MTR Station 2355
								Po Tin> Tuen Mun		Po Tin> Po Tin		Po Tin> Tuen Mun

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								Depot				Depot
Off Duty	Lam Tin MTR Station 1425	Lam Tin MTR Station 0045	Lam Tin MTR Station 1525	Lam Tin MTR Station 0130	Lam Tin MTR Station 1555	Lam Tin MTR Station 0150	South Depot 1412	Tuen Mun Depot 0050	Po Tin 1520	Po Tin 0108	Po Tin 1450	Tuen Mun Depot 0117
Working Hour (units of overtime)	0920(3.0)	1020(5.0)	1000(4.0)	1005(4.5)	1010(4.5)	0955(4.0)	0917(3.0)	1000(4.0)	1015(5.0)	0948(4.0)	0935(3.5)	0945(4.0)

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The Kowloon Motor Bus Co. (1933) Ltd

<Work Schedule>:258D

Holiday

Effective Date: 29/07/2018

Duty of Bus Captain	258D-04-1	258D-04-2	258D-05-1	258D-05-2	258D-06-1	258D-06-2	258D-L01-2	258D-L02-2	258D-L03-2	258D-L60-2	258D-S01-1	258D-S03-1
Depot	Tuen Mun Depot	Tuen Mun Depot	Tuen Mun Depot	Tuen Mun Depot	Tuen Mun Depot	Tuen Mun Depot	Tuen Mun Depot	Tuen Mun Depot	Tuen Mun Depot	Tuen Mun Depot	Tuen Mun Depot	Tuen Mun Depot
On Duty	Tuen Mun Depot 0535	Po Tin 1605	Tuen Mun Depot 0555	South Depot 1609	Tuen Mun Depot 0625	Po Tin 1617	Po Tin 1405	Po Tin 1435	Po Tin 1505	South Depot 1430	Tuen Mun Depot 0635	Tuen Mun Depot 0720
	(258D-04)	(258D-S03)	(258D-05)	(258D-05)	(258D-06)	(258D-S01)	(258D-S07)	(258D-S09)	(258D-04)	(258D-01)	(258D-S01)	(258D-S03)
	South Depot> Po Tin	R.258D	R.258D	South Depot> Po Tin	Tuen Mun Depot> Po Tin	R.258D	R.258D	R.258D	R.258D	South Depot> Leung King	Tin Terminus > Po Tin	Tuen Mun Depot> Po Tin
	R.258D	Po Tin 1605	Po Tin 0625	R.258D	R.258D	Po Tin 1617	Po Tin 1405	Po Tin 1435	Po Tin 1505	R. 58X	R. 258D	R. 258D
	Po Tin 0610	Lam Tin MTR Station 1728	Lam Tin MTR Station 0745	Po Tin 1629	Po Tin 0640	Lam Tin MTR Station 1741	Lam Tin MTR Station 1540	Lam Tin MTR Station 1610	Lam Tin MTR Station 1636	Leung King 1450	Po Tin 0655	Po Tin 0735
	Lam Tin MTR	(meal break)	(meal break)	Lam Tin MTR	Lam Tin MTR	(meal break)	Po Tin 1705	(meal break)	(meal break)	Mong Kok East	Lam Tin MTR	Lam Tin MTR

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	Station 0725			Station 1754	Station > Po Tin					1615	Station 0805	Station 0855
	(meal break)	(258D-S0 7)	Po Tin 1002	(meal break)	(meal break)	(258D-S0 9)	Lam Tin MTR Station 1831	(258D-06)	(258D-S0 1)	(meal break)	(meal break)	(interim break)
	Po Tin 0935	Po Tin 1945	Lam Tin MTR Station 1125	(258D-03)	Po Tin 0950	Po Tin 2015	(meal break)	Po Tin 1835	Po Tin> Lam Tin MTR Station	Leung King 1850	Po Tin 1026	(258D- S05)
	Lam Tin MTR Station 1055	Lam Tin MTR Station 2110	Po Tin 1250	Po Tin 2030	Lam Tin MTR Station 1110	Lam Tin MTR Station 2140	(258D-02)	Lam Tin MTR Station 1955	Lam Tin MTR Station 2010	Mong Kok East 2006	Lam Tin MTR Station 1155	Po Tin 1338
	Po Tin 1214	Po Tin 2245	Lam Tin MTR Station> South Depot	Lam Tin MTR Station 2155	Po Tin 1238	Po Tin 2315	Po Tin 2100	Po Tin 2130	Po Tin 2145	Leung King> Mong Kok East	Po Tin 1326	Lam Tin MTR Station 1510
	Lam Tin MTR Station 1340	Lam Tin MTR Station 0010		Po Tin 2330	Lam Tin MTR Station 1410	Lam Tin MTR Station 0030	Lam Tin MTR Station 2225	Lam Tin MTR Station 2255	Lam Tin MTR Station 2310	Mong Kok East 2206	Lam Tin MTR Station 1455	Po Tin 1641
		Po Tin> Tuen Mun Depot		Lam Tin MTR Station> South Depot		Po Tin> Tuen Mun Depot	Po Tin> South Depot	Po Tin> Tuen Mun Depot	Po Tin> Tin Terminus	Leung King> Po Tin		Lam Tin MTR Station 1807

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The Kowloon Motor Bus Co. (1933) Ltd

<Work Schedule>:258D

Holiday

Effective Date: 29/07/2018

Duty of Bus Captain	258D-S05-1	258D-S07-1	258D-S08-1	258D-S09-1								
Depot	Tuen Mun Depot	Tuen Mun Depot	Tuen Mun Depot	Tuen Mun Depot								
On Duty	Tuen Mun Depot 0750	Tuen Mun Depot 0820	Po Tin 1014	Tuen Mun Depot 0835								
	(258D-S05)	(258D-S07)	(258D-S08)	(258D-S09)								
	Tuen Mun> Po Tin	Tuen Mun> Po Tin	R. 258D	Tuen Mun> Po Tin								
	R. 258D	R. 258D	Po Tin 1014	R. 258D								
	Po Tin 0805	Po Tin 0835	Lam Tin MTR Station 1140	Po Tin 0850								
	Lam Tin MTR Station 0925	Lam Tin MTR Station 0955	Po Tin 1314	Lam Tin MTR Station 1010								
	Po Tin 1050	Po Tin 1114	Lam Tin MTR Station	Po Tin 1138								

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Off Duty	Po Tin 2015	Po Tin 2030	Po Tin 2100	South Depot 2058								
Working Hour (units of overtime)	0934(3.5)	0934(3.5)	1046(6.0)	1003(4.5)								

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Issued at 03: 34 on 23.07.18 Schedule 258D : Page No. 3

The Kowloon Motor Bus Co. (1933) Ltd

<Work Schedule>:258D

Holiday

Effective Date: 29/07/2018

1. Buses 1, 3, S1 change to parking
2. Morning 1 is cancelled to be recovery vehicle
3. Change the working hour of Morning 1,3,5, Night 1-5 and S1,S5
4. Morning shift to Po Tin to take the bus please take recovery vehicle 502
5. W50 Morning, Night Saturday being stand-by

Depot	Duty	On Duty	Off Duty	Working Hour	Total Working Hour	Overtime (units))	Remarks
Kowloon Bay Depot	258D-20-1	Kowloon Bay Depot 0505	Lam Tin MTR Station 1425	0920	0920	1.50(3.0)	Take 5:10 recovery vehicle to Lam Tin MTR Station
Kowloon Bay Depot	258D-20-2	Lam Tin MTR Station 1425	Lam Tin MTR Station 0045	1020	1020	2.50(5.0)	
Kowloon Bay Depot	258D-21-1	Kowloon Bay Depot 0525	Lam Tin MTR Station 1525	1000	1000	2.00(4.0)	Take 5:30 recovery vehicle to

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							Lam Tin MTR Station
Kowloon Bay Depot	258D-21-2	Lam Tin MTR Station 1525	Lam Tin MTR Station 0130	1005	1005	2.25(4.5)	
Kowloon Bay Depot	258D-22-1	Kowloon Bay Depot 0545	Lam Tin MTR Station 1555	1010	1010	2.25(4.5)	Take 5:50 recovery vehicle to Lam Tin MTR Station
Kowloon Bay Depot	258D-22-2	Lam Tin MTR Station 1555	Lam Tin MTR Station 0150	0955	0955	2.00(4.0)	
Tuen Mun Depot	258D-01-1	Tuen Mun Depot 0455	South Depot 1412	0917	0917	1.50(3.0)	Take 5:00 recovery vehicle to Po Tin
Tuen Mun Depot	258D-01-2	Po Tin 1450	Tuen Mun Depot 0050	1000	1000	2.00(4.0)	
Tuen Mun Depot	258D-02-1	Tuen Mun Depot 0505	Po Tin 1520	1015	1015	2.50(5.0)	Take 5:10 recovery vehicle to South

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Tuen Mun Depot	258D-02-2	Po Tin 1520	Po Tin 0108	0948	0948	2.00(4.0)	Depot
Tuen Mun Depot	258D-03-1	Tuen Mun Depot 0515	Po Tin 1450	0935	0935	1.75(3.5)	Take 5:20 recovery vehicle to South Depot
Tuen Mun Depot	258D-03-2	Po Tin 1535	Tuen Mun 0117	0942	0942	2.00(4.0)	
Tuen Mun Depot	258D-04-1	Tuen Mun Depot 0535	Po Tin 1505	0930	0930	1.50(3.0)	Take 5:40 recovery vehicle to South Depot
Tuen Mun Depot	258D-04-2	Po Tin 1605	Tuen Mun 0132	0927	0927	1.50(3.0)	
Tuen Mun Depot	258D-05-1	Tuen Mun Depot 0555	South Depot 1512	0917	0917	1.50(3.0)	Take 6:00 recovery vehicle to Po Tin
Tuen Mun Depot	258D-05-2	South Depot 1609	South Depot 0140	0931	0931	1.75(3.5)	

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Tuen Mun Depot	258D-06-1	Tuen Mun Depot 0625	Po Tin 1535	0910	0910	1.25(2.5)	Tuen Mun Depot takes a spare bus out of the Depot
Tuen Mun Depot	258D-06-2	Po Tin 1617	Tuen Mun Depot 0146	0929	0929	1.50(3.0)	
Tuen Mun Depot	258D-L01-2	Po Tin 1405	South Depot 0000	0955	0955	2.00(4.0)	
Tuen Mun Depot	258D-L02-2	Po Tin 1435	Tuen Mun 0020	0945	0945	2.00(4.0)	
Tuen Mun Depot	258D-L03-2	Po Tin 1505	Tin Terminus 0040	0935	0935	1.75(3.5)	
Tuen Mun Depot	258D-L60-2	South Depot 1430	Po Tin 2334	0904	0904	1.25(2.5)	
Tuen Mun Depot	258D-S01-1	Tuen Mun Depot 0635	Po Tin 1617	0942	0942	2.00(4.0)	
Tuen Mun Depot	258D-S03-1	Tuen Mun Depot 0720	Po Tin 1114	0354	0946	2.00(4.0)	Tuen Mun Depot takes a spare bus out of the

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							Depot
		Po Tin 1338	Po Tin 1930	0552			
Tuen Mun Depot	258D-S05-1	Tuen Mun Depot 0750	Po Tin 1438	0648	0934	1.75(3.5)	
		Po Tin 1729	Po Tin 2015	0246			
Tuen Mun Depot	258D-S07-1	Tuen Mun Depot 0820	Po Tin 1505	0645	0934	1.75(3.5)	
		Po Tin 1741	Po Tin 2030	0249			
Tuen Mun Depot	258D-S08-1	Po Tin 1014	Po Tin 2100	1046	1046	3.00(6.0)	
Tuen Mun Depot	258D-S09-1	Tuen Mun Depot 0835	Po Tin 1535	0700	1003	2.25(4.5)	
		Po Tin 1755	South Depot 2058	0303			

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香港專營巴士服務
獨立檢討委員會

香港金鐘道 66 號
金鐘道政府合署 21 樓



Independent Review Committee on
Hong Kong's Franchised Bus Service

21/F, Queensway Government Offices,
66 Queensway, Hong Kong

本函檔號 Our Ref.: CSO/IRC-BUS/CR/7-45/9

來函檔號 Your Ref.:

電話號碼 Tel No.: (852) 2867 5324

傳真號碼 Fax No.: (852) 3104 0254

4 June 2018

Miss WONG Yee-ling (黃綺玲女士)
Operations-in-Charge
Kowloon Motor Bus Tuen Mun Depot
1 Kin Wing Street
Tuen Mun

PERSONAL

Dear Miss WONG,

**Invitation for Written Submissions for Consideration by the
Independent Review Committee on Hong Kong's Franchised Bus Service**

On 9 May 2018, the Secretariat of the Independent Review Committee ("the Committee") received via facsimile a letter addressed to the Committee ("letter to the Committee") from "KMB and LWB Zone Heads". Attached to the letter was another letter ("the attached letter") addressed to the Chairman and Board Members of the Kowloon Motor Bus Company (1933) Limited ("KMB") and signed off by seven operations-in-charge of KMB and the Long Win Bus Company Limited.

We attach at the Annex a copy of the letters and invite you to confirm, if it is the case, that: (i) the letter to the Committee was sent out by you; and (ii) the attached letter is your statement and that both the letter to the Committee and the attached letter are true to the best of your knowledge and belief.

If so, we would invite you to indicate whether you will be willing to assist the Committee further in its work by providing further written submissions and/or attend hearing to deliver oral evidence with regard to the two letters mentioned above.

In addition to providing the response to the Committee, you may also provide information on other bus-safety related issues, including, for example, details and further elaborations on the improvements to facilities at bus stations, about which reference was made in the attached letter, and how such improvements helped with bus safety. In doing so, we would invite you to focus on matters of which you have personal knowledge but not on matters of which you do not have first hand knowledge.

We would be grateful if your response could reach the Secretariat of the Committee by **11 June 2018**. Please send the submission to:

By post: Secretariat to the Independent Review Committee on Hong Kong's Franchised Bus Service, 21/F, Queensway Government Offices, 66 Queensway, Admiralty, Hong Kong (*with the envelope specifying that the written submission is enclosed*); or

Via email: secretariat@irc-bus.gov.hk (*with the email heading specifying that the written submission is enclosed*)

Please be advised that the information provided in your response will be considered by the Committee in reviewing the matters it is directed to consider under the terms of reference of the Committee and in drawing up its recommendations. If necessary, the Committee may invite you to provide supplementary written submissions and/or to give oral evidence. All written submissions (including any annexes, appendices and attachments contained therein) and oral evidence will be treated as public information and, at the discretion of the Committee, may be published on the Committee's website.

Yours sincerely,



(CHAN Ping-lai, Peter)
Secretary, Independent Review Committee on
Hong Kong's Franchised Bus Service

Encl

香港專營巴士服務
獨立檢討委員會

香港金鐘道 66 號
金鐘道政府合署 21 樓



Independent Review Committee on
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來函檔號 Your Ref.:

電話號碼 Tel No.: (852) 2867 5324

傳真號碼 Fax No.: (852) 3104 0254

(中文譯本)

屯門建榮街 1 號
九龍巴士屯門車廠
車務主管
黃綺玲女士

私人信件

黃女士:

邀請你向香港專營巴士服務獨立檢討委員會提供書面意見

於 2018 年 5 月 9 日，香港專營巴士服務獨立檢討委員會（下稱“委員會”）的秘書處透過傳真接獲一份由“KMB and LWB Zone Heads”交予委員會的信函（下稱“給委員會的信函”）。有關信函夾附了另一份交予九龍巴士（一九三三）有限公司（下稱“九巴”）主席及董事局成員的信函（下稱“夾附的信函”），並由七位九巴及龍運巴士有限公司的車務主管簽署。

我們於本函附件附上了上述信函的副本，並邀請你確認以下陳述是否真確：（一）給委員會的信函是由你交予委員會；及（二）夾附的信函的內容是由你所作出的陳述，而且就你所知所信，給委員會的信函和夾附的信函的內容，均實真確。

如你確認以上陳述屬實，我們邀請你確認是否樂意就與上述兩份信函相關的事宜向委員會提供協助，包括進一步提供書面意見及／或出席聽證會以提供口述證供。

除了回應上述事宜外，你亦可就其他與巴士安全相關的事宜向委員會提供資料，例子包括夾附的信函中提及的站頭設施改善，以及有關改善如何對巴士安全有幫助。在向委員會提供資料時，我們邀請你集中於你曾親身經歷的事宜，而非你沒有第一手資料的事宜。

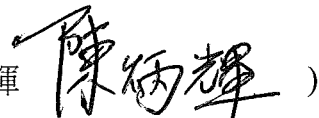
請於 **2018年6月11日** 或之前向委員會秘書處提供你的回應，
並以下列方式將有關回應交予秘書處：

郵遞： 香港金鐘金鐘道 66 號
金鐘道政府合署 21 樓
香港專營巴士服務獨立檢討委員會秘書處
(請於信封上註明郵件為予委員會的書面意見)；
或

電子郵件： secretariat@irc-bus.gov.hk (請於電子郵件的標題
上註明郵件為予委員會的書面意見)

請注意委員會將會考慮書面意見所提供的資料，以按照其職權範圍檢視各項事宜及制訂建議。如有需要，委員會或會邀請貴工會以書面及／或口頭方式提供進一步資料。所有書面意見(包括書面意見中的任何附件、附錄及其他夾附的文件)以及口述證供均會被視作公開資料，而委員會或會將有關資料上載至委員會網頁。

(陳炳輝



香港專營巴士服務獨立檢討委員會秘書

2018 年 6 月 4 日

連附件

Annex 附件

Written Submission is enclosed

8th May 2018

Secretariat to the Independent Review Committee
on Hong Kong's Franchised Bus Service,
21/F, Queensway Government Offices,
66 Queensway, Admiralty, Hong Kong

Dear Sir/Madam,

We refer to the Testimonies submitted by various ex-management and operation staff of KMB (adduced as Item 4 and 5 of the Bundle for Miscellaneous) was being published to the public through IRC's website.

A letter written by Zone Heads of KMB and Long Win Bus Operations is attached for IRC's consideration. This letter was submitted to the Board of Directors of KMB on 18 March 2018 regarding the aforementioned Testimonies.

As we understand that this letter may be inserted into the bundle for the IRC hearing, and may probably be uploaded to the IRC website which is accessible by the general public, we humbly request that the names of the uploaded version would be redacted for privacy reason.

In February 2018, as known from media, a group of ex-staff of KMB alleged the current management on compromising safety for more profit, on poor management which leads to low morale & confusion in the company, and on unreasonable dismissal of experienced staff. We found the allegations to be untrue and groundless. Being a current member of staff in the company, we have written the attached letter to express our view and support to our management. This letter was only sent to the Board but not to the IRC as we regarded the allegations mentioned in the ex-staff report were solely internal matters and were nothing related to safety.

To our surprise, the report was being uploaded and disclosed to the public by the IRC yesterday. In response to this, we must stand up for the company and the management about the unfair and untrue allegations. We have to provide a clear picture to the IRC as well as to the public about the recent changes in KMB, which we see positive, to the Company, passengers and shareholders. Therefore, we have decided to submit our letter.

We have to point out that operating a franchise bus business is not easy. Nevertheless, our management is passionate and committed to serving KMB and the general public. They have been working very hard to improve KMB's bus service and, at the same time, to take care of all staff member in the company. Their courage is what the society should cherish rather than to criticize.

Thank you for your attention.

Yours sincerely,
KMB and LWB Zone Heads

致九龍巴士(一九三三)有限公司董事局主席及全體董事局成員：

最近公司成為傳媒焦點，有關九巴的新聞一則接一則，其中多份報章及媒體刊登了關於一班離職九巴員工的報導。文章指他們對公司相當不滿並對管理層作出各樣指控，管理層在記者及這班舊員工筆下好像成為了「十惡不赦」的罪人。究竟他們做錯了什麼？外界對公司的了解只靠片面之詞，對我們公平嗎？

他們已離職一段時間，並隻字不提公司近年的最新情況，原因是他們根本完全不了解我們所艱辛努力做的事情。作為公司的現職員工，突然覺得有責任發表我們的意見及對管理層表達支持。然而，我們不願浪費筆墨及時間評論報導的真確性，我們只想說出親眼所見的事實。

車務組是公司與前線同事的重要橋樑，我們留意到前線同事比以前開心了，工作環境的改善是主要原因。以前公司忽略了很多前線同事基本的需要，現屆管理層上任後，其中最迫切的任務是完善站頭設施，現在大部份已完成。同事在站頭有更理想的休息環境，對安全駕駛也有幫助。

以前，前線同事總覺得管理層高高在上，亦很少有機會與他們接觸。現屆管理層風格截然不同，他們親民並時常到車廠及站頭探望同事，聽取需要及意見。對於同事的需要，能配合的管理層一定盡力配合，前線同事完全感受被公司尊重及重視。

這幾年，我們親身見證著公司的轉變，現在的成就是我們一步一步努力的成績，的確是得來不易。無可否認，現在的工作量是比以前繁忙，我們卻覺得更有意義。因為大家的目標明確，亦知道管理層正與我們一同努力，希望公司成功。

要改變舊人事、舊制度、舊作風、舊方法，從來並非易事，而且「吃力不討好」，我們佩服一班管理層的勇氣及毅力。我們會繼續支持公司，努力工作。這是我們的一點點心聲，亦希望董事局能給予管理層更多的支持，謝謝！

九巴/龍運各區車務主管

荔枝角廠 -

九龍灣廠 -

九龍灣廠 -

沙田廠 -

屯門廠 -

屯門廠 -

龍運巴士 -

18-03-2018

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**Invitation for Written Submissions for Consideration by the Independent
Review Committee on Hong Kong's Franchised Bus Service**

12.06.2018 09:39

From: Debby Wong TM [REDACTED]
To: "secretariat@irc-bus.gov.hk" <secretariat@irc-bus.gov.hk>,

Dear Mr. Chan,

I refer to your letter dated 4 June 2018 with your ref. CSO/IRC_BUS/CR/7-45/9, I hereby confirmed (i) that the letter to the Committee with the attached letter addressed to the Chairman and Board Members of the Kowloon Motor Bus Company (1933) Limited was signed by the seven zone heads of KMB and LWB and I am one of them; (ii) the attached letter is true to the best of my knowledge and belief.

I am willing to assist the Committee further.

Thanks and Regards,

Debby

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香港專營巴士服務
獨立檢討委員會

香港金鐘道 66 號
金鐘道政府合署 21 樓



Independent Review Committee on
Hong Kong's Franchised Bus Service

21/F, Queensway Government Offices,
66 Queensway, Hong Kong

本函檔號 Our Ref.: CSO/IRC-BUS/CR/7-45/9

來函檔號 Your Ref.:

電話號碼 Tel No.: (852) 2867 5324

傳真號碼 Fax No.: (852) 3104 0254

28 June 2018

Miss WONG Yee-ling, Debby
Operations-in-Charge
Kowloon Motor Bus Tuen Mun Depot
1 Kin Wing Street
Tuen Mun
New Territories

PERSONAL

Dear Miss WONG,

**Invitation for Written Submissions for Consideration by the
Independent Review Committee on Hong Kong's Franchised Bus Service**

The Committee thanks you for your reply dated 12 June 2018 confirming that the written submission received by the Committee on 9 May 2018 from "KMB and LWB Zone Heads" is your statement and that the statement is true to the best of your knowledge and belief.

2. In the letter addressed to the Chairman of the Board of Directors and all Board Members of the Kowloon Motor Bus Company (1933) Limited (KMB) dated 18 March 2018 that was attached to your written submission to the Committee of 9 May 2018, paragraph 3 states that:

"Since the current management took office, the most urgent mission is to advance the facilities at the stations, which have mostly been completed."
[Note: a copy of the letter is attached for reference.]

3. The Committee would be assisted if you could provide further information regarding the above statement by addressing the following questions:

- (a) Are there any existing standards or guidelines issued by KMB on the resting facilities for bus captains that should be provided at bus stations? If so, please provide details of the existing standards or guidelines. Are you aware of any guidelines issued by the Transport Department on the provision of such facilities? If so, please describe them.

- (b) How many bus stations are currently under the purview or management of the Tuen Mun Depot?
- (c) Of the bus stations mentioned in (b) above, are there currently any bus stations that are considered to have insufficient resting facilities, as determined under any standards or guidelines, if any, of KMB or as alleged by bus captains or unions? If so, please identify them, *in particular those at which bus captains employed by KMB operating on special shifts commence and/or spend their rest breaks* of no less than three or more consecutive hours in the course of working a special shift.
- (d) Are there plans to provide resting facilities at the bus stations identified in (c) above? Have there been difficulties in providing or improving the resting facilities at these bus stations? If so, what are these difficulties and has the assistance been sought from the Transport Department or other relevant government departments?
- (e) Please provide examples of the advancements to resting facilities at bus stations that have been made since “the current management took office”.

4. In addition to addressing the questions above, the Committee is also considering inviting you and other Zone Heads who have agreed to provide further assistance to the Committee to one of the coming hearings to deliver oral evidence to the Committee as a group. The tentative dates being considered by the Committee are 14, 16 or 17 July 2018. In this connection, the Committee would like to invite you to indicate whether you will be available to attend a hearing on one of these three days.

5. I should be grateful if the response to paragraphs 3 and 4 above could reach the Secretariat of the Committee by **5 July 2018**. Please send the submission to:

By post: Secretariat to the Independent Review Committee on Hong Kong's Franchised Bus Service, 21/F, Queensway Government Offices, 66 Queensway, Admiralty, Hong Kong (*with the envelope specifying that the written submission is enclosed*); or

Via email: secretariat@irc-bus.gov.hk (*with the email heading specifying that the written submission is enclosed*)

6. In addition to providing the response to the Committee, you may also provide information on other bus-safety related issues. If you do so, we would invite you to focus on matters of which you have personal knowledge but not on matters of which you do not have first hand knowledge.

7. Please be advised that the information provided in your response will be considered by the Committee in reviewing the matters it is directed to consider under the terms of reference of the Committee and in drawing up its recommendations. If necessary, the Committee may invite you to provide supplementary written submissions and/or to give oral evidence. All written submissions (including any annexes, appendices and attachments contained therein) and oral evidence will be treated as public information and, at the discretion of the Committee, may be published on the Committee's website.

Yours sincerely,



(CHAN Ping-fai, Peter)
Secretary, Independent Review Committee on
Hong Kong's Franchised Bus Service

Encl

Written Submission is enclosed

8th May 2018

Secretariat to the Independent Review Committee
on Hong Kong's Franchised Bus Service,
21/F, Queensway Government Offices,
66 Queensway, Admiralty, Hong Kong

Dear Sir/Madam,

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A letter written by Zone Heads of KMB and Long Win Bus Operations is attached for IRC's consideration. This letter was submitted to the Board of Directors of KMB on 18 March 2018 regarding the aforementioned Testimonies.

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To our surprise, the report was being uploaded and disclosed to the public by the IRC yesterday. In response to this, we must stand up for the company and the management about the unfair and untrue allegations. We have to provide a clear picture to the IRC as well as to the public about the recent changes in KMB, which we see positive, to the Company, passengers and shareholders. Therefore, we have decided to submit our letter.

We have to point out that operating a franchise bus business is not easy. Nevertheless, our management is passionate and committed to serving KMB and the general public. They have been working very hard to improve KMB's bus service and, at the same time, to take care of all staff member in the company. Their courage is what the society should cherish rather than to criticize.

Thank you for your attention.

Yours sincerely,
KMB and LWB Zone Heads

致九龍巴士(一九三三)有限公司董事局主席及全體董事局成員：

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要改變舊人事、舊制度、舊作風、舊方法，從來並非易事，而且「吃力不討好」，我們佩服一班管理層的勇氣及毅力。我們會繼續支持公司，努力工作。這是我們的一點點心聲，亦希望董事局能給予管理層更多的支持，謝謝！

九巴/龍運各區車務主管

荔枝角廠 -
九龍灣廠 -
九龍灣廠 -
沙田廠 -
屯門廠 -
屯門廠 -
龍運巴士 -

18-03-2018

Independent Review Committee on Hong Kong's Franchised Bus Service

Your Ref: CSO/IRC-BUS/CR/7-45/9

Email: secretariat@irc-bus.gov.hk

4 July 2018

Dear Mr. Chan,

**Invitation for Written Submissions for Consideration by the Independent Review
Committee on Hong Kong's Franchised Bus Service**

I refer to your email dated 28/6/2018, my reply is in below:

3a. In my knowledge, KMB is providing 2 standard fiber kiosks for Bus Captain resting. One is Type A: 1.2Mx1.66Mx2.57M, another one is Type B: 2.48Mx2.86Mx2.57M. Both is basically standard but subject to the actual pavement size and the approval from Transport Department (after public consultation). There is no guidelines that issued by the Transport Department on the provision of such facilities.

3b. There is 30 bus stations are under the management of Tuen Mun Depot.

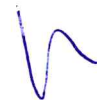
3c. Recently, all bus stations were installed the resting facilities and chemical toilet under the management of Tuen Mun Depot.

3d. Under my management at Lai Chi Kok Depot, one sample at Allway Gardens, KMB have applied the placement of chemical toilets for almost 3 years but each proposals were rejected by Transport Department due to public consultation objection. Finally, the Lok Wah issue in August 2017 and several lobbying with DC members, Transport Department finally made approval in October 2017. Another sample mentioned in (c) above at Tuen Mun Depot is Yuen Long Park. We applied the resting facilities in 2014 and approved in 2016. During the public consultation, only one party rejected was Police and we continuous communication and revised our plan. There is no other assistance in these 2 samples.

3e. In this 2 years, our new management requested us to provide a better environment to bus captains. One item is to refurbish the concrete toilet facilities, e.g. Yuen Long West. We have improve the flashing system, provide AC and improve ventilation system. Another item is to refurbish the concrete resting area and Terminus Supervisor Office, e.g. Yuen Long West. We have renovated the

interior, provide sleeping chairs, provide distilled water, provide shelves for storage, provide TV for entertainment. Another sample is concrete office at Tin Heng, we have renovated the interior, storage room and provide tidy furniture for meal. Both bus stations are the majority in Yuen Long and Tin Shui Wai zone.

Yours sincerely,



Debby Wong Yee-Ling

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Our Ref : 

6 October 2014

Commissioner for Transport
Transport Department
Urban (Kln) & NT Regional Offices
7&8/F Mong Kok Government Offices
30 Luen Wan Street,
Kowloon

(By fax 2381 3799 & by Post)

Attn : 

Dear Madam,

**Application for Placement of Bus Operation Kiosks
on/over Government Land at Yuen Long Park Bus Terminus, Yuen Long**

To cope with the terminal relocation of route No. 68E to Yuen Long Park Bus Terminus in December 2014, we hereby apply for your permission for us to place two bus operation kiosks (1 type A and 1 type S) to facilitate bus operation at the terminus. Attached please find eight copies of the schedule and plan for your further action.

Please note that this bus terminus, formerly known as "Town Park Road North Bus Terminus" where the No-objection Letter (NOL), ref: L/M (128/03) in NR 76/180-268B, for the placement of 1 type A and 1 type S kiosk was granted. The NOL was cancelled on 25 May 2005 due to bus terminus changes.

Your reissue of the no objection letter is highly appreciated.

Yours faithfully,
for and on behalf of
THE KOWLOON MOTOR BUS CO. (1933) LTD.



Head of Office Administration Department

Enc

HOAD/BJ

Our Ref : [REDACTED]

17 March 2015

Commissioner for Transport
Transport Department
Urban (Kln) & NT Regional Offices
7&8/F Mong Kok Government Offices
30 Luen Wan Street,
Kowloon

(By fax 2381 3799 & by Post)

Attn : [REDACTED]

Dear Madam,

**Application for Placement of Bus Operation Kiosks
on/over Government Land at Yuen Long Park Bus Terminus, Yuen Long**

Please refer to our application letter dated 6 October 2014.

We would like to follow up with you about our application for the captioned placement at Yuen Long Park Bus Terminus. Kindly please advise us on the latest position.

Thank you for your attention.

Yours faithfully,
for and on behalf of
THE KOWLOON MOTOR BUS CO. (1933) LTD.

[REDACTED]
Head of Office Administration Department

HOAD/aj



運輸署
Transport Department

Our Ref: [REDACTED]

Your Ref: [REDACTED]

Tel.: 2399 2447

Fax: 2391 0119

By Post and Fax (2745 0300).

10 April 2015

Head of Office Administration Department,
The Kowloon Motor Bus Co. (1933) Ltd.,
No. 9, Po Lun Street,
Lai Chi Kok,
Kowloon,
(Attn: [REDACTED])

Dear Madam,

**Application for Placement of Bus Operation Kiosk on
Government Land at Yuen Long Park Bus Terminus**

I refer to your letters dated 6 October 2014 and 17 March 2015 regarding the captioned subject.

After consulting relevant Government Departments, we regret to inform you that your proposal is not supported due to the remaining clear width of the footpath may not be sufficient to cater the pedestrian flow during peak hours at the concerned location.

Should you have any query regarding to the captioned subject, please free feel to contact the undersigned at [REDACTED]

Yours faithfully,

[REDACTED]
for Commissioner for Transport

c.c

Internal
SN/YL

Pls note in file

市區(九龍)及新界分區辦事處
Urban (Kin.) & NT Regional Offices
九龍聯環街三十號旺角政府合署七樓及八樓
7th & 8th Floors, Mong Kok Government Offices, 30 Luen Wan Street, Kowloon.
圖文傳真 Fax No.: 2381 3799 (新界區) (NTRO) 2397 8046 (九龍市區) (U(K)RO)
網址 Web Site: <http://www.td.gov.hk>

Our Ref : 

28 August 2015

Commissioner for Transport
Transport Department
Urban (Kln) & NT Regional Offices
7&8/F Mong Kok Government Offices
30 Luen Wan Street,
Kowloon

(By fax 2381 3799 & by Post)

Attn : 

Dear Madam,

**Application for Placement of Bus Operation Kiosks
on/over Government Land at Yuen Long Park Bus Terminus, Yuen Long**

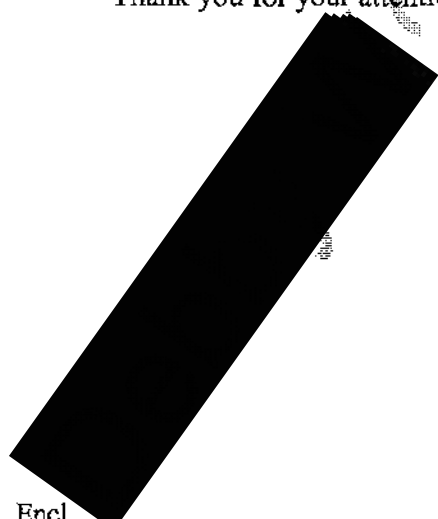
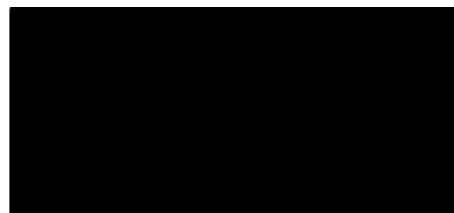
We refer to your letter dated 10 April 2015 and the subsequent discussion during the meeting held at Yuen Long Park Bus Terminus. Your comments and the views of Hong Kong Police Force are noted.

In response to your suggestion, we hereby re-submit our application for placing two bus operation kiosks (1 x Type A kiosk and 1 x Type S kiosk) at the captioned terminus.

Attached please find eight copies of the schedule and revised plan for your further attention. We should be grateful if you would consider approving our application and forward as soon as possible the no objection letter to us.

Thank you for your attention.

Yours faithfully,
for and on behalf of
THE KOWLOON MOTOR BUS CO. (1933) LTD.



Head of Office Administration Department

Encl.

HOAD/ay

Our Ref : [REDACTED]

15 December 2015

Commissioner for Transport
Transport Department
Urban (Kln) & NT Regional Offices
7&8/F Mong Kok Government Offices
30 Luen Wan Street,
Kowloon

(By fax 2381 3799 & by Post)

Attn : [REDACTED]

Dear Sir,

**Application for Placement of Bus Operation Kiosks
on/over Government Land at Yuen Long Park Bus Terminus, Yuen Long**

Please refer to our letter dated 28 August 2015.

We would like to follow up with you about our application for the captioned placement at Yuen Long Park Bus Terminus. Kindly please advise us on the latest position.

Thank you for your attention.

Yours faithfully,
for and on behalf of
THE KOWLOON MOTOR BUS CO. (1933) LTD.

[REDACTED]
Assistant Manager

OAD/ay
[REDACTED]

**運輸署****Transport Department**

Our Ref: [REDACTED]

Your Ref: [REDACTED]

Tel.: 2399 2447

Fax: 2391 0119

By Post and Fax (2745 0300)

18 January 2016

Head of Office Administration Department,
The Kowloon Motor Bus Co. (1933) Ltd.,
No. 9, Po Lun Street,
Lai Chi Kok,
Kowloon,
(Attn: [REDACTED])

Dear Madam,

**Application for Placement of Bus Operation Kiosks on
Government Land at Yuen Long Park Bus Terminus**

I refer to your letters dated 28 August and 15 December 2015 regarding the captioned subject.

Please be informed that your application has been approved by Assistant Commissioner for Transport/New Territories on 18 January 2016. Grateful if your company will signify the acceptance form and return the duplicate copy of the no-objection letter and the plan annexed within 28 days from 18 January 2016.

Should you have any query regarding to the captioned subject, please free feel to contact the undersigned at [REDACTED].

Yours faithfully,

[REDACTED]
for Commissioner for Transport

c.c.

External

Internal
SN/YL

Pls note in file

市區(九龍)及新界分區辦事處
Urban (Kln.) & NT Regional Offices
九龍彌敦道三十號旺角政府合署七樓及八樓
7th & 8th Floors, Mong Kok Government Offices, 30 Luen Wan Street, Kowloon.
國文傳真 Fax No.: 2381 3789 (新界區) (NTRC) 2397 8046 (九龍市區) (U(K)RO)
網址 Web Site: <http://www.td.gov.hk>

Our Ref : [REDACTED]

21 January 2016

Commissioner for Transport
Transport Department
Urban (Kln.) & NT Regional Offices
7&8/F Mong Kok Government Offices
30 Luen Wan Street
Kowloon

Attn : [REDACTED] (By Fax [REDACTED] and By Post)

Dear Madam,

**Application for Placement of Chemical Toilet
on/over Government Land at Allway Gardens Bus Terminus, Tsuen Wan, New Territories**

In order to facilitate bus operation at Allway Gardens Bus Terminus, we hereby submit an application for placement of a chemical toilet. Attached please find eight copies of the schedule and plan for your further action.

We would be grateful if you would consider approving our application and issue the No-objection Letter to us as soon as possible.

Thank you for your attention.

LAI CHI KOK DEPOT	
DATE	22-1-16
FROM	
TO	
Zone HK	Zone 3
Zone 1	Admin.
Zone 2	Maintenance
Please Circulate/ Note/ Comment	
CC	
File	
Remarks	

Yours faithfully,
for and on behalf of
THE KOWLOON MOTOR BUS CO. (1933) LTD.



Encl.

OAS/ay

Schedule

KMB's Minor Facilities

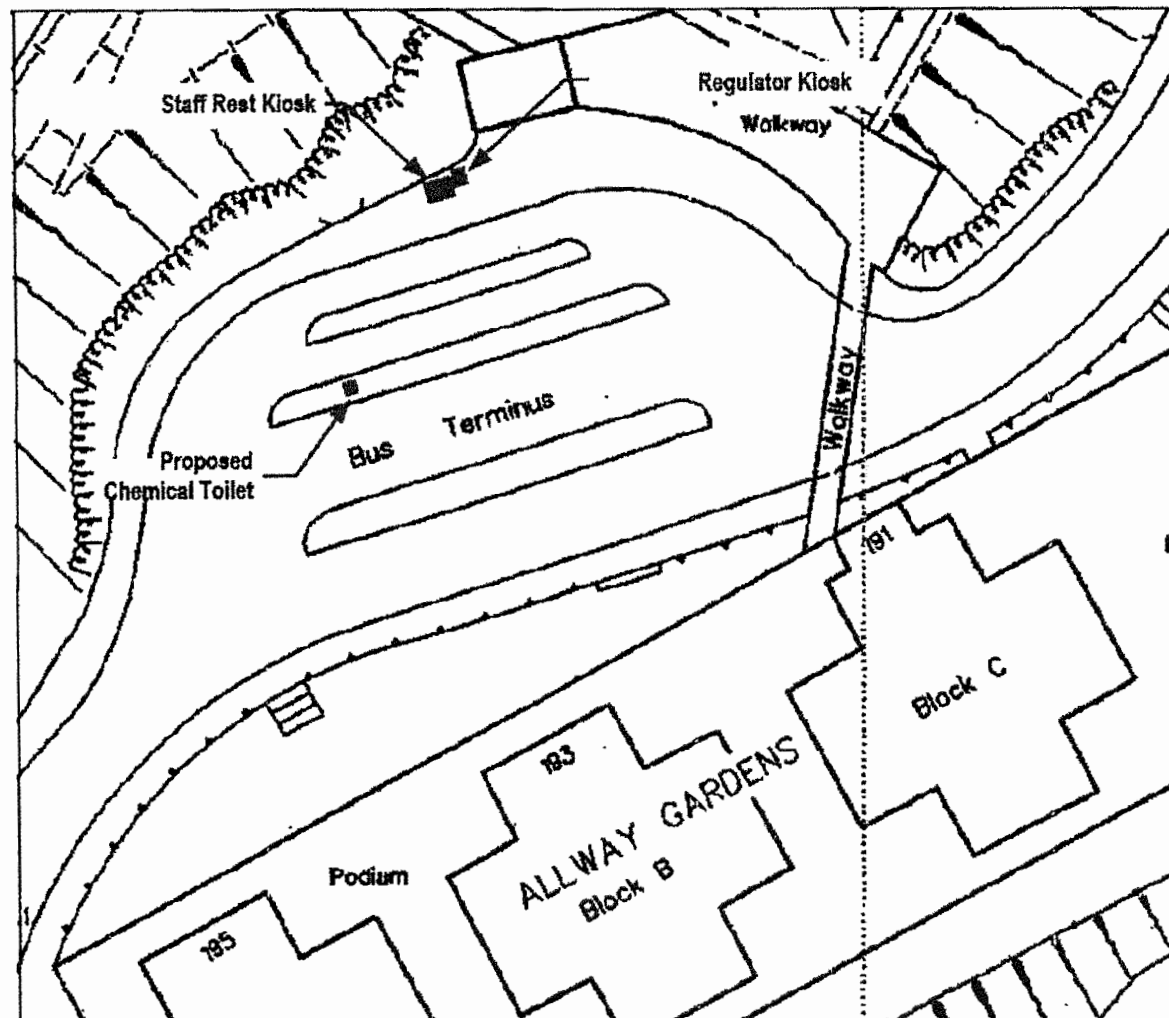
Serial No.	Location	Plan No.	Dimensions	No. of Operation Kiosk
TW-3	Allway Garden	1	1.20 x 1.20 x 2.40	1 no. chemical toilet

Signed for and on behalf of
The Kowloon Motor Bus Co (1933) Ltd.



Lai Chi Kok Depot

Date: 21 JAN 2016



DRAWING NO.: PF/AG-13-01	DRAWING TITLE: LOCATION PLAN OF PROPOSED FACILITIES AT ALLYWAY GARDEN BUS TERMINUS	Extracted From Drawing of Lands Department (Survey and Mapping Officer) Sheet No.: 6-SE-15C Revision Date: Oct 1993 Scale 1:500
DATE: OCT 2013		

11-APR-2016 17:07

P.001



運輸署

Transport Department

Distribution List : CFM,PD,LCK,OAD

Action Party : OA

DMS : /OA /Lease_Tenancy_Licence_NOL/Lease-Tenancy-Licence-NOL

Our Ref. : [REDACTED]

Your Ref. : [REDACTED]

Tel. No. : [REDACTED]

Fax No. : [REDACTED]

The Kowloon Motor Bus Co. (1933) Ltd.
No. 9 Po Lun Street
Lai Chi Kok
Kowloon

Attn : [REDACTED]

By Post & Fax at [REDACTED]

LAI CHI KOK DEPOT	
DATE	12.4.16
FROM	
TO	2
Zone HK	Zone 3 /
Zone 1	Admin.
Zone 2	Maintenance
Please Circulate/Note/Comment	
CC	1
File	[REDACTED]
Remarks	

11 April 2016

Dear Sir/Madam,

**Application for Placement of Chemical Toilet on/over Government Land
at Allway Gardens Bus Terminus, Tsuen Wan, New Territories**

Thank you for your letter dated 21 January 2016 and your subsequent email on 26 January 2016 regarding the subject matter.

This Department has circulated your proposal to all relevant government departments for comments and sought Tsuen Wan District Office's assistance to conduct local consultation on the subject matter. I would like to advise that strong objection from local resident's representative to the placement of the proposed chemical toilet at Allway Gardens Bus Terminus were received due to hygiene concern and proximity of toilet facilities nearby. The details of the reasons for objection are listed in Annex A for your reference, please.

As such, we regret to inform you that the application in relation to the placement of the chemical toilet is not supported. You are advised to reconsider the need and location of chemical toilet placement and re-submit application, if necessary.

Thank you for your attention.

Yours faithfully,

[REDACTED]
for Commissioner for Transport

c.c.: [REDACTED] - pls note in file

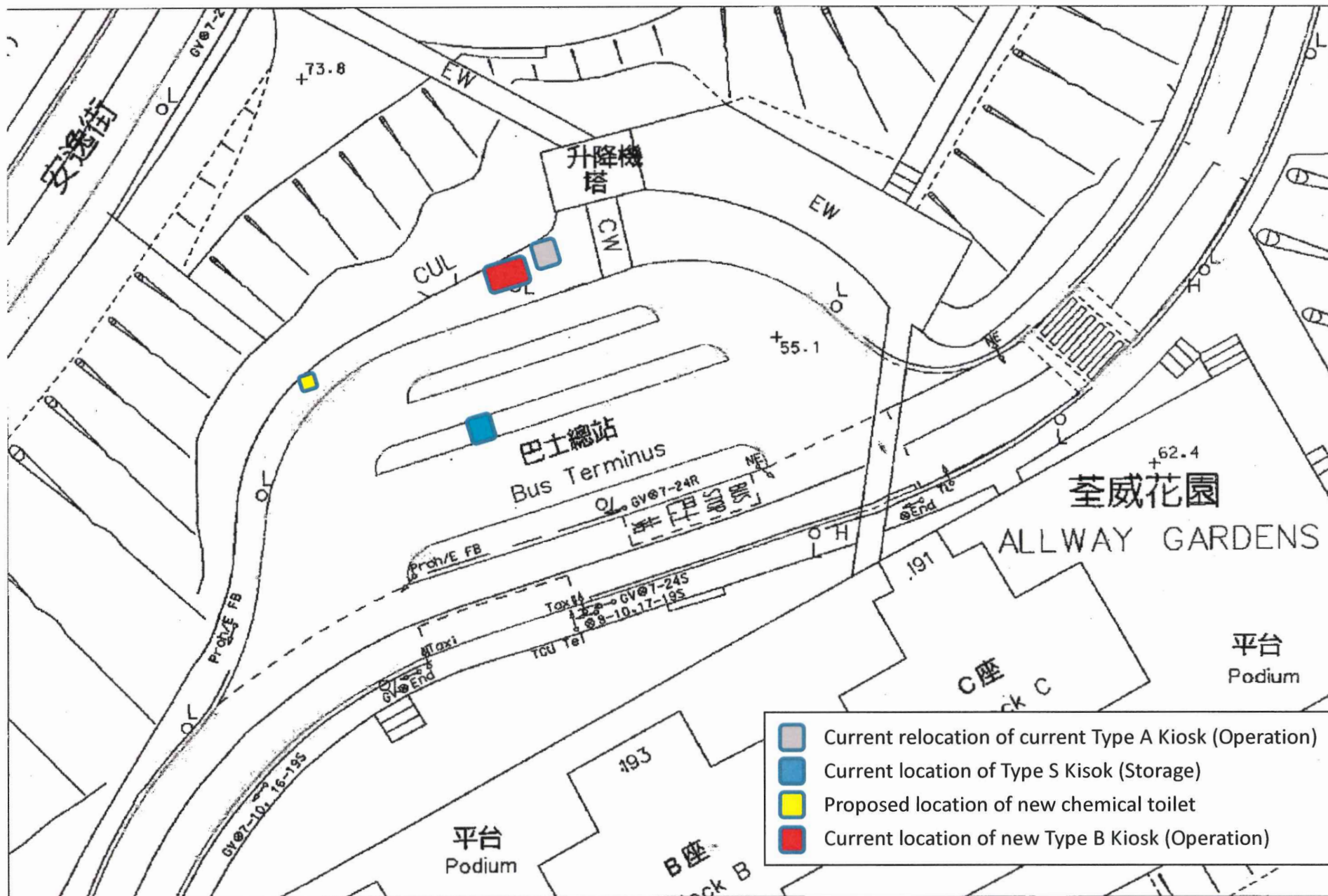
市區(九龍)及新界分區辦事處
Urban (Kln.) & NT Regional Offices
九龍彌敦道二十號旺角政府合署七樓及八樓
7th & 8th Floors, Mong Kok Government Offices, 20 Luen Wan Street, Kowloon.
圖文傳真 Fax No.: 2381 3799 (新界區) (NTRO) 2397 8046 (九龍市區) (UKIRO)
網址 Web Site: <http://www.td.gov.hk>

199-10

Annex A

反對上述意見

- 附近商場有廁所，一直 24 小時借給九巴司機使用，故不太需要再設置廁所
- 會影響環境衛生，附近街市也有提供廁所



Our Ref: [REDACTED]

31 July 2017

Commissioner for Transport
Transport Department
Urban (Kln.) & NT Regional Offices
7&8/F Mong Kok Government Offices
30 Luen Wan Street
Kowloon

Attn: [REDACTED]

(By Fax [REDACTED] and By Post)

Dear Madam/Sir,

**Application for Placement of Chemical Toilet
on/over Government Land at Allway Gardens Bus Terminus, Tsuen Wan, New Territories**

In order to facilitate our bus operation and provide a better working environment for our bus captains, we hereby submit an application for placement of a chemical toilet at Allway Gardens Bus Terminus.

Please note that the chemical toilet has been upgraded with better design and ventilation. The clear width of footpath after placing the chemical toilet will be 1.23M. Attached please find eight copies of the schedule, plan and photos for your further action and reference.

[REDACTED]
We would be grateful if you would consider approving our application and issue the No-objection Letter to us as soon as possible. Should you have any further queries, please contact [REDACTED] at [REDACTED]

Yours faithfully,
for and on behalf of
THE KOWLOON MOTOR BUS CO. (1933) LTD.

Encl. [REDACTED]

Schedule

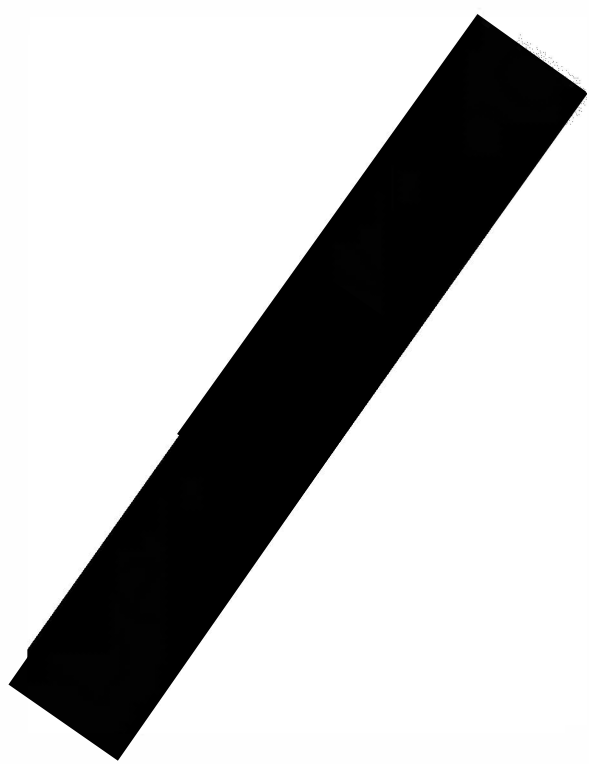
KMB's Minor Facilities

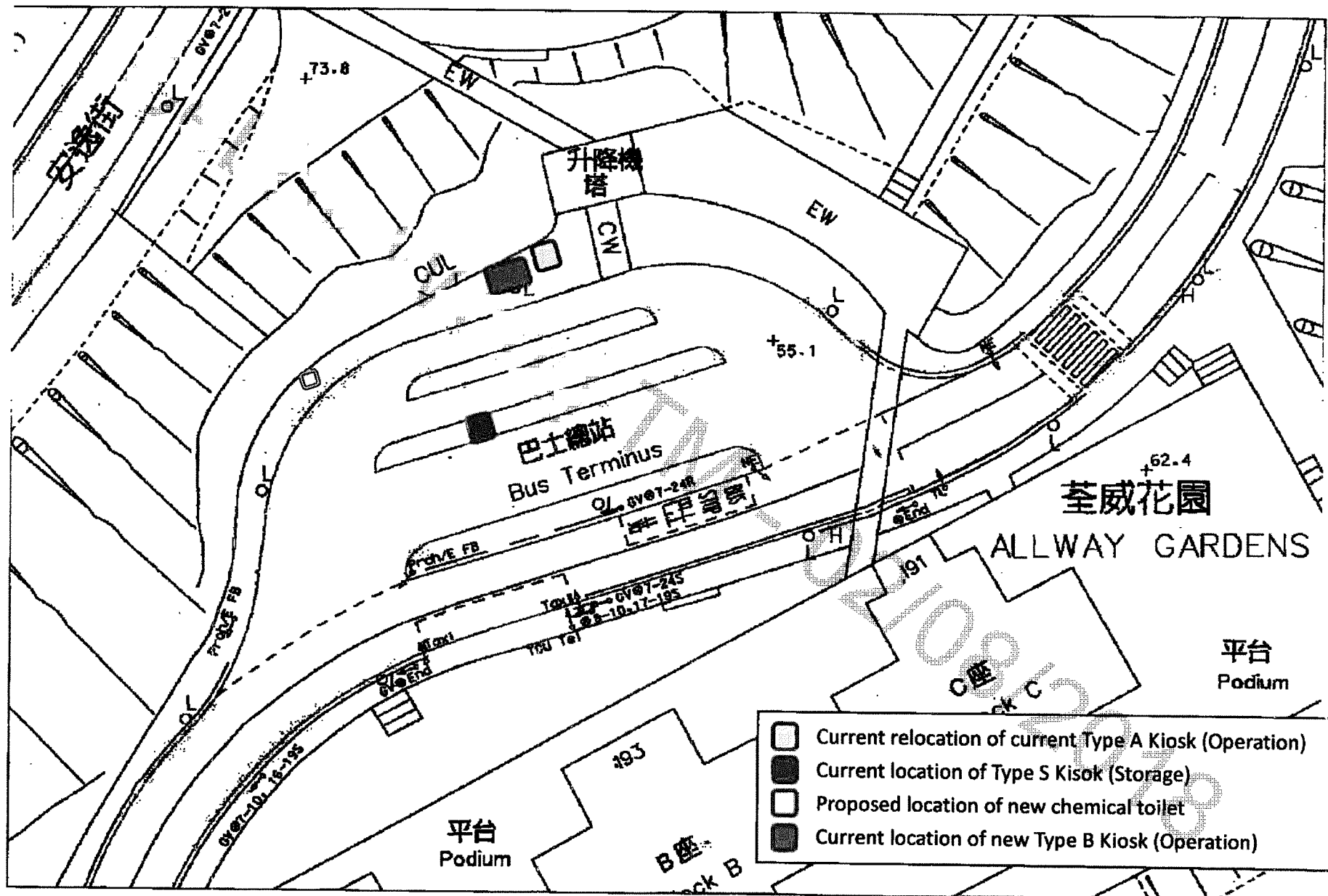
Serial No.	Location	Plan No.	Dimensions W x L x H (m)	No. of Operation Kiosk
TW-3	Allway Garden		1.22 x 1.22 x 2.42	1 no. Chemical Toilet

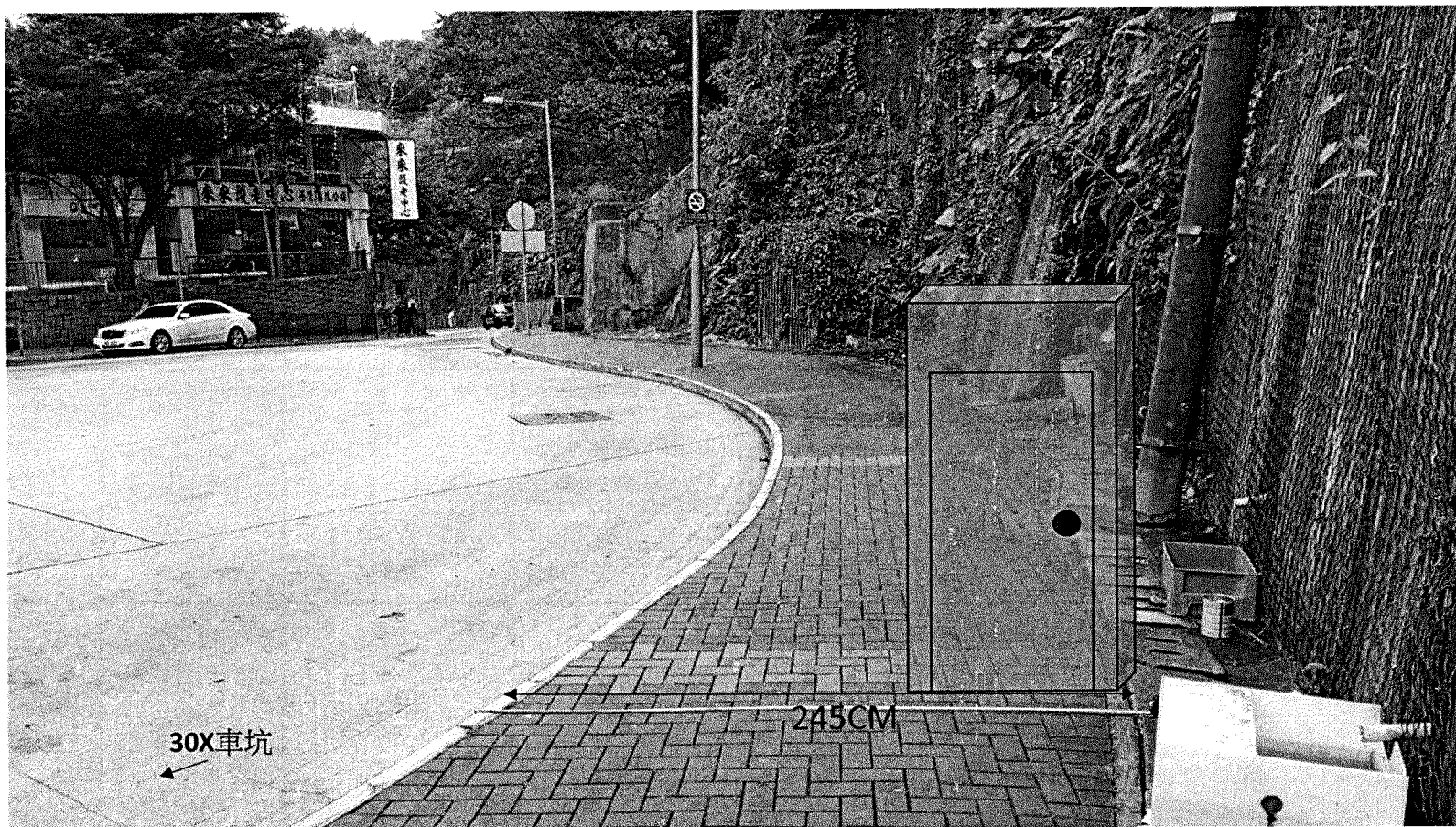
Signed for and on behalf of
The Kowloon Motor Bus Co (1933) Ltd.



Date: 31 JUL 2017



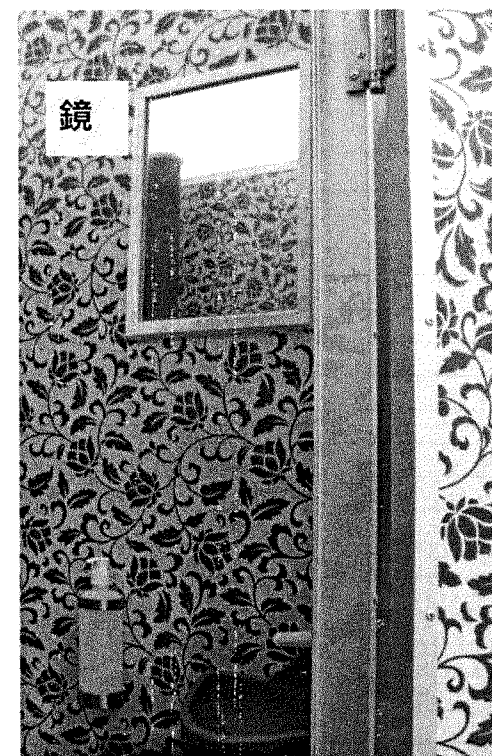




荃威花園總站建議安裝化學廁所位置



物料： 防火鋁質夾板
尺寸： 1.2m x 1.2m x 2.4m (高)



199-17 新型號流動廁所(需電力供應)

Our Ref : [REDACTED]

29 September 2017

Commissioner for Transport
Transport Department
Urban (Kln) & NT Regional Offices
7&8/F Mong Kok Government Offices
30 Luen Wan Street
Kowloon

(By Email & by Post)

Attn: [REDACTED]

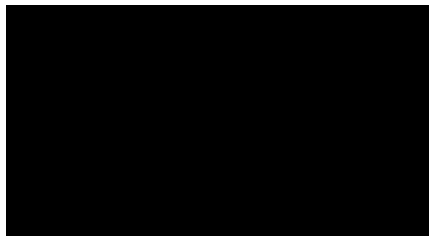
Dear Sir/Madam,

**Application for Placement of Chemical Toilet
on Government Land at Allway Gardens Bus Terminus, Tsuen Wan, New Territories**

With reference to our application letter (Ref [REDACTED]) dated 31 July 2017, we would like to re-submit the application for placement of chemical toilet at Allway Gardens Bus Terminus.

Enclosed please find eight copies of the revised proposal for your approval. Should you have query, please contact me at [REDACTED]

Yours faithfully,
for and on behalf of
THE KOWLOON MOTOR BUS CO. (1933) LTD.



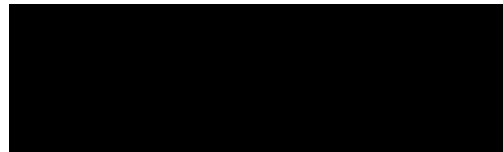
Encl. (8 sets – each with 2 pages)

Schedule

KMB's Minor Facilities

Serial No.	Location	Plan No.	Dimensions W x L x H (m)	No. of Operation Kiosk
TW-3	Allway Garden		1.22 x 1.22 x 2.42	1 no. Chemical Toilet

Signed for and on behalf of
The Kowloon Motor Bus Co (1933) Ltd.



Date: 31 JUL 2017

From: [REDACTED]
Sent: Wednesday, October 11, 2017 12:26 PM
To: [REDACTED]
Cc: [REDACTED]
Subject: Fw: Application for Placement of Chemical Toilet at Allway Garden Terminus, Tsuen Wan
Attachments: Allway Gardens Bus Terminus (9.10.2017)_1.JPG; Allway Gardens Bus Terminus (9.10.2017)_2.JPG

Dear [REDACTED],

I refer to my previous email. Grateful for your comment if the mentioned unauthorized chemical toilet is placed by your side.

Unauthorized structures should be removed immediately from the land and the land should be restored to its original condition.

Your urgent reply is much appreciated.

Regards,

[REDACTED]
Transport Department
[REDACTED]

----- Forwarded by Tom KH YUEN/TD/HKSARG on 11/10/2017 12:29 -----

From: [REDACTED]
To: [REDACTED]
Cc: [REDACTED]
Date: 10/10/2017 08:55
Subject: Fw: Application for Placement of Chemical Toilet at Allway Garden Terminus, Tsuen Wan

Dear [REDACTED],

We spoke yesterday afternoon.

This Office received a report that a chemical toilet was found near Allway Gardens Bus Terminus. Some photos are attached for your reference.

Please note that no authorization is given to placing chemical toilet at the location concerned. Please confirm if the above mentioned unauthorized chemical toilet is placed by your side.

Unauthorized structures should be removed immediately from the land and the

land should be restored to its original condition.

Your urgent attention is required and please provide your reply by 10/10/2017(today).

Regards,

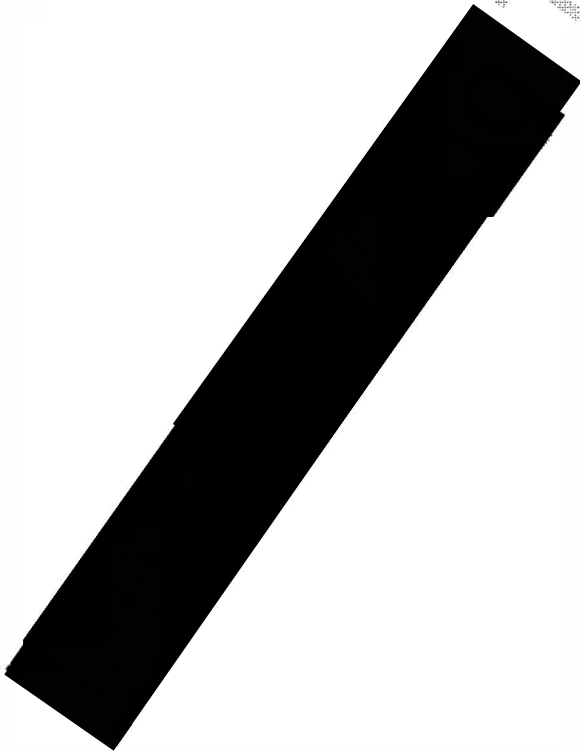
[REDACTED]

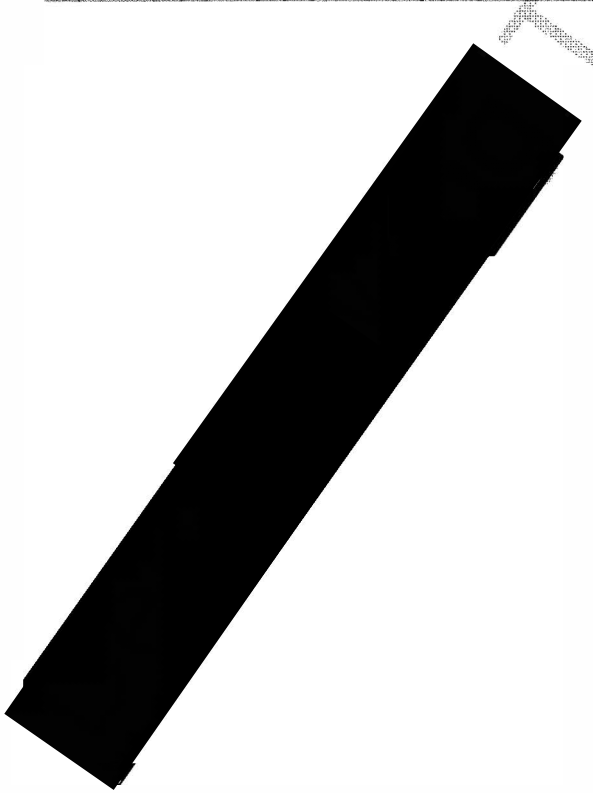
Transport Department

[REDACTED]

[REDACTED]

TM - 02/08/2018





Our Ref. : [REDACTED]
Your Ref. : [REDACTED]

24 October 2017

Commissioner for Transport
Transport Department
Urban (Kln.) & (NT) Regional Offices
7th & 8th Floor
Mong Kok Government Offices
30 Luen Wan Street
Kowloon

Attn: [REDACTED]

[By Email: [REDACTED] & By Fax: [REDACTED]]

Dear Sir/Madam,

Application for Placement of Chemical Toilet
At Allway Gardens Bus Terminus, Tsuen Wan

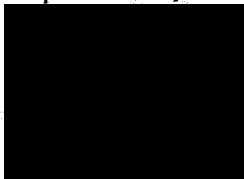
We refer to your email dated 11 October 2017 on the captioned subject.

Further to our initial reply dated 23 October 2017, we would like to provide our additional comments as follows. [REDACTED]

The working arrangement of the bus captains have become a topic highly concerned by the public recently. You would appreciate that the Government and the public transport operators have to handle this matter with care.

[REDACTED]
We notice that you have requested us to remove the chemical toilet in your email. Given the long distance from Allway Gardens Bus Terminus to the nearby public toilet, please advise us how the bus captains answer their calls of nature if the chemical toilet is removed. We sincerely look forward to a suitable alternative / solution to this matter, and will not remove the toilet until we hear from you again.

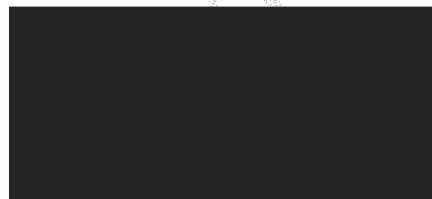
[REDACTED]
Providing a good working environment of the bus captains should not be the sole responsibility of any bus operator. We believe that your Department will join hand with the operators to provide the basic needs of the bus captains.



Kindly contact the undersigned if you have any further queries on the above.

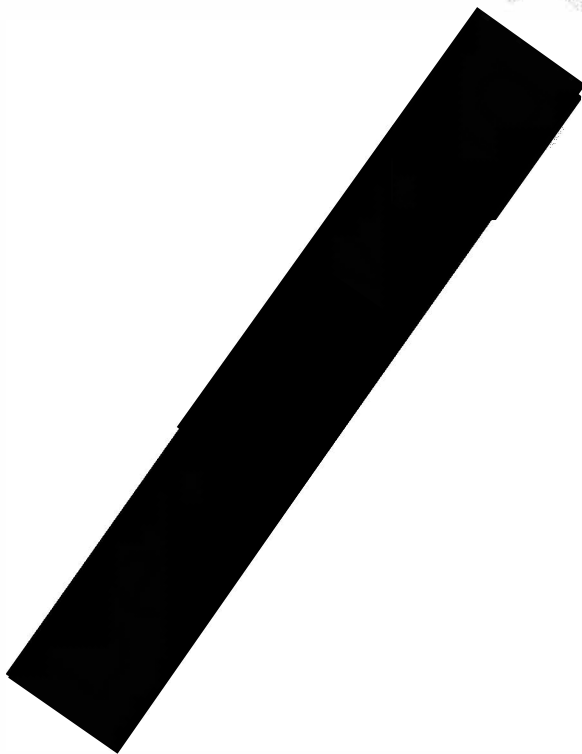
Thank you for your attention.

Yours faithfully,
for and on behalf of
THE KOWLOON MOTOR BUS CO. (1933) LTD.



Lai Chi Kok Depot

c.c. Ms  – Transport Department (By email: )





運輸署
Transport Department

- 2 JAN 2018

本署檔號 Our ref: [REDACTED]

來函檔號 Your ref: [REDACTED]

電話 Tel.: [REDACTED]

圖文傳真 Fax: [REDACTED]

29 December 2017

The Kowloon Motor Bus Co. (1933) Ltd.
No. 9 Po Lun Street
Lai Chi Kok
Kowloon

Attn: [REDACTED]

Dear Madam,

Application for Placement of Chemical Toilet
on/over Government Land at Allway Gardens Bus Terminus, Tsuen Wan

With reference to your application for placement of one chemical toilet with size of 1.22m (L) x 1.22m (W) x 2.42m (H) on/over Government land at Allway Gardens Bus Terminus in Tsuen Wan in connection with your operation of the franchised bus services, I am pleased to inform you that permission is hereby given for you to place and keep the structure as set out in the Schedule hereto (hereinafter referred to as "the structure") on, over or within the piece or parcel of Government land as and more particularly shown coloured red on the plan annexed hereto (hereinafter referred to as "the land") subject to the following terms and conditions:



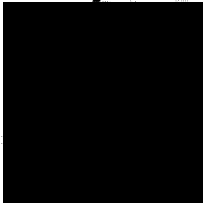
- (1) You shall not place or maintain any structure on the land other than the structure. The structure shall remain portable and be in itself well designed unit. Should there be any excavation works required on public road, Excavation Permit should be obtained from Highways Department prior to commencement of works.
- (2) You shall not use or permit or suffer the use of the land or the structure or any part thereof for any purpose other than as chemical toilet.
- (3) You shall not alter the location of the structure as indicated on the plan annexed hereto except as provided in Clause 21 (b) hereof.
- (4) You shall not permit any advertisements in any form to be displayed upon the land or the structure without my prior written consent.
- (5) You shall make your own arrangement for the supply of electricity to the structure as may be required and to pay all charges in connection therewith including the cost of installing and maintaining all pipes, wires, cables, meters, switches and any other apparatus ancillary thereto.

市區(九龍)及新界分區辦事處
Urban (Kln.) & NT Regional Offices
九龍聯運街三十號旺角政府合署七樓及八樓
7th & 8th Floors, Mong Kok Government Offices, 30 Luen Wan Street, Kowloon.
圖文傳真 Fax No.: 2381 3799 (新界區) (NTRO) 2397 8046 (九龍市區) (U(K)RO)
網址 Web Site: <http://www.td.gov.hk>

- (6) You shall not in any way transfer or encumber the rights given hereunder or part with the possession or otherwise dispose of the structure or any part thereof or enter into any agreement so to do.
- (7) You shall not store or permit or suffer to be stored in or upon the land or the structure any dangerous goods as defined under Section 2 of the Dangerous Goods Ordinance or any enactments amending the same or substituted thereof.
- (8) You shall not permit any person other than your staff to use the structure for any purpose whatsoever.
- (9) You shall take all necessary precautions to protect the structure from damage by fire, storm, typhoon or the like.
- (10) You shall not do, cause, permit or suffer anything to be done at anytime in or upon the land or the structure or any part thereof which may be or become a nuisance or annoyance or which may cause damage or inconvenience to the owners or occupiers of any adjoining or neighbouring lot, lots or premises. Should there be any damaged pavement, street furniture or other facilities due to your works, you shall be responsible for reinstating the facilities up to the satisfaction of Director of Highways at your own cost.
- (11) You shall permit my servants or agents or any person duly authorized by me at all reasonable times to enter upon the land or the structure to view the state and condition thereof, and of all defects and wants or repair or maintenance then and there found, to give or leave on the land or the structure notice in writing to you and you shall within one month after receiving such notice (or sooner if required) repair and make good the same in accordance with such notice.
- (12) You shall indemnify and keep indemnified the Government, my officers, contractors and workmen against all actions, suits, costs, claims, demands and expenses whatsoever arising directly or indirectly out of or in connection with your occupation and use of the land or the structure.
- (13) You shall pay and discharge all existing and future rates, taxes assessment, duties and outgoings whatsoever which are now or during the continuance of this permission shall be imposed, assessed or charged upon the land or the structure.
- (14) You shall not dump any earth, debris, spoil of whatsoever nature, or building materials on any Government land.
- (15) You shall not permit sewage or refuse water to flow from the land or the structure onto any adjoining land or allow any decaying, noisome, noxious, excrementitious, or other refuse matter to be deposited on any portion of the land or the structure and shall have all such matter removed from the land or the structure in proper manner.

- (16) You shall keep the structure in good condition and repair to the satisfaction of the Assistant Commissioner for Transport/New Territories.
- (17) You shall not allow any person to reside in the structure.
- (18) You shall not claim any compensation in respect of any loss or damage caused to you or others by reason of any water flowing on to the land or the structure or landslip or subsidence on or to the land or the structure.
- (19) You shall be solely responsible for the safety of the structure and any goods stored therein.
- (20) You shall not use any fresh or salt water from Government mains for any heating, cooling or humidification purpose, except with the prior written consent of the Water Authority.
- (21) (a) You shall not raise any objection or claim any compensation from the Government should the structure be affected by road maintenance or improvement works, drainage works or utility works whatsoever.
- (b) You shall relocate or remove all or any of the structure at your own cost in the manner as required by the Assistant Commissioner for Transport/New Territories after having been given at least one month's prior notice by her in writing. No compensation whatsoever shall be payable to you for such relocation or removal.
- (c) Notwithstanding sub-clause (b) hereof, no undertaking is given that upon termination of the occupation of the land or any part thereof or the structure thereon a replacement site or sites will be provided.
- (22) This permission shall be determined forthwith upon the determination or expiration of your franchise to operate the bus service.
- (23) The Assistant Commissioner for Transport/ New Territories shall have the absolute right upon giving one month's notice in writing to you, expiring at any time, and without assigning any reason thereof, to determine this permission and you shall not thereupon be entitled to any claim or be paid any compensation in respect of such determination.
- (24) If there shall be any breach, non-performance or non-observance of any of the terms and conditions, hereinbefore, the Assistant Commissioner for Transport/New Territories may by notice in writing determine this permission and upon service of such notice, this permission and all rights hereunder shall forthwith be determined.
- (25) Upon determination of this permission, you shall remove the structure from the land on which they situate and reinstate at your own expense the land to the satisfaction of the Assistant Commissioner for Transport/New Territories within the period specified by her in writing. In default, the District Land Offices shall be entitled to remove the structure and reinstate the land and recover the costs for

such removal and reinstatement including supervisory and overhead costs from you.

- (26) The permission, or the giving of any rights hereunder, does not confer on you any right of exclusive possession on the land and the Government reserves the right at all times to enter onto the land for any purpose or permit others so to do. It is expressly declared and acknowledged by you that this permission is not intended by the parties to amount to any tenancy and that no landlord and tenant relationship is created between the parties.
- (27) Any notice which is required to be served on you hereunder shall be deemed to be sufficiently served if sent by ordinary post addressed to you at your last known registered office.
- (28) A copy of the site plans with the alignment of the existing water mains and waterworks installations is attached in the Annex for your information. You should take note that the alignment of the water mains shown on the plans is indicative only. You shall follow the procedures and practices described in the "Guidelines for Excavation near Water Mains" and "How to Prevent Damage to Water Mains" which is posted on Water Supplies Department Internet Homepage.
- (29) The chemical toilet should not cause any damage to the existing mains and should not be constructed to intervene with the operation and maintenance of mains and manholes/valves/pits.
- (30) You are reminded to exercise extreme care when working in the vicinity of any existing drainage works in order not to disturb, interfere with or cause damage to them. Any blockage or damage to the said works due to your activities in the area shall be made good to the satisfaction of Drainage Services Department at your own resources. 
- (31) Cleansing service to the chemical toilet should be provided on your resources and you should keep the surrounding area of the chemical toilet at a satisfactory hygienic condition. The operation of the proposed land use must not cause any environmental nuisance to the surrounding. 
- (32) You should take care of potential problems, in particular objectionable odour and leakage of effluent during daily usage of the chemical toilet and during the time of the sewage disposal. You should follow the environmental regulations which are posted on Environment Protection Department Internet Homepage. 

If the foregoing terms and conditions are acceptable to you, I shall be glad if you will signify your acceptance by executing under seal and in accordance with your Articles of Association the docket provided on the duplicate copy of this letter and the plans annexed thereto which should be returned to me within 28 days from the date hereof.

Yours faithfully,



We hereby agree to and accept the foregoing conditions.

(Signature and name in block
letters of witness)

(Seal of The Kowloon Motor Bus Co. (1933)
Ltd and signature(s) and name(s) in block
letters of its attesting officer(s) and description
of their office(s))

Address :

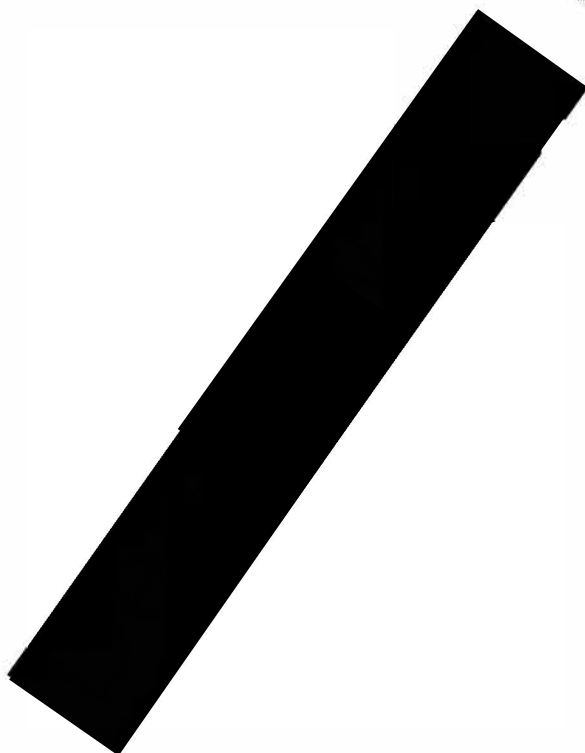
Occupation :

c.c.
Director of Lands
Commissioner for Rating and Valuation

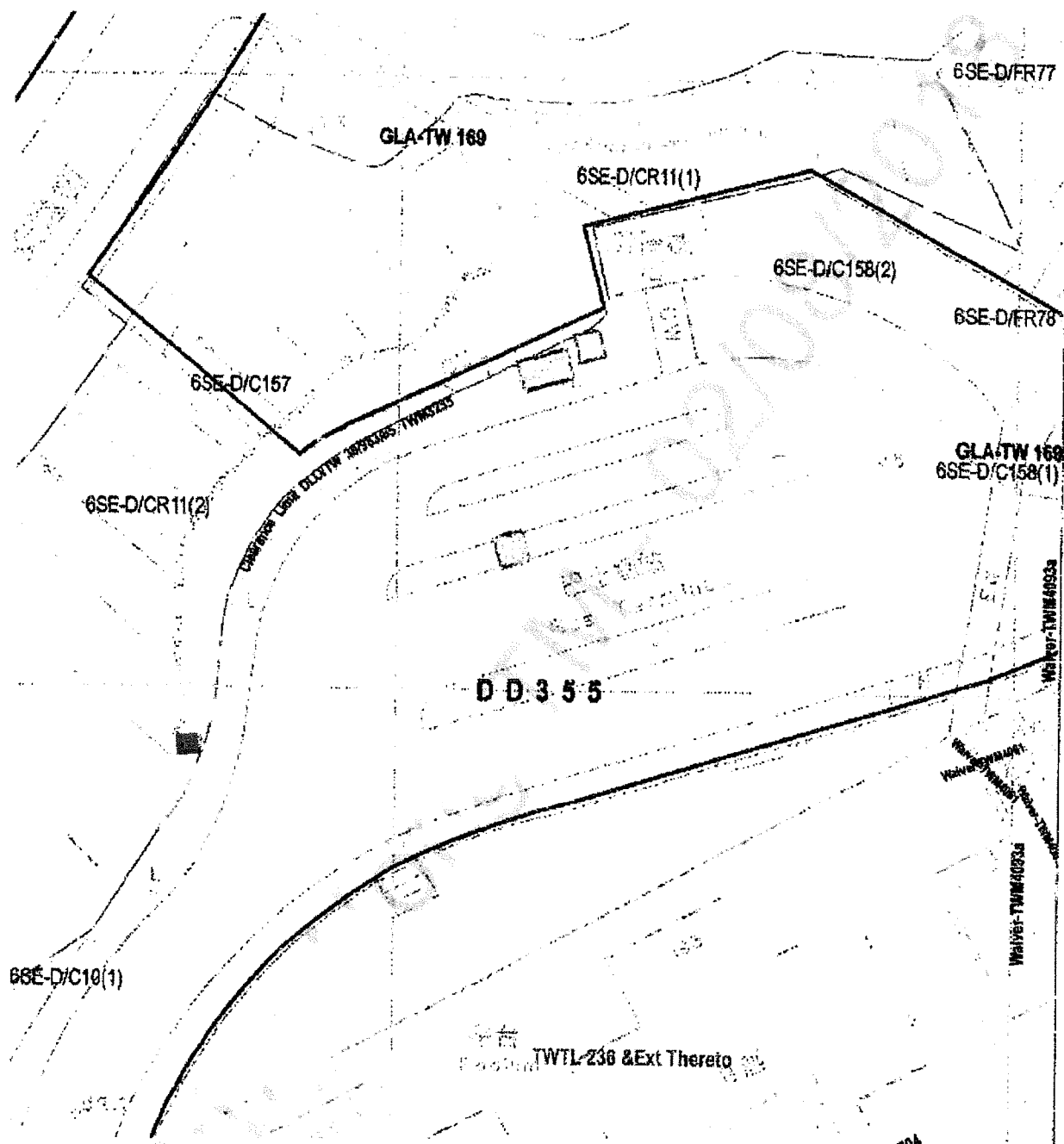
Schedule


KMB's Chemical Toilet

Location	No. of Item	Dimension
Allway Gardens Bus Terminus, Tsuen Wan	1 number of Chemical Toilet	1.22 m (L) x 1.22 m (W) x 2.42 m (H) per unit

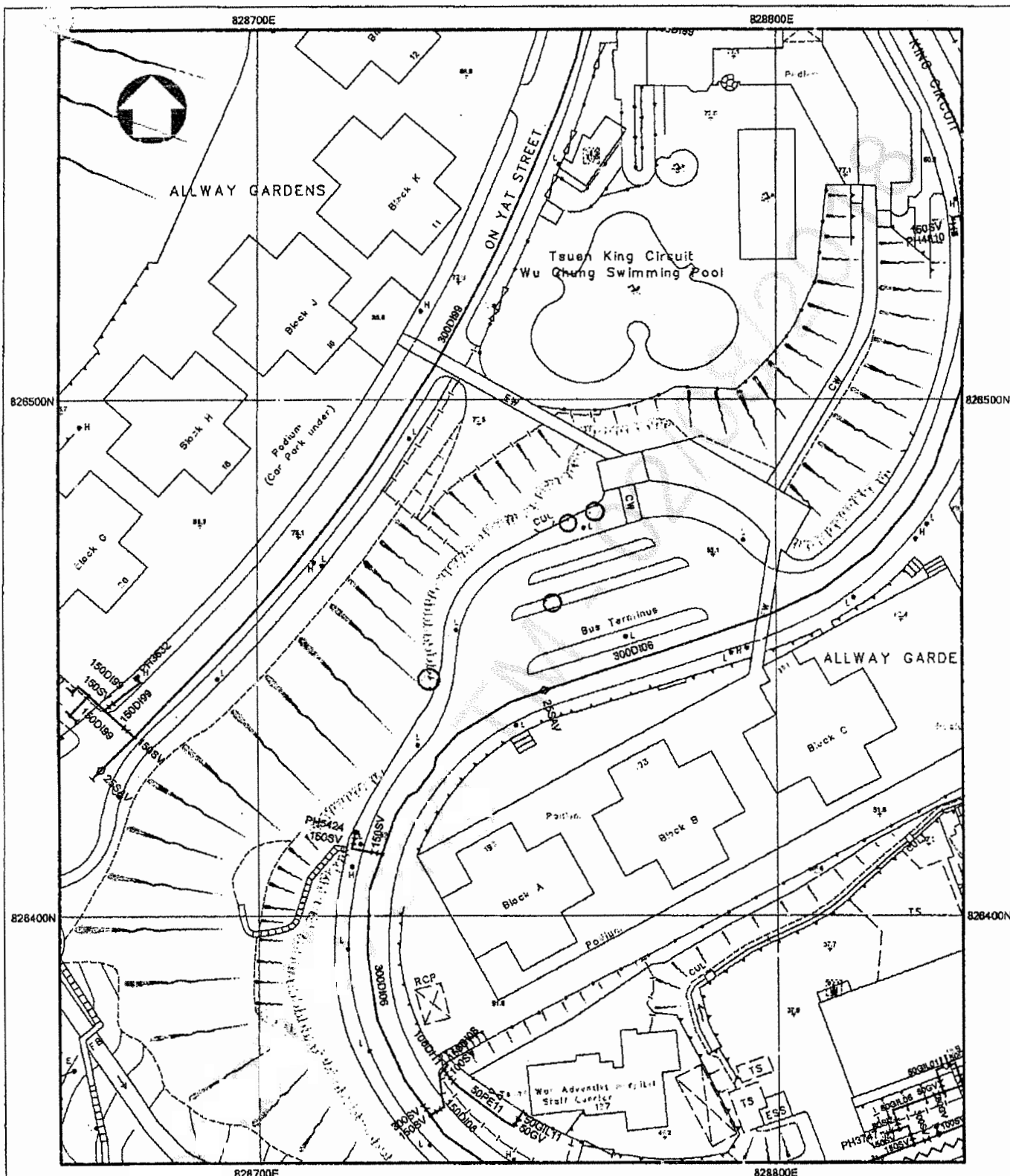


PLACEMENT OF CHEMICAL TOILET AT ALLWAY GARDENS BUS TERMINUS, TSUEN WAN



LEGEND:
CHEMICAL TOILET 

40 REF. SK39898.DWG



- NOTES:
1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SPECIFIED.
 2. ALL LEVELS ARE IN METRES ABOVE PRINCIPAL DATUM.
 3. INFORMATION ON ALIGNMENT OF MAINS IS OF INDICATIVE VALUE ONLY. WHERE POSITIONAL ACCURACY MAY BE OF IMPORTANCE, DETAILS SHOULD BE SITE CHECKED.
 4. FOR MAINS RECORDS SIGN CONVENTIONS AND DESIGNATIONS SEE SKETCH NO. 3988.
 5. NO PROPOSED WATER MAINS IN THE VICINITY OF THE SITE.
 6. NO EXISTING WSD CABLE IN THE VICINITY OF THE SITE.
 7. NO PROPOSED WSD CABLE IN THE VICINITY OF THE SITE.
 8. THE SITE IS NOT WITHIN WSD GATHERING GROUNDS.
 9. NO WSD LAND ALLOCATION / WWR WITHIN THE SITE AREA.
 10. NO WSD SLOPES ARE AFFECTED IN THE VICINITY OF THE SITE.

SUBJECT SITE



PART COPY OF FRESH WATER MAINS RECORD PLAN(S)

W67880/6-SE-15C & 20A

FILE REF. (42) in WSD/NTW 1744/8/1/2000 PT2 TJ2

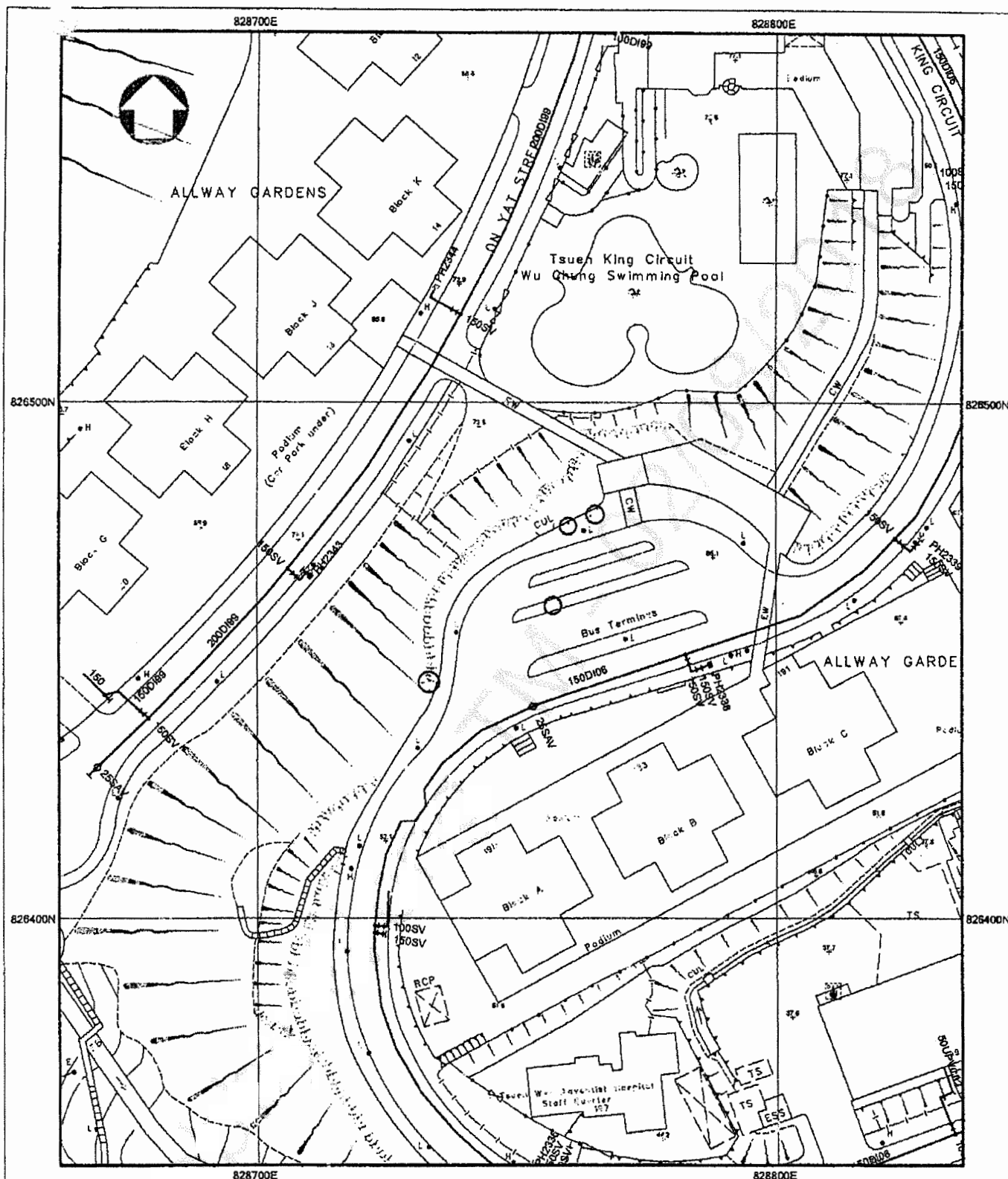
REF. CODE: 46W17M

SHEET 1 OF 1

SCALE 1:1000



水務署
Water Supplies Department



- NOTES:
1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SPECIFIED.
 2. ALL LEVELS ARE IN METRES ABOVE PRINCIPAL DATUM.
 3. INFORMATION ON ALIGNMENT OF MAINS IS OF INDICATIVE VALUE ONLY. WHERE POSITIONAL ACCURACY MAY BE OF IMPORTANCE, DETAILS SHOULD BE SITE CHECKED.
 4. FOR MAINS RECORDS SIGN CONVENTIONS AND DESIGNATIONS SEE SKETCH NO. 3968.
 5. NO PROPOSED WATER MAINS IN THE VICINITY OF THE SITE.
 6. NO EXISTING WSD CABLE IN THE VICINITY OF THE SITE.
 7. NO PROPOSED WSD CABLE IN THE VICINITY OF THE SITE.
 8. THE SITE IS NOT WITHIN WSD GATHERING GROUNDS.
 9. NO WSD LAND ALLOCATION / WWR WITHIN THE SITE AREA.
 10. NO WSD SLOPES ARE AFFECTED IN THE VICINITY OF THE SITE.

SUBJECT SITE



PART COPY OF SALT WATER MAINS RECORD PLAN(S)

W67881/6-SE-15C & 20A

FILE REF: (42) in WSD/NTW 1744/8/1/2000 PT2 TJ2

REF. CODE: 46W17M

SHEET 1 OF 1

SCALE 1:1000



水務署
Water Supplies Department

內部通告

形點 I 交匯處內駕駛

留意安全

近日於形點 I 交匯處內發生交通意外。
現提醒車長在形點站內駕駛，車坑出口右轉留意彎位及車速，以免發意外。

請有關車長留意。

此通告張貼日期
由 5/2/2018
至 4/3/2018
後 / 棄置



5/2/2018

公司內部通告只限員工閱讀參考，不得向外界轉發，除員工網外，不得上載互聯網。

199-37



九龍巴士(一九三三)有限公司
THE KOWLOON MOTOR BUS CO. (1933) LTD.

Internal Notice

YOHO MALL I DRIVING IN TRANSPORT INTERCHANGE

PAY ATTENTION TO SAFETY

Recently there was traffic accident at YOHO Mall I Transport Interchange. [We] hereby remind bus captains to beware of the turn and speed of bus when turning right out of the bus pit inside YOHO Mall bus terminus, in order to avoid the occurrence of accidents.

Relevant bus captains please pay attention.

Date of publish of this notice

From 5/2/2018

to 4/3/2018

thereafter [redacted] / disposed



2/5/2018

This internal notice of the company is only for employees' reference and should not be distributed externally; it should not be uploaded on internet, except on intranet.

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香港專營巴士服務
獨立檢討委員會

香港金鐘道66號
金鐘道政府合署21樓



Independent Review Committee on
Hong Kong's Franchised Bus Service

21/F, Queensway Government Offices,
66 Queensway, Hong Kong

本函檔號 Our Ref.: CSO/IRC-BUS/CR/7-45/9

來函檔號 Your Ref.:

電話號碼 Tel No.: (852) 2867 5324

傳真號碼 Fax No.: (852) 3104 0254

4 June 2018

Mr WONG Chi-kin (黃子健先生)
Operations-in-Charge
Kowloon Motor Bus Sha Tin Depot
1 Yuen Shun Circuit, Siu Lek Yuen
Sha Tin

PERSONAL

Dear Mr WONG,

**Invitation for Written Submissions for Consideration by the
Independent Review Committee on Hong Kong's Franchised Bus Service**

On 9 May 2018, the Secretariat of the Independent Review Committee ("the Committee") received via facsimile a letter addressed to the Committee ("letter to the Committee") from "KMB and LWB Zone Heads". Attached to the letter was another letter ("the attached letter") addressed to the Chairman and Board Members of the Kowloon Motor Bus Company (1933) Limited ("KMB") and signed off by seven operations-in-charge of KMB and the Long Win Bus Company Limited.

We attach at the Annex a copy of the letters and invite you to confirm, if it is the case, that: (i) the letter to the Committee was sent out by you; and (ii) the attached letter is your statement and that both the letter to the Committee and the attached letter are true to the best of your knowledge and belief.

If so, we would invite you to indicate whether you will be willing to assist the Committee further in its work by providing further written submissions and/or attend hearing to deliver oral evidence with regard to the two letters mentioned above.

In addition to providing the response to the Committee, you may also provide information on other bus-safety related issues, including, for example, details and further elaborations on the improvements to facilities at bus stations, about which reference was made in the attached letter, and how such improvements helped with bus safety. In doing so, we would invite you to focus on matters of which you have personal knowledge but not on matters of which you do not have first hand knowledge.

We would be grateful if your response could reach the Secretariat of the Committee by **11 June 2018**. Please send the submission to:

By post: Secretariat to the Independent Review Committee on Hong Kong's Franchised Bus Service, 21/F, Queensway Government Offices, 66 Queensway, Admiralty, Hong Kong (*with the envelope specifying that the written submission is enclosed*); or

Via email: secretariat@irc-bus.gov.hk (*with the email heading specifying that the written submission is enclosed*)

Please be advised that the information provided in your response will be considered by the Committee in reviewing the matters it is directed to consider under the terms of reference of the Committee and in drawing up its recommendations. If necessary, the Committee may invite you to provide supplementary written submissions and/or to give oral evidence. All written submissions (including any annexes, appendices and attachments contained therein) and oral evidence will be treated as public information and, at the discretion of the Committee, may be published on the Committee's website.

Yours sincerely,



(CHAN Ping-fai, Peter)
Secretary, Independent Review Committee on
Hong Kong's Franchised Bus Service

Encl

香港專營巴士服務
獨立檢討委員會

香港金鐘道 66 號
金鐘道政府合署 21 樓



Independent Review Committee on
Hong Kong's Franchised Bus Service

21/F, Queensway Government Offices,
66 Queensway, Hong Kong

本函檔號 Our Ref.: CSO/IRC-BUS/CR/7-45/9

來函檔號 Your Ref.:

電話號碼 Tel No.: (852) 2867 5324

傳真號碼 Fax No.: (852) 3104 0254

(中文譯本)

沙田小瀝源源順圍 1 號
九龍巴士沙田車廠
車務主管
黃子健先生

私人信件

黃先生:

邀請你向香港專營巴士服務獨立檢討委員會提供書面意見

於 2018 年 5 月 9 日，香港專營巴士服務獨立檢討委員會（下稱“委員會”）的秘書處透過傳真接獲一份由“KMB and LWB Zone Heads”交予委員會的信函（下稱“給委員會的信函”）。有關信函夾附了另一份交予九龍巴士（一九三三）有限公司（下稱“九巴”）主席及董事局成員的信函（下稱“夾附的信函”），並由七位九巴及龍運巴士有限公司的車務主管簽署。

我們於本函附件附上了上述信函的副本，並邀請你確認以下陳述是否真確：（一）給委員會的信函是由你交予委員會；及（二）夾附的信函的內容是由你所作出的陳述，而且就你所知所信，給委員會的信函和夾附的信函的內容，均實真確。

如你確認以上陳述屬實，我們邀請你確認是否樂意就與上述兩份信函相關的事宜向委員會提供協助，包括進一步提供書面意見及／或出席聽證會以提供口述證供。

除了回應上述事宜外，你亦可就其他與巴士安全相關的事宜向委員會提供資料，例子包括夾附的信函中提及的站頭設施改善，以及有關改善如何對巴士安全有幫助。在向委員會提供資料時，我們邀請你集中於你曾親身經歷的事宜，而非你沒有第一手資料的事宜。

請於 **2018年6月11日** 或之前向委員會秘書處提供你的回應，
並以下列方式將有關回應交予秘書處：

郵遞： 香港金鐘金鐘道 66 號
金鐘道政府合署 21 樓
香港專營巴士服務獨立檢討委員會秘書處
(請於信封上註明郵件為予委員會的書面意見)；
或

電子郵件： secretariat@irc-bus.gov.hk (請於電子郵件的標題
上註明郵件為予委員會的書面意見)

請注意委員會將會考慮書面意見所提供的資料，以按照其職權範圍檢視各項事宜及制訂建議。如有需要，委員會或會邀請貴工會以書面及／或口頭方式提供進一步資料。所有書面意見（包括書面意見中的任何附件、附錄及其他夾附的文件）以及口述證供均會被視作公開資料，而委員會或會將有關資料上載至委員會網頁。

(陳炳輝 )

香港專營巴士服務獨立檢討委員會秘書

2018 年 6 月 4 日

連附件

Annex 附件

Written Submission is enclosed

8th May 2018

Secretariat to the Independent Review Committee
on Hong Kong's Franchised Bus Service,
21/F, Queensway Government Offices,
66 Queensway, Admiralty, Hong Kong

Dear Sir/Madam,

We refer to the Testimonies submitted by various ex-management and operation staff of KMB (adduced as Item 4 and 5 of the Bundle for Miscellaneous) was being published to the public through IRC's website.

A letter written by Zone Heads of KMB and Long Win Bus Operations is attached for IRC's consideration. This letter was submitted to the Board of Directors of KMB on 18 March 2018 regarding the aforementioned Testimonies.

As we understand that this letter may be inserted into the bundle for the IRC hearing, and may probably be uploaded to the IRC website which is accessible by the general public, we humbly request that the names of the uploaded version would be redacted for privacy reason.

In February 2018, as known from media, a group of ex-staff of KMB alleged the current management on compromising safety for more profit, on poor management which leads to low morale & confusion in the company, and on unreasonable dismissal of experienced staff. We found the allegations to be untrue and groundless. Being a current member of staff in the company, we have written the attached letter to express our view and support to our management. This letter was only sent to the Board but not to the IRC as we regarded the allegations mentioned in the ex-staff report were solely internal matters and were nothing related to safety.

To our surprise, the report was being uploaded and disclosed to the public by the IRC yesterday. In response to this, we must stand up for the company and the management about the unfair and untrue allegations. We have to provide a clear picture to the IRC as well as to the public about the recent changes in KMB, which we see positive, to the Company, passengers and shareholders. Therefore, we have decided to submit our letter.

We have to point out that operating a franchise bus business is not easy. Nevertheless, our management is passionate and committed to serving KMB and the general public. They have been working very hard to improve KMB's bus service and, at the same time, to take care of all staff member in the company. Their courage is what the society should cherish rather than to criticize.

Thank you for your attention.

Yours sincerely,
KMB and LWB Zone Heads

致九龍巴士(一九三三)有限公司董事局主席及全體董事局成員：

最近公司成為傳媒焦點，有關九巴的新聞一則接一則，其中多份報章及媒體刊登了關於一班離職九巴員工的報導。文章指他們對公司相當不滿並對管理層作出各樣指控，管理層在記者及這班舊員工筆下好像成為了「十惡不赦」的罪人。究竟他們做錯了什麼？外界對公司的了解只靠片面之詞，對我們公平嗎？

他們已離職一段時間，並隻字不提公司近年的最新情況，原因是他們根本完全不了解我們所艱辛努力做的事情。作為公司的現職員工，突然覺得有責任發表我們的意見及對管理層表達支持。然而，我們不願浪費筆墨及時間評論報導的真確性，我們只想說出親眼所見的事實。

車務組是公司與前線同事的重要橋樑，我們留意到前線同事比以前開心了，工作環境的改善是主要原因。以前公司忽略了很多前線同事基本的需要，現屆管理層上任後，其中最迫切的任務是完善站頭設施，現在大部份已完成。同事在站頭有更理想的休息環境，對安全駕駛也有幫助。

以前，前線同事總覺得管理層高高在上，亦很少有機會與他們接觸。現屆管理層風格截然不同，他們親民並時常到車廠及站頭探望同事，聽取需要及意見。對於同事的需要，能配合的管理層一定盡力配合，前線同事完全感受被公司尊重及重視。

這幾年，我們親身見證著公司的轉變，現在的成就是我們一步一步努力的成績，的確是得來不易。無可否認，現在的工作量是比以前繁忙，我們卻覺得更有意義。因為大家的目標明確，亦知道管理層正與我們一同努力，希望公司成功。

要改變舊人事、舊制度、舊作風、舊方法，從來並非易事，而且「吃力不討好」，我們佩服一班管理層的勇氣及毅力。我們會繼續支持公司，努力工作。這是我們的一點點心聲，亦希望董事局能給予管理層更多的支持，謝謝！

九巴/龍運各區車務主管

荔枝角廠 -
九龍灣廠 -
九龍灣廠 -
沙田廠 -
屯門廠 -
屯門廠 -
龍運巴士 -

18-03-2018

☐ Urgent ☐ Return receipt ☐ Sign ☐ Encrypt ☐ Mark Subject Restricted ☐ Expand personal&public groups



予委員會的書面意見

13.06.2018 13:38

From: Ken Wong ST [REDACTED]
To: "secretariat@irc-bus.gov.hk" <secretariat@irc-bus.gov.hk>,

Dear Mr. Chan,

Further to your letter dated 4 June 2018, I hereby confirm that the letter to Committee with the attached letter addressed to the Chairman and Board members of KMB was sent by the seven zone heads of KMB/LWB and I am one of those seven zone heads. I also certify that both of the letters are true to the best of my belief. Moreover, I am willing to provide supplementary written submissions to the Committee if necessary.

Thanks & Regards,
Ken Wong

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香港專營巴士服務
獨立檢討委員會

香港金鐘道66號
金鐘道政府合署21樓



Independent Review Committee on
Hong Kong's Franchised Bus Service

21/F, Queensway Government Offices,
66 Queensway, Hong Kong

本函檔號 Our Ref.: CSO/IRC-BUS/CR/7-45/9

來函檔號 Your Ref.:

電話號碼 Tel No.: (852) 2867 5324

傳真號碼 Fax No.: (852) 3104 0254

28 June 2018

Mr WONG Chi-kin, Ken
Operations-in-Charge
Kowloon Motor Bus Sha Tin Depot
1 Yuen Shun Circuit, Siu Lek Yuen
Sha Tin
New Territories
(Email: [REDACTED])

PERSONAL

Dear Mr WONG,

**Invitation for Written Submissions for Consideration by the
Independent Review Committee on Hong Kong's Franchised Bus Service**

The Committee thanks you for your reply dated 13 June 2018 confirming that the written submission received by the Committee on 9 May 2018 from "KMB and LWB Zone Heads" is your statement and that the statement is true to the best of your knowledge and belief.

2. In the letter addressed to the Chairman of the Board of Directors and all Board Members of the Kowloon Motor Bus Company (1933) Limited (KMB) dated 18 March 2018 that was attached to your written submission to the Committee of 9 May 2018, paragraph 3 states that:

"Since the current management took office, the most urgent mission is to advance the facilities at the stations, which have mostly been completed."

[Note: a copy of the letter is attached for reference.]

3. The Committee would be assisted if you could provide further information regarding the above statement by addressing the following questions:

- (a) Are there any existing standards or guidelines issued by KMB on the resting facilities for bus captains that should be provided at bus stations? If so, please provide details of the existing standards or guidelines. Are you aware of any guidelines issued by the Transport Department on the provision of such facilities? If so, please describe them.

- (b) How many bus stations are currently under the purview or management of the Sha Tin Depot?
- (c) Of the bus stations mentioned in (b) above, are there currently any bus stations that are considered to have insufficient resting facilities, as determined under any standards or guidelines, if any, of KMB or as alleged by bus captains or unions? If so, please identify them, *in particular those at which bus captains employed by KMB operating on special shifts commence and/or spend their rest breaks* of no less than three or more consecutive hours in the course of working a special shift.
- (d) Are there plans to provide resting facilities at the bus stations identified in (c) above? Have there been difficulties in providing or improving the resting facilities at these bus stations? If so, what are these difficulties and has the assistance been sought from the Transport Department or other relevant government departments?
- (e) Please provide examples of the advancements to resting facilities at bus stations that have been made since “the current management took office”.

4. In addition to addressing the questions above, the Committee is also considering inviting you and other Zone Heads who have agreed to provide further assistance to the Committee to one of the coming hearings to deliver oral evidence to the Committee as a group. The tentative dates being considered by the Committee are 14, 16 or 17 July 2018. In this connection, the Committee would like to invite you to indicate whether you will be available to attend a hearing on one of these three days.

5. I should be grateful if the response to paragraphs 3 and 4 above could reach the Secretariat of the Committee by **5 July 2018**. Please send the submission to:

By post: Secretariat to the Independent Review Committee on Hong Kong’s Franchised Bus Service, 21/F, Queensway Government Offices, 66 Queensway, Admiralty, Hong Kong (*with the envelope specifying that the written submission is enclosed*); or

Via email: secretariat@irc-bus.gov.hk (*with the email heading specifying that the written submission is enclosed*)

6. In addition to providing the response to the Committee, you may also provide information on other bus-safety related issues. If you do so, we would invite you to focus on matters of which you have personal knowledge but not on matters of which you do not have first hand knowledge.

7. Please be advised that the information provided in your response will be considered by the Committee in reviewing the matters it is directed to consider under the terms of reference of the Committee and in drawing up its recommendations. If necessary, the Committee may invite you to provide supplementary written submissions and/or to give oral evidence. All written submissions (including any annexes, appendices and attachments contained therein) and oral evidence will be treated as public information and, at the discretion of the Committee, may be published on the Committee's website.

Yours sincerely,



(CHAN Ping-fai, Peter)
Secretary, Independent Review Committee on
Hong Kong's Franchised Bus Service

Encl

Written Submission is enclosed

8th May 2018

Secretariat to the Independent Review Committee
on Hong Kong's Franchised Bus Service,
21/F, Queensway Government Offices,
66 Queensway, Admiralty, Hong Kong

Dear Sir/Madam,

We refer to the Testimonies submitted by various ex-management and operation staff of KMB (adduced as Item 4 and 5 of the Bundle for Miscellaneous) was being published to the public through IRC's website.

A letter written by Zone Heads of KMB and Long Win Bus Operations is attached for IRC's consideration. This letter was submitted to the Board of Directors of KMB on 18 March 2018 regarding the aforementioned Testimonies.

As we understand that this letter may be inserted into the bundle for the IRC hearing, and may probably be uploaded to the IRC website which is accessible by the general public, we humbly request that the names of the uploaded version would be redacted for privacy reason.

In February 2018, as known from media, a group of ex-staff of KMB alleged the current management on compromising safety for more profit, on poor management which leads to low morale & confusion in the company, and on unreasonable dismissal of experienced staff. We found the allegations to be untrue and groundless. Being a current member of staff in the company, we have written the attached letter to express our view and support to our management. This letter was only sent to the Board but not to the IRC as we regarded the allegations mentioned in the ex-staff report were solely internal matters and were nothing related to safety.

To our surprise, the report was being uploaded and disclosed to the public by the IRC yesterday. In response to this, we must stand up for the company and the management about the unfair and untrue allegations. We have to provide a clear picture to the IRC as well as to the public about the recent changes in KMB, which we see positive, to the Company, passengers and shareholders. Therefore, we have decided to submit our letter.

We have to point out that operating a franchise bus business is not easy. Nevertheless, our management is passionate and committed to serving KMB and the general public. They have been working very hard to improve KMB's bus service and, at the same time, to take care of all staff member in the company. Their courage is what the society should cherish rather than to criticize.

Thank you for your attention.

Yours sincerely,
KMB and LWB Zone Heads

致九龍巴士(一九三三)有限公司董事局主席及全體董事局成員：

最近公司成為傳媒焦點，有關九巴的新聞一則接一則，其中多份報章及媒體刊登了關於一班離職九巴員工的報導。文章指他們對公司相當不滿並對管理層作出各樣指控，管理層在記者及這班舊員工筆下好像成為了「十惡不赦」的罪人。究竟他們做錯了什麼？外界對公司的了解只靠片面之詞，對我們公平嗎？

他們已離職一段時間，並隻字不提公司近年的最新情況，原因是他們根本完全不了解我們所艱辛努力做的事情。作為公司的現職員工，突然覺得有責任發表我們的意見及對管理層表達支持。然而，我們不願浪費筆墨及時間評論報導的真確性，我們只想說出親眼所見的事實。

車務組是公司與前線同事的重要橋樑，我們留意到前線同事比以前開心了，工作環境的改善是主要原因。以前公司忽略了很多前線同事基本的需要，現屆管理層上任後，其中最迫切的任務是完善站頭設施，現在大部份已完成。同事在站頭有更理想的休息環境，對安全駕駛也有幫助。

以前，前線同事總覺得管理層高高在上，亦很少有機會與他們接觸。現屆管理層風格截然不同，他們親民並時常到車廠及站頭探望同事，聽取需要及意見。對於同事的需要，能配合的管理層一定盡力配合，前線同事完全感受被公司尊重及重視。

這幾年，我們親身見證著公司的轉變，現在的成就是我們一步一步努力的成績，的確是得來不易。無可否認，現在的工作量是比以前繁忙，我們卻覺得更有意義。因為大家的目標明確，亦知道管理層正與我們一同努力，希望公司成功。

要改變舊人事、舊制度、舊作風、舊方法，從來並非易事，而且「吃力不討好」，我們佩服一班管理層的勇氣及毅力。我們會繼續支持公司，努力工作。這是我們的一點點心聲，亦希望董事局能給予管理層更多的支持，謝謝！

九巴/龍運各區車務主管

荔枝角廠 -
九龍灣廠 -
九龍灣廠 -
沙田廠 -
屯門廠 -
屯門廠 -
龍運巴士 -

18-03-2018



RE: Invitation for Submissions for Consideration by the Independent Review Committee on Hong Kong's Franchised Bus Service

03.07.2018 18:32

From: Ken Wong ST <[REDACTED]>
To: "secretariat@irc-bus.gov.hk" <secretariat@irc-bus.gov.hk>,

Dear Mr. Chan,

Below with my written response for your kind reference.

(a) According to my understanding, there is no guideline from TD that what facilities should be provided at bus station. But basically we will provide the followings facilities at the bus stations:

- Toilet (Public or Chemical)
- Regulator office with computer and card reader
- Rest Kiosk with Air-conditioning, Microwave oven, refrigerator, water dispenser etc.

The facilities may various in different bus station subject to the actual environment and operations need

(b) I manage 19 bus stations in Taipo and Sheung Shui area

(c) For the bus captains in special shifts, we usually arrange the bus captains to take the break at bus depots. Most of the bus depots have rest room or sleeping room which allow bus captains to take rest in a better environment. Most of the facilities in bus depots were upgraded by the current management.

(d) Normally we will submit our proposal to TD (we will make sure the size and location of our facilities fulfilled the standard/requirement by Lands & Highway department) and TD will make consultation with the concerned parties. However, there is always objection from Locals on our proposal especially for placement of chemical toilet. Most of the proposal finally put on shelf.

(e) After the 'Lok Wah' incident, the approval process is back on the track and positive feedback received from public. The application for upgrading the facilities at Wah Ming, Tai Kwu Leng & Man Kam To bus station got approval recently.

Thanks & Regards,
Ken

From: Ken Wong ST
Sent: Saturday, June 30, 2018 11:12 AM
To: 'secretariat@irc-bus.gov.hk'
Subject: RE: Invitation for Submissions for Consideration by the Independent Review Committee on Hong Kong's Franchised Bus Service

Dear Mr. Chan,

I am sorry that I would not attend the Committee's hearing but I will provide the written response to other questions by 5 July.

Thanks & Regards,