

**For information
17 September 2009**

**Legislative Council Panel on Transport
Subcommittee on Matters Relating to Railways**

**Progress of the Hong Kong Section of
Guangzhou-Shenzhen-Hong Kong Express Rail Link**

Introduction

This paper briefs Members on the progress of the Hong Kong section of Guangzhou-Shenzhen-Hong Kong Express Rail Link (XRL).

Background

2. On 22 April 2008, the Chief Executive-in-Council decided to invite the MTR Corporation Limited (MTRCL) to proceed with further planning and design of the Hong Kong section of XRL. Subsequently, the railway scheme was gazetted under the Railways Ordinance on 28 November and 5 December 2008 and the MTRCL started the detailed design in January 2009. To address concerns expressed by members of the public during the consultation period and to incorporate design changes, we gazetted the amendments to the railway scheme on 30 April and 8 May 2009. We also briefed this Subcommittee on the project on 14 May 2009.

The XRL

3. The XRL is an express rail of about 140km long linking up Hong Kong with Guangzhou via Futian and Longhua in Shenzhen and Humen in Dongguan. Its terminus in Guangzhou (hereinafter referred to as the "New Guangzhou Passenger Station") will be located at Shibi, the centre of the Guangzhou - Foshan metropolitan area. The terminus of the Hong Kong section is located in West Kowloon, an area in vicinity of commercial and tourist areas. The Hong Kong section of the XRL will be an underground rail corridor of 26 km in length connecting the Mainland section in Huanggang. The XRL will shorten the journey time between Hong Kong and Guangzhou significantly from about 100 minutes to 48 minutes. The journey time from Hong Kong to Futian and Longhua in Shenzhen is about 14 and 23 minutes respectively.

4. Construction of the New Guangzhou Passenger Station will be completed by end 2009 and is estimated to start operation in the 2010 Spring Festival travel season. It will first serve the Wuhan-Guangzhou Passenger Line. The Mainland section of the XRL from Shibi to Longhua is also planned to operate in 2010, with an extension to Futian Station in 2011/12. The Beijing - Guangzhou Passenger Line and the Hangzhou – Fuzhou - Shenzhen Passenger Line, which will connect with the XRL, are anticipated to complete in 2012/13. As for the Hong Kong section of the XRL, construction is planned to commence by end 2009 for estimated completion in 2015.

Strategic Significance and Economic Benefits of XRL

5. Experience from overseas countries indicates that benefits brought about by high-speed rail services between cities in overseas countries, like the Shinkansen in Japan, the ICE in Germany, the TGV in France and the Eurostar in the United Kingdom, are prominent. The State Council approved the "Medium to Long term Railway Network Plan" in 2004, kicking off the move to construct a 12,000km long high-speed passenger rail network, with train operation speed up to 350 km/h. Upon completion of the network, high-speed rail services will cover most major cities of the Mainland. The Hong Kong section of the XRL is of strategic importance to Hong Kong as it will connect to the Mainland's high-speed railway network, thus enhancing the accessibility between Hong Kong and various major cities of the Mainland. For example, XRL passengers departing from Hong Kong will take about five hours to Wuhan and Xiamen, and eight and ten hours to Shanghai and Beijing respectively. According to overseas experience, high-speed rail is attractive to many passengers of short to medium range journeys when compared to travelling by plane. We believe that taking high-speed railways to many cities in the Southern and Central Mainland will be more convenient and economical. At the regional level, a single city is difficult to maintain its international competitiveness on its own under the influence of globalization. It is important that the comparative advantages of Hong Kong and the cities in the region must complement each other. The XRL will shorten significantly the journey time between Hong Kong and the Pearl River Delta (PRD) region. This will encourage the co-development of the two areas, Hong Kong professionals to explore the market in the PRD and also attract more PRD residents to visit Hong Kong for sightseeing, shopping, enjoying cultural performances, etc. Ultimately, a variety of the sectors in Hong Kong will benefit.

6. The railway corporations appointed consultants in 2007 and 2009 to study the patronage forecasts for the project. Under these two studies, the

consultants used computer model to project the patronage forecasts taking into account various factors such as information on GDP, population and employment, their growth trends and changes of other transport infrastructure networks of the Mainland and Hong Kong. The latest forecast completed recently remains the same as that completed in 2007, i.e. the projected daily patronage of XRL in 2016 will stand at 99,000 passengers. During construction peak period and operation stage of XRL, it is anticipated that the project can create 11,000 and 10,000 job opportunities respectively. In gist, the XRL would foster closer ties between Hong Kong and the PRD, and generate additional economic activities.

Planning of the New Guangzhou Passenger Terminus

7. The New Guangzhou Passenger Terminus, together with the stations at Beijing, Shanghai and Wuhan, will become the four major national railway passenger hubs of the Mainland. The new station is located at Zhongcun of Shibi in Panyu District of Guangzhou, about 15km away from the city centres of Guangzhou and Foshan, 10km from the district city of Panyu. The station covers an area of about 200,000 square metres (20 hectares) and, upon completion, will become the largest passenger railway station in the Asia. Please see Annex for the design of the New Guangzhou Passenger Terminus.

8. The station, equipped with 28 platforms in total, will become the Mainland's top-ranking railway hub in terms of the number of railway lines to be served. It will connect to different levels of highway and rail networks including -

- High-speed railways : XRL (to Hong Kong), Wuhan-Guangzhou Passenger Line (to Wuhan), Guizhou - Guangzhou Passenger Line (to Guiyang), Nanning - Guangzhou Passenger Line (to Nanning)
- Inter-city rail transits : Guangzhou - Zhuhai Intercity Rail Transit
- Urban Metro : Guangzhou Metro Line 2 (to Guangzhou Station and Yuexiu District), Line 7 (to Panyu District and Huangpu District), Line 12 (to Shawanzen and Guangzhou New City) and Foshan Metro Line 2 (to Foshan Gaoming District)
- Highways: Dong-Xin Highway (to Panyu), Guang-Ming Highway (to Gaoming), Guang-Zhu West Highway (to Zhuhai), Ping-Nan Highway (to Nansha) and the existing highway network

- Public transport : The new station will provide public transport services to various major cities in the PRD

Planning of West Kowloon Terminus

9. The terminus of the Hong Kong section will be located in West Kowloon and cover an area of about 10 hectares for accommodating nine long platforms and six short platforms. Footbridges and subways will connect the terminus with Austin Station of the Kowloon Southern Link and Kowloon Station of the Tung Chung Line to provide convenient interchanges with other local rail lines. In addition, Route 3 Highway passing through West Kowloon will provide convenient road connections to Hong Kong Island, Kowloon, the western part of the New Territories and Lantau. The planned Central Kowloon Route will also connect West Kowloon with the Kai Tak development, Kowloon Bay, Kwun Tong as well as Tseung Kwan O. It will take less than 30 minutes to travel from the terminus to most areas of Hong Kong.

Site Selection for Emergency Rescue Station and Stabling Sidings

10. To minimise impacts to environment and community, we have decided to construct the whole 26-km long Hong Kong section in tunnel. The rail tunnel between the West Kowloon Terminus and the Futian Station in Shenzhen will measure about 30km in length. To ensure passenger safety and to enable the Fire Services Department to provide speedy rescue operations, it is necessary to construct an emergency rescue station (ERS) in the midway of the alignment.

11. In designing the XRL alignment in the New Territories, the MTRCL has undertaken detailed investigation on all possible alignment options in the areas. The extent of areas considered covers the flat areas of the entire Kam Tin and Pat Heung (i.e. areas from west of Kam Tin to east of Shui Kan Shek). It is finally recommended that the Shek Kong area is the best place for setting up the ERS. From the technical perspective, the current proposed location in Shek Kong is located approximately in the midway of the whole XRL alignment between West Kowloon and the Futian Station in Shenzhen. In addition, the proposed site is low-lying, flat and extensive, and well served by major roads allowing rescue teams to reach the ERS conveniently for evacuation of train passengers.

12. In addition, trains from different Mainland cities may operate along the Hong Kong Section of the XRL. Some of these trains will have to stable and need to undergo maintenance and cleaning in Hong Kong. Hence, we need to construct stabling sidings (SSS) which will provide an 8-track stabling area for

stabling of trains and regular cleaning and 4 running maintenance tracks for inspection and light maintenance for trains. Other complicated maintenance activities which require large working space will be conducted in the Mainland.

13. We propose to put the ERS and SSS together as this would reduce the overall land resumption and minimise the number of affected residents as some common facilities such as access roads, electrical and fire services facilities could be shared. Based on our assessment, the current scheme will affect about 150 households. The number of households to be affected will be even more if the SSS and ERS are put at separate locations.

14. As regards the site locations of the ERS and SSS, there were suggestions on making use some of the existing open spaces, car parks or abandoned building sites at Shek Kong for constructing the concerned facilities so as to minimize the number of affected residents. In this connection, the MTRCL had conducted detailed investigation of these options. In addition to a number of technical considerations, since the locations of the above-mentioned sites are not in vicinity of the main tunnels, shallow approach tunnels will be needed to link up the main tunnels and the SSS. These options would involve more land resumption and affect more households. Hence, these proposed options are not preferred.

Public Consultation

15. To listen to public views and concerns on the XRL project, we consulted the relevant District Councils and/or their subcommittees (including Yuen Long, Yau Tsim Mong, Sham Shui Po, Tsuen Wan, Shatin and Kwai Tsing), the Heung Yee Kuk, and the relevant Rural Committees before the first gazettal of XRL scheme in November last year.

16. Following the gazettal of the XRL scheme, the Highways Department immediately attended a public forum at Choi Yuen Tsuen (CYT), which will be affected by the land resumption and clearance for construction of the ERS and SSS, on 8 December 2008 to explain the background and details of the XRL project to concerned residents. Afterwards, we received objection letters from some of the CYT residents. The Secretary and Under Secretary for Transport and Housing also visited CYT and met with the residents in January and April 2009 respectively. During the period from February to May this year, we met with CYT residents, either individually or in small groups, for more than 40 times to understand their concerns and explain to them details of the XRL scheme. Most of these interviews were held in Yuen Long on selected dates and times convenient to the residents (including evenings and weekends).

17. In addition, since June this year, we have delivered five issues of the “Newsletter for Choi Yuen Tsuen Residents” and have held six public fora with CYT residents to listen to their views and update the latest development of the XRL project including alignment selection, site selection for the ERS and SSS and compensation and rehousing arrangements. In order to better understand the needs of individual resident, we also engaged individual or small groups of residents again in informal meetings for more than ten times. To cope with the residents’ needs and wishes, we met with them at different locations and times so as to listen to their views and voices.

Environmental Impact Assessment (EIA)

18. The EIA report evaluated the potential environmental impacts of the Hong Kong Section of XRL during construction and operational phases on various perspectives such as air quality, noise, water quality, waste management, hazard, ecology, historical and cultural heritage, land contamination, landscape and visual impact, with mitigation measures suggested. The MTRCL will ensure that the project will meet all statutory requirements related to environmental protection and will also implement all necessary mitigation measures to minimise the impacts to the community along the alignment in accordance with the conditions of the Environmental Permit.

19. We note that some green groups expressed concern over the hydrology to be affected by XRL tunnelling works. We too attach great importance to this issue as, apart from the hydrology impact mentioned above, train operation and safety will also be affected if water seep severely in rail tunnels. Thus, during the tunnelling processes, water-proofing treatments will be applied immediately to the newly formed tunnel surface after the tunnel boring machine has moved every few meters ahead to prevent impact on the groundwater level. To ensure that the free flow of groundwater will not be affected and that there will be no groundwater infiltration to the tunnel during the operation stage, water-proofing works will be added in the process of reinforcing the tunnel structures. As such, we envisage that there would not be any impact to the underground ecology and groundwater quality. In fact, the above-mentioned method was adopted in the construction of the Lok Ma Chau Spur Line with success. No adverse impact on the hydrology of the agricultural land above the rail tunnels and groundwater quality was observed.

Social Impact Assessments

20. The MTRCL appointed consultants to carry out preliminary social impact assessments on the different alignment options of the Hong Kong section of XRL. The findings revealed that the present alignment would affect around

150 households in Choi Yuen Tsuen. Most of the structures in CYT were built in 1970-80s in the form of two-storey temporary houses erected on agricultural lands. There are no important community facilities such as ancestral halls, village offices and burial grounds inside CYT. The report also assessed the impacts of other rail alignment options on the community. It is recognised that regardless of which rail alignment was chosen, there will be social impacts on the community. Hence the guiding principle is to reduce and minimize the level of impact as far as possible. Since other alignment options would affect more households and important community facilities, the present alignment option through CYT should be adopted as it fulfills the above-mentioned principle. With a view to minimising the impact on the community arising from the current scheme, the report suggested mitigation measures such as reinforcing the communication with the affected residents and making every endeavour to formulate appropriate compensation packages as soon as possible. These envisaged measures would alleviate residents' anxiety about the land resumption and clearance.

Rehousing Arrangement

21. The Government is now actively exploring options for providing suitable assistance to the affected CYT villagers on the rehousing arrangement. The land resumption and clearance exercise will mainly affect private agricultural land and government land. Under normal circumstances, erection of houses is not permitted on agricultural and government lands, thus the majority of the structures in CYT is either licensed structures or tolerated squatter structures, both of which are temporary in nature under the prevailing land policy. That said, we have contacted a number of villagers and understood their particular needs and concerns. Our aim is to formulate proposals to assist eligible villagers affected by the clearance to make their own choices for establishing their new life according to their needs. However, we should be mindful of the implications of the proposal as public resources are involved. A balance thus has to be maintained between provision of suitable assistance to villagers for rehousing and the best utilization of public resources in a fair and reasonable manner.

The Way Forward

22. We will maintain close communicate with the affected villagers and provide suitable assistance on rehousing arrangement. The design and preparatory work of the Hong Kong Section of XRL are almost complete. We plan to submit the XRL scheme together with the unwithdrawn objections to the Chief Executive-in-Council for consideration shortly. We are fully committed to proceeding with the XRL project and to striving for the early completion of

this strategically important cross-boundary project.

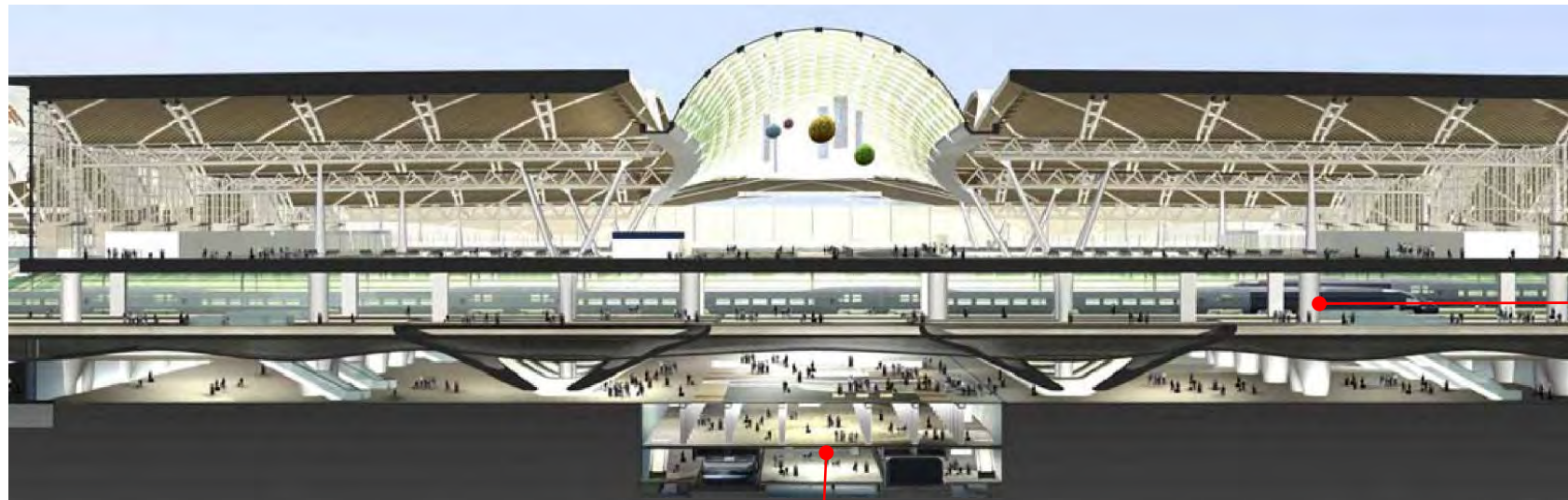
Transport and Housing Bureau
September 2009

廣州新客站 - 電腦模擬圖

New Guangzhou Station - Artistic View

Annex

附件



月台
Platform

地鐵站
Metro Station

廣州新客站 - 月台佈置圖

New Guangzhou Station - Platform arrangement

