

Agenda

Meeting: Programmes and Investment Committee

Date: Thursday 5 March 2020

Time: 10.15am

**Place: Conference Rooms 1 and 2,
Ground Floor, Palestra, 197
Blackfriars Road, London, SE1
8NJ**

Members

Prof Greg Clark CBE (Chair)

Dr Nelson Ogunshakin OBE (Vice-Chair)

Heidi Alexander

Ron Kalifa OBE

Dr Alice Maynard CBE

Mark Phillips

Dr Nina Skorupska CBE

Dr Lynn Sloman

Ben Story

As provided for under section 100B(4)(b) of the Local Government Act 1972, the Chair is of the opinion that this item should be considered as a late item as information in relation to the paper was not available at the time that the agenda and papers were published. The reason for urgency is that the Board of Crossrail Limited met after the papers for this meeting were published and the paper was held back to ensure it contained the most up to date information on the project.

Copies of the papers and any attachments are available on [tfl.gov.uk How We Are Governed](https://tfl.gov.uk/How-We-Are-Governed).

This meeting will be open to the public, except for where exempt information is being discussed as noted on the agenda. There is access for disabled people and induction loops are available. A guide for the press and public on attending and reporting meetings of local government bodies, including the use of film, photography, social media and other means is available on www.london.gov.uk/sites/default/files/Openness-in-Meetings.pdf.

Further Information

If you have questions, would like further information about the meeting or require special facilities please contact: Jamie Mordue, Senior Committee Officer; Tel: 020 7983 5537; email: JamieMordue@tfl.gov.uk.

For media enquiries please contact the TfL Press Office; telephone: 0845 604 4141; email: PressOffice@tfl.gov.uk

Howard Carter, General Counsel
Tuesday 3 March 2020

**Agenda
Programmes and Investment Committee
Thursday 5 March 2020**

5 Elizabeth Line Operational Readiness and Crossrail Update
(Pages 1 - 6)

Managing Director, London Underground and TfL Engineering, and Chief Operating Officer – Elizabeth line

The Committee is asked to note the paper and exempt supplementary information on Part 2 of the agenda.

21 Exclusion of the Press and Public

The Committee is recommended to agree to exclude the press and public from the meeting, in accordance with paragraph 3 of Schedule 12A to the Local Government Act 1972 (as amended), in order to consider the following items of business.

22 Elizabeth Line Operational Readiness and Crossrail Update
(Pages 7 - 226)

Exempt supplementary information relating to the item on Part 1 of the agenda.

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Date: 5 March 2020

Item: Elizabeth Line Operational Readiness and Crossrail Update

This paper will be considered in public

As provided for under section 100B(4)(b) of the Local Government Act 1972, the Chair is of the opinion that this item should be considered as a late item as information in relation to the paper was not available at the time that the agenda and papers were published. The reason for urgency is that the Board of Crossrail Limited met after the papers for this meeting were published and the paper was held back to ensure it contained the most up to date information on the project.

1 Summary

- 1.1 This paper provides an update on the status of the Crossrail project including the readiness of the Infrastructure Managers (IM) for the operations and maintenance of the railway after handover from the Crossrail project.
- 1.2 The paper also provides an update on the periodic reports from the Project Representative (P-Rep) on Crossrail and provides an update on the funding discussions with the Department for Transport (DfT).
- 1.3 A paper is included on the Part 2 agenda which contains supplementary information that is exempt from publication by paragraph 3 of Schedule 12A of the Local Government Act 1972 in that it contains commercially sensitive information.

2 Recommendation

- 2.1 **The Committee is asked to note the paper and the supplementary paper on Part 2 of the agenda.**

3 Crossrail update

- 3.1 On 27 February 2020, the Crossrail Limited (CRL) Board confirmed that it remains on schedule to open the central section of the Elizabeth line between Paddington and Abbey Wood in summer 2021, with intensive operational testing planned to begin in autumn 2020. The board discussed the risks to the start of Trial Running with Joint Sponsors along with possible mitigations should they be required.
- 3.2 Following the opening of the central section, full Elizabeth line services from Reading and Heathrow in the west to Abbey Wood and Shenfield in the east are planned to commence by mid-2022.

- 3.3 Health and safety remains CRL's priority and overall performance is kept under scrutiny. Over the Christmas period, there were three high potential near miss incidents and Serious Incident Executive Reviews (SIER) have been undertaken with a number of learnings now being applied as a result. Recently, there have been five consecutive weeks without an injury or lost time incident.
- 3.4 CRL has renewed focus on its Target Zero Improvement Plan which includes implementing a Health and Mental Wellbeing Action Plan; instigating an organisational-wide safe behaviours campaign and ensuring that the 'Safety Migration' from construction to an operational environment is well managed. CRL has also introduced TfL's Beacon Award which will be awarded to those in its supply-chain and individual contractors where they have demonstrated excellent health and safety behaviours and practices.
- 3.5 CRL has confirmed that it is making good progress on the routeway and installation of train software, as well as beginning the handover of the first shafts and portals. Focus remains on completing any remaining construction work, integrating the train software and completing extensive assurance of all assets before handover to TfL. To support a 'Right First Time' approach, CRL has introduced multidisciplinary 'Integrated Delivery Teams' at individual project sites across the route in order to increase productivity.
- 3.6 CRL has reported that they expect all stations to be ready in summer 2020 for the start of Trial Running in autumn 2020. CRL will then complete all remaining work required at stations before the Elizabeth line enters passenger service in summer 2021.
- 3.7 CRL is expected to agree a 'care and custody' period for all new assets to allow earlier demobilisation of Tier 1 contractors. Discussions are ongoing regarding the early handover of Liverpool Street, Farringdon and Tottenham Court Road stations which allow Tier 1 contractors to be demobilised early as well as provide operational staff with an early opportunity to familiarise themselves with these stations and review operational plans.
- 3.8 There has been an increase in the level of productivity at Bond Street station and a review is underway to understand what lessons can be captured. On 13 February 2020, members of the London Assembly Transport Committee were taken on a tour of Bond Street with Mark Wild and Tony Meggs.
- 3.9 The PD+11 signalling software configuration is now being used in the Central Operating Section allowing for further signalling testing. Approval has been received to use the software for testing all areas of the railway including using single train, multi-train and close-headway, as well as with multiple trains running across the transition boundaries. Four 'point releases' of software updates are planned for PD+11, providing the opportunity to bring forward any necessary bug fixes to enter Trial Running on the best footing.
- 3.10 CRL continue to progress with the delivery of the assurance documentation (referred to as the 'paper railway'), in particular the documents required for the start of Trial Running in autumn 2020. CRL has reported progress in transforming its metrics for assurance documentation so that it focuses on the essential requirements for Trial Running and realistic forecast rates based on actual

production. Further work is being undertaken to review the assurance process for the prioritised scope of work and CRL are engaging with the approval bodies to ensure that the approach is appropriate.

- 3.11 CRL continues to work with Network Rail (NR) to secure access for dynamic testing to continue across the Great Eastern Main Line (GEML) and Great Western Main Line (GWML) interfaces.
- 3.12 More than 90 per cent of the NR on-network works are complete and passengers travelling on both GEML and GWML routes are benefiting from a number of station and accessibility upgrades. The remaining works primarily consist of station and power supply upgrades.
- 3.13 NR station enhancement works continue at Southall, Hayes & Harlington, West Drayton, West Ealing, Ealing Broadway and Acton Main Line and are scheduled to be complete by December 2020. There is a risk that the works at Hayes & Harlington and Southall stations will not be complete until the first quarter of 2021. NR is working closely with their contractors to minimise any potential delays and how they can introduce passenger benefits, such as step-free access, earlier through the construction programme.
- 3.14 At Ilford and Romford stations, station enhancement works are ongoing and currently forecast for completion in early 2021. Apart from these stations, all stations on the eastern section between Liverpool Street and Shenfield provide step-free access. A new ticket office was opened at Harold Wood station in December 2019.

4 Operational Readiness

- 4.1 Andy Lord, Managing Director of London Underground (LU), has been assigned responsibility for coordinating all relevant teams within TfL to prepare for the opening of the Elizabeth line, providing a clear focus on handover and operational readiness. CRL continues to be responsible for the delivery of the end-to-end railway and ensuring it is safe and reliable for passenger service. However, TfL and the DfT, as Joint Sponsors, continue to seek greater certainty around schedule and cost requirements, as well as what mitigations are being put in place in order to achieve key milestones. We continue to review and closely scrutinise the project through existing governance arrangements to ensure any risks to the commencement of trial operations is effectively managed.
- 4.2 The Elizabeth Line Readiness Group has been established to oversee an agreed completion and readiness plan between CRL, LU, Rail for London (RfL) and other delivery partners. The group will initially focus on the necessary steps to Trial Running but will then continue into planning for full Elizabeth line services. The Committee will be informed of the group's progress and current actions as part of this regular Crossrail update in future.
- 4.3 A Director of Operational Readiness has been appointed in LU to coordinate and provide assurance on our readiness to perform all IM responsibilities and deliver an end-to-end revenue service. In addition, they will ensure that there is a single joined-up readiness plan with CRL. They will work closely with CRL and our operational and engineering teams and look to accelerate the safe introduction of

services where possible. In addition, work is underway to determine the scope and approach to the alternative delivery model for non-critical path works.

5 Project Representative

- 5.1 The P-Rep is in place to provide TfL and the DfT, as Joint Sponsors, with oversight of project delivery, advise and raise points of challenge to the Sponsors and scrutinise progress.
- 5.2 In line with recommendations contained in KPMG's governance reviews and the commitments made by the Mayor for greater transparency around the Crossrail project, the most recent P-Rep reports are now included as part of the regular update to the Committee. We have already published the reports from 2018/19 and the first seven periods of 2019/20. The next three reports are now available on our website¹.
- 5.3 As with all the P-Rep reports, it has been necessary to make a limited number of redactions within the reports prior to publication to protect commercially sensitive material. We have sought to keep such redactions to a minimum.
- 5.4 In the most recent report, P-Rep highlighted the following key areas of concern:
- (a) CRL's plans to develop a robust scope to complete each element of the programme;
 - (b) slippage of Bombardier Transportation's forecast date to receive authorisation by the Office of Rail and Road for the software needed to run services to Heathrow; and
 - (c) different interpretation of key milestones by the station teams to target the start of Trial Running in autumn 2020.
- 5.5 The P-Rep observations are shared with CRL and discussed in detail by CRL, P-Rep and the Sponsors at regular meetings of the Crossrail Sponsor Board. The Sponsors have asked that CRL produce a response to the P-Rep report. The response from CRL is included with the P-Rep reports on our website.
- 5.6 Unredacted versions of the most recent P-Rep reports and CRL response to sponsors have been included in the paper on Part 2 of the agenda.

6 Funding discussion

- 6.1 As confirmed on 10 January 2020, CRL's detailed cost forecasts continue to show that the project will require an additional £400 million to £650 million on top of the financing package we agreed with the GLA and Government in December 2018.
- 6.2 The DfT and TfL, as Joint Sponsors, commissioned KPMG to provide an independent view of CRL's previous cost scenarios, taking into account the cost and schedule analysis that CRL presented to its Board on 7 November 2019. As

¹ <https://tfl.gov.uk/corporate/publications-and-reports/crossrail-project-updates>

part of this work, KPMG considered more pessimistic scenarios that sit beyond CRL's current cost forecast.

- 6.3 Discussions continue with the HM Treasury, DfT and GLA regarding how funding of these additional costs will be resolved.

List of Appendices:

Exempt supplemental information is contained in a paper on Part 2 of the agenda

List of Background Papers:

None

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