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Panel on Transport

Subcommittee on Matters Relating to Railways
Meeting on 24 November 2014

Updated background brief on the construction of the Hong Kong section of the Guangzhou-Shenzhen-Hong Kong Express Rail Link

Purpose

This paper provides updated background information on the construction of the Hong Kong section ("HKS") of the Guangzhou-Shenzhen-Hong Kong Express Rail Link ("XRL"). It also summarizes the major views and concerns expressed by Members during previous discussions on this subject.

Background

2. XRL is an express rail of a total length of about 140 km linking up Hong Kong with Guangzhou via Futian and Longhua in Shenzhen and Humen in Dongguan. Its terminus in Guangzhou will be located at Shibi, the centre of the Guangzhou-Foshan metropolitan area. The Mainland section of XRL will start from Shibi and enter Hong Kong via Huanggang.

3. HKS is approximately 26 km long, which will be an underground railway running from the boundary at Huanggang to West Kowloon Terminus ("WKT") located at the north of the West Kowloon Cultural District, and between the Airport Express Kowloon Station and the West Rail Austin Station.

4. The alignment plan and the chronology of major developments of HKS of XRL are at **Appendices I** and **II** respectively.

Funding arrangement

5. On 22 April 2008, the Executive Council ("ExCo") decided that HKS of XRL would be undertaken under the concession approach. Under this approach, the construction of HKS of XRL would be funded by the Administration under the Public Works Programme. In July 2008, the Finance Committee ("FC") approved a sum of \$2,782.6 million in money-of-the-day ("MOD") prices for the design and site investigation of the project, which had been entrusted to the MTR Corporation Limited ("MTRCL") for implementation. On 20 October 2009, ExCo decided that MTRCL should be asked to proceed with the construction, testing and commissioning of HKS of XRL under the concession approach.

6. On 16 January 2010, FC approved the following funding applications -

- (a) the construction of the railway works (at an estimated cost of \$55 billion in MOD prices) and its breakdown is at **Appendix III**;
- (b) the construction of the non-railway works (at an estimated cost of \$11.8 billion in MOD prices) and its breakdown is at **Appendix IV**; and
- (c) special ex-gratia payments in relation to HKS of XRL (at an estimated cost of \$86 million).

7. The Administration entered into an entrustment agreement with MTRCL on 26 January 2010 for the construction and commissioning of XRL project. The works to be entrusted to MTRCL (under 53TR – HKS of XRL – construction of railway works, item for Public Works Subcommittee of FC) covered the construction, testing and commissioning of the railway works, including all civil, architectural, building services, fire safety provisions, railway, electrical and mechanical systems, trackwork and procurement of rolling stock, equipment and systems. MTRCL's project management cost¹ under 53TR, was estimated at \$3,261 million (in September 2009 prices).

¹ Project management cost for the project included staff, accommodation and corporate costs for the project team and project headquarters team, as well as other support services for the teams. The project team provided support for project planning and management, and construction supervision; while the project headquarters team provided support for project control, planning and programming, procurement, and contract administration etc. Support services covered human resources, legal services, public relations, finance and information technology etc.

8. The construction works for HKS of XRL started in end January 2010 and is expected to be completed in 2017. The project scopes of the construction of the railway works for HKS of XRL and non-railway works for the project are attached at **Appendices V and VI**.

Monitoring mechanism

9. Under the entrustment agreement as mentioned in paragraph 7, MTRCL is responsible for the overall management of the project. In doing so, the Administration has advised that MTRCL has to comply with its own management systems and procedures. MTRCL also has the obligation to provide any information concerning any matters relating to XRL project as requested by the Administration. The Administration has indicated that it would spare no effort in monitoring the works of MTRCL to ensure that the implementation of the project is within the approved project estimate, of good quality and on schedule.² In July 2012, FC approved the creation of a supernumerary Chief Engineer post in the Railway Development Office of the Highways Department ("HyD")³ to take up the planning and implementation of HKS of XRL project. Currently the public officers serving on the Board include Professor Anthony Cheung Bing-leung (Secretary for Transport and Housing), Mr Wai Chi-sing (Permanent Secretary for Development (Works)) and Mrs Ingrid Yeung Ho Poi-yan (Commissioner for Transport).

10. On 16 April 2010, the Administration provided a paper² to the Subcommittee on Matters Relating to Railways ("the Subcommittee") setting out the Administration's monitoring mechanism on the construction of HKS of XRL. A flowchart on this monitoring mechanism is enclosed at **Appendix VII**. Details are as follows:

A. Project Supervision Committee ("PSC")

11. The Director of Highways, being the controlling officer responsible for XRL project, leads a high-level inter-departmental PSC. The Committee holds monthly meetings with MTRCL and the related Government departments to review project progress, monitor procurement activities, post tender award cost control and resolution of contractual claims. PSC also provides steer on any matters that would affect the

² Source: The Administration's paper on "Government's Monitoring and Reporting on the Construction of the Hong Kong Section of Guangzhou-Shenzhen-Hong Kong Express Rail Link" [LC Paper No.: CB(1)1573/09-10(04)] issued in April 2010

³ The Railway Development Office of HyD is tasked with overseeing the day-to-day planning and implementation of new railway projects including XRL. It is headed by a Principal Government Engineer and consists of two groups, each headed by a Government Engineer.

progress of XRL project.

12. To support and complement PSC's effort, HyD inserts various check points into MTRCL's relevant work processes so that issues of potential concern can be flagged up and appropriately resolved at an early stage.

B. Check points in MTRCL's work processes

(a) *Tendering procedure*

13. MTRCL engages services from consultants, contractors and suppliers for XRL project by means of a four-stage process, which includes expression of interest, pre-qualification for shortlisting of tenderers, tendering and tender assessment. In general, the Procurement Team of MTRCL undergoes this four-stage process before making recommendations for tender award. The Team submits recommendations for approval of the Divisional Director, the Tender Board, or MTRCL Board depending on the tender sum.

14. The procurement and tendering procedures of MTRCL comply with the provisions of the World Trade Organization's Agreement on Government Procurement. The same procedures also apply to the contracts relating to HKS of XRL project, including those that have been tendered.

15. Representatives of HyD, normally at directorate level, attend tender readiness presentations made by the Procurement Team and all meetings of the Procurement Team and the Executive Tender Panel concerning procurement of works and services for XRL project. Where a major procurement decision is to be made by MTRCL Board, the Director of Highways participates in the relevant meeting of MTRCL's Executive Committee that makes recommendations to the Board.

(b) *Project management*

16. According to the Administration, MTRCL holds monthly project report meetings to monitor the progress of XRL project. Representatives from HyD attend such meetings. MTRCL is also required to submit relevant information to HyD. Upon request, MTRCL will arrange briefings for HyD and / or other Government departments on issues that may have bearing on the cost, quality or progress of the works.

(c) *Cost and budget control mechanism*

17. MTRCL has built-in mechanism that enables and encourages cost saving initiatives. During the tendering process, tenderers are allowed to submit alternative proposal which may achieve better performance and / or at lower costs. During the course of construction, MTRCL, its contractors, suppliers and the relevant government departments conduct value engineering sessions to identify and assess opportunities that can save cost while delivering the same or even better values. These processes, in which HyD representatives participate, help bring down the overall project cost of HKS of XRL.

18. MTRCL convenes cost control meetings to review the financial situation of the constituent consultancies, construction contracts and XRL project as a whole. Representatives from HyD attend these meetings. MTRCL has also set up a Project Control Group to scrutinize the assessment of variations and claims arising from the contracts of XRL project. HyD representatives, at directorate level, attend such meetings to provide comments and reflect views of the Administration.

C. External monitoring and verification

19. In view of the scale of XRL project, HyD also employs an external consultant to assist in the monitoring work and undertake regular audits to verify MTRCL's compliance with its obligations under the entrustment agreement with the Administration. The monitoring and verification exercise is not limited to the work of MTRCL, but also includes that of the consultants, contractors or agents employed by MTRCL for XRL project. Moreover, HyD consultant identifies and advises HyD any potential risk regarding the implementation of XRL project and proposes appropriate mitigation measures. According to the Administration, this would help ensure that XRL project will meet the required standards and will be completed on schedule and within budget.

Reporting on progress and finance of XRL project

20. Since July 2010, the Administration has provided regular half-yearly progress reports to the Subcommittee. According to the seven regular progress reports, covering the period up to 30 June 2013, provided by the Transport and Housing Bureau, the award of contracts was on schedule and within budget. Detailed half-yearly progress report of works ending 30 June 2013 and half-yearly expenditure report ending 30 June 2013 are attached as **Appendices VIII and IX** respectively.

Concerns and views of the Subcommittee

Progress of XRL project

21. At the Subcommittee meeting on 24 May 2013, because of the media's report that the progress of XRL project might be delayed and over budget, members generally showed concern over whether the Administration and MTRCL were able to complete the project as scheduled. The Administration advised that they had been working closely with the parties concerned to ensure that XRL works would be completed as scheduled in 2015.

22. At the Subcommittee meeting on 22 November 2013, the Administration advised that the construction works of HKS of XRL were expected to be completed in 2015 as scheduled. After that, it was estimated that it would take several months' time for MTRCL to conduct various tests and trial run for railway operation and seek approval from the relevant departments, such as the Electrical and Mechanical Services Department before commissioning of HKS of XRL in 2016. The Administration further explained that apart from the cross-boundary section, some of the construction works in the remaining HKS of XRL were also lagged behind the schedule and as such, various measures were adopted to catch up the schedule.

23. On 5 May and 19 May 2014, the Subcommittee members at the meetings were briefed that the construction of HKS of XRL would not be completed by the original target of 2015; and the completion date would be postponed to 2016. With the time required for testing and trial runs to ensure safe operations, the opening of the line for service would be in 2017. MTRCL explained that the causes for the delay of XRL project included inclement weather and difficult geological conditions. Members also noted that MTRCL set up an Independent Board Committee on 29 April 2014 to review the managerial approach of XRL project comprehensively; whereas the Administration formed an Independent Expert Panel on 16 May 2014 to review matters relating to the project delay. At the meetings, members pressed questions on whether MTRCL and public officers had deliberately concealed the facts and provided false information to the Legislative Council, and enquired whether the revised target of 2017 was achievable.

Financial position

24. Members at the Subcommittee meeting on 24 May 2013 showed concern about the financial position of XRL project in view of the press reports that the amount of \$4.6 billion out of \$5.4 billion of the project

contingencies had been claimed. The Administration explained that unforeseeable ground conditions were the major reason for the substantiated claims; and that the progress of the foundation and site formation works had been affected by the conditions. They had, however, already earmarked provisions for the unforeseeable situations in the course of construction. The Administration further stated that while any monetary claim had to be substantiated, the final compensation agreed was usually different from the amount claimed. The Administration suggested that according to the projections, the amount claimed could be fully covered by project contingencies. In view of the project delay as announced in April 2014, members at the Subcommittee meetings in May 2014 expressed worry about any further possible claims from contractors and increase in the approved project sum.

Labour shortage problem

25. The Subcommittee stressed the need to accord priority to the employment of local workforce in implementing XRL project. According to the 7th half-yearly report for the period ending 30 June 2013, about 8 500 construction workers and technical / professional staff were employed for the construction and electrical and mechanical works for the tunnels and WKT. The report also indicated that the figures would increase and reach its peak in 2013 and 2014.

26. At the meeting on 22 November 2013, two Subcommittee members expressed concern about the alleged labour shortage problem for XRL project. Members also urged that the relevant bureaux, like the Transport and Housing Bureau and the Labour and Welfare Bureau, should assist MTRCL in solving the alleged labour shortage problem by various means like speeding up the processing of the application for importing of labour under the Supplementary Labour Scheme. In January 2014, the Administration provided supplementary information [LC Paper No. CB(1)782/13-14(01)] updating the Subcommittee on the manpower situation for XRL project. It was indicated that while the project required about 10 000 construction workers and technical / professional staff, contractors had so far employed about 8 500 personnel. The ensuing electrical and mechanical works would also require substantial manpower.

Construction safety

27. At the Subcommittee meetings on 24 May and 22 November 2013, and 3 January 2014, members showed concern about construction safety of XRL project, in particular the three fatal incidents occurred in January 2011, July and August 2013, as well as the dramatic increase in the accident rates in late 2013. MTRCL at the meeting on 3 January 2014

explained that the increase in the accident rates for XRL project in the previous seven months could be due to the change in the nature of work involved in the different stages of construction works. Also more manual labour was involved in recent months as the manpower demand reached its peak. The overall figure of the accident rates was, however, more or less the same as those for other railway projects.

Signalling system and train safety

28. Members at the Subcommittee meetings on 24 May and 22 November 2013, and 4 July 2014 expressed concern about the signalling system of XRL project, including the procurement and compatibility of the signalling systems for both HKS and the Mainland section of XRL. The Chairman at the meeting on 22 November 2013 further cited the Wenzhou incident in China and expressed his concern over the control of the quality of the signalling systems in HKS and the Mainland section of XRL. Apart from that, members at the Subcommittee on 4 July 2014 showed worry about train safety and pressed questions on the standard of train crashworthiness of the trains procured for XRL.

Co-location arrangement

29. At a few of the Subcommittee meetings held between 2010 and 2013, members enquired about the latest progress of the arrangements for co-location of immigration and customs facilities at HKS of XRL. At the Subcommittee meetings on 24 May and 22 November 2013, the Administration advised that because co-location arrangement for XRL involved complex legal and constitutional issues, they had been negotiating with the Mainland authorities on necessary arrangements (e.g. customs, immigration and quarantine arrangements) for the commissioning of XRL. They would report to the Legislative Council in a timely manner once agreement had been reached.

Clearance of Choi Yuen Tsuen ("CYT")

30. The Subcommittee members were concerned about the assistance available to the affected CYT villagers who had submitted agricultural resite applications. The Administration advised that about 20 applications for agricultural resite had been received and 10 villagers had been verified as genuine farmers. Heung Yee Kuk, the Lands Department and the Agriculture, Fisheries and Conservation Department also assisted CYT villagers in identifying suitable sites for relocation of farming activities. In November 2010, the Administration announced that the phased clearance of CYT had been completed smoothly.

Legislative Council questions and relevant papers

31. In the Fifth Legislative Council, Members raised twelve questions relating to XRL project, including the work progress; co-location of boundary control facilities; and impacts of the construction works on neighbouring areas. The hyperlinks to the above Legislative Council questions and other relevant papers are at **Appendices X and XI** respectively.

Latest developments

32. The Administration plans to update the Subcommittee members on the progress of the construction of HKS of XRL at the meeting to be held on 24 November 2014.

Council Business Division 1
Legislative Council Secretariat
20 November 2014



The proposed alignment of the Hong Kong Section of the Guangzhou-Shenzhen-Hong Kong Express Rail Link (XRL)

圖例
LEGEND

- + - 特別行政區界
BOUNDARY OF SPECIAL ADMINISTRATIVE REGION
- 現有鐵路路線
EXISTING RAIL LINE
- 擬建廣深港高速鐵路香港段
PROPOSED HONG KONG SECTION OF THE GUANGZHOU-SHENZHEN-HONG KONG EXPRESS RAIL LINK
- 擬建廣深港高速鐵路內地段
PROPOSED MAINLAND SECTION OF THE GUANGZHOU-SHENZHEN-HONG KONG EXPRESS RAIL LINK
- 通風大樓
VENTILATION BUILDING (VB)
- 大江埔緊急救援入口
TAI KONG PD EMERGENCY ASSESS POINT

<p>圖則名稱 drawing title 工務計劃項目第53TR號 廣深港高速鐵路香港段 - 鐵路建造工程 香港段位置圖 PWP ITEM NO. 53TR HONG KONG SECTION OF GUANGZHOU-SHENZHEN-HONG KONG EXPRESS RAIL LINK - CONSTRUCTION OF RAILWAY WORKS LOCATION PLAN OF HONG KONG SECTION</p>	<p>S. H. LAM 總工程師 CHIEF ENGINEER</p>	<p>設計 designed K. K. LEI 繪圖 drawn Y. L. MA 核對 checked K. K. LEI 核准 approved C. W. YUNG</p>	<p>圖號 drawing no. HRWXRL002-SP0009 版權所有 COPYRIGHT RESERVED 鐵路拓展處 RAILWAY DEVELOPMENT OFFICE 路政署 HIGHWAYS DEPARTMENT</p>
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Chronology of major developments of the Hong Kong section ("HKS") of the Guangzhou-Shenzhen-Hong Kong Express Rail Link ("XRL") project

- In 2000, XRL project (formerly named Regional Express Line) was first recommended for implementation under the Railway Development Strategy 2000.
- In March 2005, it was agreed XRL would have its termini at West Kowloon of Hong Kong and Shibi of Guangzhou, with intermediate stations at Longhua of Shenzhen, and Humen of Dongguan.
- In July 2005, the Kowloon Canton Railway Corporation recommended two alignment options for HKS of XRL: namely, building a new dedicated rail track from the West Kowloon Terminus to the boundary ("the Dedicated Corridor Option") or sharing the tracks of the Kowloon Southern Link, the West Rail Line ("WRL"), the proposed Northern Link and a new rail track to the boundary ("the Shared Corridor Option").
- In January 2006, having considered the financial aspect, the potential impact on WRL service and the patronage forecast based on the planning assumptions at that time, the Chief Executive-in-Council ("CE-in-Council") decided that HKS of XRL should proceed on the basis of the Shared Corridor Option.
- Subsequently, several planning changes were made to the Mainland's section of XRL bearing significant implications to the choice of corridor option for HKS -
 - possible increase in the long-haul train services;
 - addition of a new XRL station at Futian, Shenzhen connecting to a newly proposed Rapid Transit System rail line; and
 - Ministry of Railway's requirement to deploy wider train cars up to 3.4 m wide for XRL.

As a result, if the Shared Corridor Option was to be adopted, the increase in XRL patronage and train frequency would saturate WRL corridor shortly after the opening of XRL.

In addition, the deployment of new train cars of up to 3.4 m-wide for XRL would conflict with the platform configurations of three WRL Stations, which were designed for train cars no more than 3.1 m wide. This would

necessitate modification of the platforms concerns and the works would take about three years with each affected platform closed for six months.

- On 17 April 2007, in view of the above and the effectiveness of the Dedicated Corridor Option in connecting with the national railway network, CE-in-Council decided that the Dedicated Corridor Option should be adopted in-principle for HKS of XRL.
- On 2 August 2007, the Chief Executive ("CE") announced the decision of adopting the Dedicated Corridor Option after the Tenth Plenary of the Hong Kong/Guangdong Co-operation Joint Conference.
- On 22 April 2008, CE-in-Council decided to invite the MTR Corporation Limited ("MTRCL") to proceed with further planning and design of HKS of XRL. On 8 July 2008, the Finance Committee ("FC") approved the funding for the design and site investigation of HKS of XRL.
- In October 2008, CE announced the proposed HKS of XRL as one of the 10 major infrastructure projects. The railway scheme was gazetted under the Railways Ordinance on 28 November and 5 December 2008. Detailed design commenced in January 2009.
- On 20 October 2009, CE-in-Council approved the implementation of HKS of XRL project and the Administration's recommendation to seek funding approval from FC so that the construction of the project could start before the end of 2009 for commissioning in 2015.
- At the meeting of the Public Works Subcommittee ("PWSC") on 3 December 2009, the funding proposals for HKS of XRL project and the special ex-gratia rehousing package were endorsed by PWSC.
- On 16 January 2010, the relevant funding proposals were approved by FC.
- In June 2010, the Administration submitted the 1st half-yearly report for the period between 16 January and 30 June 2010, which was discussed at the Subcommittee meeting on 6 July 2010.
- In March 2011, the Administration submitted the 2nd half-yearly report for the period between 1 July and 31 December 2010, which was discussed at the Subcommittee meeting on 20 May 2011.
- In September 2011, the Administration submitted the 3rd half-yearly report for the period between 1 January and 30 June 2011.
- In April 2012, the Administration submitted the 4th half-yearly report for the period between 1 July and 31 December 2011.

- In October 2012, the Administration submitted the 5th half-yearly report for the period between 1 January and 30 June 2012.
- In May 2013, the Administration submitted the 6th half-yearly report for the period between 1 July and 31 December 2012, which was discussed at the Subcommittee meeting on 24 May 2013.
- In October 2013, the Administration submitted the 7th half-yearly report for the period between 1 January and 30 June 2013, which was discussed at the Subcommittee meeting on 22 November 2013.
- On 15 April 2014, the Administration and MTRCL announced the delay of the construction of HKS of XRL project.
- On 29 April 2014, MTRCL set up the Independent Board Committee ("IBC") to review the management of XRL project.
- On 16 May 2014, the Administration formed an Independent Expert Panel to review matters relating to the project delay.
- Hon WU Chi-wai and Hon Charles Peter MOK at the Council meeting of 25 June 2014 presented a petition in connection with the delay in the construction of HKS of XRL. The request for the petition to be referred to a select committee was supported by 21 Members. The petition has thus been referred to a select committee under Rule 20(6) of the Rules of Procedure.
- On 16 July 2014, IBC submitted the first report to the Board of Directors of MTRCL and the recommendations included enhancement of project reporting; establishment of Capital Works Committee; and enhancement of communications strategies. The report was issued to Members vide LC Paper No. CB(1)1822/13-14 on 17 July 2014.
- On 28 October 2014, IBC submitted the second report to the Board of Directors of MTRCL. Two experts validated the findings of IBC in the first IBC report relating to technical matters and project management procedures and processes. They also made recommendations in four areas including enhancing project management to de-risk the critical path contracts; enhancing budget control; enhancing reporting processes and presentation; and key reporting milestones. The report was issued to Members vide LC Paper No. CB(1)144/14-15 on 28 October 2014.

**Breakdown of the construction of railway works for the Hong Kong section
of the Guangzhou-Shenzhen-Hong Kong Express Rail Link**

		\$ million	
(a)	construction of railway works	43,615	
(I)	civil works	31,596	
	- Terminus	9,454	
	- Tunnel and associated structures	18,985	
	- Emergency rescue station and stabling sidings	3,157	
(II)	architectural works	1,900	
(III)	building services	2,500	
(IV)	railway electrical and mechanical works	5,714	
(V)	rolling stock	1,905	
(b)	project management cost payable to MTRCL for planning, management and supervision of the project, covering overheads and management expenses of MTRCL	3,261	
(c)	fees for consultants appointed by the Government for monitoring and vetting MTRCL's work including cost of the project	95	
(d)	contingencies	4,445.5	
	Sub-total	51,416.5	(in September 2009 prices)
(e)	provision for price adjustment	3,601.0	
	Total	55,017.5	(in money-of-the-day prices)

Breakdown of the construction of non-railway works for the Hong Kong section of the Guangzhou-Shenzhen-Hong Kong Express Rail Link

	\$ million	
(a) construction of essential public infrastructure works		1,808.8
(I) seven footbridges at West Kowloon Terminus ("WKT")	280.0	
(II) two subways at WKT	138.8	
(III) depressed roads at part of Austin Road West and Lin Cheung Road, reconstruction of Wui Man Road and construction of Road D1A, and associated noise barriers / enclosures	1,390.0	
(b) construction of reprovisioning, remedial and improvement works		1,200.0
(c) enabling works		3,519.0
(I) enabling works for Site A	1,880.0	
(II) enabling works for West Kowloon Cultural District	1,604.0	
(III) enabling works for footbridges at Sham Mong Road	35.0	
(d) construction of boundary control facilities		2,609.0
(e) project management cost payable to MTRCL for planning, management and supervision of the project, covering overheads and management expenses of MTRCL		699.0
(f) fees for consultants appointed by the Government for monitoring and vetting MTRCL's work including cost		38.0
(g) provision of Government facilities / equipment including fire fighting equipment, and other furniture and equipment ¹		200.0
(h) contingencies		953.8
	Sub-total	11,027.6
		(in September 2009 prices)
(i) provision for price adjustment		772.4
	Total	11,800.0
		(in money-of-the-day prices)

(Source: LC Paper No. PWSC(2009-10)69 issued in December 2009)

¹ Based on an indicative list of furniture and equipment items required, including furniture and equipment in boundary control facilities.

Project scope of the construction of railway works for the Hong Kong section ("HKS") of the Guangzhou-Shenzhen-Hong Kong Express Rail Link ("XRL")

- (a) construction of the railway works for HKS of XRL, which include –
 - (i) railway facilities at the West Kowloon Terminus ("WKT"), including station concourse, passenger waiting areas, platforms, control and signal systems, etc.;
 - (ii) approximately 26 km long tunnel from WKT to the boundary at Huanggang;
 - (iii) a below ground emergency rescue station and at-grade stabling sidings in Shek Kong with necessary facilities to provide emergency rescue, passenger evacuation, as well as maintenance of rolling stock and infrastructure; and
 - (iv) eight ventilation buildings, one emergency access point and the associated ventilation shafts and adits / accesses for the tunnel;
- (b) procurement of rolling stock, railway systems, as well as safety, operation and maintenance equipment; and
- (c) fees for consultants appointed by the Government for monitoring and vetting the work of the MTR Corporation Limited relating to the railway works under HKS of XRL.

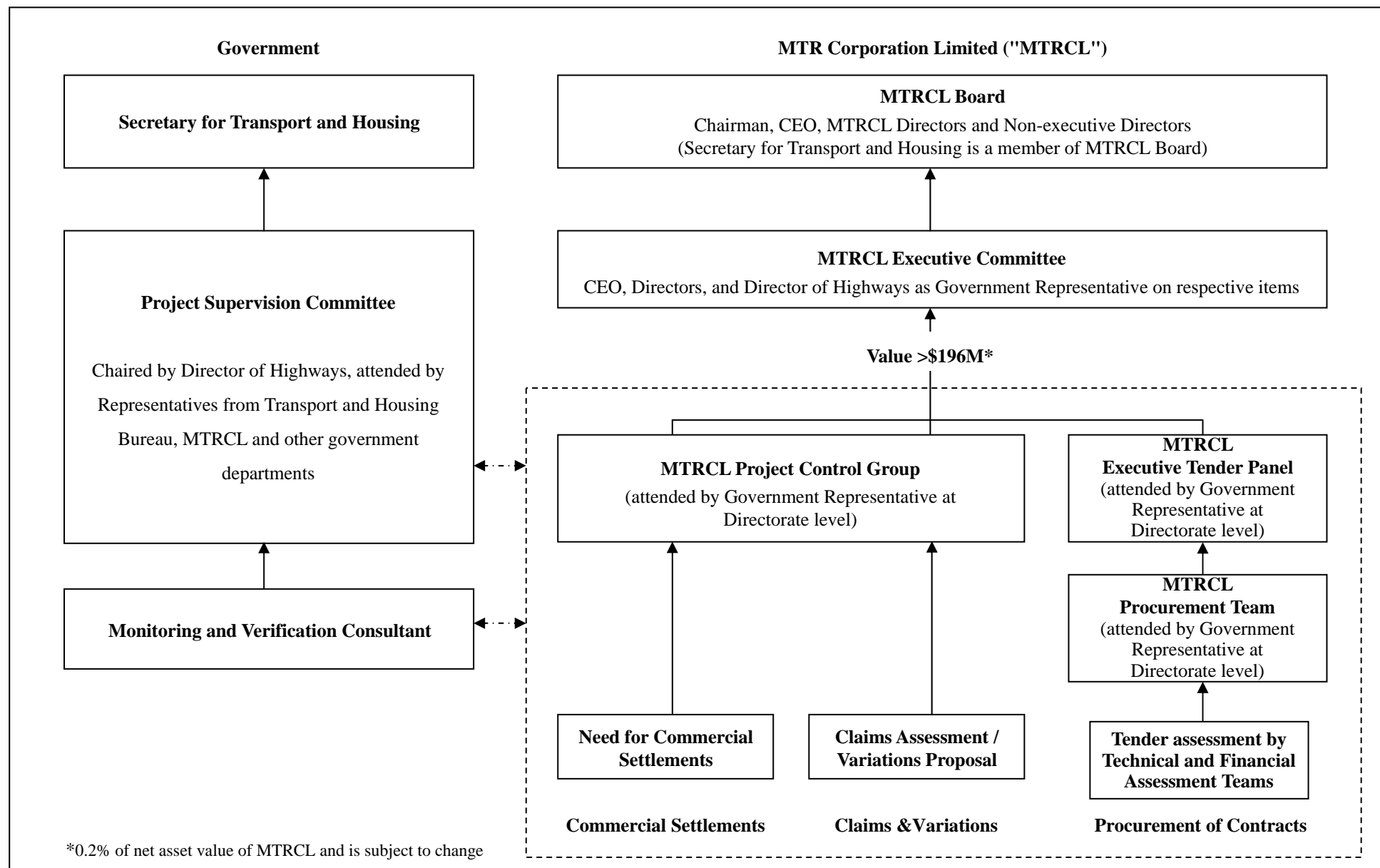
Project scope of the construction of non-railway works for the Hong Kong section of the Guangzhou-Shenzhen-Hong Kong Express Rail Link ("XRL")

- (a) construction of essential public infrastructure works ("EPIW") including –
 - (i) three footbridges linking to the Kowloon Station, two footbridges linking to the Austin Station, a footbridge linking to the public transport interchange at the north of Jordan Road and a footbridge above new Road D1A near Man Cheong Street;
 - (ii) two subways linking to the Austin Station and the footpath located at west of Lin Cheung Road;
 - (iii) construction of a depressed road system and associated at-grade roads and noise barriers / enclosures at Austin Road West and Lin Cheung Road; and
 - (iv) construction of new Road D1A and reconstruction of Wui Man Road and erection of associated noise barriers / enclosures;
- (b) construction of the reprovisioning, remedial and improvement works ("RRIW");
- (c) construction of the enabling works –
 - (i) for the topside property development at Site A¹;
 - (ii) for the future West Kowloon Cultural District development above West Kowloon Terminus ("WKT"); and
 - (iii) for the future footbridges at Sham Mong Road;
- (d) construction and provision of government facilities / equipment at WKT including the boundary control facilities, special fire fighting equipment for use in XRL tunnel during the construction and operation phases and the other associated equipment; and
- (e) fees for consultants appointed by the Government for monitoring and vetting the work of the MTR Corporation Limited relating to EPIW, RRIW, enabling works and the concerned government facilities / equipment.

(Source: LC Paper No. PWSC(2009-10)69 issued in December 2009)

¹ The site was zoned as Comprehensive Development Area (1) on the draft South West Kowloon Outline Zoning Plan No. S/K20/22A on top of WKT for non-railway development.

Flowchart on the Government's monitoring mechanism on the construction of the Hong Kong section of the Guangzhou-Shenzhen-Hong Kong Express Rail Link ("XRL") project



Source: The Administration's paper on progress and financial situation of the construction of the Hong Kong section of the Guangzhou-Shenzhen-Hong Kong XRL (1st half-yearly report for the period ending 30 June 2010) [LC Paper No. CB(1)2290/09-10(01)] (Annex 3)

**Construction of the Hong Kong section of the
Guangzhou-Shenzhen-Hong Kong Express Rail Link
Detailed half-yearly progress report of works ending 30 June 2013**

(I) Progress of works

Tunnels – For the southbound tunnelling works, the tunnel boring machine
New ("TBM") commenced from the Mai Po launching shaft has
Territories advanced about 2 200 metres ("m"). It successfully passed
Section under Wai Tsai Tsuen and would soon reach the Ngau Tam Mei
shaft to complete the southbound tunnelling works. Structural
works for the Mai Po ventilation building was completed by
about 70%.

Drilling and blasting works at the rock stratum of the Ngau Tam Mei shaft were completed. Tunnelling works heading south for Tai Kong Po continued.

Drill-and-blast tunnelling works at Tai Kong Po continued northward and have advanced about 1 000 m for both the northbound and southbound tunnel sections. Tunnel lining construction started in the southbound tunnel section and was completed by about 10%.

TBM launched from the Tsat Sing Kong site has advanced about 500 m northward and continued to head for Tai Kong Po. Another TBM assembled in March 2013 at the Shek Kong site has also advanced about 100 m for the southbound tunnelling works.

Construction of all diaphragm walls at the Shek Kong Emergency Rescue Siding and Stabling Sidings was completed, and excavation works were also completed by over 90%. Structural works for 8 out of 14 buildings were completed.

Drill-and-blast tunnelling works from the Pat Heung site continued southward under Tai Mo Shan. Together with tunnelling works from the Shek Yam site heading northward, about 60% of the entire tunnel section between Tse Uk Tsuen and Shek Yam has been completed.

For the Shing Mun ventilation building and shaft located at the junction of Cheung Shan Estate Road West and Cheung Shan

Estate Road East, acoustic shields were installed at the works sites to reduce the noise impact on the surrounding environment. Excavation works for the shaft reached a depth of 60 m underground, with downward blasting continued. Meanwhile, structural works for the ventilation building and tunnel lining construction were underway.

Drill-and-blast tunnelling works for the southbound tunnel of the Kwai Chung section were completed, while those for the northbound tunnel broke through to the Shek Yam tunnel section in March 2013. Tunnel lining construction was completed by about 85%.

**Tunnels –
Urban
Section**

For the urban section of tunnels, two TBMs commenced boring works for the northbound and southbound tunnel sections between Mei Lai Road and Hoi Ting Road. After the southbound tunnel section between Nam Cheong and Mei Lai Road broke through to the Kwai Chung tunnel section in December 2012, TBM was re-assembled and commenced the northward tunnelling works at Nam Cheong for the northbound tunnel of the same section. So far, TBM has advanced about 1 000 m. As regards the southbound tunnel, TBM continued with the southward tunnelling works towards Yau Ma Tei. Meanwhile, structural works for the Nam Cheong ventilation building was completed by about 50%.

Tunnelling works to the south of Hoi Ting Road progressed as scheduled, and tunnel structural works were commenced.

Reprovisioning of the footbridge connecting Sham Mong Road and Hoi Lai Shopping Centre in Sham Shui Po was completed. The footbridge was re-opened for public use in mid-June 2013.

**West
Kowloon
Terminus
("WKT")**

As regards the main structure of WKT, the concrete structure of the underground station to the south of Austin Road was being constructed by top-down approach. Underground structural works at the southern end of WKT reached the lowest level B4 (a total of four levels from B1 to B4). For the northern part of WKT, excavation works reached the lowest level B4 and construction of the main structure by bottom-up approach continued.

Electrical and Mechanical ("E&M") Works Installation of E&M equipment was commenced at level B2 of the southern end of WKT. Major E&M equipment and materials were delivered to the Shek Kong Emergency Rescue Siding and Stabling Sidings for installation. Other E&M systems such as lifts, escalators and fixed communication systems were under inspection and testing in various production plants. Regarding the laying of rails, over 1 300 pieces of rail (each measured 18 m in length) were delivered to the Shek Kong site, where the laying of temporary rails was completed by 25%.

The rolling stocks were under production, with the assembly of the main frame for the first train commenced in the second quarter of 2013.

(II) Preparatory work and interface issues

Major Temporary Traffic Measures The various Temporary Traffic Management Scheme ("TTMS") in West Kowloon have remained in effect. As the construction of the Lin Cheung Road-Austin Road West Underpass was underway, the MTR Corporation Limited ("MTRCL") would plan and co-ordinate in details the integration of the new and existing road systems to minimize the impact on the traffic in West Kowloon.

Also, minor TTMSs have remained in effect at various locations along Sham Mong Road and Hoi Wang Road to make room for reinstatement works.

The Government and MTRCL would continue consultation with the relevant District Councils and local communities about various stages of TTMS.

**Construction of the Hong Kong section of the
Guangzhou-Shenzhen-Hong Kong Express Rail Link
Half-yearly expenditure report ending 30 June 2013**

Table 1 – Situation of expenditure

	Awarded contract sum for the contracts (\$ million)	Cumulative Expenditure (\$ million)	Estimated amount* of unresolved claim (\$ million)
Railway Tunnels	22,401	18,088.1	2,597
West Kowloon Terminus ("WKT")	14,465	8,358.1	2,572
Electrical and Mechanical ("E&M") Works	7,947	2,111.4	0
Total	44,813	28,557.6	5,169

* 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	47	1,737	862	149	2,907.7	310.5
WKT	46	247	187	182	2,670.6	98.6
E&M Works	4	0	0	8	0	0
Total	97	1,984	1,049	339	5,578.3	409.1

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

Updated background brief on the latest position of the construction of the Hong Kong section ("HKS") of the Guangzhou-Shenzhen-Hong Kong Express Rail Link ("XRL")

Relevant questions raised at Council meetings
(in the Fifth Legislative Council)

19.12.2012	Hon Claudia MO raised a question on impact of construction works of HKS of XRL on structure of nearby buildings. (http://www.info.gov.hk/gia/general/201212/19/P201212190238.htm)
29.5.2013	Hon Jeffrey LAM Kin-fung raised a question on progress of the construction of HKS of XRL and related immigration arrangements. (http://www.info.gov.hk/gia/general/201305/29/P201305280556.htm)
29.5.2013	Hon Frederick FUNG Kin-kee raised a question on monitoring the construction of HKS of XRL. (http://www.info.gov.hk/gia/general/201305/29/P201305290217.htm)
23.10.2013	Hon Frederick FUNG Kin-kee raised a question on co-location of boundary control facilities for HKS of XRL. (http://www.info.gov.hk/gia/general/201310/23/P201310220570.htm)
11.12.2013	Dr Hon KWOK Ka-ki raised a question on impacts of railway construction works on residents in Ngau Tam Mei. (http://www.info.gov.hk/gia/general/201312/11/P201312100593.htm)
26.2.2014	Hon SIN Chung-kai raised a question on co-location of immigration and customs facilities at the West Kowloon Terminus of XRL. (http://www.info.gov.hk/gia/general/201402/26/P201402260233.htm)
9.4.2014	Hon Albert HO Chun-yan raised a question on railway safety (including the progress of the procurement of the trains for XRL). (http://www.info.gov.hk/gia/general/201404/09/P201404090399.htm)
16.4.2014	Hon James TO raised a question on impacts of XRL works on nearby sites and buildings. (http://www.info.gov.hk/gia/general/201404/16/P201404160445.htm)
30.4.2014	Hon Tony TSE Wai-chuen raised a question on works progress of the Hong Kong section of the XRL. (http://www.info.gov.hk/gia/general/201404/30/P201404300347.htm)

21.5.2014	Dr Hon LAM Tai-fai raised a question on handling of the delay in the completion of the project to construct the express rail link. (http://www.info.gov.hk/gia/general/201405/21/P201405210505.htm)
21.5.2014	Dr Hon KWOK Ka-ki raised a question on construction works delay of the XRL. (http://www.info.gov.hk/gia/general/201405/21/P201405210325.htm)
28.5.2014	Hon Kenneth LEUNG raised a question on construction works of XRL. (http://www.info.gov.hk/gia/general/201405/28/P201405280337.htm)

**Updated background brief on the construction of the Hong Kong section of the
Guangzhou-Shenzhen-Hong Kong Express Rail Link**

List of relevant papers

Date of meeting	Committee	Minutes/Paper	LC Paper No.
20.6.2008	Establishment Subcommittee	Administration's paper on Hong Kong section of Guangzhou-Shenzhen-Hong Kong Express Rail Link - creation of one supernumerary post of Chief Engineer in Highways Department	EC(2008-09)8 http://legco.hk/yr07-08/english/fc/esc/papers/e08-08e.pdf
2.12.2009 3.12.2009	Public Works Subcommittee	Administration's paper on Hong Kong section of Guangzhou-Shenzhen-Hong Kong Express Rail Link - construction of railway works	PWSC(2009-10)68 http://www.legco.gov.hk/yr09-10/english/fc/pwsc/papers/p09-68e.pdf
		Administration's paper on Hong Kong section of Guangzhou-Shenzhen-Hong Kong Express Rail Link - construction of non-railway works	PWSC(2009-10)69 http://www.legco.gov.hk/yr09-10/english/fc/pwsc/papers/p09-69e.pdf
		Minutes of meetings	PWSC32/09-10 http://www.legco.gov.hk/yr09-10/english/fc/pwsc/minutes/pwsc20091202.pdf PWSC33/09-10 http://www.legco.gov.hk/yr09-10/english/fc/pwsc/minutes/pwsc20091203.pdf

Date of meeting	Committee	Minutes/Paper	LC Paper No.
18.12.2009 8.1.2010 15.1.2010 16.1.2010	Finance Committee	Recommendations of the Public Works Subcommittee made on 2 and 3 December 2009	FCR(2009-10)44 http://www.legco.gov.hk/yr09-10/english/fc/fc/papers/f09-44e.pdf
16.4.2010	Subcommittee on Matters Relating to Railways	Administration's paper on government's monitoring and reporting on the construction of the Hong Kong section of the Guangzhou-Shenzhen-Hong Kong Express Rail Link	CB(1)1573/09-10(04) http://www.legco.gov.hk/yr09-10/english/panels/tp/tp_rdp/papers/tp_rdp0416cb1-1573-4-e.pdf
		Minutes of meeting	CB(1)2071/09-10 http://www.legco.gov.hk/yr09-10/english/panels/tp/tp_rdp/minutes/rdp20100416.pdf
6.7.2010	Subcommittee on Matters Relating to Railways	Administration's paper on progress and financial situation of the construction of the Hong Kong section of the Guangzhou-Shenzhen-Hong Kong Express Rail Link (1 st half-yearly report for the period ending 30 June 2010)	CB(1)2290/09-10(01) http://www.legco.gov.hk/yr09-10/english/panels/tp/tp_rdp/papers/tp_rdp0706cb1-2290-1-e.pdf
20.9.2010	Subcommittee on Matters Relating to Railways	Minutes of meeting	CB(1)757/10-11 http://www.legco.gov.hk/yr09-10/english/panels/tp/tp_rdp/minutes/rdp20100920.pdf

Date of meeting	Committee	Minutes/Paper	LC Paper No.
20.5.2011	Subcommittee on Matters Relating to Railways	Administration's paper on progress and financial situation of the construction of the Hong Kong section of the Guangzhou-Shenzhen-Hong Kong Express Rail Link (2 nd half-yearly report for the period between 1 July 2010 and 31 December 2010)	CB(1)1585/10-11(07) http://www.legco.gov.hk/yr10-11/english/panels/tp/tp_rdp/papers/tp_rdp0318cb1-1585-7-e.pdf
		Minutes of meeting	CB(1)3031/10-11 http://www.legco.gov.hk/yr10-11/english/panels/tp/tp_rdp/minutes/rdp20110506.pdf
--	Subcommittee on Matters Relating to Railways	Administration's paper on the third half-yearly report on the construction of the Hong Kong section of the Guangzhou-Shenzhen-Hong Kong Express Rail Link project (for the period between 1 January 2011 and 30 June 2011)	CB(1)3049/10-11(01) http://www.legco.gov.hk/yr10-11/english/panels/tp/tp_rdp/papers/tp_rdpcb1-3049-1-e.pdf
--	Subcommittee on Matters Relating to Railways	Administration's paper on the fourth half-yearly report on the construction of the Hong Kong section of the Guangzhou-Shenzhen-Hong Kong Express Rail Link project (for the period between 1 July 2011 and 31 December 2011)	CB(1)1710/11-12(01) http://www.legco.gov.hk/yr11-12/english/panels/tp/tp_rdp/papers/tp_rdpcb1-1710-1-e.pdf

Date of meeting	Committee	Minutes/Paper	LC Paper No.
--	Subcommittee on Matters Relating to Railways	Administration's paper on the fifth half-yearly report on the construction of the Hong Kong section of the Guangzhou-Shenzhen-Hong Kong Express Rail Link project (for the period between 1 January 2012 and 30 June 2012)	CB(1)24/12-13(02) http://www.legco.gov.hk/yr12-13/english/panels/tp/tp_rdp/papers/tp_rdp0524cb1-24-2-e.pdf
24.5.2013	Subcommittee on Matters Relating to Railways	Administration's paper on the progress and financial situation of the construction of the Hong Kong Section of the Guangzhou-Shenzhen-Hong Kong Express Rail Link	CB(1)1072/12-13(03) http://www.legco.gov.hk/yr12-13/english/panels/tp/tp_rdp/papers/tp_rdp0524cb1-1072-3-e.pdf
		Administration's paper on the sixth half-yearly report on the construction of the Hong Kong section of the Guangzhou-Shenzhen-Hong Kong Express Rail Link project (for the period between 1 July 2012 and 31 December 2012)	CB(1)1108/12-13(01) http://www.legco.gov.hk/yr12-13/english/panels/tp/tp_rdp/papers/tp_rdp0524cb1-1108-1-e.pdf
		Administration's supplementary information paper on the Hong Kong section of the Guangzhou-Shenzhen-Hong Kong Express Rail Link project (follow-up paper)	CB(1)1434/12-13(01) http://www.legco.gov.hk/yr12-13/english/panels/tp/tp_rdp/papers/tp_rdp0524cb1-1434-1-e.pdf
		Minutes of meeting	CB(1)1870/12-13 http://www.legco.gov.hk/yr12-13/english/panels/tp/tp_rdp/minutes/rdp20130524.pdf

Date of meeting	Committee	Minutes/Paper	LC Paper No.
22.11.2013	Subcommittee on Matters Relating to Railways	Administration's paper on the seventh half-yearly report on the construction of the Hong Kong section of the Guangzhou-Shenzhen-Hong Kong Express Rail Link project (for the period between 1 January 2013 and 30 June 2013)	CB(1)81/13-14(01) http://www.legco.gov.hk/yr13-14/english/panels/tp/tp_rdp/papers/tp_rdp11-81-1-e.pdf
		Administration's supplementary information on the progress and financial situation of the construction of the Hong Kong Section of the Guangzhou-Shenzhen-Hong Kong Express Rail Link (follow-up paper)	CB(1)782/13-14(01) http://www.legco.gov.hk/yr13-14/english/panels/tp/tp_rdp/papers/tp_rdp1112cb1-782-1-e.pdf
		Minutes of meeting	CB(1)1010/13-14 http://www.legco.gov.hk/yr13-14/english/panels/tp/tp_rdp/minutes/rdp20131122.pdf
5.5.2014 19.5.2014	Subcommittee on Matters Relating to Railways	Administration's paper on the latest position of the construction of the Hong Kong section of the Guangzhou-Shenzhen-Hong Kong Express Rail Link	CB(1)1328/13-14(03) http://www.legco.gov.hk/yr13-14/english/panels/tp/tp_rdp/papers/tp_rdp0505cb1-1328-3-e.pdf
		MTR Corporation Limited's paper on the construction and commissioning of the Hong Kong section of the Guangzhou-Shenzhen-Hong Kong Express Rail Link	CB(1)1354/13-14(01) http://www.legco.gov.hk/yr13-14/english/panels/tp/tp_rdp/papers/tp_rdp0505cb1-1354-1-e.pdf

Date of meeting	Committee	Minutes/Paper	LC Paper No.
		Administration's response to issues raised at the meeting on 5 May 2014	CB(1)1422/13-14(02) http://www.legco.gov.hk/yr13-14/english/panels/tp/tp_rdp/papers/tp_rdp0519cb1-1422-2-e.pdf
		MTR Corporation Limited's supplementary information on the construction of the Hong Kong section of the Guangzhou-Shenzhen-Hong Kong Express Rail Link	CB(1)1438/13-14(01) http://www.legco.gov.hk/yr13-14/english/panels/tp/tp_rdp/papers/tp_rdp0519cb1-1438-1-e.pdf
		Minutes of meetings	CB(1)1904/13-14 http://www.legco.gov.hk/yr13-14/english/panels/tp/tp_rdp/minutes/rdp20140505.pdf CB(1)1987/13-14 http://www.legco.gov.hk/yr13-14/english/panels/tp/tp_rdp/minutes/rdp20140519.pdf
4.7.2014	Subcommittee on Matters Relating to Railways	Administration's paper on safety management measures for trains of Guangzhou-Shenzhen-Hong Kong Express Rail Link	CB(1)1722/13-14(05) http://www.legco.gov.hk/yr13-14/english/panels/tp/tp_rdp/papers/tp_rdp0704cb1-1722-5-e.pdf
		Minutes	CB(1)139/14-15 http://www.legco.gov.hk/yr13-14/english/panels/tp/tp_rdp/minutes/rdp20140704.pdf