

Translation

For Information

May 2013

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

**Progress and Financial Situation of
Construction of Hong Kong Section of
Guangzhou-Shenzhen-Hong Kong Express Rail Link**

PURPOSE

As requested by the Subcommittee on Matters Relating to Railways, this paper addresses the concerns expressed by the media about the construction of the Hong Kong section of the Guangzhou-Shenzhen-Hong Kong Express Rail Link (XRL), in particular its progress and financial situation.

OVERALL PROGRESS AND SCHEDULE

2. The Government has entrusted the design and construction of the XRL to the MTR Corporation Limited (MTRCL). Construction of the XRL commenced in January 2010, and all major construction contracts for civil, electrical and mechanical (E&M) works have been awarded. The construction is targeted for completion in 2015. We spare no effort in monitoring the works entrusted to MTRCL to ensure that the implementation of the XRL project is within the approved project estimate, of good quality and on schedule. We will continue to work closely with the parties concerned to ensure that the XRL works will be completed as scheduled within the approved budget.

3. As at 31 March 2013, over 70% of the excavation works for the tunnels and West Kowloon Terminus (WKT) have been completed. Excavation works at the southern end of the WKT have reached to level B4, and the main structures for the first two underground levels have been completed. For the

northern part of the WKT, unforeseeable ground conditions were encountered, the MTRCL and the contractors have been exploring feasible measures to catch up with the programme so that the completion of construction of the XRL will not be affected.

4. Construction of all diaphragm walls at the Shek Kong Emergency Rescue Siding (SKERS) site has been completed. Among the 14 buildings to be constructed under the project, seven have their structural works completed. E&M works at the WKT and SKERS sites commenced. The design of rolling stock has been completed and manufacturing of rolling stock started in April 2013.

5. The relevant Government departments (including the Highways Department (HyD) and Buildings Department) and the MTRCL have conducted comprehensive and prudent assessments of the planning and design of the XRL project to ensure that the design and construction methods are all safe and practicable. Nevertheless, there are often unexpected difficulties in the course of construction, and the MTRCL will liaise closely with the contractors to work out the most appropriate solutions.

6. The design of the WKT was completed prior to the commencement of works. Only minor amendments or enhancements to the design were made whenever necessary in the course of works to tie in with the actual situations, such as unforeseeable ground conditions. The MTRCL will work closely with the contractors to draw up appropriate construction plans. The MTRCL, HyD and other relevant departments will also examine various measures proposed by the contractors to minimise the impacts on the project progress and cost, as well as the local community.

FINANCIAL SITUATION OF THE PROJECT

7. As at the end of 2012, all major construction contracts for civil and E&M works have been awarded with a total value of \$44.812 billion. As at 31 March 2013, the cumulative expenditures were about \$24.418 billion.

8. In the course of works for infrastructure projects, contractors often encounter unexpected difficulties. If it is necessary to have more time or

change to more appropriate construction methods and machinery to cope with the situation, the MTRCL will handle the matter according to the contract terms. The overall impact on the project will be assessed for all options available, and payments will be made, in accordance with the contract terms, to the contractors to cover their reasonable additional expenditures. We have already earmarked, in the funding for the XRL project, provisions for unforeseeable situations in the course of construction, and the project contingencies amounted to about \$5.4 billion at 2009 price level.

9. Regarding expenditures arising from contractual claims, contractors have obligation to complete the works concerned as required under the contracts within the specified period of time. Where there are situations not expected at the tendering stage (e.g. there were more amount of excavated materials or more complicated obstructions than expected in the course of foundation or excavation works and the contractors may have to spend more time or change to more appropriate machinery to cope with the situation), the contractors are entitled to submit claims to the MTRCL in accordance with the relevant contract terms.

10. Depending on the complexity of individual cases, it may take some time to resolve the claims. When the verification of claims is comparatively complicated, the MTRCL may need more time to negotiate with contractors on the justifications of their cases in accordance with established principles for handling claims. During the negotiation process, the contractors have to provide sufficient justifications with detailed documents supported to substantiate their claims. The MTRCL will examine every claim to ensure strict compliance with the contract terms and established procedures.

11. If the process involves in-depth investigation and analysis of the information and documents provided by the contractors, the MTRCL will need professional advice in various disciplines to assess the validity of their claims and whether the amount claimed is reasonable. If the contractors disagree with the results of the assessment, further review and investigation will be required to work out the feasible resolutions. Therefore, it takes much time to process contractual claims. The claims may remain unresolved when the works are completed. Under certain circumstances, dispute resolution mechanisms such as mediation, adjudication and legal proceedings may be required to settle the claims.

12. As at the end of 2012, 97 cases have been resolved with about \$1,049 million awarded. The MTRCL continues to process the unresolved claims prudently. Regarding the progress of the works for the northern part of the WKT (that has aroused certain public concern recently), the contractor has raised that the progress of the foundation and site formation works has been affected by unexpected ground conditions. The MTRCL is discussing feasible measures with the contractor to cope with the situation with a view to catching up with the scheduled programme. According to current projections, the amount claimed can be fully covered by project contingencies.

13. In view of the scale of the XRL project, we have established a high-level inter-departmental Project Supervision Committee (PSC), chaired by the Director of Highways. The PSC holds regular meetings with the MTRCL and the related Government departments to monitor the project implementation at various levels to review project progress, monitor procurement activities, post tender award cost control and resolution of contractual claims, etc. The PSC also provides steer on any matters that would affect the progress of the XRL project.

14. In addition, HyD has employed an external consultant to assist in monitoring of works and undertake regular audits to verify the MTRCL's compliance with its obligations under the entrustment agreement. The audits cover construction safety, technical, procedural, and financial aspects. The handling of contractual claims by the MTRCL will also be examined.

REMOVAL OF PILES AT NAM CHEONG STATION

15. Various options of the tunnel alignment were studied at the design stage of the XRL project. The XRL Scheme, authorized by Chief Executive-in-Council in October 2009, is an underground railway corridor, which has the least impacts on the local communities. The tunnel at the south of the urban area is constructed by tunnel boring machines (TBMs) and where possible, the tunnel is under wider carriageways like Hoi Wang Road and Sham Mong Road. As a whole, fewer buildings are along the alignment and the impact to the community is comparatively low.

16. In a dense urban area, it is inevitable that some structures conflict with the tunnel, and thus are required for removals, adjustments or re-provisioned. The planning of the top-side development at Nam Cheong Station and the West Rail Line began in the 90s. Some of the piles of the top-side development were also constructed during the construction of the West Rail Line. As the tunnel alignment conflicts with some of those piles, it is necessary to remove those piles for the TBM to drive through. Bored piles will be reinstated to replace the original piles to provide support for the future top-side development at the Nam Cheong Station. The relevant works have been indicated in the XRL Scheme gazetted in 2009 as part of the project. They were also reported to the Subcommittee on Matters Relating to Railways of the Legislative Council in a paper entitled “Supplementary Information on the Increase in Costs of the Railway and Non-railway Works” in November 2009.

17. The TBMs will pass under the area near Nam Cheong Station twice for the construction of the northbound tunnel and the southbound tunnel. The TBM has already passed under the area near the station successfully (for the southbound tunnel). Removal of the remaining piles is being carried out smoothly and will be completed before the TBM pass under the area near the station (for the northbound tunnel) for the second time.

CONCERNS ABOUT THE BUILDING SAFETY AT TAI KOK TSUI

18. One TBM for constructing the southbound tunnel successfully passed under the Tai Kok Tsui area for the first time in November 2012. It is heading towards Yau Ma Tei. The TBM for constructing the northbound tunnel is expected to pass under the Tai Kok Tsui area for the second time in the second quarter of 2014.

19. The Government and the MTRCL attach great importance to the impact of the XRL project on the structural safety of nearby community facilities and buildings. The MTRCL has carried out the design and construction of the project under the Buildings Ordinance and according to relevant safety requirements to ensure that the railway works will not affect the structural safety of buildings along the railway alignment.

20. Since 2012, the MTRCL has installed monitoring points in Tai Kok Tsui

and the buildings concerned to closely monitor the conditions of buildings, ground and communal facilities during the works. It submits regular monitoring reports to HyD for examination of relevant departments. So far, all monitoring data are within expected levels. The XRL project has not affected the safety of existing buildings.

21. The MTRCL has established procedures to handle reports of damages to buildings. Upon receipt of such reports, it will arrange joint site inspection and professional assessment by the project team, representatives of its contractors and the person concerned to ascertain whether the relevant damages are caused by the XRL works. It will also install crack gauges in some buildings to strengthen monitoring of buildings and protection of residents. We and the MTRCL take construction safety as the prime concern and will continue to keep a close watch over the project and maintain communication with residents.

Transport and Housing Bureau
May 2013