

Part II Findings

Chapter 5 Difficult Stage (May to October 2013)

5.1 In this Chapter, reference to "Difficult Stage" covers various incidents that took place between May 2013 and October 2013 which are said to have made the construction work of the Project difficult, the issues that have surfaced and the corresponding actions taken by the Corporation and the Government. It also sets out the Select Committee's observations on the impact of labour shortage on the construction of the Project and on the Corporation's project management and corporate governance.

Key dates for the "Difficult Stage"

Date	Events
7 May 2013	Media reported that there would be a delay of one year or more in the completion of the Project.
23 May 2013	THB submitted the 6 th half-yearly report covering the period from 1 July 2012 to 31 December 2012, which was discussed at the Railways Subcommittee meeting on 24 May 2013. At this meeting, Professor Anthony CHEUNG Bing-leung reported that the target completion date of the Project in 2015 would be maintained.
June 2013	The Projects Programme team of the Corporation produced a Schedule Risk Assessment for the first time, in which it was shown that the opening of HKS of XRL in 2015

could be achieved on a partial opening basis.⁷²

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| 13 July 2013 | The Corporation's Project Team gave a presentation ("the July Presentation") to the then CEO, the then Deputy Chief Executive Officer ("DCEO"), the then Finance Director ("FD") of the Corporation on the Partial Opening Plan. |
| 13 July 2013 | Mr CHEW Tai-chong, the then Projects Director of the Corporation, highlighted labour shortage as one of the key challenges affecting the delivery of the Project on time. |
| 20 August 2013 | The Corporation proposed to RDO and HyD the Partial Opening Plan. |
| 22 August 2013 | Mr CHEW Tai-chong presented to the Corporation's Board meeting that there was a programme in place to complete the key elements of the Project for opening in 2015. At this Board meeting, there was no mention of the Partial Opening Plan by Mr CHEW Tai-chong and others who had been present at the July Presentation. |
| July to October 2013 | The Corporation's Project Team considered what might entail to achieve the Partial Opening Plan. The contractors were asked to think of a work plan. |
| 13 September 2013 | A presentation was given by the Chief Programming Engineer of the Corporation to Mr Peter LAU Ka-keung and RDO, putting forward the Partial Opening Plan in detail. |

⁷² First Report by the Independent Board Committee on the Express Rail Link Project, paragraphs 4.37 and 4.65.

- October 2013 The Projects Programme team updated the Schedule Risk Assessment, which showed that the situation in contract 826 was deteriorating and would not meet the December 2015 deadline for opening even with the Partial Opening Plan, and that the situation in contract 810A had deteriorated significantly since March 2013.
- 22 October 2013 HyD reported to Professor Anthony CHEUNG Bing-leung and Mr Joseph LAI Yee-tak that there were delays in the cross-boundary tunnelling works and that the Corporation had proposed a Partial Opening Plan to achieve opening in 2015.
- 29 October 2013 At the Project Supervision Committee meeting, the Corporation reported that the gap between the actual and planned progress at the end of September 2013 had reached approximately 25%.

Chronology of developments⁷³

Delay reported by the media

5.2 In early May 2013, approximately three years into the construction process, news articles appeared in the media to the effect that there would be a delay of one year or more before the Project's completion, with an estimated cost overrun of more than \$4 billion. The news reports appeared to have been based on information received from contractors. At that time, the press reports were refuted by the Corporation and the Government, who maintained that the Project would be completed on time and within budget.⁷⁴

⁷³ First Report by the Independent Board Committee on the Express Rail Link Project, paragraphs 4.41 to 4.77.

⁷⁴ Report of HKS of XRL Independent Expert Panel, paragraph 2.14.

5.3 In May 2013, THB submitted the 6th half-yearly report covering the period from 1 July to 31 December 2012 to Railways Subcommittee, in which the Corporation was said to have reported a target completion date of the Project in 2015. The 6th half-yearly report was discussed at the Railways Subcommittee meeting on 24 May 2013. At this meeting, the Government stated that the construction of HKS of XRL would still be targeted for completion in 2015 and that the Corporation had an obligation to comply with EA2.

5.4 In June 2013, the Projects Programme team of the Corporation produced a Schedule Risk Assessment for the first time to some members of ExCom, in which it was shown that opening in 2015 could be achieved on a partial opening basis.⁷⁵

5.5 At the Project Supervision Committee meeting held on 28 June 2013, the actual progress of the Project as at the end of May 2013 was reported as 39.7% complete against the planned progress of 61.8% under the original programme, representing an overall delay of six to seven months.

Presentation by the Project Team of the Partial Opening Plan

5.6 On Saturday 13 July 2013, a presentation was given by the Project Team to the then CEO, the then DCEO and the then FD, i.e. the July Presentation, where it was reported that the Project's completion cost was estimated to be \$65.1 billion and that a 2015 opening could be achieved on the Partial Opening Plan. The July Presentation suggested that the target opening date would not be in August 2015 but in December 2015.

5.7 According to its report, IBC understood that the focus of the July Presentation was on achieving the Project goals that had been agreed with the Government. The progress of the tunnelling sections was discussed, in relation to which the Project Team indicated that the excavation would be 100% complete by September 2014 and that all sections would be handed over to E&M works by March 2015. The Project Team also indicated that the trains would be delivered by December 2014 and the

⁷⁵ First Report by the Independent Board Committee on the Express Rail Link Project, paragraphs 4.37 and 4.65.

stabling yards would be ready. These indications were consistent with a commencement of passenger service at the end of 2015.⁷⁶

5.8 The Select Committee notes that, in relation to WKT, however, the Project Team reported significant delays in some of the works and the DRMs being undertaken as well as how they were then prioritizing critical plant rooms and track access for Day-1 operations. Day-1 operations would include six long-haul tracks in the centre of WKT, railway facilities, station entrances, customs, immigration, quarantine, Government areas, taxi lay-by, Public Transport Interchange and pedestrian connections to Kowloon Station and Austin Station at ground level. The Project Team had informally begun to refer to the changes made to the individual components of the Project, and that notwithstanding, the Project would still achieve the overall goal under Minimum Operating Requirement ("MOR"). However, at this stage, MOR was described in just one of an approximately 20-slide presentation pack showing how the works could be prioritized.⁷⁷

Partial opening to meet Day-1 Operational Requirements

5.9 The attraction of the Partial Opening Plan to the presenter, and to the three members of ExCom to whom it was addressed, was that it would allow the Corporation to commence a limited passenger service that would be able to meet Day-1 Operational Requirements with the Government's agreement.⁷⁸

5.10 The presentation of Mr CHEW Tai-chong also highlighted shortage of labour as one of the key challenges affecting the Corporation's ability to meet the time schedule in the Project.⁷⁹

5.11 The Select Committee notes from the 1st IBC Report that at a briefing given to THB on construction progress on 23 July 2013, the

⁷⁶ First Report by the Independent Board Committee on the Express Rail Link Project, paragraphs 4.41 and 4.42.

⁷⁷ First Report by the Independent Board Committee on the Express Rail Link Project, paragraph 4.43.

⁷⁸ First Report by the Independent Board Committee on the Express Rail Link Project, paragraph 4.44.

⁷⁹ First Report by the Independent Board Committee on the Express Rail Link Project, paragraph 4.46.

Corporation advised the Government that the target for revenue service of HKS of XRL would be December 2015. THB reminded the Corporation to use its best endeavours to deliver the Project on time and within budget.⁸⁰

5.12 At the ExCom meeting on 25 July 2013, Mr CHEW Tai-chong highlighted the fact that under the Project Cost Report for June 2013, the Project exceeded its budget projection at the time. He mentioned that an update on the Project would be given to ExCom in August 2013, followed by a paper to RDO. The then DCEO was chairing this meeting (in the then CEO's absence). Apparently no reference to the Partial Opening Plan or the meeting on 13 July 2013 was made at this ExCom meeting held on 25 July 2013.⁸¹

5.13 In the following week, at the ExCom meeting on 31 July 2013 chaired by the then DCEO (in the then CEO's absence), Mr CHEW Tai-chong reported that the shortage of workers remained a serious concern for the Corporation's ongoing projects and that the Project continued to experience challenges, but so far its costs had stayed within budget and the target opening date could still be met. The apparent contradiction between this report and Mr CHEW Tai-chong's report in the previous week regarding budget projection excess appeared not to have been commented upon.⁸²

5.14 At the Audit Committee meeting on 14 August 2013, Mr CHEW Tai-chong reported that the Project was on time and within budget, although there would be multiple challenges to overcome and DRMs to be undertaken.⁸³

⁸⁰ First Report by the Independent Board Committee on the Express Rail Link Project, paragraph 4.47.

⁸¹ First Report by the Independent Board Committee on the Express Rail Link Project, paragraph 4.48.

⁸² First Report by the Independent Board Committee on the Express Rail Link Project, paragraph 4.49.

⁸³ First Report by the Independent Board Committee on the Express Rail Link Project, paragraph 4.50.

The Government first informed of the Partial Opening Plan

5.15 The Government was first informed of the Partial Opening Plan on 20 August 2013, when the Corporation made known its proposal to RDO and HyD to open HKS of XRL by the end of 2015 with six long-haul platforms/tracks in service. The outstanding balance of the works would be completed in mid-2016.⁸⁴

Partial Opening Plan not reported at the Board meeting

5.16 The Select Committee notes that, in his presentation to the Board meeting on 22 August 2013, Mr CHEW Tai-chong said that he believed that there was a programme in place to complete the key elements of the Project for opening in 2015 and within budget, although some non-essential works might have to be completed at a later date. He explained that various measures had been adopted to control costs and manage the programme, including awarding fixed-price contracts and ensuring all contracts to have on average 80% of their labour requirements. At this meeting, however, there was no mention of the Partial Opening Plan by Mr CHEW Tai-chong or any other person who had attended the meeting on 13 July 2013.⁸⁵

5.17 The Select Committee also notes from the IEP Report⁸⁶ that when Mr CHEW Tai-chong was questioned by the independent non-executive directors at the Board meeting on 22 August 2013 on the progress of the Project, he responded that the Project would be delivered on time and within budget.

5.18 The Select Committee further notes that, at the same Board meeting, one of the independent non-executive directors stressed the importance of good project management so that any issue could be identified and reported to the Government at the right opportunity, especially in light of the fact that any additional funding would require LegCo's approval. There appeared to have been no reaction to this

⁸⁴ First Report by the Independent Board Committee on the Express Rail Link Project, paragraph 4.51.

⁸⁵ First Report by the Independent Board Committee on the Express Rail Link Project, paragraph 4.52.

⁸⁶ Report of HKS of XRL Independent Expert Panel, Annex 3 paragraph 176.

observation from Mr CHEW Tai-chong or anyone else present at the 13 July 2013 meeting.⁸⁷

5.19 At the 29 August 2013 Project Supervision Committee meeting, Mr Peter LAU Ka-keung expressed concerns on the difference between the actual progress and the planned progress of the Project, especially the progress of the WKT works.⁸⁸

5.20 At the ExCom meeting on the same day, the General Manager-XRL Tunnels presented a report headed "Projects Progress Reports for July 2013". In that report, it was stated that labour shortage was an issue common to all five of the Corporation's on-going projects. On average, there was a 20% shortfall across all contracts.⁸⁹

Challenges mounting

5.21 On 13 September 2013, a presentation (the content of which was largely the same as the July Presentation) was given by the Chief Programming Engineer of the Corporation to Mr Peter LAU Ka-keung and RDO, putting forward the Partial Opening Plan in greater detail with a target opening date set for December 2015. RDO was very concerned about the incomplete works shown by the Partial Opening Plan, but it did not make any explicit objection to the Corporation. HyD, without indicating agreement to the Partial Opening Plan, requested the Corporation to provide further information for a report to be made to THB.⁹⁰

5.22 Notwithstanding the commitment of Mr CHEW Tai-chong made at the ExCom meeting on 25 July 2013 to update ExCom on the Project in August 2013, it was in fact on 19 September 2013 that the Project Team made another presentation to ExCom (chaired by DCEO as the then CEO was away) on the Project programme and projected outturn costs.

⁸⁷ First Report by the Independent Board Committee on the Express Rail Link Project, paragraph 4.53.

⁸⁸ First Report by the Independent Board Committee on the Express Rail Link Project, paragraph 4.54.

⁸⁹ First Report by the Independent Board Committee on the Express Rail Link Project, paragraph 4.55.

⁹⁰ First Report by the Independent Board Committee on the Express Rail Link Project, paragraph 4.56.

The presentation included a description of the Partial Opening Plan and a reference to the target opening date in December 2015 with cost estimated at \$65.1 billion.⁹¹

5.23 The Select Committee notes that, during the presentation by the Project Team, it was explained to ExCom that there were major delays in contracts 810A, 810B and 811B which would prevent the completion of works in May 2015 as originally planned and that a partial opening would be achievable in December 2015. The programme progress and timelines were based on the assumption that the key challenges identified would be mitigated with improved productivity and efficiency. In the absence of an improvement in productivity, the Project Team warned that further delay would be expected.⁹²

5.24 The Corporation's Corporate Relations Department was asked at the meeting on 19 September 2013 to come up with a "line to take" taking into account the latest status of the Project and the briefing provided by the Project Team. This item did not appear to have been logged on the register of matters arising and followed up by DCEO in subsequent meetings or elsewhere.⁹³

5.25 During the period from July to October 2013, the delay in the Project became steadily worse. In an e-mail exchange between Mr CHEW Tai-chong and the Chief Programming Manager on 11 October 2013, Mr CHEW Tai-chong stated his concern that the opening of HKS of XRL by the end of 2015 was reaching a point of "near impossibility".⁹⁴

⁹¹ First Report by the Independent Board Committee on the Express Rail Link Project, paragraph 4.57.

⁹² First Report by the Independent Board Committee on the Express Rail Link Project, paragraph 4.58.

⁹³ First Report by the Independent Board Committee on the Express Rail Link Project, paragraph 4.59.

⁹⁴ First Report by the Independent Board Committee on the Express Rail Link Project, paragraph 4.60.

Professor Anthony CHEUNG Bing-leung being informed of the Partial Opening Plan

5.26 The Select Committee notes that on 22 October 2013, based on the third quarterly report on the construction progress of the cross-boundary tunnel section of HKS of XRL, the subject team in THB reported to Professor Anthony CHEUNG Bing-leung and Mr Joseph LAI Yee-tak that the cross-boundary tunnelling works continued to suffer delay. The subject team also reported that the Corporation had recently proposed to HyD a partial opening of HKS of XRL (putting in use six tracks by end-2015) and the commissioning of four more tracks in mid-2016, and that WKT and the cross-boundary tunnel section were on the critical paths of the Project and any further delay at either of these work projects might jeopardize the target commissioning date of HKS of XRL. Mitigation measures were under consideration. In view of the development, Mr Joseph LAI Yee-tak became very concerned that HKS of XRL could not commence service in 2015 and therefore requested the Corporation and HyD to provide a detailed briefing on the latest progress of the Project.

5.27 When presenting his Project Progress Report for September 2013 at the ExCom meeting on 24 October 2013, Mr CHEW Tai-chong emphasized that critical delays were occurring in contracts 810A, 810B, 811B and the Mainland section of XRL. According to the latest forecast, the first tunnel boring machine from the Mainland side would only reach the boundary at Shenzhen by the end of November 2013, which would have a significant impact on the overall timetable for completing the Project in 2015. It was also noted by Mr CHEW Tai-chong that THB had been made aware of the delay and that a further briefing would be given to THB on the latest progress. On the WKT recovery plan, it was reported that there were still issues to be overcome due to unforeseen complications.⁹⁵

5.28 At the end of July 2013, the Corporation had begun discussion with the WKT contractors and the E&M experts in relation to what a Partial Opening Plan would entail. Between July and October 2013, the Corporation's on-site team (together with the E&M team) had been

⁹⁵ First Report by the Independent Board Committee on the Express Rail Link Project, paragraph 4.62.

working to ascertain the critical parts of the WKT construction programme in order to decide on the essential elements of the Partial Opening Plan.⁹⁶

5.29 In October 2013, the Corporation gave the contractors the E&M mark-ups and a set of drawings which showed the footbridges and the other facilities needed for partial opening. The contractors were asked to come up with a plan on that basis.⁹⁷

Actual progress falls behind planned progress by 25%

5.30 At the Project Supervision Committee meeting on 29 October 2013, it was reported by the Corporation that the difference between the actual progress and the planned progress of the Project as at the end of September 2013 had reached approximately 25%. According to HyD's information⁹⁸, the difference was 28.3%. The Corporation further reported that there was an overall delay in the Project of about nine months and an 11-month delay in the cross-boundary tunnelling works.⁹⁹ The IEP inquiry confirmed that the Project was delayed by about nine months in general and by eleven months in respect of the cross-boundary tunnelling works.¹⁰⁰

5.31 In October 2013, the Projects Programme team updated the Schedule Risk Assessment which they had first produced in June 2013. This showed that the situation in contract 826 was deteriorating and the Project would not meet the December 2015 deadline for partial opening, as the Mainland section was three months late in reaching Hong Kong. The Schedule Risk Assessment also showed that the situation in contract 810A had worsened significantly since March 2013.¹⁰¹

⁹⁶ First Report by the Independent Board Committee on the Express Rail Link Project, paragraph 4.63.

⁹⁷ First Report by the Independent Board Committee on the Express Rail Link Project, paragraph 4.63.

⁹⁸ Paper submitted by the Government to the Subcommittee on Matters Relating to Railways in May 2014, LC Paper No. CB(1)1328/13-14(03).

⁹⁹ First Report by the Independent Board Committee on the Express Rail Link Project, paragraph 4.64.

¹⁰⁰ Report of HKS of XRL Independent Expert Panel, Annex 3 paragraph 189.

¹⁰¹ First Report by the Independent Board Committee on the Express Rail Link Project, paragraph 4.65.

5.32 The Select Committee notes that¹⁰² Mr Peter LAU Ka-keung, at the Project Supervision Committee meeting held on 29 October 2013, had requested the Corporation to provide information on the roadmap toward the proposed opening scenario for monitoring against the actual progress. At the following Project Supervision Committee meeting in November 2013, General Manager-XRL of the Corporation responded that "*[the] Project Team had developed a roadmap towards the proposed target opening scenario, which set down the target dates for completion of all civil works and E&M works by June 2015 for testing and commissioning.*"

Observations

Project management and corporate governance of the Corporation

The Partial Opening Plan not reported to the Board until mid-April 2014

5.33 As indicated in paragraph 4.20 of Chapter 4, the Project Team of the Corporation first began to consider a Partial Opening Plan in March 2013 due to the delay already experienced with the WKT contracts. After the workshop held on 17 April 2013, the contractor for contract 810A was requested to work on a Partial Opening Plan under which only six long-haul platforms/tracks would be operational in WKT with the relevant tunnels fully operational. It was formulated and proposed as a solution for achieving an opening of HKS of XRL in 2015 on a reduced scope.¹⁰³ It could be inferred from the necessity for such a plan that there was already a very serious overall delay in the Project at that time. Yet the existence of the Partial Opening Plan eventually formed was knowledge restricted to ExCom and not brought to the attention of the Board until mid-April 2014.

¹⁰² Report of HKS of XRL Independent Expert Panel, Annex 3 paragraph 190.

¹⁰³ First Report by the Independent Board Committee on the Express Rail Link Project, paragraph 4.27.

5.34 The Select Committee shares IBC's view¹⁰⁴ that the Partial Opening Plan was not a unilateral solution that could be imposed on the Government under EA2. If implemented, this would represent a material change to the Project programme and would require the consent of the Government. IBC found that the failure to report the Partial Opening Plan by ExCom to the Board reflected poor judgment on the part of Mr CHEW Tai-chong, the then Projects Director of the Corporation, and Mr Jay H WALDER, the then CEO. The Select Committee considers that the failure also reflected poor judgment on the part of ExCom as a whole.

5.35 Since Mr CHEW Tai-chong and Mr Jay H WALDER declined the Select Committee's invitation to attend a hearing, the Select Committee did not have the opportunity to make enquiry on relevant matters of concern.

5.36 The Select Committee is of the view that, apart from the poor judgment of Mr CHEW Tai-chong, Mr Jay H WALDER and ExCom, the Board's governance over the Corporation's affairs was also less than satisfactory. The Select Committee notes that¹⁰⁵ the Corporation announced on 15 April 2014 that the opening date for HKS of XRL had been delayed to 2017 from an originally anticipated opening in 2015, and that the Board was only informed of such delay and its reasons for the first time at a Special Board Meeting held on 16 April 2014. It was also at this time that the Board and its Chairman first learned of the Partial Opening Plan. In the context of the history of this matter, this speaks volumes of the governance, or the lack of it, in the Corporation. The Select Committee finds this startling from a corporate governance perspective.

¹⁰⁴ First Report by the Independent Board Committee on the Express Rail Link Project, paragraphs 1.31 and 1.32. The Select Committee notes Clause 8.1 of EA2. The Select Committee also notes Clause 8.2 of EA2 providing that the Corporation shall be entitled to adjust Appendix C (Entrustment Programme) to EA2 under specified circumstances.

¹⁰⁵ First Report by the Independent Board Committee on the Express Rail Link Project, paragraph 1.29.

5.37 The Select Committee observes¹⁰⁶ that within the Corporation, there were a number of matters delegated by the Board to be dealt with by ExCom without the need to refer back to the Board for approval. The Select Committee considers such a delegation without a proper and effective mechanism and system for reporting back to the Board inappropriate.

5.38 With regard to internal communication amongst ExCom, Mr CHEW Tai-chong and Mr Jay H WALDER, the Select Committee notes from the IEP Report that "[b]y October 2011, the ExCom Reports stopped quantifying delays to overall Project and less precise statements were included."¹⁰⁷

5.39 The Select Committee further notes from the IEP Report that¹⁰⁸ "[a] review of ExCom monthly progress meeting notes has identified limited discussion concerning the Project. In addition, in the ExCom Report, 'matters requiring executive action' has been blank for the 17 ExCom reports that we [IEP] have reviewed. During the Panel Meeting with Projects Director on 15 August 2014, the following was noted on his communication with the CEO/ExCom:

'Mr Chew admitted that on three or four earlier occasions he could have made it clear to the CEO that 2015 was out of question but he had left it to the programme and writing in the monthly progress reports to tell the situation of the project.'

'He opined that there were clear indications on the problems encountered in the Project and it was up to the senior executives on what questions should be raised or asked'."

Mr CHEW Tai-chong's assertiveness hindered frank communication

5.40 It is noted that when Mr CHEW Tai-chong was questioned by independent non-executive directors of the Board at the meetings on

¹⁰⁶ First Report by the Independent Board Committee on the Express Rail Link Project, paragraphs 1.40 to 1.47.

¹⁰⁷ Report of HKS of XRL Independent Expert Panel, Annex 3 paragraph 170.

¹⁰⁸ Report of HKS of XRL Independent Expert Panel, Annex 3 paragraphs 171 to 173.

22 August and 10 December 2013 on the progress of the Project, he had persistently responded that the Project would be delivered on time and within budget.¹⁰⁹ He never suggested that the cumulative effect of the contract delays, including delay in contracts 810A and 826, was making the original timetable unachievable. He also did not report fully and accurately to the then CEO, ExCom, the Audit Committee and the Board the information presented by the Project Team indicating their concerns about delivering the Project on time.

5.41 The Select Committee shares the view of IBC that Mr CHEW Tai-chong should have responded fully, frankly and unreservedly to the questions and concerns raised by the members of the Board.

5.42 Mr Jay H WALDER has indicated¹¹⁰ to IBC that, other than attending a number of ExCom meetings in which the members of the Project Team were present, he had also met with Mr CHEW Tai-chong individually and reviewed with him the status of the Project frequently, and that in those meetings, he had accepted and relied in good faith upon the assurances from Mr CHEW Tai-chong that notwithstanding the delay, the Project would still be completed by the end of 2015 on a partial opening basis. If what Mr Jay H WALDER said to IBC were true, the Select Committee finds his judgment questionable. According to paragraph 5.39, since Mr CHEW Tai-chong had told the situation of the Project in the ExCom monthly progress reports with clear indication on the problems encountered in the Project, Mr Jay H WALDER should have a good understanding of the progress status of the Project. The Select Committee considers that as head of the executive arm of the Corporation, Mr Jay H WALDER could not have relied upon the assurances given by Mr CHEW Tai-chong alone, without question and without proper, credible and verifiable evidence to show how the problems could be managed. As Mr CHEW Tai-chong stated to IEP, it was up to the senior executives (including Mr Jay H WALDER) on what questions should be raised or asked. Mr Jay H WALDER should have made independent enquiries, raised questions and sought clarification and corroboration of such assurances.

¹⁰⁹ First Report by the Independent Board Committee on the Express Rail Link Project, paragraph 1.42.

¹¹⁰ First Report by the Independent Board Committee on the Express Rail Link Project, paragraph 1.43.

5.43 According to the 1st IBC Report¹¹¹, when Mr CHEW Tai-chong was asked why he had not reported the concerns of the Project Team, he stated that pending a response from the WKT contractor to the Partial Opening Plan, he believed that there was still time for DRMs to effectively mitigate the delay. IBC also found it unfortunate that there had been a "chain of command" style within the Project Team as to who should do the talking such that caution and proper concerns were not openly and freely aired to qualify or challenge Mr CHEW Tai-chong's assertion that an opening for HKS of XRL in 2015 was achievable. This might have led to the failure of the Audit Committee and the Board to have been notified and the consequent lack of regular and proper enquires made on progress.

5.44 The Select Committee notes¹¹² that the then CEO stated to IBC that he was largely relying on the information and views provided by Mr CHEW Tai-chong alone. Given the then CEO's knowledge of the sustained delays in the Project, and particularly given the importance of the Project to the Government and the public, IBC believed that the then CEO should have exercised more critical judgment in supervising the progress of the Project as a whole. The Select Committee finds it difficult to believe that, in implementing such a large scale project, the Corporation seemed to merely rely on the then CEO and ExCom, who would, in turn and for so many years, merely rely upon the views fed by Mr CHEW Tai-chong alone. In reality, therefore, it would seem that one person was effectively making the important decisions relating to the Project, at least as to time and costs.

5.45 In this connection, the Select Committee notes¹¹³ IEP's comment that the Corporation's project organization arrangements were missing an independent project control function that is typical in large capital projects usually known as Programme Management Office. IEP commented that, although there was good communication among the managers within the Project Team for HKS of XRL on technical matters, overall project delays and forecast completion dates were not clearly

¹¹¹ First Report by the Independent Board Committee on the Express Rail Link Project, paragraph 1.45.

¹¹² First Report by the Independent Board Committee on the Express Rail Link Project, paragraphs 1.46 and 1.47.

¹¹³ Report of HKS of XRL Independent Expert Panel, paragraphs 3.9 to 3.11.

communicated in the monthly project progress reports submitted to ExCom or in the Project Supervision Committee reports submitted to HyD.

5.46 The Select Committee finds the failure of Mr CHEW Tai-chong to properly report the progress and the challenges of the Project to the Board startling and unacceptable. The Select Committee notes from the 1st IBC Report that the Board (including the Chairman) was informed for the first time at a Special Board Meeting on 16 April 2014 that the completion of the Project would be delayed to 2017 and the reasons for the delay. It was also at this time that the Board first learnt of the Partial Opening Plan.¹¹⁴ The Select Committee considers that the Board should have taken a more earnest and vigilant interest in the progress of the Project, especially after the media reports in May 2013 had articulated possible delays and cost overrun at WKT. The Board should have raised more questions with the then CEO, ExCom and the Projects Division. In light of the above, the Select Committee considers that the Board has neglected to exercise adequate supervisory functions in the Project.

Establishment of the Capital Works Committee

5.47 As indicated in Chapter 2, the Select Committee is disappointed that the non-Executive Chairman of the Board, Dr Raymond CH'EN Kuo-fung, declined the Select Committee's invitation to attend to give evidence. In view of this, the Select Committee subsequently decided to extend the invitation to any member of the Board who was familiar with the Project to attend to give evidence from the Board's perspective. Regrettably, such invitation was also declined.

5.48 The Select Committee notes from the 1st IBC Report¹¹⁵ that "[t]he Board should establish a Capital Works Committee to oversee in the future any project involving design and/or construction with a capital value of a certain material size as assessed by the Board". This recommendation seems to suggest, perhaps with the benefit of hindsight,

¹¹⁴ First Report by the Independent Board Committee on the Express Rail Link Project, paragraph 1.29.

¹¹⁵ First Report by the Independent Board Committee on the Express Rail Link Project, paragraphs 6.5 and 6.6.

that there was inadequacy in the past and the proposed establishment of a Capital Works Committee under the Board would provide a remedy for the future. The Select Committee also notes that the Capital Works Committee would have to report to the Board on a quarterly basis on progress of projects and their respective budgets. It was the view of IBC that the role of the Capital Works Committee was not to manage projects but to provide oversight and review to the Board in relation to project progress.

5.49 The Select Committee notes that IBC has also reviewed the format and the content of future project reporting by ExCom to the Board and the Audit Committee. This is to ensure that the Board would be provided with clear and comprehensive information regarding ongoing projects and be advised of critical challenges as well as financial reporting in each project.

5.50 The Select Committee finds it unacceptable that for a public company providing railway service to more than 5 million passenger rides per day¹¹⁶, having vast experience in construction of railways and being entrusted with the task of building the world's first underground high-speed rail, Mr CHEW Tai-chong appeared to be the only person having overall charge of the Project and the Board and the senior management simply relied on his take on the status of the Project, without more. The Select Committee does not see any effective check and balance in this respect. As a corollary, the Select Committee finds that the Board should take a measure of criticism for failing to supervise ExCom and the senior management diligently and effectively in delivering the Project according to EA2.

Project management of the Corporation

5.51 The Select Committee notes that IEP criticized the project management of the Corporation as lacking in robustness¹¹⁷. The Select Committee has examined this issue.

5.52 According to the evidence of Mr Lincoln LEONG Kwok-kuen, CEO of the Corporation, the Corporation's project management systems

¹¹⁶ Source: <http://www.mtr.com.hk/en/corporate/investor/patronage.php>

¹¹⁷ Report of HKS of XRL Independent Expert Panel, paragraph 6.1.

and procedures were set out in the Corporation's Project Integrated Management System and Procurement and Contracts Procedures documents. These documents covered all project delivery areas including programme management, design management, construction management, safety management, environmental management, cost management, procurement, contract administration and reporting. They were designed to operate in accordance with recognized international standards on safety, quality, and risk and asset management, as well as internationally recognized good practices.

5.53 Mr Lincoln LEONG Kwok-kuen also pointed out in his statement to the Select Committee that Jacobs performed a total of over 250 audits between January 2010 and April 2014. The audit reports from Jacobs disclosed no significant deficiencies other than certain observations such as opportunities for improvement (mainly in relation to safety reporting on near misses) and updating of contractor submissions in method statements, in relation to which improvement actions were taken.

5.54 Further, Mr Lincoln LEONG Kwok-kuen quoted paragraph 5.3 of the 1st IBC Report in his statement to the Select Committee that IBC had *"not identified any systemic flaw in the engineering aspects of the project management process which would suggest that [the project] delays should have been avoided or could reasonably have been handled better."*

5.55 Nevertheless, according to IEP, the Corporation's project management systems and practices, which had worked well on projects with less complex interfaces, have come under severe stress in the Project. This was primarily due to the complexity of contract interfaces and the multiple delays in adjacent contracts.

Communication channels not effective enough

5.56 The Select Committee notes the comment of IEP¹¹⁸ that *"although there were good communications among the managers within the XRL Project Team on technical matters, overall project delays and forecast completion dates were not clearly communicated in the monthly*

¹¹⁸ Report of HKS of XRL Independent Expert Panel, paragraphs 3.9 to 3.11.

project progress reports (submitted to the [Corporation]'s ExCom) or Project Supervision Committee reports (submitted to the Highways Department). As a result, the interpretation of the likelihood of achieving the planned project completion date relied on the judgment of the Projects Director [Mr CHEW Tai-chong]."

5.57 The Select Committee further notes from the statement of Professor Anthony CHEUNG Bing-leung that, according to the Corporation's own submission to Railways Subcommittee in May 2014 and from its 2nd IBC Report, Project Supervision Committee was not given an accurate picture of the prognosis for the Project as a whole by the Corporation so that Project Supervision Committee was unable to make timely decision on the critical delay in the Project.

5.58 At the hearing on 28 April 2015, Mr YAU Shing-mu informed the Select Committee that even the senior management of the Corporation failed to have an accurate picture of the Project, and that the Corporation had not disclosed all the necessary information, including the progress of the Project, to the Government.

5.59 The Select Committee has reservations on whether the senior management of the Corporation and the Board had used their best endeavours to monitor and supervise the Project. The Select Committee considers that the senior management of the Corporation and the Board should have coordinated various parts of the Project at a higher level and made proper enquiries on the progress of the Project at different stages instead of relying solely on the report and assurances made by the Project Team headed by Mr CHEW Tai-chong.

DRMs not so effective at certain sites

5.60 In Chapter 4, the Select Committee has examined the effectiveness of some DRMs adopted by the Corporation to mitigate the project delay. The Select Committee notes the successful examples of DRMs used in contract 823A and contract 802, as set out in paragraphs 4.77 and 4.78 in Chapter 4. The Select Committee notes that initially, the DRMs implemented were able to recover the delays in certain contracts. These successes and past successful experience might have boosted the confidence of the Project Team and Mr CHEW Tai-chong in recovering the cumulative delays in the Project by means of DRMs.

5.61 The Select Committee notes from the evidence of Mr Peter LAU Ka-keung that, under contract 811B (West Kowloon Terminus Approach Tunnel (South)), the original plan was to divert Jordan Road northward on top of the completed diaphragm wall at north of Jordan Road, thus allowing the diaphragm wall within the existing alignment of Jordan Road to be constructed. However, the construction of the diaphragm wall at north of Jordan Road was delayed due to unfavourable ground conditions, such as core stones. If no DRM was taken, the Jordan Road northward diversion would be delayed for about eight months from December 2011 to July 2012.

5.62 In view of this, the Corporation presented a DRM proposal to Project Control Group on 29 September and 6 October 2011, proposing to move Jordan Road to the south allowing the contractor to take up the major portion of the original space of Jordan Road to construct the underground diaphragm wall and, at the same time, continue to complete the construction of the diaphragm wall at north of Jordan Road. HyD provided comments on the proposed DRM with particular concerns on its effectiveness and requested the Corporation to submit further assessment of its impact to the construction sites nearby.

5.63 Since the Project Supervision Committee meeting held in September 2011, HyD raised concerns on the implementation of the Temporary Traffic Management Scheme and requested the Corporation to regularly report on progress. HyD and the M&V consultant inspected the site regularly in order to monitor the progress after the Temporary Traffic Management Scheme's implementation in February 2012. It was intended that the construction of the diaphragm wall panels at the northern part of WKT could be brought forward by about six months.

5.64 It is noted from the evidence of Mr Peter LAU Ka-keung that since then, adverse ground conditions had further affected the bulk of the excavation works in both contract 811B and contract 810A (WKT(North)), and the overall delays in these two contracts accumulated. The Corporation subsequently proposed other mitigation measures to address the problems.

5.65 The Select Committee finds that unfavourable ground conditions had the effect of reducing the effectiveness of the DRMs adopted. The Select Committee notes that IEP found instances where the Corporation had been over-optimistic about the viability of the proposed DRMs. IEP,

in particular, pointed out that the Partial Opening Plan had assumed the workability of certain perceived time-saving benefits before their viability could be determined.¹¹⁹ Further, the Select Committee notes IEP's comment that, despite the heavy reliance on DRMs to bring the overall Project back on track, it has found no evidence that the Corporation had any process for measuring the benefits of DRMs.¹²⁰

5.66 Further, at the hearing on 10 November 2015, Mr Anthony J W KING told the Select Committee that they had reported at certain stages that, despite the implementation of DRMs, the Project's progress was still slipping. Mr Anthony J W KING also said, *"...we reported to HyD through our monthly reports, at monthly meetings and through our review reports; and we reported the delays, the escalating delays, and then some assessments of what those delays would mean for the end date of the project"*.

5.67 The Select Committee notes the comment from the joint statement of Mr Anthony J W KING and Mr William NG Siu-kee on the DRMs taken in March 2012, *"[t]here is no sign yet that the situation will improve, nor that Delay Recovery Measures instructed and Supplemental Agreements implemented to date have started to have any meaningful impact"*.

5.68 The Select Committee notes from IEP¹²¹ that Jacobs had reported delays in individual construction contracts and had estimated the impact on the overall project programme in its monthly reports to HyD. From December 2011 (and at monthly intervals thereafter), Jacobs alerted HyD that delays in individual construction contracts were likely to threaten the overall project completion date. Starting from May 2012, Jacobs recommended that the Corporation should *"undertake a complete appraisal of the overall project programme and the current delay situation"*.

5.69 The Select Committee observes that when the Project encountered challenges, the Corporation would make efforts to speed up progress through the use of DRMs. The Select Committee observes that

¹¹⁹ Report of HKS of XRL Independent Expert Panel, paragraph 3.17.

¹²⁰ Report of HKS of XRL Independent Expert Panel, paragraph 3.18.

¹²¹ Report of HKS of XRL Independent Expert Panel, paragraph 4.10.

nevertheless, even with the implementation of DRMs, there were still signs of a widening gap between the actual and the planned progress of the Project according to the reports made to Project Supervision Committee from June 2010 to April 2014. According to the chart presented in paragraph 6.46 in Chapter 6, the differences between the actual and the planned progress as of January in 2011, 2012, 2013 and 2014 were 0.9%, 4.9%, 14.7% and 30.7% respectively. Given these data, the Select Committee considers that the DRMs deployed were unable to avert the delay in the programme or to narrow the widening gap between the actual and the planned progress, which seemed to have become a systemic trend.

5.70 The Select Committee notes from the 2nd IBC Report¹²² that, at the interviews, *"the Project Team acknowledged that in hindsight [the Corporation] should have renegotiated the opening date instead of relying on schedule compression."* It also notes from the same report that *"[w]hilst the proposed DRMs were undertaken in good faith with the clear objective of recovering delays and completing the Project by 2015, in hindsight and taking into account the on-going effect of other delay events, the DRMs implemented were insufficient to finish the Project by 2015."* The Select Committee shares these views.

Whether labour shortage led to delay in the Project

5.71 The Select Committee has examined the issue of whether labour shortage had contributed to the project delay. Both the Corporation and Mr Peter LAU Ka-keung claimed that labour shortage was one of the factors contributing to the delay in the Project.

5.72 The Select Committee notes from the IEP Report¹²³ that the Corporation had foreseen early in the Project that the manpower requirement was expected to reach a peak of about 11 000 workers in 2013, including 9 200 construction workers and 1 800 technical and professional staff. Mr CHEW Tai-chong also reported to the Board on 9 July 2010 that staff recruitment was generally satisfactory and there was

¹²² Second Report by the Independent Board Committee on the Express Rail Link Project, Appendix paragraphs 3.13 and 3.30.

¹²³ Report of HKS of XRL Independent Expert Panel, Annex 3 paragraphs 293 to 296.

no problem in hiring senior staff, and that the supply of local construction workers might be a concern in future. However, the Corporation's half-yearly reports to Railways Subcommittee covering June 2010 to June 2012 suggested that the Project seemed to have met its planned staffing levels for technical and professional staff during the period, but they also showed that the levels of construction workers fell short of the planned levels in June 2011 and June 2012 by 7.7% and 13% respectively.

5.73 The IEP Report¹²⁴ further commented that *"the XRL Project and the current expansion of the Hong Kong rail network have been handicapped by a shortage of skilled labour. [The Corporation] was aware of this problem from the outset of the XRL Project."* The Select Committee also notes from the IEP Report, quoting the 2009 report by Arup and Atkins which had warned that *"construction resources, particularly skilled labour...are no longer available in the same quantities as was the case during the last major expansion of infrastructure that took place"*.

5.74 In July 2013, when Mr CHEW Tai-chong presented the Partial Opening Plan to the then CEO, DCEO and FD, he highlighted labour shortage as one of the key challenges affecting the Corporation's ability to meet the Project's programme schedule.¹²⁵ Mr Peter LAU Ka-keung also mentioned labour shortage as one of the reasons accounting for the delay in the Project.

5.75 Mr Lincoln LEONG Kwok-kuen expressed in his statement to the Select Committee that *"the acute shortage of labour has had a significant impact on the project. This is an industry wide factor that has impacted on all projects in Hong Kong. The Corporation was aware that we would face challenges in this area, although the extent of those challenges has been greater than foreseen at the time the original programme was developed"*.

¹²⁴ Report of HKS of XRL Independent Expert Panel, paragraph 2.11.

¹²⁵ First Report by the Independent Board Committee on the Express Rail Link Project, paragraph 4.46.

5.76 Mr Lincoln LEONG Kwok-kuen said that the Corporation had introduced various mitigation measures to deal with the labour shortage issue, for instance:

- (a) active engagement with the Government and the Construction Industry Council on the enhancement of the Supplementary Labour Supply Scheme and the construction-related training schemes;
- (b) holding job fairs;
- (c) improving work conditions (e.g. introduction of a life insurance scheme for contractors' site workers, provision of free health check services); and
- (d) incorporating additional requirements in work contracts relating to safety and welfare issues, employment of apprentices and graduate engineers and training.

5.77 Mr Lincoln LEONG Kwok-kuen said that despite these measures, labour shortage had significantly impacted a large number of third party contracts. Civil works contractors in the Project had reported a shortage of labour averaging around 20% on a monthly basis for the period between January 2013 to April 2014 (monthly average of 4 894 actual against 6 135 planned). Mr Lincoln LEONG Kwok-kuen informed the Select Committee that the problem was especially acute with regard to skilled labour, specialist tunnel workers and frontline supervision. Particular trades had reported an average shortage of over 60% in the last year.

5.78 Dr Philco WONG Nai-keung, Projects Director of the Corporation, stated that *"a significant shortfall in skilled labour and frontline supervision has caused, or contributed to, production rates falling short of programme plans across many of the contracts."* Dr Philco WONG Nai-keung also informed the Select Committee at the hearing on 15 December 2015 that *"in the most recent few months, the Project is short of 6 to 8 % workers, i.e. about 300 workers. Since it will take about 6 to 8 months to apply for import of labour through the Supplementary Labour Scheme, such a long process could not fit well our works programme. At the present moment (i.e. December 2015), we are still suffering from shortage of labour"*.

5.79 Dr Philco WONG Nai-keung further explained at the hearing that the Corporation had to undergo a series of procedures in applying for import of labour. For instance, they had to try to recruit workers from the local labour market first, having failed to find suitable workers, they then had to provide the number of workers, the trade to which they belonged, the level of wages offered and the other arrangements to the Labour Department in the application.

5.80 When asked whether HyD had provided assistance in this respect at the hearing, Dr WONG said that HyD had provided assistance in getting workers through the Supplementary Labour Scheme and, as a result, the relevant time required was shortened. But he said it would still take about five to six months to successfully get the workers in place, and each case differed from another.

5.81 In an e-mail on 6 December 2013, shortly before Mr CHEW Tai-chong was due to meet the Labour Department (with RDO), the Chief Programming Manager expressed his concern on the labour shortage as follows:¹²⁶

- (a) Age of workers and hence consequential lack of productivity;
- (b) Lack of frontline supervision;
- (c) Lack of new blood or continuous inflow of workers to maintain a core of experienced workers; and
- (d) Lack of skilled workers, general labour used for skilled trades.

5.82 The Select Committee also observes that the Corporation and the Government have tried to work together to resolve the problem. The solution, however, seemed not to have come timely enough to raise productivity at the sites where it was greatly needed to recover delay. Given the serious labour shortage in some trades and the ageing problem within the construction industry, the Select Committee considers that

¹²⁶ First Report by the Independent Board Committee on the Express Rail Link Project, paragraph 4.87.

some of the DRMs proposed by the Corporation involving additional labour would unlikely be effective.

5.83 The Select Committee considers that, if the Corporation and the Government had anticipated labour shortage back in 2009 before the signing of EA2, they should have taken early measures to address the problem, such as stepping up training of the local workforce to increase the supply of skilled labour and streamlining the procedures required by the Supplementary Labour Scheme to expedite the import of labour (if necessary) to meet the manpower demand of the Project. Since the Government had the overall picture of labour supply through the Construction Workers Registration System, it had a greater responsibility than the Corporation for lack of foresight of the impact of labour shortage on the construction of the Project, in particular, when the Government had decided to implement five railway projects in parallel with construction commencing between 2009 and 2012 and completing between 2014 and 2020.

5.84 The Select Committee considers that, in future, when a major infrastructure project is to be undertaken by the Government, manpower resources, in particular, the maintenance of a core skilled and experienced workers and frontline supervisors, must be given a more meticulous consideration and effective measures should be in place to ensure a continuous and steady supply of labour throughout the implementation of the project.