

CONTROLLING OFFICER'S REPLY

THB(T)035

(Question Serial No. 2026)

Head: (60) Highways Department

Subhead (No. & title): (-) Not Specified

Programme: (3) Railway Development

Controlling Officer: Director of Highways (Daniel K W CHUNG)

Director of Bureau: Secretary for Transport and Housing

Question:

As stated in the document, "one of the duties of the Highways Department (HyD) is to plan, monitor and co-ordinate various activities associated with the implementation of new railway projects". Would the Government inform this Committee on -

- (1) In the Railway Development Strategy 2014 (RDS-2014) published by the Government in September 2014, it was stated that the South Extension of Tuen Mun Station and the Northern Link (NOL) at Kam Sheung Road would be taken forward, with construction and commissioning initially anticipated to commence in 2019 and 2022 respectively. Given the construction works of a number of railway projects fell behind the anticipated schedules in recent years, does the Government have any measures to ensure the timely commissioning of Tuen Mun South Extension (TMS Extension)? Could expenditures on the relevant study and initial construction costs be provided using table form?
- (2) The Government has temporarily suspended the study on the Tuen Mun to Tsuen Wan Link (TMTWL) on the ground of little significance. Could the reasons of suspension be explained in detail? How much expenditure was involved in the study? Has any long-term study been conducted by the Government on the feasibility of 9-car trains?
- (3) Please provide a breakdown of such capital projects under design and construction currently entrusted to the railway corporation or other agencies, including the names of the agencies entrusted, the project costs, the sums payable to the agencies entrusted and the anticipated dates of completion;
- (4) Please provide a list of those capital projects which involve cost overrun or delay with overrun amount, as well as length and causes of delay.

Asked by: Hon HO Kwan-yiu, Junius (Member Question No. 7)

Reply:

(1) In accordance with the indicative implementation window recommended in the RDS-2014, the Transport and Housing Bureau (THB) has invited the MTR Corporation Limited (MTRCL) to submit proposals for the implementation of the first batch of railway schemes, including the NOL (and Kwu Tung Station) and the TMS Extension. The MTRCL has submitted the proposals for the TMS Extension in end December 2016, and

will submit the proposals for the NOL (and Kwu Tung Station) later this year. The THB, the HyD and other departments concerned are currently assessing the contents of the proposal for the TMS Extension. The MTRCL is required to provide further details and give supplementary information in respect of the proposal to ensure that the proposal is feasible and most beneficial to the community.

In line with established procedures, prior to the finalisation of any new railway schemes, we will consult the public on the detailed alignment, locations of stations, mode of implementation, cost estimate, mode of financing and actual implementation timetable of the scheme. We will strive to consult the public, including the Legislative Council (LegCo) and the relevant District Councils, in respect of the TMS Extension in the 2017-18 legislative session.

(2) The Government examined in detail the feasibility of building the TMTWL in the consultancy study of the RDS-2014 and considered that the cost effectiveness of TMTWL could hardly be established at that time. Please refer to the RDS-2014 for the relevant findings in detail which are enclosed in the Annex.

The approved cost for the RDS-2014 consultancy study is \$43 million. The Government has no breakdown of the TMTWL study cost.

At present, the number of West Rail Line (WRL) train trips per direction per hour during peak hours is 20. To tie in with the Shatin to Central Link (SCL) which is under construction, starting from January 2016, WRL trains have been progressively converted from 7-car to 8-car trains. It is expected that the overall carrying capacity can be enhanced by about 14% when all WRL trains have been converted to 8-car trains by 2018. Besides, under the SCL project, MTRCL is upgrading the signalling system of the WRL to prepare for the increase in train frequency. The MTRCL is also procuring new train cars and modifying the existing trains. After all these new and modified trains have been put into service by mid-2019, the WRL will be able to serve in a maximum hourly frequency of 24 trains per direction. Based on this, the overall carrying capacity will increase by 37% as compared to that in 2015.

After considering the facilities along the SCL, including the fire safety requirements for tunnel sections and lengths of station platforms, it is expected that the SCL can ultimately reach an hourly frequency of 28 trips in each direction with 8-car trains. On this basis, the carrying capacity of the WRL will increase by 60% as compared to that in 2015. That said, the actual enhancement in train service will depend on the then operation and passenger demand.

Upon the completion and commissioning of the "East-West Corridor" (formed by the existing WRL, the Tai Wai to Hung Hom section of the SCL currently under construction, and the existing Ma On Shan Line) in 2019, the passengers from New Territories West will be able to travel to eastern Kowloon, Tai Wai, Hin Keng and Wu Kai Sha, from Tuen Mun Station without interchange. As the platform length of Austin Station as well as Hung Hom Station to Wu Kai Sha Station restricts their trains to 8-car trains, the East-West Corridor, including the WRL, cannot operate with 9-car trains.

(3) The information on major railway-related capital projects under design/construction currently entrusted to the railway corporation or other agencies is tabulated below:

Subhead	Project Title	Entrusted to	Estimated Total Expenditure (\$ million)	Anticipated Completion Date
6038TR	West Rail (WR) (phase 1) – Essential Public Infrastructure Works (EPIW) for Tuen Mun section	MTRCL	409	Works substantially completed
6039TR	WR (phase 1) – EPIW for Sham Shui Po section	MTRCL	378.7	Works substantially completed
6045TR	WR (phase 1) – EPIW for Yuen Long section	MTRCL	576	Works substantially completed
6055TR	West Island Line – EPIW	MTRCL	79.6	Works substantially completed
6052TR	Hong Kong section of the Guangzhou - Shenzhen - Hong Kong Express Rail Link (XRL) – design and site investigation	MTRCL	2,782.6	Works substantially completed
6053TR	XRL – construction of railway works	MTRCL	70,405	Third quarter of 2018
6057TR	XRL – construction of non-railway works	MTRCL	16,015	Third quarter of 2018
6051TR	SCL – design and site investigation	MTRCL	2,407.5	Works substantially completed
6058TR	SCL – construction of railway works - protection works	Major Works Project Management Office of the HyD	440.6	Works substantially completed
6059TR	SCL – construction of railway works - protection works in Wan Chai Development Phase II	Civil Engineering and Development Department	119.4	Works substantially completed
6063TR	SCL – construction of railway works - advance works	MTRCL	6,254.9 (Approved Project Estimate (APE) needs to be increased from \$6,254.9 million to \$7,102.6 million)	Works substantially completed
6064TR	SCL – construction of non-railway works - advance works	MTRCL	1,448.2	End of 2017
6061TR	SCL – construction of railway works - remaining works	MTRCL	65,433.3 (under review)	Tai Wai to Hung Hom section: mid-2019
				Hung Hom to Admiralty section: 2021
6062TR	SCL – construction of non-railway works - remaining works	MTRCL	5,983.1 (under review)	Tai Wai to Hung Hom section: mid-2019
				Hung Hom to Admiralty section: 2021

Subhead	Project Title	Entrusted to	Estimated Total Expenditure (\$ million)	Anticipated Completion Date
6056TR	South Island Line (East) [SIL(E)] – EPIW	MTRCL	927 (APE needs to be increased from \$927 million to \$1,213.2 million.)	Works substantially completed
6060TR	Kwun Tong Line Extension (KTE) – EPIW	MTRCL	826.9	Works substantially completed

*Projects with APE exceeding \$50 million

(4) The subhead, project titles, original and forecast completion dates, and estimated budget overrun for the projects involving delay or budget overrun are tabulated below –

Subhead	Project Title	Original Completion Date	Forecast Completion Date	Estimated Budget Overrun (\$ million)
6053TR	XRL – construction of railway works	August 2015	Third quarter of 2018	15,387.5 (additional provision approved)
6057TR	XRL – construction of non-railway works	August 2015	Third quarter of 2018	4,215 (additional provision approved)
6063TR	SCL – construction of railway works – advance works	Fourth quarter of 2015	Works substantially completed	APE needs to be increased from \$6,254.9 million to \$7,102.6 million by \$847.7 million (pending approval by the Finance Committee)
6064TR	SCL – construction of non-railway works – advance works	Fourth quarter of 2015	End of 2017	No overrun
6061TR	SCL – construction of railway works – remaining works	December 2020	2021	See note
6062TR	SCL – construction of non-railway works – remaining works	December 2020	2021	See note
6056TR	SIL(E) – EPIW	2015	Works substantially completed	APE needs to be increased from \$927 million to \$1,213.2 million by \$286.2 million (pending approval by the Finance Committee)
6060TR	KTE – EPIW	2015	Works substantially completed	No overrun

Note: MTRCL pointed out that the SCL project was complicated and only 45% of the Hung Hom to Admiralty section had been completed as at 31 December 2016, adding that the remaining 55% of the section would still be affected by a number of factors. To provide a more accurate estimate for the cost of the main works, it is necessary to wait until the second half of 2017 in order to have a more practical assessment. As it is anticipated that the contingencies for the main works of the SCL would not be sufficient to meet the additional costs of the main works, upon receiving the final assessment on the additional costs from the MTRCL and completing the scrutiny of such assessment, the HyD and the THB will seek additional funding from the LegCo in the 2017-18 legislative session for the continuation of the main works.

The reasons for the delay and budget overrun generally include unfavourable ground conditions encountered, production rates lower than anticipated, workmanship and logistic issues, interface and co-ordination of contractors, site constraints such as utilities diversion, temporary traffic diversion, inclement weather, price escalations, etc.

**Excerpt on the Coastal Railway between
Tuen Mun and Tsuen Wan (TMTWL) from RDS-2014**

- 5.6 The proposed Tuen Mun to Tsuen Wan Link (see Figure 13) envisages a railway station in Tuen Mun West and five intermediate stations along the 20 km coastal corridor.
- 5.7 We have carefully examined the catchment area which the proposed scheme is intended to serve. The local population is mainly concentrated at the eastern and western ends of the 20 km coastline between Tuen Mun and Tsuen Wan, while the remaining population is scattered and dispersed along the coast. For passengers wishing to travel from Tuen Mun to Tsuen Wan (or vice versa), using the Tuen Mun to Tsuen Wan Link instead of the West Rail Line would only generate very limited travel time savings of around one minute. In either case, interchange to other railway lines would be required in the Tsuen Wan area for onward train journeys. For passengers boarding further north of Tuen Mun, e.g. at the Siu Hong Station, taking the Tuen Mun to Tsuen Wan Link would mean a longer overall journey time with two additional interchanges. We will keep a close watch on the usage of the West Rail Line, and evaluate the cumulative effects of the various NDAs and the Northern Link on the West Rail Line, so as to explore other transport infrastructure and measures in good time to provide relief to the railway line.
- 5.8 With reference to the latest planning condition, the residential population within the coastline areas between Tuen Mun and Tsuen Wan is expected to grow by about 11% by 2021, with no significant growth beyond. The distribution pattern will remain largely identical by 2031.
- 5.9 After the improvement works for Tuen Mun Road are completed in 2014, road traffic between Tuen Mun and the urban area will be further improved. The journey time for the bus services currently serving routes between Tuen Mun and the urban area will likely be shortened. As a result, more passengers may prefer to travel to and from Tuen Mun by bus, leading to relatively lower attractiveness of the railway scheme insofar as time savings are concerned. Moreover, implementation of the project will also create negative visual and landscape impacts along the scenic coastal areas. The cost of the project is also expected to be very high (in the region of \$65 billion (in 2013 prices)) due to the technical difficulties involved. The cost-effectiveness can hardly be established up to this point.
- 5.10 Based on the latest development planning and population distribution, the potential for further development by either reclamation or site formation at hillsides along the coast between Tuen Mun and Tsuen Wan is not substantial. We would consider revisiting the railway proposal if there are further changes in the planning circumstances and population as well as increase in transport demand in the longer term in the coastal areas between Tuen Mun and Tsuen Wan or other relevant new considerations in the planning for development in the region.

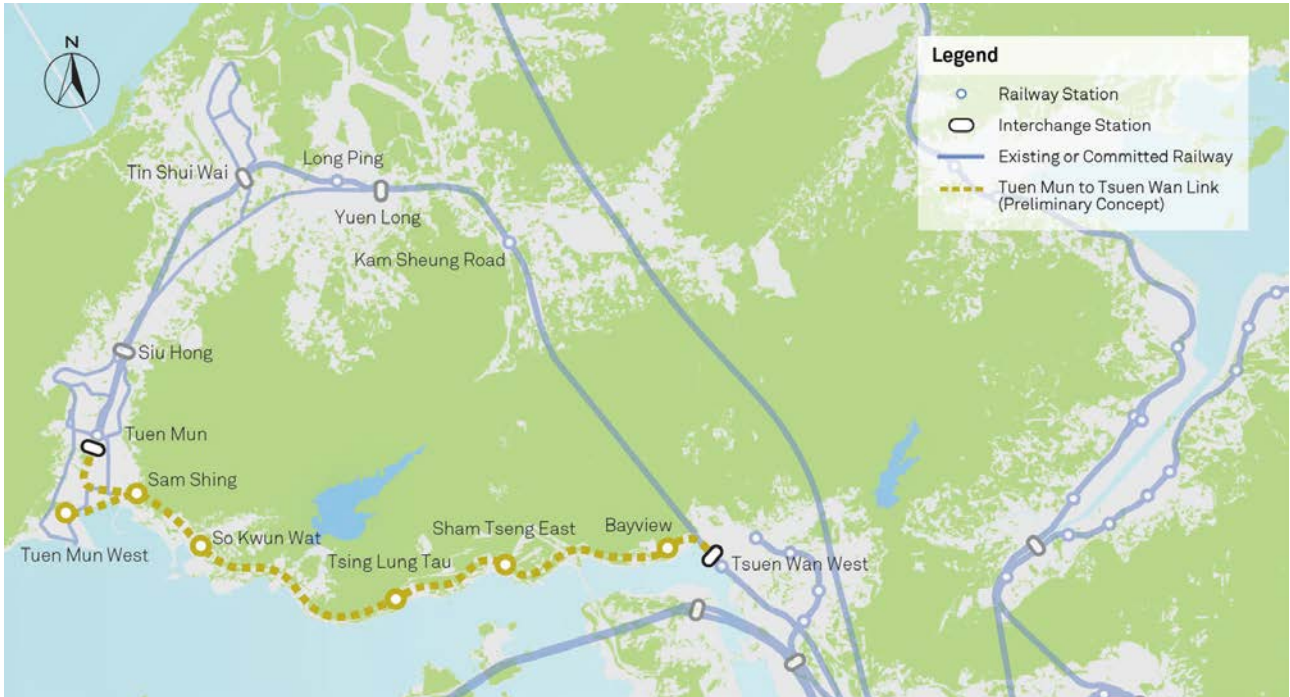


Figure 13: Preliminary Conceptual Scheme of the Tuen Mun to Tsuen Wan Link

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