

CROSSRAIL BOARD

**Minutes of the Meeting of the Board of Directors of Crossrail Limited
held on Thursday 29 January 2015 at 15.30
28th Floor Boardroom, 25 Canada Square, Canary Wharf, E14 5LQ**

Members:

In Attendance:

Apologies:

Terry Morgan (Chairman) <i>Chairman</i>	Funmi Amusu <i>Company Secretarial Assistant</i>	Jayne McGivern <i>Non-executive Director</i>
Andrew Wolstenholme <i>Chief Executive</i>	Martin Buck <i>Transition and Strategy Director</i>	
David Allen <i>Finance Director</i>	Mark Fell <i>Legal Services Director & Company Secretary</i>	
Michael Cassidy <i>Non-executive Director</i>	Lucy Findlay <i>Chief of Staff</i>	
Phil Gaffney <i>Non-executive Director</i>	Will Parkes <i>External Affairs Director</i>	
Terry Hill <i>Non-executive Director</i>	Howard Smith <i>Operations Director</i>	
Robert Jennings <i>Non-executive Director</i>	Valerie Todd <i>Talent and Resources Director</i>	
Daniel Moylan <i>Non-executive Director</i>	Chris Green (agenda item 6 only) <i>Chair, Operations and Systems Expert Panel</i>	
Simon Wright <i>Programme Director</i>	Chris Sexton (agenda item 7 only) <i>Technical Director</i>	
	Chris Parker (agenda item 7 only) <i>Yellow Plant Lead Engineer</i>	

The meeting was quorate, and no directors declared conflicts of interest in relation to any matters discussed.

	The Chairman welcomed Board members and attendees.
BD MIN 080115	Minutes of the Meeting of the Board held on 08 January 2015 The Board approved the minutes of the meeting held on 08 January 2015 for signature.
BD AC 290115	Actions and Matters Arising The Board noted the updates provided on the outstanding actions. The Board received a verbal update on the cause of the late handover of the Crossrail works at Paddington carried out by Network Rail (NR) over the Christmas possession. Although the physical works went well, the assurance documentation had not been completed appropriately. The Board discussed the need to review the NR report into this incident and to seek assurance from NR that this oversight will not

	<p>repeated given the potential impact of such disruption on the future possessions required for Crossrail works at Easter and thereafter.</p> <p>Further disruption at Paddington was caused by a Heathrow Express train hitting a trolley left on the track. An investigation into this incident by the Rail Accident Investigation Branch is ongoing.</p>
<p>BD CBR 290115</p>	<p>Crossrail Board Report</p> <p>The Board considered the Crossrail Board Report for Period 10, noting that performance during the period had been relatively stable.</p> <p><i>Are we safe?</i></p> <p>Overall, safety performance had been maintained, with the RIDDOR AFR rate remaining at 0.20 for the fifth consecutive period, meeting the corporate objective and representing a 40% reduction over 2013/14 rates. HSPI had decreased slightly to 2.25 from 2.26 in Period 9; 15 out of 17 contracts had achieved HSPI scores of 2.00 or above (equivalent of 88% of the contracts). The points of focus for the Period included a Target Zero Reboot and the launch of a new Crossrail-wide induction course.</p> <p>There had been one RIDDOR 7+ day injury, one 3+ day lost time incident and one lost time incident during Period 10. The Lost Time Case AFR remained at 0.35. Following the campaign on slips, trips and falls, there were no significant incidents to that category in the Period.</p> <p>A serious incident had occurred after the reporting period which would likely have an impact on the AFR for Period 11. Also, one of the lost time injuries from Period 10 had escalated to a RIDDOR 7+ days injury and would be reflected in the Period 11 Report.</p> <p><i>Are we within funding?</i></p> <p>The Project remained within funding. The P50 AFCDC had decreased slightly to £11,707m (from £11,709m) with the headroom to Intervention Point (IP) 0 decreasing slightly to £35m (from £36m). The headroom to IP1 had decreased, with the P80 AFCDC now £24m below IP1, compared to £25m in Period 9. The EAC (Estimate at Completion) Low and EAC High had both increased in the Period by £42m and £67m respectively, resulting in the P50 AFCDC of £11,707m being £138m below EAC Low (£94m in Period 9).</p> <p>The cumulative SPI had increased to 0.99 and cumulative CPI had decreased to 0.94, with the period SPI and CPI both improving to 1.06 and 0.81 respectively (from 0.90 and 0.75 in Period 9). Despite the improvement in CPI, period CPIs at Paddington, Bond Street, Tottenham Court Road, Farringdon, Liverpool Street and Whitechapel continued to reflect contractor overspends.</p> <p>Programme Change increased in the Period by £27m mainly due to the acceleration measures at Farringdon for handover to Systemwide and on C305 Eastern Running tunnels, and ground improvement works for cross passage 14.</p> <p>Direct costs (including risk) in Period 10 were £33.4m below the Business Plan, while indirect costs were £4.2m below the Business Plan.</p> <p><i>Are we on time?</i></p> <p>The Board received a presentation by Simon Wright, the Programme Director and</p>

noted that:

- TBM Elizabeth had broken through at C305 Liverpool Street on 29 January 2015
- An evidence based assessment of the cause of the problem with the defective piles at Paddington was being carried out in conjunction with the CRL Legal team;
- A safety stand down at Bond Street had resulted in 4 -5 days delay. The stand down became necessary due to the number of incidents occurring on the site;
- Cast iron segments were being used on C350 Pudding Mill Lane instead of SCL. The Board queried whether this was more cost effective and noted that feedback on this would be provided to Daniel Moylan offline.

Action: Simon Wright

- Problems with the SCL at Liverpool Street may cause delays to the arrival of the TBM at Farringdon.
- The size of the commercial challenge at Whitechapel is significant and the contractor is not providing the right leadership in response to this challenge. The intention was to meet with their joint venture board to highlight these problems.

Action: Simon Wright

Andrew Wolstenholme and Simon Wright were also scheduled to meet with the new CEO of Balfour Beatty and would have a conversation with him about staying on track with health and safety.


- An extended possession and blockade plan at Whitechapel had been developed and would be discussed with London Underground/ TfL.

At the end of Period 10, 60.9% of works were complete, against a plan of 61.8% (a variance of 0.9%). Forecast completion of Stage 3 remained at December 2018. Tunnelling was at a cumulative total of 39.6km, against the plan of 40.1km, with Elizabeth and Victoria making progress towards Liverpool Street Station (noting that Elizabeth had broken through into Liverpool Street that morning, after the reporting period). SCL installation during the Period was good with 0.4km being achieved versus a plan of 0.1km, though this was still behind the cumulative schedule with 11.8km achieved against a plan of 13.2km.

Surface works were now 36% complete, with the NR AFC remaining at £2,006m, the same as the previous 2 periods. Headroom to the funding limit also remained at £179m. Key achievements in the Period included successful installation of points at Stockley for HEX trains and track lowering completed at St. Mary's Road Bridge, Slough; commencement of demolition of the public ramps over the railway at SE Spur; track units inspected and delivered for Christmas installation works at NE Spur; and all Crossrail works completed during the Christmas possessions.

Rolling Stock design work continued to progress with interface designs complete for all systems, initial orders placed and dates agreed for delivery of the first components. A number of elements within the programme were being reviewed, as detailed design work was completed and manufacturing sequences understood. Depot works were also making good progress with the demolition now complete, geothermal test bores sunk and piling rigs due on site in January 2015.

	<p>Land and Property performance was on track with continued good progress in line with the construction programme on taking possession of sites.</p> <p>CRL was finalising an initial change appraisal on the Paddington Sellar Scheme to go to the Sponsors in the following week. The decision on whether to go ahead with accommodating the early demolition scheme was one for the Sponsors to make. The Board noted that if CRL was instructed to accommodate the scheme, it would critically affect the Bakerloo Line Link programme.</p> <p><i>Are we world class?</i></p> <p>In Period 10, many sites were shut due to the Christmas close down. There had been one level 2 incident during the Period involving a breach of a section 61 consent by C300 on Tunnels West (Drive X) when a crane was operated outside consented working hours. Measures had since been taken by the contractor to avoid a repetition in the future.</p> <p>The total number of apprentices engaged on Crossrail was now over 440, exceeding the target of 400 apprentices by the end of the programme. Work was ongoing with contractors to maximise opportunities for yet more apprenticeships during the second half of the project. The Board noted the need to focus on the quality of apprentices other than the numbers. TUCA had now trained 9,452 delegates since its opening, with the number trained during 2014 reaching 3,322, making it TUCA's best performing year and surpassing its annual target by 19%.</p> <p>External affairs activities in the Period included a number of meetings and site visits. The exhibition at the London Transport Museum to mark the end of tunnelling on Crossrail was scheduled to commence on 1 February 2015 and would remain on display for 6 months.</p> <p>The Transition Strategy was scheduled to come to the Board in February 2015 for approval. A transition business case for the transfer of the procurement function to TfL by the end of March/ early April 2015 had been approved by the Executive with six individuals to be transferred. Consultations with these individuals would commence shortly.</p> <p>The Board NOTED the report.</p>
63/15	<p>CRLB PAPER 38/15 – Project Representative Report</p> <p>The Board received the Project Representative's (PRep's) Project Status Report for Period 9.</p> <p>The Report noted the new health and safety induction course being developed for launch in Period 12 and CRL's forthcoming assessment of C305. With regard to funding, it continued to highlight the likelihood of CRL breaching IP0 and noted a new initiative led by David Allen, the Finance Director, to review the control of contingency. It also noted a £25m increase in overspend due to cost overruns and estimated that CPI is 0.93.</p> <p>PRep highlighted the decrease in the number of Notified Compensation Events (NCEs) in Period 9 against a significant increase in value, noting that CRL is not keeping pace with processing NCEs and recruiting resource for this purpose is proving challenging. The report noted an increase in Programme risk exposure as being at its highest since Period 3 and that unresolved trends at Programme level have increased by £53m to £236m since Period 8.</p>

	<p>The decrease in SPI to 0.98 was noted as a 3-4 week delay to the whole programme. In terms of NR Reporting, PRep noted that NR has been asked to improve the content and quality of specific elements of their reporting. It noted that the Commercial and Change Sub-committee approved the On Network Functional Requirements change for NR to develop ETCS Plan B to Grip 4.</p> <p>The need for CRL to remain vigilant in the management of remaining designs was highlighted, as dates were being missed and design review gates failed due to lack of evidence and/ or timely completion of necessary design work. The ongoing work to identify practicable solutions to the Paddington Station piles was noted and Westminster City Council's (WCC's) disappointment at the Bomb Gap not being developed was highlighted. It also noted WCC had stated that the current design for the Paddington Crossrail arch would fail to meet the design standards required for the site, for which Consents need to be in place by June 2015.</p> <p>The Board NOTED the report.</p>
64/15	<p>CRLB PAPER 39/15 – Legal Report</p> <p>The Board received the Legal Report which updated the Board on legal matters.</p> <p>The Board NOTED the report</p>
<i>Chris Green joined the meeting.</i>	
65/15	<p>CRLB PAPER 40/15 – Operations and Systems Expert Panel Update</p> <p>The Board received a paper from Chris Green updating the Board following the Operations and Systems Expert Panel held on 12 December 2014.</p> <p>The Board discussed the Panel's recommendations.</p> <p>In terms of ETCS Signalling, the Panel expressed concern that a Plan B on TPWS for the Heathrow branch was yet to be prepared and recommended that the Board ask for this to be prepared by NR. It was noted however that the ORR's awaited response with regard to TPWS on the line would provide some direction on this.</p> <p></p> <p>Action: Mark Fell</p> <p>The Panel highlighted the need for CRL and RfL to engage with Bombardier at the highest level, both in the UK and Group Headquarters, on the delivery of Old Oak Common and Ilford Depots to prevent late delivery or a depot design that is sub-standard. It was noted that a report on Ilford was scheduled to be brought to the Board in February 2015.</p> <p>Action: Simon Wright</p> <p>The Panel noted that detailed proposals on Yellow Plant procurement had been reviewed and endorsed and highlighted the urgency for this to be decided by the end of March 2015. With regard to infrastructure maintenance, a decision also needed to be made on whether to supplement a rail grinding machine with a milling one. The</p>

	<p>Panel suggested peer review of integrated testing plans against the best practice on the Victoria and Northern lines and the Board noted that this had already commenced with LU. The Board suggested that the Programme Director should liaise with George Clark of LU on this.</p> <p>Action: Simon Wright</p> <p>The excellent progress made with trail modelling was noted by the Panel and it was recommended that performance modelling should move forward to real-time simulation modelling. Sponsors' support for Crossrail trains being equipped with both 4G and WiFi subject to the finalising of funding arrangements was also noted.</p> <p>The Board NOTED the paper.</p>															
<i>Chris Green left the meeting.</i>																
<i>Chris Sexton and Chris Parker joined the meeting.</i>																
66/15	<p>CRLB PAPER 41/15 – Yellow Plant</p> <p>The Board received a paper from Chris Sexton on Yellow Plant.</p> <p>The Board noted the progress that had been made in specifying Yellow Plant for Crossrail including those that would need to be hired, bought or leased. The Yellow Plant would be required for the start of Dynamic Testing in November 2017 and in order to meet this date, it was necessary for an agreement to be reached by the end of February 2015 on how the Yellow Plant would be procured, including funding and project management arrangements. The Board noted that CRL does not have a budget allocated to procurement of the plant and that the funding and procurement of Yellow Plant was to be discussed at the Sponsor Board meeting on 23 February 2015. The Board REQUESTED an update after the Sponsor Board meeting.</p> <p>Action: Andrew Wolstenholme</p> <p>The Board NOTED the paper.</p>															
<i>Chris Sexton and Chris parker left the meeting.</i>																
67/15	<p>Minutes of Board Committees for Reference</p> <p>The Board received the following minutes for reference:</p> <table> <tr> <td>Executive and Investment Committee</td> <td>EIC MIN 231214</td> <td>Andrew Wolstenholme</td> </tr> <tr> <td></td> <td>EIC MIN 120115</td> <td>Andrew Wolstenholme</td> </tr> <tr> <td>Health and Safety Committee</td> <td>HS MIN 241114</td> <td>Andrew Wolstenholme</td> </tr> </table> <p>Verbal Updates of Recent Board Committee meetings</p> <table> <tr> <td>Executive and Investment Committee</td> <td>EIC 210115</td> <td>Andrew Wolstenholme</td> </tr> <tr> <td>Health and Safety Committee</td> <td>HS 190115</td> <td>Andrew Wolstenholme</td> </tr> </table>	Executive and Investment Committee	EIC MIN 231214	Andrew Wolstenholme		EIC MIN 120115	Andrew Wolstenholme	Health and Safety Committee	HS MIN 241114	Andrew Wolstenholme	Executive and Investment Committee	EIC 210115	Andrew Wolstenholme	Health and Safety Committee	HS 190115	Andrew Wolstenholme
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68/15	<p>AOB</p> <p>Insurance premium – The Board noted that, in view of the favourable claims record over the first 5 years of the OCIP insurance programme, there was no longer any risk of an increase in CRL's premium. The risk provision had therefore been completely</p>															

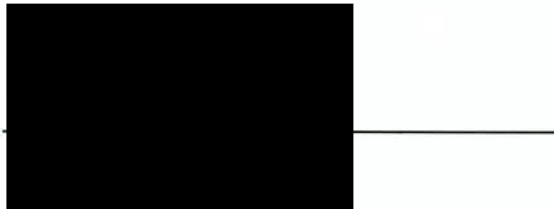
retired.



Art Programme – The CRL Art Programme Board would be kept running until the art sponsorship list was closed. Good progress was being made in securing commitments for funding the Crossrail art programme across the relevant stations. However, the Board noted the emerging timing and funding constraints on the Art Programme which the Executive were working to resolve.

Signed by:

Terry Morgan
Non-executive Chairman



Pre-meeting Board Briefing – Thursday 29 January 2015**Members:****In Attendance:****Apologies:**

Terry Morgan (Chairman) <i>Chairman</i>	Funmi Amusu <i>Company Secretarial Assistant</i>	Jayne McGivern <i>Non-executive Director</i>
Andrew Wolstenholme <i>Chief Executive</i>	Martin Buck <i>Transition and Strategy Director</i>	
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Terry Hill <i>Non-executive Director</i>	Howard Smith (part of meeting) <i>Operations Director</i>	
Robert Jennings <i>Non-executive Director</i>	Valerie Todd <i>Talent and Resources Director</i>	
Daniel Moylan <i>Non-executive Director</i>	Colin Gainsford (part of meeting) <i>Systemwide Delivery Director</i>	
Simon Wright <i>Programme Director</i>	Paul Grammer (part of meeting) <i>Commercial Director</i>	
	Chris Sexton (part of meeting) <i>Technical Director</i>	

1. Crossrail's 2015/16 Business Plan

The Board received a presentation from David Allen outlining the 2015/16 business plan; what the plan achieved; the main changes to it; and an evaluation of how rigorous the business plan process was.

The Board considered that it would be helpful, going forward, to be kept abreast of the business plan process as the plan is being prepared and AGREED that a similar session as this should be provided in October/ November 2015 when putting together the 2016/17 business plan. The Board also requested that “superstretch” targets be considered when developing the 2016/17 business plan.

Action: David Allen

The Board **NOTED** the presentation.

2. Update on Cost and Performance

The Board received a presentation from David Allen and Paul Grammer providing an update on cost and performance and the measures used by the Executive to monitor and measure performance.

The Board considered that it would be useful for the Sponsors to be given a similar update and suggested that this be added to a future Sponsor Board meeting agenda.

Action: Lucy Findlay

As Jayne McGivern was absent from the meeting, it was agreed that she be briefed on this item separately.

Action: David Allen

The Board commended David and his team on the quality of the materials presented and **NOTED** the presentation.

3. Security

The Board received a presentation from Chris Sexton with regard to security on the Crossrail project and its scope including site security; incident response and business continuity; security in design; and IT security.

As Jayne McGivern was absent from the meeting, it was agreed that she be briefed on this item separately.

Action: Chris Sexton

The Board **NOTED** the presentation.

4. Update on Systemwide (C610)

The Board received a presentation from Colin Gainsford providing an update on C610's readiness for construction in 2015.

The Board noted that more visibility on C610 progress would be provided to the Executive going forward. It was noted that the possibility of early dynamic testing on Systemwide was being looked into. It was also noted that C610's level of mobilization and issues with procurement were currently under control.

The Board raised an issue regarding the ability to install the floating track slab at Barbican within the programme set and noted that Phil Gaffney would be briefed on this.

Action: Chris Sexton

The Board **NOTED** the presentation.

