# 立法會 Legislative Council

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## **Panel on Transport**

# Proposed extension of period of work of the Subcommittee on Matters Relating to Railways

# **Purpose**

This paper invites members of the Panel on Transport to endorse the proposal of the Subcommittee on Matters Relating to Railways ("the Subcommittee") to extend the period of its work and continue to operate in the 2015-2016 session.

# **Background**

2. The Subcommittee was appointed by the Panel on Transport on 16 November 2012 to follow up various issues relating to the planning and implementation of new railway projects, and the operation of existing railways. According to its terms of reference, the Subcommittee will focus its work on the following areas –

# 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.

#### Work of the Subcommittee

- 3. The Subcommittee has, since 16 November 2012, held a total of 21 meetings and received views of deputations at one of these meetings. Major issues studied by the Subcommittee include
  - (a) <u>Planning of new railway projects</u>
    Railway Development Strategy 2014 ("RDS-2014") which provides a framework for planning the expansion of Hong Kong's railway network up to 2031.
  - (b) <u>Implementation of new railway projects</u>
    - (i) progress update on the implementation of the Hong Kong section ("HKS") of the Guangzhou-Shenzhen-Hong Kong Express Rail Link ("XRL"), Shatin to Central Link ("SCL"), West Island Line ("WIL"), South Island Line (East) ("SIL(E)"), and Kwun Tong Line Extension ("KTE");
    - (ii) construction safety and community liaison works carried out by the MTR Corporation Limited ("MTRCL") for HKS of XRL, SCL, WIL, SIL(E) and KTE;
    - (iii) implementation of the MTR Station Art Programme for

# HKS of XRL, SCL, WIL, SIL(E) and KTE;

- (iv) co-ordination of public transport services arising from the commissioning of WIL and SIL(E);
- (v) safety management measures for trains of HKS of XRL; and
- (vi) new railway system for SIL(E), including the Fully Automatic Operation.

# (c) Operation of existing railways

- (i) railway service performance, including train service performance and safety management;
- (ii) causes of MTR service disruptions, such as faulty insulators and intrusion by stray animals into track areas, and respective contingency arrangements;
- (iii) causes of Light Rail incidents and enhancement measures to avoid recurrence of similar incidents;
- (iv) progress of the retrofitting of automatic platform gates ("APGs") along the East Rail Line ("ERL") and the Ma On Shan Line and their related financial arrangements;
- (v) rail inspection regime of MTRCL, including the issue on outsourcing of maintenance staff; and
- (vi) the capacity of MTR trains and management of loading in train compartments to enhance comfort and the travelling experience for passengers.
- 4. The Subcommittee has also conducted four site visits. On 24 June 2013 and 28 April 2014, the Subcommittee visited the West Kowloon Terminus ("WKT") of HKS of XRL to better understand the progress of the works. On 10 January 2014, the Subcommittee conducted another site visit to MTR Shatin Freight Yard and Racecourse Station to better understand the works progress of retrofitting APGs at ERL stations. The Subcommittee also paid a visit to a busy station, i.e. MTR Admiralty Station, on 19 May 2015 to observe the conditions of the train compartments and platform during evening peak hours.

- 4 -

#### Need for continuation of work in the 2015-2016 session

# Planning of new railway projects

- The Administration commissioned a consultant in March 2011 to conduct a study for the review and update of the Railway Development Strategy 2000 ("RDS-2000"), with a view to updating the long-term railway development blueprint to meet the local transport needs up to The Administration conducted the Stage 1 Public Engagement Exercise from April to July 2012 which featured conceptual schemes of three major regional railway corridors<sup>1</sup> for public discussion. Also, the Administration conducted the Stage 2 Public Engagement Exercise from February to May 2013 to collect public opinion on the seven local enhancement schemes<sup>2</sup> for existing railway lines.
- At the meeting on 27 October 2014, the Subcommittee members 6. were briefed by the Administration on RDS-2014, which was based on the findings and final recommendations of the abovementioned review and update of RDS-2000 consultancy study. RDS-2014 recommended that seven railway projects be completed in the planning horizon up to year 2031 having regard to transport demand, cost-effectiveness and the development needs of New Development Areas and other new The Subcommittee noted that the seven planned projects were Northern Link and Kwu Tung Station (combined as one); Tuen Mun South Extension; East Kowloon Line; Tung Chung West Extension; Hung Shui Kiu Station; South Island Line (West); and North Island Line. The proposed indicative implementation window for planning purpose and the preliminary cost estimates for the individual railway projects were set out in the table at **Appendix I**. The Administration recommended that seven railway projects be completed, tentatively between 2018 and 2026, with the preliminary total cost estimate in the order of \$110 billion. As such, the Subcommittee will need to continue to monitor the planning including the alignment, financing as well as the environmental impact assessment of the new railway projects.

# Implementation of new railway projects

Hong Kong-Shenzhen Western Express Line, Northern Link and Coastal Railway between Tuen

Shui Kiu Station, Tung Chung West Extension and Kwu Tung Station

Mun and Tsuen Wan <sup>2</sup> North Island Line, Siu Sai Wan Line, South Island Line (West), Tuen Mun South Extension, Hung

7. The Subcommittee will need to continue with its work to monitor the implementation of the five railway projects under construction, namely HKS of XRL, SCL, WIL, SIL(E) and KTE. HKS of XRL and SCL are implemented under the concession approach<sup>3</sup> whereas WIL, SIL(E) and KTE are implemented under the ownership approach<sup>4</sup>. The key information of the five railway projects is attached at **Appendix II**. The Administration in mid-2014 announced that the said projects encounter different difficulties and challenges at the construction stage and therefore, they are unlikely to be completed as originally scheduled and may experience cost overruns.

Hong Kong section of the Guangzhou-Shenzhen-Hong Kong Express Rail Link

At the meetings on 2 January, 6 March, 19 May and 3 July 2015, the Subcommittee expressed grave concern over the delay of the works progress and the financial implications of HKS of XRL. Having noted the need to remove a significant quantity of rock, the complexity of the steel structure and low production rate for the steelworks of WKT (Contract 810A) and the labour shortage problem as presented by MTRCL, members in general were worried that the project might be further delayed. Besides, the Subcommittee was informed by the Administration that MTRCL's estimated cost to complete for HKS of XRL would be \$71.52 billion, which was about \$6.5 billion more than the entrustment cost of \$65 billion, and also exceeded the approved project estimate of \$66.8 billion. After the Highways Department's assessment, MTRCL was asked to review again the cost to complete. According to MTRCL in June 2015, the commissioning of HKS of XRL would have to be delayed further from the end of 2017 to the third guarter of 2018 and the cost to complete for the project would have to be revised to \$85.3 billion. It is therefore envisaged that the Subcommittee will need to continue to monitor the implementation of HKS of XRL, which is expected to be commissioned in 2018, and the possible increase in project cost.

Shatin to Central Link

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<sup>&</sup>lt;sup>3</sup> Under the concession approach, the Administration is responsible for the construction costs of the railway project whilst MTRCL is entrusted with the planning and design of the project. Upon completion of the construction, MTRCL will be granted a service concession for the operation of the railway line while the Administration will receive a service concession payment annually.

<sup>&</sup>lt;sup>4</sup> Under the ownership approach, MTRCL is responsible for the financing, design, construction, operation and maintenance of the railway project, and will own the railway.

9. At the meetings on 24 November 2014 and 19 May 2015, the Subcommittee members were briefed that there was a cumulative delay of at least 11 months for the Tai Wai to Hung Hom Section of SCL arising from archaeological discovery in To Kwa Wan and this Section was estimated to be commissioned in 2019. They also noted that for the Hung Hom to Admiralty Section of SCL, the commissioning date would be deferred to 2021 to allow flexibility for the topside development of the convention centre at the Exhibition Station, and to cater for the reclamation works under Wan Chai Development Phase II and the construction of the Central-Wan Chai Bypass tunnel thereof. expressed worry that archaeological discovery at To Kwa Wan Station, discovery of a large metal object on the seabed in the vicinity of the old Wan Chai Ferry Pier and manpower shortage problem would further delay the construction progress of SCL. Besides, the Subcommittee noted that there would be an additional cost of at least \$4.1 billion for the Tai Wai to Hung Hom Section of SCL. The Administration advised that as the current contingency of SCL would not be sufficient to meet the additional expenditure arising from the archaeological and conservation works, the Transport and Housing Bureau would seek additional funding from the Legislative Council together with the Development Bureau in In this connection, the Subcommittee will need to continue to follow up the progress and financial situation of the implementation of SCL.

#### West Island Line

10. The Subcommittee at its meetings on 24 November 2014 and 19 May 2015 was briefed that WIL, together with HKU Station and Kennedy Town Station, was commissioned on 28 December 2014 whereas Sai Ying Pun Station (except Ki Ling Lane Entrance) was completed and opened on 29 March 2015. The Subcommittee was advised that owing to the impact of earlier construction works, the ground freezing works for the passenger adit between Ki Ling Lane entrance and First Street/Second Street entrance were still ongoing. The Subcommittee noted that the Ki Ling Lane entrance could be opened to the public in the fourth quarter of 2015. Members also noted that the latest capital cost of WIL was \$18.5 billion, which was higher than the originally estimated capital cost of \$15.4 billion. As such, the Subcommittee will need to continue to monitor the completion of the implementation of WIL.

South Island Line (East)

11. At the meetings on 2 January and 19 May 2015, the Subcommittee members expressed serious concern about the delay in the underpinning works beneath the Island Line tunnel at Admiralty Station, which was the major reason hampering the overall progress of the construction of SIL(E). The Administration advised that based on the current assessment, there were still risks to achieve the target commissioning of SIL(E) at the end of 2016. MTRCL also briefed members that the estimated cost of SIL(E), which had increased from \$12.4 billion to \$15.2 billion, was likely to rise given the complexities of the construction works and the various difficulties and challenges encountered. In view of the possible delay and cost overrun, the Subcommittee will need to continue to monitor the implementation of SIL(E).

#### Kwun Tong Line Extension

12. On 2 January and 19 May 2015, the Subcommittee was briefed that the excavation works for the platform tunnel connecting the East and West concourses of the Whampoa Station of KTE were still ongoing. In view of the uncertainties arising from the complex geological conditions, there were risks to achieve the target of commissioning of KTE in mid-2016. According to MTRCL, the estimated capital cost of \$5.3 billion was likely to rise given the complexities of the construction works and the various difficulties and challenges continuously encountered. As a result, the Subcommittee will need to continue to monitor the implementation of KTE.

# Operation of existing railways

13. At the meeting on 6 March 2015, the Subcommittee noted the outcome of the independent expert's review of MTR overhead line system as a result of ERL incidents on 9 February and 18 February 2014 as well as the Light Rail incident on 22 January 2014. According to MTRCL, the incidents had been caused by faulty overhead line insulators. Some members expressed dissatisfaction that the senior management of MTRCL was not held accountable for railway service disruptions and that the current fine penalty system for serious service disruptions was considered inadequate to compensate the affected passengers for their loss in journey time as well as monetary losses. It is envisaged that the Subcommittee will need to continue to follow up the operation of existing railway lines.

14. The Subcommittee at the above meeting also expressed concern about an incident occurring on ERL on 20 August 2014 in which a dog was found dead on the tracks. Members noted from MTRCL's report an account of the incident and MTRCL's proposed improvement measures in consultation with the Agriculture, Fisheries and Conservation Department and animal welfare organizations. Members urged MTRCL to conduct more frequent inspections of the boundary fencing, installing sensors to detect animals entering the track areas, etc., to avoid recurrence of similar incidents which might lead to disruption of railway service. The Subcommittee will need to continue to monitor the performance of existing railway lines and the contingency measures taken by MTRCL.

#### Proposed extension of period of work

- 15. Rule 26(c) of the House Rules provides that a subcommittee should complete its work within 12 months of its commencement and report to the relevant Panel(s). If it is necessary for a subcommittee to work beyond that 12 months, the subcommittee should, after obtaining the endorsement of the relevant Panel(s), report to the House Committee and give justifications for an extension of the 12-month period. In accordance with the said House Rule, approval was previously given by the House Committee at its meeting on 31 October 2014 for the Subcommittee to extend the period of its work after expiry of the 12-month period in December 2014 up to 30 September 2015.
- 16. The Subcommittee plays a significant role in monitoring the Administration and MTRCL in the implementation of new railway projects under construction or planning and the various issues arising from railway operations like service disruption or safety operation. Having regard to the matters which need more focused discussion and follow-up by the Subcommittee as set out in paragraphs 5 to 14 above, the Subcommittee agreed at its meeting on 3 July 2015 that it should continue its work in the 2015-2016 session.

# **Advice sought**

17. Members are invited to endorse the proposal of the Subcommittee to extend the period of its work and continue to operate in the 2015-2016 session. Subject to the endorsement of the Panel on Transport, a report will be made to the House Committee for seeking its approval of the proposal.

Council Business Division 4
Legislative Council Secretariat
9 July 2015

# Proposed indicative implementation window for planning purpose and the preliminary cost estimates for railway projects under planning

Railway projects under planning	Indicative implementation window for planning purpose	Preliminary cost estimate (\$ billion, in 2013 prices)	
(a) Northern Link and Kwu Tung Station	2018 – 2023*	23	
(b) Tuen Mun South Extension	2019 – 2022	5.5	
(c) East Kowloon Line	2019 – 2025*	27.5	
(d) Tung Chung West Extension	2020 – 2024*	6	
(e) Hung Shui Kiu Station	2021 – 2024*	3	
(f) South Island Line (West)	2021 – 2026*	25	
(g) North Island Line	2021 – 2026	20	
Total		110	

<sup>\*</sup> Implementation of the schemes will be contingent upon the progress of the residential developments in the vicinity.

# **Key information of the five railway projects under construction** (*Updated as at July 2015*)

	Hong Kong section of Guangzhou-Shenzhen- Hong Kong Express Rail Link	Shatin to Central Link	West Island Line	South Island Line (East)	Kwun Tong Line Extension
Length of the rail line	26 km	17 km	3 km	7 km	2.6 km
Estimated construction cost	\$66.8 billion	\$79.8 billion	\$15.4 billion	\$12.4 billion	\$5.3 billion
The MTR Corporation Limited's ("MTRCL") latest estimated construction cost	\$85.3 billion  (\$20.3 billion more than the January 2010 original entrustment fee of \$65 billion)	At least \$4.1 billion increased	\$18.5 billion (\$3.1 billion increased)	\$15.2 billion (\$2.8 billion increased)	\$5.3 billion
Funding arrangement	Implemented under the concession approach  Construction of the railway works: \$55 billion  Construction of the non-railway works: \$11.8 billion  Special ex-gratia payments in relation to the project: \$86 million	Implemented under the concession approach  Protection works: \$695 million  Advance works: \$7.7 billion  Construction of the railway works — main works: \$65.4 billion  Construction of the non-railway works — main works: \$5.98 billion	Implemented under the ownership approach  Funded by a capital grant of \$12.7 billion	Implemented under the ownership approach  MTRCL granted the property development right of the ex-Wong Chuk Hang Estate to bridge the funding gap of \$9.9 billion	Implemented under the ownership approach  MTRCL granted the property development right of ex-Valley Road Estate Phase 1 site to bridge the funding gap of \$3.3 billion

	Hong Kong section of Guangzhou-Shenzhen- Hong Kong Express Rail Link	Shatin to Central Link	West Island Line	South Island Line (East)	Kwun Tong Line Extension
Works commenced in	2010	2012	2009	2011	2011
Original target commissioning date	End of 2017	December 2018: Tai Wai to Hung Hom Section  December 2020: Hung Hom to Admiralty Section	August 2014	December 2015	August 2015
Target opening	Third quarter of 2018	2019: Tai Wai to Hung Hom Section  2021: Hung Hom to Admiralty Section	HKU Station and Kennedy Town Station were opened on 28 December 2014  Sai Ying Pun Station (except Ki Ling Lane Entrance) was opened on 29 March 2015  Ki Ling Lane entrance would be opened to the public in the fourth quarter of 2015	End of 2016	Mid-2016
Journey time	Between Hong Kong and Futian, Shenzhen: 14 minutes  Between Hong Kong and Shenzhen North: 23 minutes	Admiralty: 36 minutes  Between Tai Wai and	Between Sheung Wan and Kennedy Town: less than 10 minutes	Between Admiralty and South Horizons: 10 minutes	Between Mong Kok and Whampoa: 5 minutes

Hong Kong section of Guangzhou-Shenzhen- Hong Kong Express Rail Link	Shatin to Central Link	West Island Line	South Island Line (East)	Kwun Tong Line Extension
	Between Hung Hom and			
_	Admiralty: 5 minutes			
minutes	Between Tai Wai and			
	Admiralty: 17 minutes			
	rammanty. 17 minutes			
	Between Lo Wu and			
	Admiralty: 50 minutes			