

CROSSRAIL SPONSOR BOARD MINUTES NO.104B

MINUTES OF MEETING HELD ON

Friday 5 April 14.00-16.00

Venue: CRL, 5 Endeavour Square, Room 7BMR01

Present:

David Hughes*	Chair, TfL, Investment Delivery Planning Director
Ruth Hannant*	DfT, Director General of Rail
Simon Kilonback*	TfL, Chief Finance Officer
Matt Lodge*	DfT, Director for Rail Infrastructure - South
Alison Munro	Independent Member

Simon Adams	Head of Joint Sponsor Team (JST)
[REDACTED]	JST, Secretariat

By invitation:

Simon Adams	Head of Joint Sponsor Team (JST)
Tanya Coff	TfL, Finance Director for London Underground
Graham Stockbridge	DfT, Project Director
[REDACTED]	DfT, Crossrail Deputy Project Director
Andrew Wallace	JST
[REDACTED]	Project Representative
[REDACTED]	Project Representative
[REDACTED]	HM Treasury
Kenny Laird	Technical advisor to Sponsors
Mark Wild	Crossrail Limited (CRL), Chief Executive
David Hendry	CRL, Chief Finance Officer
Howard Smith	CRL, Chief Operations Officer
Lucy Findlay	CRL, Chief of Staff
[REDACTED]	Network Rail (Item 4 only)
[REDACTED]	Network Rail (Item 4 only)

(* Voting Members)

Apologies:

Chris Sexton	CRL, Deputy Chief Executive Officer
Peter Henderson	CRL, Programme Director

1. Minutes and Actions of Meeting 103b

David Hughes introduced Alison Munro as an Independent Member of Sponsor Board and Kenny Laird as the technical advisor to Sponsors.

The minutes of the last meeting, held on Friday 8 March were discussed and agreed with minor changes.

[REDACTED] summarised the actions:

103b/01: Complete: CRL wrote to TfL on the week commencing 18 March 2019 to set out its revised required financial delegation. TfL considered this, in

consultation with DfT, and responded to CRL on 1 April 2019.

- 103b/02** Open: CRL continue to consider the threshold criteria for a decision on the EOP (see Item 3).
- 103b/03** Complete: A meeting was held on 13 March between CRL, DfT and TfL to discuss the communications plan for EOP.
- 103b/04** Open: CRL to take P-Rep through its recruitment progress and induction process, and to provide graphs on the rate of progress versus requirement at the April Sponsor Board (See Item 5).
- 103b/05** Open: P-Rep and CRL to discuss the extent to which infrastructure managers could be better used in the delivery of infrastructure rather than witness testing (See Item 5).
- 103b/06** Complete: JST Secretariat circulated CRL's KPMG slides for Sponsor review on 11 March 2019. A joint Sponsors and CRL draft close-out report was included in April 2019 Sponsor Board pack.

2. CRL Progress Update

CRL presented to Sponsors on the programme's progress using the visualisation room in Endeavour Square. The visualisation board reporting had now been implemented at all work sites on the programme.

The production of Installation Release Notices (IRNs) had improved and CRL was targeting the end of August 2019 for the completion of the installation.

Additional resource had been brought onto the programme to strengthen the programme leadership and new project managers had been brought onto sites, including C610 and Bond Street. CRL had 300 outstanding roles and was working to identify the critical roles based on the Earliest Opening Programme (EOP).

On cost performance, the Tier One Substantial Demobilisation (TOSD) dates had been achieved at Paddington and Liverpool Street in April. Simon Kilonback asked how these TOSDs and other factors were reducing the cost run rate. David Hendry said that the cost forecasting periodic review meetings and the visualisation board reporting was increasing the visibility and challenge of cost run rates. CRL was monitoring productivity graphs and identifying actions to improve productivity, although further work was needed to complete this. Site teams were improving their abilities to deliver planned activities to time which would enable quicker demobilisation of contractors and reduce the run rate.

There had been two incidents testing the Communications-based train control (CBTC) signalling software. An independent review was underway to establish the cause of the incidents and necessary improvements.

On health and safety there had been nine incidents in the past period. CRL was appointing a new Health and Safety Director. The health and safety messages related to working alongside an operational railway had been effective to date in preventing incidents due to this factor.

3. Earliest Opening Programme (EOP)

Mark Wild updated Sponsors on the EOP. He said that the logic linking of the schedule (with over 400 lines), including the EOP scope, was incredibly complex and was involving significant work across CRL. At the CRL Board on 25 March the 'red team' had provided an independent assessment of the progress to date. The 'black team' was due to provide a further independent assessment of the schedule and finances, with an update to the 17 April CRL Board meeting.

David Hughes clarified the expectations for the CRL Board meetings on 17 and 25 April and whether the CRL Board was expecting an alternative option to the EOP to be presented. Mark Wild said that the 17 April CRL Board would be considering the schedule logic and productivity rates and the 25 April Board would be considering the schedule critical path, an opening window and an initial view of costs. CRL reiterated that the alternative to the EOP was to wait for all stations to be considered and that CRL would be demonstrating the best value for money option. David Hendry noted that the cost forecasts would be based on the Quantified Schedule Risk Assessment (QSRA) at a P80 confidence rate. Simon Kilonback noted that he had concerns over probability assessments at this stage in the programme and it would be helpful to have scenario assessments. P-Rep noted that, in its views, the initial schedule on 17 April would not be underpinned by contractor schedules and that it was seeking further information from CRL on its risk and QSRA approach.

The 'red team' review had provided an 'amber/red' assessment of the schedule presented to date with 40 improvement actions. Simon Kilonback asked if the 'amber/red' assessment reflected any over-optimism in the schedule. David Hendry said the assessment was not about optimism but about the activities which need to be completed to demonstrate that the schedule is logically linked and deliverable.

Kenny Laird noted that CRL would need to be conscious of the additional work required to complete the safety case to reflect the EOP.

Howard Smith said that one of the challenges CRL was facing was to improve the reliability growth and get the train running on European Train Control System (ETCS) and CBTC signalling software (currently assessed as amber/red). Andy Pitt had said to the CRL Board that based on his experience there would be a drop in reliability as new software is uploaded which would then improve based on train mileage. Howard said CRL had a plan to address this risk which they hoped would improve the assessment to amber.

Graham Stockbridge noted the number of actions emerging from the red team reviews and asked about the morale of CRL and its capacity and resource to implement them. Mark Wild said that CRL staff were working long hours but were well supported by Sponsors and had received a visit from the Mayor of London on 4 April. He did note there was a risk of duplicate assurance and the need for Sponsors & CRL to ensure assurance activities were integrated.

Matt Lodge asked about CRL's strategy for ensuring its contractors were aligned to the EOP. Mark Wild said CRL was developing a communication plan for each contractor based on the EOP requirements.

Mark Wild noted that there remained a risk with the number of assets which need to be commissioned in a short period, which CRL was continuing to review.

4. Stages 2:2 and 5A opening

David Hughes introduced [REDACTED] and [REDACTED] from Network Rail (NR) who were representing Mark Langman, NR's Western Route Managing Director.

Howard Smith presented on Stage 2:2. The timetable had been bid for two class 345 trains to Hayes and Harlington and two 360 class trains to Heathrow as it would be easier to swap to four class 345 trains per hour to Heathrow once Stage 2:2 was ready. Bombardier Transportation's (BT) current date for authorisation of the software was [REDACTED]. CRL wished to use the updated ETCS software for Stage 2:2 operations which was due in [REDACTED]. As a result, [REDACTED].

Andy Wallace noted that the train software authorisation date had gone back a few months and asked what assessment CRL had made to arrive at the revised dates. Howard Smith said the revised dates were based on combining the ETCS and CBTC software (to make it more efficient) and adding additional time for one more cycle of the software.

Howard Smith noted the letter from DfT on the need for an industry developed contingency [REDACTED]. CRL and Heathrow Express need to work through this and an update would be provided to Sponsor Board (**action 104b/01**).

Howard Smith presented on Stage 5A. He said there were three requirements for Stage 5A in December. First, the full length units (FLUs) needed to be ready to run reliably between Paddington and Reading. CRL intended to introduce the FLUs between Paddington and Hayes and Harlington in [REDACTED] and key to achieving this was testing the FLUs at the Melton test track this week. CRL intended to submit the authorisation to place the FLUs into service on [REDACTED]. The second requirement was for all the drivers to be trained and the third requirement was for the completion of the driver only operation (DOO) CCTV and platform extensions. Howard noted that CRL had received a programme from NR a few months ago and since then the works had been brought back by 5 weeks. Further work was needed to bring the works back to the beginning of October.

NR provided an update on the On Network Works (ONW) and the ONW programme (**action 102b/09**). The platform extensions and DOO CCTV would be installed between [REDACTED] with the intention for train testing to commence before the final completion of the works. A revised schedule for the DOO CCTV was expected from the contractor on [REDACTED] to bring the works back. Ruth Hannant asked when the works need to be brought back to. NR said the intention was for the bulk of works to be complete [REDACTED] and Howard reiterated that CRL wanted all works complete [REDACTED].

Alison Munro asked what level of schedule confidence NR and CRL were expecting [REDACTED] date. NR said once the programme's QSRA had been completed it was hoping for a [REDACTED] date. Simon Adams asked how much float was included in the programme. NR said [REDACTED] this needed to be reassessed once the contractor's updated programme had been received and integrated.

NR said that in order to bring forward the works it was considering with CRL the need for additional access / possessions of the railway. Following these discussions NR intended to request longer possessions in [REDACTED]. NR would assess the revised schedule and consider with CRL the case for further access, the additional costs of requesting these, and

the other possible mitigations. An update on NR & CRL's plans for requesting access, the cost implications of these, and the other planned mitigations would be provided at the May Sponsor Board (**action 104b/02**). Sponsors reiterated for CRL and NR to notify them if support was required with securing access (action 102b/10).

Matt Lodge asked how lessons from the East (Stage 1) were being applied. Howard Smith said the lessons from Stage 1 had been learnt by the DOO CCTV contractor for Stage 2:1 (May 2018), the same contractor was delivering the works for Stage 5A and the lessons were continuing to be reflected upon.

Matt Lodge asked about the [REDACTED] Howard Smith said CRL had not yet had a discussion with the operator on [REDACTED] but would be doing so. Ruth Hannant emphasised the importance of CRL developing and articulating [REDACTED] given the criticality of Stage 5A to both Sponsors (**action 104b/03**).

NR provided an update on the timescales for the enhanced western stations (action 102b/12). The contractor had now been mobilised on package 3 and the contract for package 2 was due to be finalised and awarded in April. The completion of all the stations was December 2020 but NR was expecting substantial completion of key passenger facing works in advance of that date.

5. Response to P-Rep

P-Rep noted the challenge CRL was facing to deliver the works, 'bid' and present the case for the EOP, and re-mobilise resource. CRL and P-Rep would continue to discuss CRL's resourcing requirements based on the revised schedule and provide updates at Sponsor Board (**action 103b/04**).

P-Rep discussed the need for infrastructure managers (IMs) to be involved in the delivery of the infrastructure rather than witness testing (**action 103b/05**). P-Rep and CRL had discussed this and P-Rep recommended CRL created an expert panel (potentially including Howard Smith, Richard Schofield, a CRL Board Non-Executive Director and P-Rep) to review the actions required to move IMs from witness testing to installing.

P-Rep emphasised the importance of CRL finalising its integrated assurance plan. Mark Wild said the corporate governance committees had been set-up and the integrated plan was being finalised.

6. AOB

DfT noted that the National Audit Office draft report was expected next week ahead of publication in early May and the Public Accounts Committee hearing on 15 May.

P-Rep noted that the CRL Board had asked P-Rep whether it could make its report available in advance of the CRL Board. P-Rep would work with CRL to see whether it could have earlier sight of information and provide elements of the P-Rep report to the CRL Board.

CRL noted that it is considering a [REDACTED] CRL would discuss this proposal with the JST and P-Rep before bringing it back to Sponsor Board (**action 104b/04**). CRL was also considering [REDACTED] of the project delivery partner which it would present to the May Board (**action 104b/05**).

Action Tracker:

No.	Action	Responsible	Target and Update
104b/01	CRL and Heathrow Express to work [REDACTED] (following DfT letter) and CRL to provide an update at Sponsor Board.	Howard Smith	May / June 2019
104b/02	NR & CRL to provide an update on their plans for requesting access, [REDACTED]	Howard Smith / John Williams & NR	May 2019 Sponsor Board
104b/03	CRL to develop and articulate the [REDACTED]	Howard Smith	May / June 2019 Sponsor Board
104b/04	CRL would discuss the [REDACTED] with the JST and P-Rep before bring this proposal back to Sponsor Board	David Hendry, Simon Adams & [REDACTED]	June 2019
104b/05	CRL to present [REDACTED]	David Hendry	May 2019