# 立法會

# Legislative Council

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# Report of the Subcommittee on Matters Relating to Railways for submission to the Panel on Transport

### **Purpose**

This report gives an account of the work of the Subcommittee on Matters Relating to Railways (the Subcommittee) during the 2011-2012 legislative session.

#### The Subcommittee

- 2. In the 2010-2011 session, the Panel on Transport (the Panel) decided at its first meeting on 14 October 2010 that the Subcommittee should continue its work according to the existing terms of reference in the remaining sessions of the current term. The terms of reference and membership list of the Subcommittee are at **Appendices I and II** respectively.
- 3. Under the chairmanship of Hon Miriam LAU, the Subcommittee has held seven meetings (up to mid-June 2012) with the Administration and the MTR Corporation Limited (MTRCL).

#### Major work

## New railway projects

Shatin to Central Link (SCL)

4. The 17-kilometre SCL is a territory-wide strategic railway project with ten stations<sup>1</sup>, including six interchange stations<sup>2</sup> and new stations in six districts serving a wide catchment across Hong Kong Island, Kowloon and the New Territories. Upon gazettal of the SCL scheme under the Railways Ordinance (Cap. 519) on 26 November 2010, the statutory consultation stage of the SCL project commenced. To fine-tune the railway scheme, two amendment exercises were made and gazetted on 15 July and 11 November 2011 respectively. On 27 March 2012, the Chief Executive-in-Council (CE-in-Council) approved the implementation of the SCL scheme.

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5. The Administration and MTRCL briefed the Subcommittee on the progress of the SCL project at its meeting on 2 March 2012, and consulted the Subcommittee on 23 and 30 March 2012 on the funding applications for the construction of the remaining SCL main works (both railway works and non-railway works) which amounted to \$57.3 billion (in September 2011 prices). Including the approved funding for the advance works and protection works, the overall construction cost for SCL was estimated at \$64.9 billion (in September 2011 prices). The Subcommittee examined the reasons for the upsurge in the estimated construction cost and the project management cost (PMC) payable by the Government to MTRCL. The Subcommittee noted that the PMC for the entire SCL project (including the advance works and the main works) was adjusted downwards from the provisional assumption of 16.5% to 10.5% of the total construction cost estimate including contingencies for all the works entrusted to MTRCL. Some members asked whether there was room to further adjust downward the PMC rate and suggested that a

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<sup>&</sup>lt;sup>1</sup> The ten stations are: Tai Wai, Hin Keng, Diamond Hill, Kai Tak, To Kwa Wan, Ma Tau Wai, Ho Man Tin, Hung Hom, Exhibition and Admiralty.

<sup>&</sup>lt;sup>2</sup> The six interchange stations are: Tai Wai, Diamond Hill, Ho Man Tin, Hung Hom, Exhibition and Admiralty.

sliding scale be introduced for determining PMC such that the higher the construction cost, the lower should be the rate of PMC. In response to the Subcommittee's request, the Administration provided a detailed breakdown of PMC and explained the basis of the estimate of the PMC which was equivalent to 10.5% of the overall construction cost of the SCL project. The Administration advised that the SCL project was very complicated and enormous in scale, a majority part of which would go through a number of densely populated urban districts. The Administration considered that to ensure quality of work and timely completion, sufficient manpower resources were necessary for implementation of the mega project. The Administration informed the Subcommittee that the independent consultants commissioned by the Government had assessed the PMC of the SCL project and considered the current estimate of PMC reasonable.

- 6. The Subcommittee also expressed concerns about other issues, including the impact on the carrying capacity of the East Rail Line (ERL) and the passenger flow of the Tai Wai Station upon the commissioning of SCL, facilities for passengers to listen to digital broadcasting, seating capacity of MTR trains, provision of toilet facilities in SCL, and locations and entrances of some of the proposed SCL stations. MTRCL undertook that it would continue to communicate closely with the community in the course of implementing the SCL project, and would establish community liaison groups comprising representatives of the concerned and affected parties, including owners' corporations, owners' committees, management offices and local communities, etc. to provide assistance to stakeholders as far as possible.
- 7. The funding applications were supported by the Subcommittee and approved by the Finance committee (FC) on 11 May 2012. Construction of SCL is scheduled to commence in mid-2012. The Tai Wai to Hung Hom section is expected to be completed by 2018 and the Hung Hom to Admiralty section by 2020.

Mechanism for handling complaints and compensation claims concerning construction of new railway lines

- 8. At the request of the Subcommittee, the Administration and MTRCL briefed members on the mechanism for handling complaints and compensation claims concerning building structures affected by the construction of new railway lines on 23 April 2012. Some members expressed concern that among a total of 222 complaints (as at end of February 2012) on the Hong Kong section of Guangzhou-Shenzhen-Hong Kong Express Rail Link, the West Island Line and the South Island Line (East) received by MTRCL, it had not been established in any one case that the identified damages to buildings would affect building safety. Subcommittee members were concerned whether the interests of the owners and occupiers were adequately safeguarded under the existing mechanism for handling complaints and claims concerning building structures affected by the construction of new railway lines.
- 9. MTRCL advised that when it received a complaint about building damage, its project team would arrange for a preliminary inspection of the building damage with the complainant. Depending upon the nature of the case, MTRCL might refer the case to the loss adjuster for assessment. MTRCL emphasized that the loss adjuster was employed by an insurance company acting as an independent third party. Some members, however, considered that there might be doubt about the independence of the loss adjuster as it was employed by the insurance These members also pointed out that if the complainant was dissatisfied with the assessment of the loss adjuster, there was a lack of appeal avenues under the existing mechanism. Some members opined that as a number of railway projects were underway, MTRCL might receive many complaints from affected owners and occupiers in the years These members considered that there was a need to strengthen the mechanism to better safeguard the interests of owners and occupiers and ensure that their complaints would be properly handled. After discussion, the Subcommittee passed the following motion -

"That regarding the mechanism for handling complaints and compensation claims concerning railway construction works, the Subcommittee requests the Government to set up an "independent committee" to be responsible for handling the relevant complaints

### and compensation claims."

### Environmental measures for new railway projects

- 10. The Subcommittee received a briefing by MTRCL on the environmental measures for new railway projects on 22 May 2012. MTRCL explained to members that a number of environmentally-friendly design and measures had been put in place in the railway system in Hong Kong to enhance energy efficiency. They included energy efficiency considerations in the design of railway alignment and ventilation system, the establishment of the Comprehensive Energy Consumption Monitoring System and regenerative braking system, and the reduction in power loss resulting from power transmission, distribution and conversion.
- 11. Some members took the opportunity to call for improvements to be made to reduce noise generated by running trains that had long been complained about by residents in Tsuen Wan and Chai Wan. MTRCL advised that it would adopt appropriate measures to mitigate noise impact and ensure that the noise level was within the statutory limits under the Noise Control Ordinance (Cap. 400). Subcommittee members also suggested that consideration should be given to constructing noise barriers where appropriate.

### Railway safety and incidents

Retrofitting of automatic platform gates (APGs)

12. The Subcommittee discussed progress of retrofitting of APGs on ERL on 13 January and 2 March 2012. Subcommittee members noted that the programme to retrofit APGs at the eight at-grade and above-ground stations, namely Kwai Fong, Kwai Hing, Tsuen Wan, Kowloon Bay, Ngau Tau Kok, Kwun Tong, Chai Wan and Heng Fa Chuen stations, had been completed at the end of 2011, one year ahead of the original plan. However, as for the stations along ERL and Ma On Shan Line (MOSL), MTRCL advised that, if APGs were to be retrofitted on ERL, both the signalling system and the train fleet would have to be replaced to solve technical difficulties. On the other hand, under the SCL project, MTRCL also made a similar proposal of replacing the signalling system and new trains of ERL in order to permit operation of

the North-South Line<sup>3</sup> (NSL). As such, MTRCL was of the view that retrofitting of APGs in tandem with construction of NSL of SCL would achieve synergy. As regards the APG retrofitting works along MOSL, MTRCL advised that its plan was also to carry out the works in tandem with the construction of the East-West Corridor of SCL scheduled for completion by 2018.

- 13. Subcommittee members in general expressed dissatisfaction with MTRCL for the long lead time for retrofitting of APGs on ERL and MOSL. Some Subcommittee members suggested retrofitting APGs at MOSL stations first where the platforms were less curved, and reprovisioning the APGs when the platforms concerned underwent reconstruction works for the SCL project. MTRCL explained that when SCL came into operation, platform modifications would be required for MOSL. If the retrofitting of APGs along MOSL was carried out first, most of the APGs installed would then have to be dismantled when construction of SCL commenced.
- 14. The Subcommittee urged MTRCL to introduce additional safety measures from the present onwards until completion of the retrofitting project to prevent passengers from falling onto the rail track, and to employ additional Platform Assistants, especially for crowded stations such as Kowloon Tong Station, to maintain platform order and provide assistance to passengers to board and alight at ERL and MOSL stations.

### Railway incidents

15. The Subcommittee noted that in the wake of the rail breakage incidents occurring in early 2011, MTRCL had engaged a team of experts on rail technology from the Institute of Railway Technology of the Monash University (IRT) to conduct a comprehensive review of MTRCL's rail procurement, quality control, inspection and maintenance regime with particular focus on rail cracks and breakages. The review

<sup>3</sup> Under the SCL project, the existing ERL will be extended from Hung Hom, crossing the harbour to reach Admiralty, thereby forming a strategic line from the border at Lo Wu or Lok Ma Chau to the heart of the business centre on Hong Kong Island. This strategic line

is termed NSL. The NSL completion date is forecast to be in 2020.

was completed in July 2011. The Subcommittee discussed on 4 November 2011 the findings of the IRT review and the Administration's assessment on the findings. The Subcommittee noted the major findings of the IRT review on the following aspects –

- MTRCL's procurement process for plain rail, switches and crossings and rail expansion joints;
- control and quality assurance of manufacturers;
- adequacy of MTRCL's inspection and maintenance regime;
- technology currently used by MTRCL in non-destructive testing of rail defects; and
- management of broken and defective rails by MTRCL
- 16. MTRCL advised that it had made reference to international standards in rail procurement, quality control, inspection and maintenance adopted by overseas railway systems with a level of passenger loading comparable with that of the MTR network. The Administration advised that to ensure railway safety, the Electrical and Mechanical Services Department would also keep track of the latest technological developments to ensure that MTRCL would follow the appropriate safety and maintenance standards. Subcommittee members urged MTRCL to expeditiously implement the improvement recommendations put forward by IRT, and to put in place a system of independent examination and certification based on the ISO9712 standard as early as possible.
- 17. At the same meeting on 4 November 2011, the Subcommittee also discussed the MTR railway service performance for the period between 1 July and 30 September 2011. The Subcommittee noted with concern that during the period, the number of delays of 8 minutes or more totaled 86, and that since 2008, the total investment in maintenance, repair and renewal of railway assets had increased by about 17.5%, whereas the number of full-time maintenance staff had only increased by about 2.6%. The Subcommittee sought the Administration's assessment on the MTR railway service performance and the relationship between

the outsourcing of maintenance work of MTRCL and the frequent occurrence of incidents. The Administration advised that the number of railway incidents was considered acceptable from the regulatory authority's point of view because a large majority of the train service delays were actually caused by passenger behaviour and external factors<sup>4</sup>. MTRCL assured members that it had a well established monitoring system to ensure that its outsourced maintenance work met the required standards and it would apply the same standards and requirements to maintenance tasks carried out by MTR in-house staff and contractors' staff. Besides, MTRCL had achieved maintenance manpower saving in recent years by automation of work.

18. On 3 May 2012, a train broke down during rush hours in the morning causing delays on the West Rail Line and reportedly affecting hundreds of passengers. The Subcommittee was very concerned about the incident and has scheduled a special meeting on 28 June 2012 to discuss it and other recent incidents as well as an overview of MTRCL's contingency measures and maintenance work.

## Design of next generation of railway stations and new trains

Design of next generation of railway stations

19. MTRCL briefed the Subcommittee on the new facilities and designs to be introduced to the next generation of railway stations on 13 January 2012. According to MTRCL, MTR railway stations in early years were designed to cater for the primary function of addressing the travel need of passengers. As railway played a more significant role in Hong Kong's public transport service, MTR stations had become a part of people's daily living. It was MTRCL's plan that future MTR stations

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	Average number of railway incidents per month caused by equipment failure/staff factor	Average number of railway incidents per month caused by passenger behaviour and external factor
2008	7	130
2009	8	132
2010	8	139
2011(Jan to Sept)	11	147

(Source: Transport and Housing Bureau)

would see greater emphasis on human-centred designs. The new design was that greening features, such as vertical greening and green roof, would be adopted for the external structures of new MTR stations, where appropriate. The "art in mtr" initiative would continue with a long-term goal of installing one unique, permanent art piece at each MTR station for the enjoyment of the public. In future, local communities would be involved in the station art programmes as far as possible to enhance the connection between the stations and the communities, as well as incorporate local culture and characteristics into the stations.

- 20. The Subcommittee noted that MTRCL would roll out a series of new facilities and designs in stations of new railway projects, which included -
  - (a) there would be at least one barrier-free access, e.g. equipped with a passenger lift or a ramp, in each new railway station;
  - (b) tactile guide paths and tactile station layout maps with audible device would be provided in all new stations. Escalator audible warning signals would be installed in all stations to serve the needs of passengers with impaired vision;
  - (c) public toilets would be provided for new stations for the convenience of the travelling public;
  - (d) platform screen doors or APGs would be provided in new stations; and
  - (e) LCD monitors would be installed in the concourses and platforms of new stations for information display, such as time, weather, and service disruption information.
- 21. Some members considered that MTRCL should allocate more space at MTR stations for display of artwork and musical performance. Subcommittee members called on MTRCL to provide public toilets, breast-feeding rooms, lifts and escalators as well as facilities enabling passengers to receive radio or audio broadcasting at MTR stations as far

as possible.

### New trains for MTRCL

- 22. The Subcommittee received a briefing by MTRCL on 13 January 2012 on the procurement and testing procedures for the commissioning of new trains by MTRCL and the features of the ten trains newly purchased. The Subcommittee noted that the first of the ten trains arrived in Hong Kong in April 2011. By the end of 2011, a total of seven trains had been The remaining three trains were expected to arrive within MTRCL advised that a well established regime was in place for selecting train suppliers with procurement conducted internationally in the form of open tender. MTRCL stressed that the foremost consideration in new train procurement was the supplier's capability to comply with MTRCL's technical requirements, including internationally recognized safety standards and whether its products were suitable to operate in the MTR system. MTRCL advised that the new trains also came with new enhanced features such as 22-inch colour liquid crystal display panels, offering train service information, news, weather, etc.
- 23. Some members expressed concern about the media reports on the uneven leveling of train floor of the new trains and the need to operate the emergency stop manually by the MTR train captains of the new trains. The Subcommittee expressed concern about the safety of the new trains and asked why such technical problems had not been detected during the MTRCL explained that the incidents in question did not testing stages. pose safety problems to passengers. According to MTRCL, the difference between the train floor level and platform level was within the normal range and only simple adjustments were required to fix the minor irregularity for better passenger comfort. As for the incident involving manual operation of emergency stop, MTRCL explained that it had only occurred once and was in the course of a dynamic train test with no MTRCL stressed that the new trains were designed and passengers. built to high stringent specifications in line with the current MTR system.

# Public consultation on the interim study findings of the review and update of the Railway Development Strategy (RDS) 2000

- 24. The Administration is currently conducting a review and update of the blueprint of the railway development strategy in RDS 2000 to take account of the changing needs of the society and latest planning parameters. It includes reviewing the priority of the railway network expansion proposals that were recommended previously but not yet implemented, as well as adding new railway proposals. The Administration's target is to update the railway development strategy to meet the transport need up to year 2031. The funding proposal to create a commitment of \$43 million for the review and update of RDS 2000 was approved by FC on 14 January 2011. The review study will last for about 24 months. At the meeting on 22 May 2012, the Administration briefed the Subcommittee on its plan to launch a three-month Stage 1 Public Engagement Exercise from 20 April to 21 July 2012 with a view to gathering public opinion on long-term railway development. In this connection, a consultation document entitled "Our Future Railway" was published in April 2012. The Subcommittee noted that the consultants engaged to conduct the study initially considered that the Hong Kong-Shenzhen Western Express Line (WEL), the Northern Link (NOL) and the Coastal Railway between Tuen Mun and Tsuen Wan (Tuen Mun to Tsuen Wan Link) were conceptual schemes which were worthy of public discussion in the public engagement for Stage 1, but it did not represent that the consultants proposed to construct the above railways.
- 25. Some members considered that in the course of the study, the Administration and its consultants should also take into account the findings of the Third Comprehensive Transport Study in 1999, which had looked at improvements to be made for better co-ordination of public transport services, in order to develop a balanced transport plan for Hong Kong. Some members considered that NOL should be actively explored as it could provide a more direct and convenient cross boundary railway service for residents in New Territories West. Some members, however, expressed doubt on the patronage forecast of WEL and suggested that the consultants should conduct more in-depth study to ascertain the service demand for WEL.

# Recommendation

26. The Panel is invited to note the work of the Subcommittee.

Council Business Division 1
<a href="Legislative Council Secretariat">Legislative Council Secretariat</a>
25 June 2012

### **Panel on Transport**

### **Subcommittee on matters relating to railways**

#### **Terms of Reference**

To follow up various issues relating to the planning and implementation of new railway projects, and the operation of existing railways as follows:

### Planning and implementation of new railway projects

- (a) planning and financing of new railway projects;
- (b) environmental impact assessment of new railway projects;
- (c) resumption of land arising from the implementation of new railway projects under the Railways Ordinance (Cap. 519);
- (d) progress update on the implementation of new railway projects;
- (e) provision of supporting public infrastructure for new railway projects; and
- (f) co-ordination of public transport services arising from the commissioning of new railway lines.

# Railway operation

- (a) performance of existing railway lines including train service performance and safety management;
- (b) maintenance programme; and
- (c) train service disruptions and breakdowns, and arrangements for handling emergency situations.

Matters relating to corporate governance of the post-merger corporation and fares should be dealt with by the Panel on Transport.

# **Appendix II**

# **Legislative Council Panel on Transport**

### **Subcommittee on Matters Relating to Railways**

### Membership list for 2011-2012 session

**Chairman** Hon Miriam LAU Kin-yee, GBS, JP

**Members** Ir Dr Hon Raymond HO Chung-tai, SBS, S.B.St.J., JP

Hon LAU Kong-wah, JP

Hon Andrew CHENG Kar-foo

Hon Abraham SHEK Lai-him, SBS, JP

Hon LI Fung-ying, SBS, JP Hon WONG Kwok-hing, MH

Hon Jeffrey LAM Kin-fung, GBS, JP Hon CHEUNG Hok-ming, GBS, JP Hon Ronny TONG Ka-wah, SC

Hon KAM Nai-wai, MH

Hon Starry LEE Wai-king, JP (since 5 December 2011)

Hon CHAN Hak-kan Hon WONG Sing-chi Hon IP Wai-ming, MH

Hon Mrs Regina IP LAU Suk-yee, GBS, JP

Hon LEUNG Kwok-hung

Hon Tanya CHAN

Hon Albert CHAN Wai-yip

(Total: 19 members)

**Clerk** Ms Joanne MAK

**Legal Adviser** Mr Kelvin LEE

**Date** 5 December 2011