



CROSSRAIL BOARD

Minutes of the Meeting of the Board of Directors of Crossrail Limited
Held on Thursday 26 April 2018 at 13:15
28th Floor Boardroom, 25 Canada Square, Canary Wharf, London E14 5LQ

Table with 3 columns: Members, In Attendance, Apologies. Lists names and titles of board members and attendees.

The meeting was quorate.

The Chairman welcomed Board members and attendees.
Directors' Interests
Members were reminded that any interests in a matter under discussion must be declared at the start of the meeting, or at the commencement of the item of business.
There were no interests declared in relation to the business of the meeting.
However, the meeting NOTED that Pam Alexander had been appointed a Non-Executive Director of the London Legacy Development Corporation (LLDC) from the 1st of April 2018 and a member of the LLDC Planning Committee from the 1st of July 2018.

	<p><b>Informal Session</b></p> <p>It was <b>NOTED</b> that an informal session of the Board had been held earlier in the day.</p> <p>The Board had received a detailed briefing on the following topic:</p> <ul style="list-style-type: none"> <li>• <b>Schedule Overview</b> – progress across the programme including an update on RAB-C approvals, dynamic testing and readiness for Stage 3 opening; and</li> </ul> <p>The Board had <b>REQUESTED</b> that:</p> <ul style="list-style-type: none"> <li>• Clarity should be provided on whose responsibility it is to ultimately authorise train service commencement.</li> </ul> <p><b>Action:</b> Howard Smith</p>
BD MIN 180329	<p><b>Minutes of the Meeting of the Board held on 29 March 2018</b></p> <p>The Board <b>APPROVED</b> the minutes of the meeting held on 29 March 2018 for signature.</p>
BD AC 180426	<p><b>Actions and Matters Arising</b></p> <p><b>18.205</b> – ██████ – The Board <b>NOTED</b> the verbal update on ██████ financial background.</p> <p><b>18.221 – Cost profile during the past 12 months</b> – The Board <b>NOTED</b> the update on cost increases in the year 2017/18 and <b>REQUESTED</b> that the messaging/ narrative around an increase in funding should be presented to the next Board meeting on 24 May 2018.</p> <p><b>Action:</b> Sarah Allen</p> <p><b>18.222</b> – ██████ – The Board <b>NOTED</b> the update on ██████ explaining the position regarding ‘recoverables’ and <b>REQUESTED</b> a further update on this in 3 month’s time.</p> <p><b>Action:</b> Paul Grammer</p> <p><b>18.226 – TBTC</b> – It was <b>NOTED</b> that data on MTR-South Island Hong-Kong was still being obtained and would form part of the Operations Update at the next Board meeting.</p> <p><b>18.229 – 2018/19 Objectives and Performance Metrics</b> – It was <b>NOTED</b> that further meetings were scheduled to discuss this with the CRL Chair.</p> <p>The Board <b>NOTED</b> that all the other ‘due’ actions had either been completed or were covered by the agenda for the day’s meeting.</p>
BD CBR 180426	<p><b>Crossrail Board Report Period 13</b></p> <p>Simon Wright introduced the Board Report for Period 13 highlighting that:</p> <ul style="list-style-type: none"> <li>• A number of crucial anchor milestones were achieved in the Period including completion of fire mains in Zones 1 and 2; delivery of the</li> </ul>

Eastern Ticket Hall at Farringdon in time for the Over-Site Development; C660 dark fibre now available in Zones 3 and 4; further progress on Stage 1 with all Class 345 Full Length Units (FLUs) now in passenger service; and commencement of daytime dynamic testing between Abbey Wood and Stepney Green with trains operating in manual mode, and automatic mode testing with trains under full control of the signalling system scheduled to start in Period 1;

- Period 12 had seen the start of dynamic testing in Zones 1 and 2 with the first class 345 FLU travelling between Abbey Wood and Connaught Tunnel. The next phase was not without challenges, but the Executive remained focused on completing the remaining work in Zones 3 and 4 to enable the full dynamic testing programme to begin in July;
- Two anchor milestones relating to systems safety reporting were missed due to late submission of required documentation from contractors;
- HSPI increased to 2.59, the second highest score ever recorded on the programme (compared to a target of 2.20);
- At the end of Period 13, the project was 92.1% complete against a plan of 93.9%; and
- AFCDC in the Period had increased by £255.6m to £12,723m, following a detailed AFC review of each major contract and a decision to add £243m to the risk provision.

#### ***Are We Safe?***

It was **NOTED** that:

- All the 11 key contracts achieved a HSPI score of 2.20 or above, with 55% of the contracts scoring at least 2.60 or above;
- The RIDDOR rate increased slightly to 0.09 (0.08 in the previous Period) and the Lost Time Case (LTC) rate increased slightly to 0.17 (0.16 in the previous Period) – both remained significantly within the targets for the year;
- There were 5 significant incidents in the Period – 1 RIDDOR 7+ Days, 3 LTCs and 1 High Potential Near Miss; and
- HSPI had been made more challenging from Period 1, 2018/19.

#### ***Are We Within Funding?***

Mathew Duncan presented a summary of financial performance for the Period. It was **NOTED** that:

- The AFCDC in Period 13 was £12,723m which was £210.7m above IP2 and £15.6m above the reported financial budget. Cost increases in the Period were predominantly due to: [REDACTED]

- Of the £475m QRA total, £450m was currently programme risk not allocated to projects. If all £340m of URTs were approved, the QRA total would reduce to £135m;
- In the Period, Crossrail had spent £107.5m above the 2017/18 Business Plan. This was predominantly due to delays to [REDACTED];  
[REDACTED];  
offset by apparent unspent Programme risk due to cost being reported in the Sectors (£10.6m). The full year overspend was £438m against the 2017/18 Business Plan;
- The overall contingency budget of £220m was not sufficient to cover the P50 risk exposure of £475m by £256m; and
- CRL had expressed an interest in receiving a copy of the draft independent cost review being carried out by Jacobs on behalf of Sponsors and was waiting for this to be provided.

The Board **REQUESTED** that the bookend numbers be included in the Finance overview from Period 1 2018/19 onwards.

**Action:** Mathew Duncan

The Board emphasised that communications on increase in cost should highlight the decrease in interest rates and additional scope imposing additional cost.

#### **Commercials Update**

Paul Grammer updated the Board on commercial performance in the Period. The Board **NOTED** that:

- The total gap between CRL's and its contractors' views of target had increased by [REDACTED] and the total forecast gap in forecast defined cost decreased by [REDACTED]. The gap between Programme AFC and CRL's view on forecast defined cost had increased by [REDACTED] since Period 12 to [REDACTED];
- The full AFC review was carried out for C405-Paddington Station, C412-Bond Street Station, C422-Tottenham Court Road Station, C435-Farringdon Station, C502-Liverpool Street Station, C512-Whitechapel Station, C530-Woolwich Station, C610-Systemwide, C620-Signalling, and C660-Communications. [REDACTED]  
[REDACTED] This was the subject of a separate Board paper; and
- Commercial negotiations with [REDACTED] had concluded and approval of a proposed combined commercial settlement, which resolved historical issues and aligned with MOHS dates, was the subject of another separate Board paper.

## Network Rail On Network Works and Funding

- The Forecast Final Outturn Cost (FFOC) reduced to £2,376m reflecting the £22m provided via the Additional Funding Agreement between CRL and Network Rail (NR) in addition to the £28m and £84m cash funding NR secured via the DfT Grant Funded Agreement. The balance of £20m was NR's funding contribution;

However, further to the commercial risks identified in previous reports, NR had indicated that these risks were driving additional cost pressures estimated to be between [REDACTED]. NR was seeking additional funding (£54m) from the NR Portfolio Board (CP5 contingency) to address cost risk previously identified.

### ***Are We on Time?***

Simon Wright had presented an overview of delivery performance during the informal session held earlier in the day. The following current issues were **NOTED** by the Board:

- Progress of 0.7% was achieved in the Period against the plan of 0.9%;
- The On Network Works were 94% complete. At Abbey Wood, platform bridges cladding was completed. At the stations in the West, piling was underway at Hayes & Harlington and Acton. Also, the first of two sets of tender returns had been received by NR for west stations enhancements;
- Following the MOHS rebaseline in February 2018, schedule pressures continued to be felt across most contracts. Whilst 4 out of 6 anchor milestones were delivered in the Period, only 39 out of 61 measured project milestones were delivered. Although many of these missed milestones did not affect MOHS, the overall impact was still significant and needed to be addressed;
- In the Period, all joint proving tests were completed along with the train database and coverage tests (some of which would require retesting to validate the outcomes). However, overall only 46 hours of testing had been used against the planned 127 hours specified in the revised MOHS. A plan to run several tests in parallel was being designed in an effort to recover the lost hours, but the removal of engineering trains along the testing line as well as the lengthy energisation process eroded the testing time available. In addition, poor train reliability had compounded the delays. To address this, a testing window strategy was being implemented, the first of which would take place on 26 April 2018, providing uninterrupted access over an extended weekend for critical testing works. There would be a total of 8 testing windows, occurring every 2 weeks;
- Dynamic testing in Zones 3 and 4 remained on plan to start on 11 June 2018 which would then extend to Zones 1 – 4 and continue until 5 August 2018. The critical path for meeting this key date remained through the systemwide infrastructure works and the availability of the HV Traction and Non-Traction power supply, all of which was under constant scrutiny by the CRL Executive;
- Three checkpoints had been established to determine readiness for Stage 3 and designed around specific events i.e. Trial Running, Trial Operations,

Passenger Services. These checkpoints were aligned to the T-Minus process. Sponsors had been informed and were satisfied with this process and updates would be provided to the Board at each checkpoint in June, July and October 2018;

- There remained ongoing pressure on Siemens delivery of C660 communications software. The software was essential to the testing of the SCADA network and continued to show slippage for the next scheduled drop. However, following an executive review on 26 March 2018, Siemens had indicated that they would prioritise Crossrail over other major projects in their portfolio;
- The overall production of Installation Release Notes (IRN) (as well as other key documents) to support handover of assets by the Tier 1 contractors remained significantly below the level required for both Stations and Systemwide. The major challenge with completion remained a resource issue which the project teams continued to push with each Tier 1 contractor; and
- The provision of asset data, O&M manuals and training materials by contractors in time to meet the Infrastructure Managers' needs was now critical. All parties were working to accelerate the production of asset data and to make best use of it progressively as it became available. The Executive had set a very clear strategy requesting a focus, in particular, on essential O&Ms and systems safety documentation and where possible, challenging the requirement for the O&M with the maintainers. Both Rail for London (RfL) and London Underground (LU) supported the strategy. In the meantime, efforts continued to improve both production and quality.

### Operations

Howard Smith provided an update on key operations matters, highlighting some of the issues relating to Stage 1 (current operations), Stage 2 Operational Readiness, Rolling Stock for Stage 3, Stage 3 Operational Readiness including the Elizabeth Line Countdown Board tracker and Stages 4 and 5.

The Board **REQUESTED** that a short update on Stage 2 Phase 2 should be included in the Operations presentation to the next Board meeting.

**Action:** Howard Smith

The Board **NOTED** that discussions were ongoing with NR around transition testing, design and schedule requirements and **REQUESTED** a report back on this.

**Action:** Simon Wright

The Board also **NOTED** that in preparation for the opening of the Elizabeth line in December 2018, it was necessary for RfL to secure proprietary interest in relevant land on the central section before it could become the Infrastructure Manager. Some key parcels of land at Westbourne Park, Royal Oak Portal, Plumstead Portal, Pudding Mill Lane and the South East Spur needed to be transferred from NR to TfL. There was growing pressure on the pace of negotiations with NR, which needed to be concluded for handover of the assets to RfL in July 2018.

	<p><b><i>Are we world class?</i></b></p> <p>It was <b>NOTED</b> that:</p> <ul style="list-style-type: none"> <li>• The Crossrail Helpdesk had successfully transitioned to TfL; and</li> <li>• The Crossrail Design Line exhibition had closed and there had been 620,000 visitors, with the design campaign reaching 16 million.</li> </ul> <p>The Board <b>NOTED</b> the Board Report for Period 13.</p>
01/19	<p><b>CRLB 01/19 – 2017/18 Performance Measurement</b></p> <p>Mathew Duncan presented a paper reviewing CRL's performance against its Key Performance Indicators (KPIs) for 2017/18.</p> <p>The Board:</p> <ul style="list-style-type: none"> <li>• <b>NOTED</b> the individual performance ratings and the safety performance; and</li> <li>• after further discussion (in a session without CRL executives present) and taking into account CRL's positive health and safety performance in the year, exercised their discretion and <b>APPROVED</b> an increased overall KPI score from the proposed 28% to 32%, as an appropriate reflection of CRL's performance in the year.</li> </ul>
02/19	<p><b>CRLB 02/19 – Transfer of Board Contingency to Programme Contingency</b></p> <p>Mathew Duncan presented a paper informing the Board of the status of the contingency budgets; requesting a transfer of £96.2m from Board Contingency to Programme Contingency; and [REDACTED]</p> <p>The Board <b>NOTED</b> that the drawdown of £96.2m from Board Contingency was required to fund the grant of IA for a number of major projects and that the residual Board Contingency would be £3.6m.</p> <p>The Board also <b>NOTED</b> that increasing the financial budget above IP2 raised questions of CRL becoming unable to deliver its obligations within the funding currently available to it and the possibility of Sponsors exercising their 'Put and Call' options. CRL was currently seeking assurance from Sponsors that this would not be the case.</p> <p>The Board:</p> <ul style="list-style-type: none"> <li>• <b>NOTED</b> the status of the contingency budgets;</li> <li>• <b>APPROVED</b> the transfer of £96.2m from Board Contingency to Programme Contingency; and</li> <li>• <b>NOTED</b> that [REDACTED] and a paper on this would be submitted to the next Board meeting.</li> </ul>
03/19	<p><b>CRLB 03/19 – Increase in Investment Authority for Projects</b></p> <p>The Board:</p> <ul style="list-style-type: none"> <li>• <b>APPROVED</b> the provision of additional IA for [REDACTED]</li> </ul>

	<p>██████████ and</p> <ul style="list-style-type: none"> <li>• <b>NOTED</b> the amounts for the other projects, which had been approved by the Commercial and Change Sub-committee on 17 April 2018 and endorsed by the Executive and Investment Committee on 18 April 2018.</li> </ul>						
04/19	<p><b>CRLB 04/19 – ██████████ Commercial Settlement and ██████████</b></p> <p>The Board:</p> <ul style="list-style-type: none"> <li>• <b>NOTED</b> the terms of the proposed commercial settlement with ██████████</li> <li>• <b>APPROVED</b> the ██████████ and</li> <li>• <b>NOTED</b> that the ██████████ constituted a new contractual commitment on CRL's part and that Sponsors had agreed to this commitment.</li> </ul>						
05/19	<p><b>CRLB 05/19 – Replacement of Company Secretary</b></p> <p>The Board <b>APPROVED</b> the replacement of Mark Fell by Susan Beadles as Company Secretary with effect from 1 May 2018.</p>						
06/19	<p><b>CRLB 06/19 – Project Representative Report (P-Rep) Period 12</b></p> <p>The Board reviewed and <b>NOTED</b> the P-Rep Report for Period 12.</p> <p>Simon Wright provided a verbal summary of the issues that were expected to be raised in the Period 13 report which were <b>NOTED</b> by the Board. These included matters relating to: financials; schedule and progress; Stage 2 Opening; Stage 3 Opening; Stage 4 and 5 Opening; handover; and approvals and assurance.</p>						
07/19	<p><b>CRLB 07/19 – Legal Report</b></p> <p>Mark Fell presented the Legal Report which was <b>NOTED</b> by the Board.</p> <p>Matters highlighted at the meeting included:</p> <ul style="list-style-type: none"> <li>• the dismissal by the High Court of Mr Charlesworth's application for a judicial review of CRL's decision under the Land Disposal Policy relating to a site at Woolwich; and</li> <li>• confirmation that land compensation claims and FOI and data protection matters were now being handled directly by TfL.</li> </ul>						
	<p><b>Minutes of Board Committees for Reference</b></p> <p>The Board received the following minutes for reference:</p> <table border="1" data-bbox="363 1639 1377 1720"> <tr> <td><b>Executive and Investment Committee</b></td> <td><b>EIC D 180321</b></td> <td>Simon Wright</td> </tr> </table> <p><b>Verbal Updates of Recent Board Committee meetings</b></p> <table border="1" data-bbox="363 1787 1377 2087"> <tr> <td> <p><b>Executive and Investment Committee 18 April 2018</b> Matters covered by the Committee were:</p> <p><b>Board agenda items:</b></p> <ul style="list-style-type: none"> <li>• 2017/18 Performance Measurement</li> </ul> </td> <td><b>EIC MIN 180418</b></td> <td>Simon Wright</td> </tr> </table>	<b>Executive and Investment Committee</b>	<b>EIC D 180321</b>	Simon Wright	<p><b>Executive and Investment Committee 18 April 2018</b> Matters covered by the Committee were:</p> <p><b>Board agenda items:</b></p> <ul style="list-style-type: none"> <li>• 2017/18 Performance Measurement</li> </ul>	<b>EIC MIN 180418</b>	Simon Wright
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	<ul style="list-style-type: none"> <li>• Major Projects Investment Authority Increase</li> <li>• [REDACTED]</li> </ul> <p><b>Other items:</b></p> <ul style="list-style-type: none"> <li>• Accommodation Update</li> <li>• Revised Incentive Milestones</li> <li>• Revised Terms of Reference for the Commercial and Change Sub-committee.</li> </ul>		
<b>AOB</b>	There was no other business.		
<b>NEDs Only Session</b>	Non-executive Directors provided feedback on the day's meeting.		

Signed by:

Terry Morgan  
Non-executive Chairman

[REDACTED SIGNATURE]