

**CROSSRAIL BOARD**

**Minutes of the Meeting of the Board of Directors of Crossrail Limited  
Held on Thursday 24 May 2018 at 13:05  
28th Floor Boardroom, 25 Canada Square, Canary Wharf, London E14 5LQ**

<b>Members:</b>	<b>In Attendance:</b>	<b>Apologies:</b>
Terry Morgan <i>Chairman</i>	Sarah Allen <i>Head of External Affairs</i>	
Pam Alexander <i>Non-executive Director</i>	Funmi Amusu <i>Assistant Company Secretary</i>	
Michael Cassidy <i>Non-executive Director</i>	Dawn Barker <i>Head of Human Resources</i>	
Mathew Duncan <i>Finance Director</i>	Susan Beadles <i>Head of Legal Services and Company Secretary</i>	
Phil Gaffney <i>Non-executive Director</i>	Lucy Findlay <i>Chief of Staff</i>	
Terry Hill <i>Non-executive Director</i>	Paul Grammer <i>Commercial Director</i>	
Robert Jennings <i>Non-executive Director</i>	Anne McMeel <i>TfL</i>	
Chris Sexton <i>Technical Director</i>	Howard Smith <i>Operations Director</i>	
Mark Wild <i>Non-executive Director</i>		
Simon Wright <i>Chief Executive</i>		

The meeting was quorate.

	<p>The Chairman welcomed Board members and attendees.</p> <p><b>Directors' Interests</b></p> <p>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.</p> <p>There were no interests declared in relation to the business of the meeting.</p> <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 which was attended by Andy Pitt – additional Department for Transport (DfT) nominee Non-executive Director from 1 July 2018 and Anne McMeel &amp; Nelson Ogunshakin – additional Transport for London (TfL) nominee Non-executive Directors from 1 July 2018.</p>
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	<p>The Board had received detailed briefings on the following topics:</p> <ul style="list-style-type: none"> <li>• <b>Schedule Overview</b> – progress across the programme including updates on transition testing, design and schedule requirements and readiness for Stage 3 opening including the proposed deferral of handover to Rail for London (RfL) by 2 months to 1 October 2018; and</li> <li>• <b>RAB(C)</b> – an update on progress with approvals.</li> </ul> <p>The Board had <b>REQUESTED</b> that:</p> <ul style="list-style-type: none"> <li>• A check should be carried out to determine whether [REDACTED] supplied any other products for the project, [REDACTED]</li> </ul> <p><b>Action:</b> Chris Sexton</p> <ul style="list-style-type: none"> <li>• The possibility of moving the Elizabeth line train currently parked at Abbey Wood into the second platform should be looked into, to prevent exposure to vandalism.</li> </ul> <p><b>Action:</b> Howard Smith</p>
BD MIN 180426	<p><b>Minutes of the Meeting of the Board held on 26 April 2018</b></p> <p>The Board <b>APPROVED</b> the minutes of the meeting held on 26 April 2018 for signature.</p>
BD AC 180524	<p><b>Actions and Matters Arising</b></p> <p><b>18.216 – Gender Pay Gap Reporting</b> – The Board <b>NOTED</b> that a draft paper had been prepared and would be shared with Pam Alexander.</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 180524	<p><b>Crossrail Board Report Period 1</b></p> <p>Simon Wright introduced the Board Report for Period 1 highlighting that:</p> <ul style="list-style-type: none"> <li>• Stage 2 Phase 1 was achieved on schedule on 20 May 2018 (in Period 2);</li> <li>• Period 1 had seen another major achievement with the Class 345 train operating in automatic mode under full signalling control between Canary Wharf and Custom House, as well as running at full line speed of 100kph between Woolwich and Canary Wharf;</li> <li>• Some highlights from the Period included the completion of installation of all platform screen door modules with the emphasis now firmly on testing and commissioning activities; the extension of the Crossrail Data Network from Zones 1 &amp; 2 to Zones 3 &amp; 4, proving increased resilience during operations; and continued installation of artwork across the stations providing a glimpse of what some of our stations would look like when fully completed, including art inspired by the diamond district at Farringdon as well as the hand-gilded intricate gold-leaf ceiling at Tottenham Court Road;</li> </ul>

- HSPI increased to a new record high of 2.63, the highest ever recorded on the programme (compared to a target of 2.20);
- At the end of Period 1, the project was 92.6% complete against a plan of 93.9%, with reported progress distorted by the commercial impact of changes made in Period 13; and
- In line with the demobilisation of risk management from the project and the curtailment of all QRA analysis work, the P50, P80 and P95 presentation of AFCDC had been superseded by the single AFCDC (formerly the P50) which, in the Period, remained at £12,723m with a drawdown of £20m from the Programme risk provision. Discussions with the Sponsors continued with regard to funding of the project above IP2 including the independent cost analysis being undertaken by Jacobs for the Sponsors.

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

It was **NOTED** that:

- All the 11 key contracts achieved a HSPI score of 2.20 or above, with C405-Paddington scoring the highest ever result of 2.94;
- Both the RIDDOR rate and the Lost Time Case (LTC) rate remained at 0.09 and 0.17 respectively (the same as the previous Period). These remained significantly within the targets for the year; and
- In the Period, there were 3 significant incidents – 1 RIDDOR 7+ Days, 1 LTC and 1 High Potential Near Miss; and 13 injuries were sustained, the largest category (4 injuries) being slips, trips and falls.

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

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

- The AFCDC in Period 1 remained at £12,723m, which was £216m above the reported financial budget;
- Of the £456m QRA total, £424m was currently programme risk not allocated to projects. URTs had increased by £46m since last Period. If all £386m of URTs were approved, the QRA total would reduce to £70m;
- In the Period, Crossrail had spent £46.3m above the 2018/19 Business Plan. The Business Plan for Direct Costs was set in Period 6 2017/18 and since then, there had been a significant increase to the AFCDC (£0.4bn) and delays to MOHS dates for the key contracts, therefore variances to the Business Plan were to be expected;
- The overspend in the Period was predominantly: at [REDACTED] due to lower than expected productivity, additional scope, access delays and cost increases for [REDACTED] and [REDACTED] which were established after the Business Plan was set

██████████; at ██████████ due to prolongation and ongoing ██████████ which had been forecast to be complete ██████████; and other net overspends ██████████ offset by apparent unspent Programme risk due to cost being reported in the Sectors (£14.3m);

- The overall contingency budget of £201m was not sufficient to cover the P50 risk exposure of £456m by £255m; and
- AFCDC scenarios summarising the bookend numbers had been split into two and going forward, the Finance Overview presentation to the Board would focus on these i.e. Tail 1 and 2 scenarios.

The Board **REQUESTED** an executive summary on the findings of the Jacobs' independent cost review on bookends.

**Action:** Lucy Findlay

### **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 ██████████ and the total forecast gap in forecast defined cost decreased by ██████████;
- The £20m drawdown from the Programme risk provision was to offset known costs that were provisioned for in Period 13. However, work remained ongoing to challenge cost where possible and to drive contractors to complete works efficiently;
- There was evidence of some further cost pressures emerging as ██████████ continued to increase resources to maintain schedule. Although additional provision was held, the full requirement needed to be reviewed, assessed and managed through the trend process. A request for increase in Investment Authority (IA) for ██████████ was the subject of a separate Board paper; and
- The criteria for final account settlements had been set and discussions had commenced with Bam, Ferrovial, Kier (BFK) and Laing O'Rourke (LOR) for C435-Farringdon Station, C422-Tottenham Court Road Station and C502-Liverpool Street Station. The Board **REQUESTED** that after accounts were settled with BFK and LOR, a summary of the status of final account settlements should be provided, highlighting those contracts that remained open.

**Action:** Paul Grammer

### **Network Rail On Network Works and Funding**

- The Forecast Final Outturn Cost (FFOC) remained at £2,376m reflecting the grand total cost position of £2,835.4m less the non-NR programme costs (£305.4m for accelerated renewals/ traction power/ other non-Crossrail related spend in addition to the £154m combined cash funding from the DfT, CRL and NR for additional variations). CRL had assessed the grand total cost mid-point sensitivity of +£89.4m;

- Total Funding secured remained at £2,835.4m. NR had assumed a further £16.4m of recoveries in relation to other NR projects and tax/ insurance. NR was seeking additional funding (£54m) from the NR Portfolio Board (CP5 contingency) to address the cost risk previously identified and this additional funding had been approved, in principle; and
- NR cumulative (gross) spend (excluding adjustments for traction power/ accelerated renewals) was £2,663.9m and represented 94.5% complete. The Period 1 COWD was £23.9m – lower than forecast due to lower than forecast access and OOCPA costs in the Period.

### ***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 0.5% was achieved in the Period against the plan of 0.0%. It should be noted that the planned value was distorted from 0.75% to 0.0% due to the impact of [REDACTED] which rebaselined their cost position;
- Progress of C660 cable installation remained significantly behind plan due to the need to prioritise the C620 cable installation ahead of dynamic testing. However, this did not diminish the criticality of the work that still needed to be done;
- The On Network Works were 95% complete. Activities noted in the Period included the completion of Paddington platform edge works on platforms 1 & 2; the return of tender packages for the West Stations; and good progress to complete the Forest Gate station fit-out programme;
- Following the MOHS rebaseline in February 2018, schedule pressures continued to be felt across most contracts. Whilst 3 out of 7 anchor milestones were delivered in the Period (cumulatively 19 against a plan of 28), only 64 out of 98 measured project milestones were delivered. Although many of these missed milestones did not affect MOHS and the start of trial running, they still needed to be addressed;
- Following the first Dynamic Testing Window (as part of the new testing strategy), a total of 12 out of 35 tests were carried out. Of the 12 that were done, 10 were successfully completed, with 2 failures. Due to time constraints during the testing window, caused in part by poor organisation, 25 tests needed to be re-scheduled in Test Window 2 which would take place from 10 – 14 May 2018. Test Window 3 was due to commence on 24 May 2018. As the testing programme unfolded, a revised overall schedule of assigned tests to Testing Windows was expected in May 2018;
- 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 remained under constant scrutiny by the CRL Executive;
- The delivery of Siemens communications software continued to be

challenging but additional resource had now been mobilised. The emphasis for C660 was back on the handover of assets by Stations and Systemwide to Siemens to allow them to maintain their schedule to completion;

- 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. This had been addressed directly with the Executives of each Tier 1 contractor and the next few weeks would demonstrate whether these messages were having the desired impact. Close monitoring remained across all sites; and
- The provision of asset data, O&M manuals and training materials by contractors in time to meet the Infrastructure Managers' needs remained critical. All parties were working to accelerate the production of asset data and to make best use of it progressively as it became available. Efforts were ongoing to improve production and quality as well as prioritising those documents essential for trial running, trial operations and Stage 3 services.

### **Operations**

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

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. A high level meeting with senior managers from CRL, RfL and NR took place on 18 April 2018. TfL had now provided a full list of drawings to NR to enable the clearance process commence for all sites. TfL had also provided a further draft of the Umbrella Property Agreement explaining their view on the associated agreements and the degree of completion they would need to achieve before the Umbrella Property Agreement could be signed. CRL, TfL and NR had set up fortnightly senior level conference calls to drive completion of this essential aspect of the works.

### ***Are We Ready for Closeout?***

In relation to transitioning to TfL, the Board **NOTED** that the CRL data centre and key IT contracts would end in December 2018 with a prohibitive cost impact of extending into 2019. The plan, which was well understood both within CRL and TfL, was to migrate CRL users and data to TfL's domain over the weekend of 15 – 16 December 2018, this being the latest opportunity to do so. It would be the first weekend after the Elizabeth line launch (9 December 2018) and there would be no access to CRL data or emails during the period, as such, very careful management was necessary. It was proposed that CRL retained some IT resources into 2019 to support the continued high usage of eB and some other temporary applications which it would host outside of the TfL domain. This approach was to be discussed at the CRL Executive and Investment Committee on 13 June 2018.

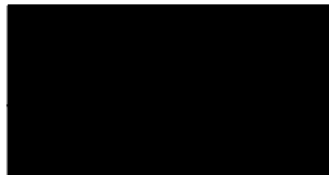
	The Board <b>NOTED</b> the Board Report for Period 1.
<b>08/19</b>	<p><b>CRLB 08/19 – Draft Semi-Annual Construction Report 19 (SACR19)</b></p> <p>Simon Wright presented the draft SACR19 to the Board for review.</p> <p>Subject to a slight amendment to the opening paragraph of the Chairman and Chief Executive's Overview, the Board:</p> <ul style="list-style-type: none"> <li>• <b>NOTED</b> that the Financial Model which informed the forecast costs in SACR19 had been updated in accordance with the requirements as defined in Schedule 7 ('Financial Model') of the Crossrail Project Development Agreement (PDA);</li> <li>• <b>NOTED</b> that the CRL Finance Director had approved the release of the updated Financial Model to the Sponsors;</li> <li>• <b>NOTED</b> that CRL would be requesting the remaining TfL contingent funding of £156m for payment into the SFA account in Period 4 2018/19; and</li> <li>• <b>APPROVED</b> the SACR19 for submission to the CRL Sponsors.</li> </ul>
<b>09/19</b>	<p><b>CRLB 09/19 – AF CDC Exceeding Intervention Point 2: Legal and Budgetary Implications</b></p> <p>Mathew Duncan presented a paper informing the Board of the consequences of the AF CDC exceeding Intervention Point 2 (IP2) and requesting authority to increase the financial budget to the level of the P80 AF CDC at Period 13 2017/18, which was £278m above IP2.</p> <p>The Board discussed whether CRL should require assurance from TfL on CRL's financial status, in addition to the annual letter confirming that CRL would remain a subsidiary of TfL. [REDACTED]</p> <p><b>Action:</b> Susan Beadles/ Mathew Duncan</p> <p>The Board:</p> <ul style="list-style-type: none"> <li>• <b>NOTED</b> that it was considered that Crossrail Ltd continued to have the capacity to pay its debts as they fell due;</li> <li>• <b>AUTHORISED</b> the Executive Directors to continue to grant Investment Authority and adjust contract budgets in accordance with the Scheme of Authorities (and the additional controls agreed by the Board on 14 September 2017) notwithstanding that the AF CDC exceeded IP2; and</li> <li>• <b>APPROVED</b> an increase in the total Crossrail financial budget of £283m (£96m to replenish Board Contingency and the balance of £187m to be allocated to Programme Contingency).</li> </ul>
<b>10/19</b>	<p><b>CRLB 10/19 – 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]; and</li> <li>• <b>NOTED</b> the amounts for [REDACTED] which were below the Board threshold for</li> </ul>

	<p>approval and had been endorsed by the Executive and Investment Committee on 16 May 2018.</p> <p>The Board <b>AGREED</b> that the authority levels for approving IA should be discussed with the Chair.</p> <p><b>Action:</b> Mathew Duncan</p>									
<p>11/19</p>	<p><b>CRLB 11/19 – Funding Narrative</b></p> <p>Sarah Allen presented a paper seeking the Board’s approval for the narrative on Crossrail’s funding and the approach to be taken on external communication of the narrative.</p> <p>The Board <b>NOTED</b> the proposed approach for communicating the change in Crossrail’s costs and funding and considered that a simple and clear message highlighting the successes of the project would be appropriate, without dwelling on historical elements.</p> <p>The Board <b>REQUESTED</b> that the Written Ministerial Statement along with the Q&amp;A section should be circulated to Board members when finalised.</p> <p><b>Action:</b> Sarah Allen</p> <p>The Board also <b>REQUESTED</b> that a meeting should be arranged with the new London Deputy Mayor for Transport, Heidi Alexander, as well as a site visit.</p> <p><b>Action:</b> Sarah Allen</p>									
<p>12/19</p>	<p><b>CRLB 12/19 – Project Representative Report (P-Rep) Period 13</b></p> <p>The Board reviewed and <b>NOTED</b> the P-Rep Report for Period 13.</p> <p>Simon Wright provided a verbal summary of the issues that were expected to be raised in the Period 1 report which were <b>NOTED</b> by the Board. These included matters relating to: financials; schedule and progress; Stage 2 Opening; Stage 3 Opening; and Stages 4 and 5.</p>									
	<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 1346 1382 1485"> <tr> <td data-bbox="363 1346 847 1442"><b>Executive and Investment Committee</b></td> <td data-bbox="847 1346 1115 1442"><b>EIC D 180418</b></td> <td data-bbox="1115 1346 1382 1442">Simon Wright</td> </tr> <tr> <td data-bbox="363 1442 847 1485"><b>Health and Safety Committee</b></td> <td data-bbox="847 1442 1115 1485"><b>HS MIN 180122</b></td> <td data-bbox="1115 1442 1382 1485">Simon Wright</td> </tr> </table> <p><b>Verbal Updates of Recent Board Committee meetings</b></p> <table border="1" data-bbox="363 1552 1382 2096"> <tr> <td data-bbox="363 1552 847 2096"> <p><b>Executive and Investment Committee 16 May 2018</b> Matters covered by the Committee were:</p> <p><b>Board agenda items:</b></p> <ul style="list-style-type: none"> <li>• AFCDC Exceeding IP2: Legal and Budgetary Implications</li> <li>• Funding Narrative</li> </ul> <p><b>Other items:</b></p> <ul style="list-style-type: none"> <li>• Risk Report</li> <li>• Bi-annual Gifts &amp; Hospitality Returns and Expenses</li> </ul> </td> <td data-bbox="847 1552 1115 2096"><b>EIC MIN 180516</b></td> <td data-bbox="1115 1552 1382 2096">Simon Wright</td> </tr> </table>	<b>Executive and Investment Committee</b>	<b>EIC D 180418</b>	Simon Wright	<b>Health and Safety Committee</b>	<b>HS MIN 180122</b>	Simon Wright	<p><b>Executive and Investment Committee 16 May 2018</b> Matters covered by the Committee were:</p> <p><b>Board agenda items:</b></p> <ul style="list-style-type: none"> <li>• AFCDC Exceeding IP2: Legal and Budgetary Implications</li> <li>• Funding Narrative</li> </ul> <p><b>Other items:</b></p> <ul style="list-style-type: none"> <li>• Risk Report</li> <li>• Bi-annual Gifts &amp; Hospitality Returns and Expenses</li> </ul>	<b>EIC MIN 180516</b>	Simon Wright
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	<ul style="list-style-type: none"> <li>• Transfer of Crossrail Learning Legacy Website and Content</li> <li>• PP and PDP KPI Performance and Incentive Payment</li> </ul> <p><b>Health and Safety Committee 26 April 2018</b></p> <p>Matters covered by the Committee were:</p> <ul style="list-style-type: none"> <li>• Period 12 Health and Safety Report</li> <li>• RfL Readiness/ Progress Update</li> </ul>	<p><b>HS MIN 180426</b></p>	<p>Simon Wright</p>
<p><b>AOB</b></p>	<p>There was no other business.</p>		
<p><b>NEDs Only Session</b></p>	<p>Non-executive Directors provided feedback on the day's meeting.</p>		

Signed by:



Terry Morgan  
Non-executive Chairman