

Translation

For Information

August 2015

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

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

(Quarterly Report for the Period ending 30 June 2015)

INTRODUCTION

This paper aims to brief Members on the major works progress and financial situation of the construction of the Hong Kong section of the Guangzhou-Shenzhen-Hong Kong Express Rail Link (“XRL”) and the relevant monitoring work carried out by the Highways Department (“HyD”) for the period ending 30 June 2015.

BACKGROUND

2. At the meeting of the Subcommittee on Matters Relating to Railways (“RSC”) under the Legislative Council (“LegCo”) Panel on Transport in April 2010, Members agreed that reports on progress update and financial situation of the construction of the Hong Kong section of the XRL should be submitted at six-month intervals. To enhance the reporting to the LegCo on the progress update and financial situation of the construction of the Hong Kong section of the XRL, such reports are now submitted to the RSC at quarterly instead of six-month intervals.

3. This paper, which is appended with the progress report (**Annex**) of the MTR Corporation Limited (“MTRCL”), reports on the major works progress, indicators and financial situation for the period between 1 April and 30 June 2015.

THE REVISED PROGRAMME TO COMPLETE (REVISED PTC) AND COST TO COMPLETE (REVISED CTC) OF THE XRL

4. The MTRCL submitted on 30 June 2015 the latest assessment of the Revised PTC and Revised CTC of the XRL. **According to the MTRCL’s latest assessment, the commissioning of the Hong Kong section of the XRL will have to be delayed further from the end of 2017 to the third quarter of 2018, which includes a 6-month contingency period. As regards the Revised CTC, the MTRCL advised that the amount will have to be revised to \$85.3 billion, which includes a Revised Total Project Cost of \$83.2 billion and a sum of \$2.1 billion for contingency.**

5. The Government has grave concern about the further delay and cost overrun of the Hong Kong section of the XRL. At the request of Government, the MTRCL submitted a paper to RSC on 30 June 2015 (Paper No. CB(4)1228/14-15(01)) reporting the assessment result. The Government submitted to RSC a paper on 3 July 2015 (Paper No. CB(4)1273/14-15(01)) to set forth her initial response on the assessment result. The Secretary for Transport and Housing, Director of Highways and other government representatives, as well as the Chief Executive Officer of MTRCL and his colleagues also attended the RSC meeting held on 3 July 2015 to report on the latest situation.

6. **The Highways Department (HyD), assisted by its Monitoring and Verification (M&V) consultant, are currently in the process of critically scrutinising in details the information submitted by the MTRCL regarding the latest Revised PTC and Revised CTC. As we pointed out at the RSC**

meeting held on 3 July 2015, the Government expects that the MTRCL and all its contractors should use their best endeavors to deliver the critical and other works of the XRL project. In processing the contractors' claims, the MTRCL will have to demonstrate that it has used its best endeavors to protect the best interests of the Government as the entrusted party of the project. Upon the completion of review by HyD, we will report the outcome to the public and Legislative Council as soon as possible.

7. The above-mentioned review of MTRCL's Revised CTC only focuses on the engineering estimate of the cost required to complete the whole XRL project. Apart from that, the obligations regarding project cost overrun will have to be ascertained. The Government will assess the MTRCL's obligations regarding project implementation, works delay and project cost overrun, and will reserve all the rights to pursue the warranties and obligations from MTRCL.

PROGRESS UPDATE OF THE PROJECT

8. Over the reporting period (i.e. from 1 April 2015 to 30 June 2015), HyD, with the assistance of its M&V consultant, continued to monitor systematically the implementation of the XRL project by MTRCL under its monitoring mechanism. This includes meetings at various levels (such as meetings of the Project Supervision Committee ("PSC") chaired by the Director of Highways, Project Coordination Meetings chaired by an Assistant Director of HyD, Contract Review Meetings ("CRMs") chaired by HyD's Chief Engineer) and regular site inspections.

9. Before the completion of review of the Revised PTC submitted by MTRCL on 30 June 2015, HyD continued to monitor closely the progress of the remaining works of the XRL project against the PTC proposed by MTRCL in May 2014 (i.e. commissioning of the XRL by end 2017). At the meetings of the PSC held on 24 April 2015, 2 June 2015 and 6 July 2015, MTRCL reported that the progress of XRL works, including those of the critical contracts (see paragraphs 11-18 below), remained falling behind the PTC. HyD and its M&V consultant also noticed that the delay of works in certain contracts remained

persistent as the target production rates continued to fall behind target. MTRCL explained that the delay of works was caused by a shortage of manpower and resources on the part of contractors, poor co-ordination of sequence of works, insufficient work fronts and unforeseen difficulties in works. HyD and its M&V consultant also noticed in their regular monitoring mechanism that similar problems had resulted in continuous failure on meeting the target production rates. HyD expressed its grave concern over the issue of persistent delay of works at the PSC meetings and in its letters to MTRCL.

10. As stated in MTRCL's progress report, the overall progress of the Hong Kong section of the XRL was 71.3% as at the end of June 2015, indicating a delay when compared to the planned progress of 77.1% in the PTC (commissioning of the XRL by end 2017). Based on the progress figures between April and June and compared with the progress of the two precedent quarters (i.e. the 4th quarter of 2014 and the 1st quarter of 2015), the overall progress was delayed by 5.8% and the situation is still at a very critical state. The progress of works of some critical contracts is as follows.

(a) Construction of West Kowloon Terminus (WKT) North (Contract 810A)

11. According to MTRCL's progress report, about 95% of excavation works and 40% of concrete structural works for WKT North (Contract 810A) were completed. The progress of excavation works was marginally satisfactory. However, there was a tendency for deterioration in the overall structural concrete works for station, with a 18% shortfall against the planned progress of 58% in the PTC. HyD considered that MTRCL should enhance its management and press its contractor to review the sequence of concreting works with more manpower and work fronts so as to recover the delay in concrete works. The effectiveness of improvement measures of MTRCL would be followed up and monitored by HyD through regular site inspections and monthly CRMs and ad-hoc meetings.

12. There are three critical paths for the construction of WKT North, namely (i) excavation works near Jordan Road for the northern portion of the

WKT; (ii) steelwork fabrication for the Station Entrance Building (“SEB”); and (iii) construction works for the Lin Cheung Road Underpass. Their current progress is set out below.

13. Critical path (i) (excavation works for the northern portion of WKT) involves removal of a significant quantity of rock. To enhance the efficiency of the excavation works, MTRCL obtained the blasting permit in September 2014 and conducted the first two (out of four) stages of blasts in end December 2014. The third stage of blast commenced in January this year and the fourth stage commenced in mid-2015 concurrent with the third stage. With the blasting process together with the excavation by mechanical means, there was improvement in rock excavation in this quarter. Since the commencement of the blasting works, MTRCL’s records have shown that the impact due to vibration arising from the blasting works is minimal. HyD will continue to closely monitor the effectiveness of the blasting works and its impacts on the surrounding buildings.

14. HyD was very concerned about the progress of critical path (ii) (steelwork fabrication for the SEB), which was highly complicated. HyD noticed that MTRCL was working very hard with the contractor to formulate and implement proposals to overcome various works-related difficulties, including the fabrication, delivery and erection of the steelwork, as well as the planning and implementation of the temporary works. One of the proposals is that the contractor set up two additional fabrication yards in the Mainland. Over the past few months, these two fabrication yards have been put into full production which have resulted in a remarkable improvement in the fabrication of temporary supporting steelwork. On the other hand, there has been considerably serious delay in the current fabrication of steelwork elements for the SEB. MTRCL expected that the delay of SEC steelwork would likely defer the overall completion of XRL Project to the first quarter of 2018. MTRCL is implementing further mitigation measures to protect and upkeep the progress of works, such as arranging the contractor to set up an additional fabrication yard for structural steelwork in the Mainland and increase resources with a view to mitigating the risk of delay in the fabrication of structure steelwork.

15. As regards critical path (iii) (the construction works for the Lin Cheung Road Underpass), after the closure of the section of Lin Cheung Road northbound between Austin Road West and Jordan Road on 1 April 2015, the contractor arranged to demolish the temporary steel carriage bridge at that section of Lin Cheung Road with a view to accelerating the construction works for the concerned underpass. HyD and MTRCL will closely monitor the impact on the traffic in the vicinity.

(b) Construction of Tai Kong Po to Tse Uk Tsuen Tunnels (Contract 823A)

16. Since the two tunnel boring machines (“TBMs”) commenced tunnelling works for the uptrack South Tunnel and North Tunnel in late October and late November 2014, the tunneling operation has been generally smooth. MTRCL forecasted that the tunneling excavation work for uptrack South Tunnel and North Tunnel would be completed in the third quarter of 2015. HyD will continuously ask MTRCL to closely monitor the progress of works and the performance of the two TBMs in the remaining tunnel boring works at regular meetings and during site inspections.

(c) Construction of Huanggang to Mai Po Tunnels (Contract 826)

17. Regarding the cross-boundary tunnel section, the two TBMs have completed the tunnelling works for the Shenzhen section of the XRL and commenced those for the Hong Kong section of the XRL. The TBMs for north bound and south bound left the marble zone in late December 2014 and mid-March 2015 respectively. They are now heading towards Mai Po. MTRCL forecasted that the excavation for north bound and south bound tunnels would be completed in the third and fourth quarter of 2015 respectively, which would be about 15 weeks and 36 weeks behind the planned progress. HyD is very concerned about the overall progress delay of the tunnelling works, especially the performance of the South Tunnel’s TBM at the composite (soil and rock) stratum and the progress of works for the cross passages between the south and north bound tunnels. It has also requested MTRCL in writing and at

regular PSC meetings to explain the delay and urged MTRCL to take effective mitigation measures and proposals to upkeep the progress, such as the contractor to strengthen its maintenance resources persistently in order to speed up the maintenance works of TBMs, and to step up the communication between the top management of MTRCL and the contractor.

(d) Other Works Contracts

18. As for the progress of the remaining construction works, HyD and its M&V consultant noted that continuous delays remained in the works of the WKT Approach Tunnel (South) (Contract 811B) and the Ngau Tam Mei to Tai Kong Po Tunnels (Contract 824). MTRCL has proposed measures to rectify the delay situation. To improve the progress of excavation works under Contract 811B, in response to MTRCL's suggestion, the Contractor increased the number of egresses for spoil disposal in the second quarter of this year, such as building more platforms and increasing the number of construction plant for transportation. However, as the excavation works is currently being undertaken in corestones zone underneath Jordan Road, whether the delay in excavation works could be rectified is still pending further observation. In view of the delay in the tunnel lining works under Contract 824 and the shortage of resources and manpower of the contractor, HyD has written to MTRCL to express its concern. After discussions between MTRCL and the Contractor, a series of measures and proposals to increase the resource and manpower are being implemented, such as increasing the number of steel moulds for tunneling lining works so as to upkeep the progress of works. HyD and its M&V consultant will continue to closely monitor the progress of works, and the effectiveness of measures and proposals in the upkeeping of progress. Where necessary, HyD will offer assistance to MTRCL in solving any works-related problems as early as possible to help secure the progress of remaining works.

(e) Electrical and Mechanical Systems and XRL Trains

19. Installation of various electrical and mechanical (E&M) systems at the Shek Kong Main Building, Running Maintenance Shed, Traction Power Station,

Trackside Building Services Maintenance Building and Security Centre had been completed. The inspection of these buildings by the Fire Services Department (FSD) was also completed. The installation works of E&M systems at the Operation Control Centre and Train Wash Plant was completed. Acceptance test and inspection by the FSD were anticipated to be conducted in August 2015. As for the other major facilities at Shek Kong (such as Stabling Sidings, Emergency Rescue Siding and Shek Kong Plant Building (South)/(North), etc), the work progress under various E&M contracts were satisfactory. The 25kV overhead line at the Running Maintenance Shed would be energized in the third quarter of 2015.

20. The contractors for Trackwork, Overhead Line and Trackside Auxiliaries (Contracts 830 and 846) have gained access to about 68% of the tunnel area for carrying out the installation works. A total of 40% of the tracks was laid. The track laying of the Southbound tunnel between Pat Heung and Mong Kok was completed, while 50% of overhead line of this tunnel was installed.

21. Works for the Tunnel Environmental Control System (Contract 843) at various ventilation buildings and the other E&M contracts were underway as scheduled. The progress of the E&M and building services works at Nam Cheong ventilation building was satisfactory. The Testing & Commissioning and FSD inspection of the Nam Cheong ventilation building and Kwai Chung ventilation building was anticipated to be performed in the second half of 2015. The installation of the 25kV Traction Infeed Transformers at Mong Kok was underway. The installation progress of E&M and building services system at Pat Heung ventilation building and Mai Po ventilation building was satisfactory.

22. At WKT, the respective E&M contractors have strengthened their plant and manpower resources to recover the progress of works for various E&M systems (including low voltage Electrical Installation (Contract 816C), Environmental Control System (Contract 816A), Lifts and Escalators and Moving Walkways (Contracts 847 and 848), Fire Services, Plumbing and Drainage Systems (Contract 816D)) and to lessen the impact caused by the

delays of civil engineering works at various zones and levels. There were two sets of escalators installed at the WKT which connects Level B2 and B4. Four number of lift shafts were handed over to the contractor for installation works. Nevertheless, the progress of installation of lifts was still being affected by insufficient work fronts at WKT. HyD had repeatedly reminded MTRCL to arrange for earliest release of all floors of the lift shafts at the work site to ensure the effective installation works by the lift contractor.

23. The first XRL train, Rolling Stock (Contract 840), would be delivered to Hong Kong at appropriate time for testing. As the peak of the installation works for E&M systems would be tightly interlaced with the integrated testing and commissioning phase of the whole railway system, MTRCL has to maintain close communication and collaboration with different Government departments in order to ensure the timely completion of the project. HyD would continue to guide the co-ordination work in this regard.

Transport and Housing Bureau
Highways Department
August 2015

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

(Report for the period between 1 April and 30 June 2015)

INTRODUCTION

This is the progress report on the construction of the Hong Kong section of the Guangzhou-Shenzhen-Hong Kong Express Rail Link (“XRL”) project.

BACKGROUND

2. This paper outlines the critical challenges and the latest progress update of the XRL project under the revised programme with target commissioning by the end of 2017 announced in April 2014 (“2017 Schedule for opening”), and reports the project progress, key performance indicators (“KPIs”) and financial status for the period between 1 April and 30 June 2015.

3. As reported to the Subcommittee on Matters Relating to Railways under the LegCo Panel on Transport (“RSC”) in July 2015 (LegCo paper: CB(4)1228/14-15(01)), the Corporation has submitted the revalidation of the program and costs to complete for the XRL project to the Government on 30 June 2015. It is estimated that the project completion to be in Q3 2018 including a 6-month contingency period, and the estimated cost to be HK\$85.3 billion, with a contingency amount of HK\$2.1 billion. The revalidation is currently under

assessment by Government.

MAJOR WORKS PROGRESS OF THE XRL PROJECT

(I) Critical Challenges of the Target Opening (Contracts 810A, 823A and 826)

4. In the meeting of the Subcommittee on 5 May 2014, the Corporation highlighted that the Contracts 810A, 823A and 826 are critical to the programme. The following will focus on the progress and key challenges currently faced by these three contracts.

(a) West Kowloon Terminus Station North (Contract 810A) – Multi-works carried out in parallel under complex construction environment

5. The excavation works in the vicinity of Jordan Road, which requires the removal of a considerable amount of boulders and bedrock of approximately 87,000 m³ at West Kowloon Terminus (WKT) station north, continued to be a critical challenge. Production blasting has been carried out since January 2015 and the rock excavation was 39% complete as at 30 June 2015. Overall excavation in both the hard ground conditions near the Jordan Road area and the station core area was 95% complete against the planned 84% of the 2017 Schedule for opening.

6. Concrete production was below the target by 18% as at 30 June 2015. The shortfall is currently not in the critical area, as the contractor is optimising and prioritising the excavation and concrete structure construction sequence. The construction of the B4 slab in the northern area of the station started in May 2015. In parallel, the contractor also needs to secure sufficient labour resources such as steel fixers and carpenters to increase production.

7. The full closure of Lin Cheung Road northbound between Austin Road West and Jordan Road has been implemented since 1 April 2015 to provide a greater programme certainty for the construction of Lin Cheung Road Underpass.

8. As of end June 2015, the erection of both the temporary and permanent steel members of the roof structure were 63% and 23% complete respectively, falling behind the planned completion of 100% and 46% respectively according to the 2017 Schedule for opening. Additional off site fabrication yards and resources have been arranged by contractor to increase the pace of production of the temporary steelworks. Additional measures are being pursued to further improve both fabrication and erection of the temporary and permanent steel structures. As reported to the RSC on 3 July 2015, the steelwork fabrication for the Station Entrance Building (“SEB”) is highly complicated and serious delays have been experienced. The current behind-scheduled progress with SEB will delay the overall XRL opening into 2018.

(b) The tunnel connecting Tsat Sing Kong and Tai Kong Po (Contract 823A) in Yuen Long District

9. Two tunnel boring machines (“TBM”) are deployed for the excavation of the northern and southern northbound track tunnel section between Tai Kong Po and Tse Uk Tsuen. Both TBMs are now making satisfactory progress.

10. The northern TBM commenced excavation of the northbound track tunnel from Tsat Sing Kong to Tai Kong Po in Q4 2014. The progress is currently ahead of the 2017 Schedule for opening by approximately 26 weeks.

11. Based on the experiences gained from the previous southbound track tunnel drives, improvement measures have been adopted to improve the performance of the two TBMs and better production rates have been achieved in the current northbound track tunnel drives.

12. According to the latest works progress, Contract 823A is currently not critical to the programme of XRL.

(c) Cross-boundary tunnel section (Contract 826) – Substantial maintenance of the TBM is affecting performance

13. The northbound track TBM continued to struggle through the alluvial clay material in Q2 2015 and achieved only around 50% of the planned production rate under the 2017 Schedule for opening. The heavy clay content in the alluvial subsoil conditions impacted the performance of the slurry circulation system of the TBM operation, causing a substantial slow-down in progress. The southbound track TBM exited the marble zone in March 2015, and was making good progress until the last week of May 2015 when the TBM entered the alluvial clay zone and started to suffer from the same performance issues as the northbound track TBM.

14. Attempts are being made to mitigate the delay through this alluvial clay material by modifying the slurry handling and treatment process. As of 30 June 2015, the overall tunnel excavation of the cross-boundary tunnel was 65.5% completed, which was behind the 100% target under the 2017 Schedule for opening.

15. The delay of the northbound and southbound TBMs has used all the float time allowed under the 2017 Schedule for opening. Recovery measures have been developed to mitigate the impact, including excavating the cross passages between the northbound track and southbound track tunnels and constructing the tunnel walkways in parallel with the excavation of the tunnels by the two TBMs. Overall progress for the cross passages was 27% complete as at end June 2015 and walkway construction trials also commenced in June 2015.

(II) Overall Progress of Construction Works

(a) Tunnel construction – New Territories section

16. The track laying and related works at the Tse Uk Tsuen to Shek Yam tunnels (Contract 822) are now in progress. The Shing Mun Ventilation Building structural works were over 79% complete.

17. Tracks from Shek Kong Stabling Sidings (SSS) and Emergency Rescue Siding (ERS) (Contract 823B) have been temporarily connected to the southbound track tunnel (Contracts 823A and 822) at Pat Heung. Trackbed concreting was progressing from Tse Uk Tsuen (Contract 823A) southwards to Pat Heung crossover.

18. The lining installation at the Ngau Tam Mei to Tai Kong Po Tunnels (Contract 824) suffered further delay due to insufficient labour resources. The contractor has already extended working hours and used additional lining shutter for progress recovery. The Corporation has also urged the contractor to closely mitigate the delay. As reported to the RSC on 3 July 2015, this contract becomes one of the critical contracts due to the bottleneck it creates for continuation of the track works from the urban to the New Territories tunnel sections.

19. The Mai Po to Ngau Tam Mei tunnel section (Contract 825) achieved steady progress in Q2 2015. Construction of the cross passages between the northbound track and southbound track tunnels and the walkways along both sides of the tunnel have progressed satisfactorily.

20. The structural works of the Plant Buildings North and South for Shek Kong Stabling Sidings (SSS) and Emergency Rescue Siding (ERS) (Contract 823B) had been completed. The architectural builder's works and finishes (ABWF) works and electrical and mechanical (E&M) installation are in progress. Currently, the work focus is on preparation for energisation and first train delivery.

(b) Tunnel construction - Urban section

21. All tunnel construction between Mei Lai Road (Mei Foo) and Hoi Ting Road (West Kowloon) (Contract 820) was completed. Track and overhead line bracket installation from Nam Cheong crossover (Contract 820) to Hoi Ting Road southbound track tunnel (Contract 811A) has also been completed. Track-laying in the northbound track tunnel of Contract 820 will commence in July 2015. Track related installation programme activities are scheduled to commence from Mongkok West Ventilation Building (MKV) to Nam Cheong Ventilation Building (NCV) in Q3 2015 in the southbound track tunnel.

22. The Northern Approach Tunnel near Hoi Ting Road (Contract 811A) was successfully completed. The structural works for MKV and traction substation were substantially completed with E&M installation in progress.

23. Structural works for the Southern Approach Tunnel near Jordan Road (Contract 811B) were 86% complete. All slabs at B3 levels at the top-down area were substantially completed as at end June 2015. Other works including the new Public Transport Interchange (PTI) and the installation of related underground utilities are in progress. Jordan Road reinstatement is targeted to complete in mid July 2015 and this will allow works to commence at the Lin Cheung Road (LCR) Underpass and associated works to the north of the reinstated Jordan Road.

(c) Construction of West Kowloon Terminus (Contracts 810A and 810B)

24. As of end of June 2015, the West Kowloon Terminus was 53% complete, with overall excavation of 97% complete and 53% of the concrete structure having been cast. Structural works of the Station Entrance Building, other building services and E&M works continue. The excavation and concrete works of the Austin Road West Underpass reached 68% and 25% completion respectively.

25. Concreting work at the central part (core area) of WKT at different slab levels is in progress, while E&M contractors were given access to carry out works at some of the floor areas at both WKT north (Contract 810A) and south (Contract

810B) during the reporting period.

(d) E&M and signaling systems

26. Installation and testing of major E&M equipment are in progress at WKT. The E&M contractors had strengthened their resources and machinery to cope with the increasing access given to them at the WKT. As at 30 June 2015, E&M contractors had access to 81,911m² at the WKT representing 18.4% of the total floor area. However, this is behind the planned access area of 28.9% under the 2017 Schedule for opening. The first lift and escalator zones have been made available for the E&M contractors to start preparation and installation works. The first escalator was delivered and positioned between the B2 arrival area and the B4 platform level at 810B.

27. Building services works at critical rooms of Mongkok West Ventilation Building (MKV) were substantially completed and the 25kv Traction Infeed Transformers was delivered in April.

28. Installation works on E&M equipment including ventilation system and telecom equipment continues at several ventilation buildings and tunnel section.

29. The trackwork contractor (Contract 830) was given access to about 68% of the XRL tunnels to carry out overhead line installation and track-laying. Track and overhead line bracket installation from Shek Yam to Pat Heung southbound track tunnel (Contract 822) beneath Tai Mo Shan was completed. Trackbed concreting which is expected to complete before October 2015, was in progress in the corresponding northbound track tunnel. Track related installation programme activities would commence in the southbound track tunnel in September 2015 from Shek Kong Stabling Sidings (SSS) and Emergency Rescue Siding (ERS) (Contract 823B) to Hoi Ting Road (Contract 811A).

30. Phase I statutory inspection of the SSS by the Fire Services Department (FSD) was completed satisfactorily in June 2015, which is an important milestone

of the Project. Phase II statutory inspection by the FSD is scheduled for August 2015.

31. Building services works for Operation Control Centre were substantially completed and access was given to follow-on E&M contractors progressively. Video wall of the Main Control System in Operation Control Room was installed.

(e) Overall progress

32. As at 30 June 2015, the overall completion progress of the XRL project was 71.3%¹ against the 77.1% planned progress of the 2017 Schedule for opening.

(III) Preparation and Interface Works

(a) Temporary traffic arrangements

33. The Corporation updated the Traffic and Transport Committee of Yau Tsim Mong District Council (YTMDC T&TC) in May 2015 on the latest works progress as well as both existing and proposed temporary traffic management schemes, including the implementation details on the closure of a section of Lin Cheung Road northbound between Austin Road West and Jordan Road. On top of the engagement exercises before implementation, relevant District Council members were contacted with site walk arranged to review implementation of the road closure; while estates atop the Kowloon Station have also been kept abreast of the improvement measures in response to the traffic impact after the road closure.

¹ sum of all weighted percentage complete of all major contracts

(b) Blasting works at WKT Station North (Contract 810A)

34. Advance SMS will be sent to community stakeholders to keep them informed of the estimated blasting time on the day of blasting, also with hotline set up to address the related enquiries. In case of any delay or cancellation of blasts, stakeholders will also be notified through the SMS. Since blasting was carried, occasional complaints and enquiries received concerning the noise and delayed blast were dealt with in a timely manner.

(c) Communication with residents of Yau Tam Mei Tsuen (YTMT)

35. At the requests of YTMT residents, since the commencement of works, representatives of the Corporation and relevant Government departments attended around 300 site inspections, visits and residents meetings in order to maintain direct communication with the local stakeholders to explain the works in details and to listen to their views.

36. Complaints referred by LegCo Public Complaints Office had been handled in a timely manner by the Corporation. The Corporation and its contractors are maintaining close dialogue with the residents to alleviate their concerns.

(d) Handling of enquiries and complaints

37. Members of the public can make use of various channels to express their views or make enquiries concerning the XRL project including MTR Projects Hotline, site inspections and meetings. Enquiries and complaints received concerning the XRL project over the past 3 months were about the tidiness and cleanliness of work sites, environmental implications, traffic management and suspected damage to buildings, etc., and all cases have been followed up accordingly, whilst the XRL Information Centre handled 4 project related enquiries during the period of April to June 2015.

(e) Public engagement and community involvement activities

38. During April to June 2015, school talks were arranged for 4 secondary schools and 3 primary schools about the XRL project and its latest works progress.

(IV) Employment Opportunities

39. As at the end of June 2015, a daily average of about 6,462 construction workers and technical/professional staff members were employed for the construction and E&M works for the tunnels and the WKT. The XRL project will continue to seek deployment of manpower resources actively to meet the project needs.

(V) Updated Financial Situation of the XRL project

40. As at 30 June 2015, the cumulative expenditure for the awarded contracts was \$46.79 billion.

41. The Corporation will continue to monitor closely the costs and progress of the XRL project. Details of the financial situation of the project are shown at Annex 3.

MTR Corporation Limited
August 2015

Annex 1 - KPIs of Major Works Progress

Summary of the Construction Progress of the XRL Project

Works Commencement Date	26 January 2010
Target Opening Date*	End 2017 Schedule for opening
Works Progress	<ul style="list-style-type: none"> • Overall completion progress: 71.3% [as at end June 2015] • Project expenditure: HK\$46.7942 billion [as at end June 2015]

* The Corporation submitted the latest review to the Government on 30 Jun 2015, with the XRL project estimated to complete in Q3 2018, which includes a 6-month contingency period.

Progress of Key Civil Works Contracts

Cumulative progress of contracts for WKT construction:

Contract No.	Concrete structural works		Terminus excavation works	
	End March 2015	End June 2015	End March 2015	End June 2015
810A	36%	40% (58%)	87%	95% (84%)
810B	84%	89% (100%)	100%	100% (100%)




Percentage in bracket is the planned progress of the 2017 Schedule for opening




Cumulative progress of contracts for other tunnel sections:




Contract No.	Tunnel excavation works			
	End March 2015		End June 2015	
	Northbound	Southbound	Northbound	Southbound
811B	84%	84%	86% (100%)	86% (100%)
811A	100%	100%	100% (100%)	100% (100%)
820	100%	100%	100% (100%)	100% (100%)
821	100%	100%	100% (100%)	100% (100%)
822	100%	100%	100% (100%)	100% (100%)
823A	57%	100%	78% (39%)	100% (100%)
824	100%	100%	100% (100%)	100% (100%)
825	100%	100%	100% (100%)	100% (100%)
826	58%	36%	76% (100%)	55% (100%)




Percentage in bracket is the planned progress of the 2017 Schedule for opening




Annex 2 - Progress Photos

<p>New Territories Section - Cross-boundary Tunnel Section (826)</p>	<p>General view at northbound track tunnel</p>	
<p>New Territories Section - Mai Po to Ngau Tam Mei Tunnel Section (825)</p>	<p>Rails stored at southbound track tunnel</p>	
	<p>Preparation work for the concreting at Cross Passage CP8</p>	

<p>New Territories Section - Ngau Tam Mei to Tai Kong Po Tunnel Section (824)</p>	<p>Ngau Tam Mei crossover tunnel</p>	
<p>New Territories Section - Tai Kong Po to Tse Uk Tsuen Tunnel Section (823A)</p>	<p>Southbound TBM inside the northbound track tunnel</p>	
<p>New Territories Section - Shek Kong Stabling Sidings and Emergency Rescue Siding (823B)</p>	<p>Interior of the Running Maintenance Shed</p>	

<p>New Territories Section - Tse Uk Tsuen to Shek Yam (Tai Mo Shan) Tunnel Section (822)</p>	<p>General view of Pat Heung Vehicular Access Adit</p>	 <p>A photograph showing the interior of a large, concrete-lined tunnel. The floor is dark and appears to be a road surface. On the right side, there are several stacks of red and white traffic barrels. A red scissor lift is visible in the distance. The ceiling is high and has some structural elements. A timestamp in the bottom right corner reads '2015/06/25 09:28'.</p>
	<p>Pat Heung main crossover tunnel</p>	 <p>A photograph showing a long, straight section of a tunnel. The floor is covered with concrete slabs and there are several rows of concrete beams or supports. The ceiling is high and has a series of lights. A red scissor lift is visible on the left side. A timestamp in the bottom right corner reads '2015/06/25 10:17'.</p>
<p>New Territories Section - Shek Yam to Mei Lai Road Tunnel Section (821)</p>	<p>E&M works at Kwai Chung Vehicular Access Adit</p>	 <p>A photograph showing the interior of a tunnel under construction or maintenance. The floor is concrete and there are several rows of concrete beams. A blue scissor lift is visible in the distance. The ceiling is high and has some structural elements. A timestamp in the bottom right corner reads '25/06/2015'.</p>

<p>Urban Section - Mei Lai Road to Hoi Ting Road Tunnel Section (820)</p>	<p>Overview of Nam Cheong Ventilation Building</p>	
<p>Urban Section — West Kowloon Terminus Approach Tunnel North (811A)</p>	<p>Internal walls for concrete duct in progress at Mong Kok West Ventilation Building</p>	
	<p>Ground beam of Public Transport Interchange</p>	

<p>Urban Section - WKT Approach Tunnel South (811B)</p>	<p>Permanent way access shaft with the Approach Tunnel</p>	
<p>West Kowloon Terminus North (810A)</p>	<p>Excavation underneath B3 slab</p>	
	<p>Overview at blasting area</p>	

South temporary support tower









Erection of falsework for wall construction at Level L1, station north






Steel structures packaged for delivery



	<p>Roof slab construction for the Lin Cheung Road Underpass</p>	
<p>West Kowloon Terminus South (810B)</p>	<p>Rebar fixing, formwork installation and concreting work for walls and columns above B1 slab</p>	
<p>E&M System</p>	<p>Turnout concreting at Nam Cheong crossover (830)</p>	

<p>Building services work at B2, WKT 810A area 1 (816D)</p>	
<p>Pneumatic system at Kwai Chung Ventilation building (843)</p>	
<p>Installation of escalator at WKT 810B area 2 (848)</p>	

	<p>Fire hydrant pipe installation at northbound track tunnel (846)</p>	
	<p>Connection works for infeed isolator in SSS (845)</p>	
	<p>Foundation work for signaling equipment in SSS (841)</p>	

Annex 3 - Financial Expenditure

Expenditure report ending 30 June 2015

Table 1 – Situation of Expenditure

	Awarded contract sum for the contracts (\$ million)	Cumulative expenditure (\$ million)	Estimated amount* of unresolved claim (\$ million)
Railway Tunnels	22,466.1	25,787.2	7,688.7
West Kowloon Terminus (“WKT”)	14,591.0	14,815.3	7,237.6
Electrical and Mechanical (“E&M”) Works	8,166.1	6,191.7	2,502.0
Total	45,223.2	46,794.2	17,428.3

*Amount stated in the contractor’s detailed claim report.

Table 2 – Situation of substantiated claims

	Claims resolved			Claims unresolved		
	Number	Amount claimed originally* (\$ million)	Amount awarded (\$million)	Number	Amount claimed* (\$ million)	Interim award (\$ million)
Railway Tunnels	82	2,258	1,207	345	9,236	1,548
WKT	46	247	187	281	8,940	1,702
E&M Works	2	0	0	65	2,599	97
Total	130	2,505	1,394	691	20,775	3,347

*Amount stated in the contractor's detailed claim report.

2. As at 30 June 2015, the Corporation received 821 substantiated claims and the amount claimed in total was approx. \$23.28 billion, representing 51.5% of the awarded contract sum for the contracts. The Corporation has been discussing the details of the claims with the contractors concerned, and would thoroughly assess the amount claimed. The Corporation would process each claim in a prudent manner, and the contractors would have to provide sufficient justifications and information. As at 30 June 2015, 130 cases were resolved and about \$1,394 million was awarded, representing about 3.08% of the awarded contract sum for the contracts. Subject to the needs of individual works and progress of the relevant assessment and discussion, interim award amounting to about \$3,347 million was made for some cases.