

Date: 30 September 2021

Item: Elizabeth Line Programme Assurance Update

This paper will be considered in public

1 Summary

- 1.1 This paper reports on progress with programme assurance activity across the Elizabeth Line Three Lines of Defence (3LoD) Integrated Assurance Framework (IAF) discussing: confidence of delivery; adequacy of assurance coverage; and exceptional risks requiring escalation.
- 1.2 A paper is included on the Part 2 agenda which contains supplementary information that is exempt from publication by virtue of paragraph 3 of Schedule 12A of the Local Government Act 1972 in that it contains information relating to the business affairs of TfL. Any discussion of that exempt information must take place after the press and public have been excluded from this meeting.

2 Recommendation

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

3 Background

- 3.1 The IAF was established in June 2019, based on a 3LoD model. This model is now being updated to cover the elements of the Elizabeth line comprising:
 - (a) Line 1 – Management functions of Crossrail, TfL Rail for London Infrastructure Limited and key interfaces;
 - (b) Line 2 – Elizabeth Line Project Programme Assurance (PPA) team; and
 - (c) Line 3 - TfL Internal Audit and (as of January 2021) a sub-group of the Independent Investment Programme Advisory Group (IIPAG-EL).
- 3.2 This paper reports specifically on Line 2 (PPA), Line 3 (Internal Audit) and Line 3 (IIPAG-EL) assurance progress.
- 3.3 The teams meet periodically with a panel of advisers and the Project Representative to ensure that assurance is carried out by the right team, at the right time and to avoid duplication and minimise overlap of effort.

4 Line 2 (PPA) Assurance

- 4.1 As part of the transition arrangements between TfL and Crossrail, Line of Defence 2 (LoD2) is in the process of transferring to TfL's Risk and Assurance Directorate. Their work is being expanded to cover all the Elizabeth line entities. This is also in line with recommendations from the Independent Project Authority and IIPAG and will mean that all independent assurance is managed under one function. Further details of how this will work in practice are set out in Appendix 1.
- 4.2 Overall, the Elizabeth line is now at a more mature level of readiness and while there are a number of performance and reliability issues to be addressed, there is increased confidence that the railway is on track to revenue service, and the question is now one of precise timing of its opening.
- 4.3 LoD2 assurance continues to be undertaken, principally, on a real-time, continual assurance basis, through participation in project meetings and related activities, and providing real-time feedback to the project teams. Formal reporting is through the LoD2 Periodic Assurance Review (PAR) Reports.
- 4.4 Since the last meeting of the Committee, LoD2 has issued PAR Reports covering Periods 3 and 4 2021/22, which have provided input to the periodic Integrated Assurance Report to the Elizabeth Line Delivery Group and the Committee.
- 4.5 In relation to the timeline to complete, based upon our Period 5 assessment, it is the opinion of LoD2 assurance that the schedule for completing Crossrail is under significant pressure but considering the balance of risks is currently most likely to be on-track to open within 'first half of 2022'.
- 4.6 Regarding cost to complete, current costs and financial commitments are still within the approved budget. Costs to complete the works remain under pressure but cost reduction work is ongoing.
- 4.7 On completion of the works, the project has continued to make significant progress over the last quarter, key progress highlights including:
- (a) Trial Running in the Central Operating Section has stepped-up from four trains-per-hour (tph) to eight tph and then 12 tph;
 - (b) stations progress has seen significant steps forward with the transfer of responsibility for seven stations to their respective Infrastructure Manager; three stations to Rail for London (Infrastructure) Limited – Paddington, Woolwich and Custom House; and four stations to London Underground – Tottenham Court Road, Farringdon, Liverpool Street and Whitechapel; and
 - (c) maintenance productivity and access have increased substantially and are on an improving trajectory to support projected revenue service requirements.
- 4.8 The operational performance of the Trial Running railway is still highly variable, typically seeing delays and interruption of planned services due to reliability and functional issues. Identification and resolution of such issues is an essential, anticipated part of the commissioning, integration, and testing process toward achieving acceptable levels of passenger service.

- 4.9 A key feature, therefore, of Crossrail's current work to deliver a passenger-ready level of service reliability is its focus on the expeditious management of the process of identifying, diagnosing, attributing and implementing solutions across one or more contractors. Key indicators of Crossrail's performance in this respect should therefore start to include the average fault identification and diagnosis interval and the overall fault-to-fix cycle time. LoD2 are working with Crossrail to help develop these measures.
- 4.10 Planned LoD2 assurance activity is set out as part of the 3LoD Assurance Forward Look provided in Appendix 2 to this paper.

5 Line 3 (TfL Internal Audit) Assurance

- 5.1 The Crossrail Internal Audit Plan for 2021/22 was approved by the Crossrail Audit and Assurance Committee on 16 March 2021.
- 5.2 In Quarter 1 2021/22 (Q1) we issued two reports, have four in progress which will be completed in Quarter 2 2021/22 (Q2) and have four audits starting in Q2.

Audit Delivery

- 5.3 Summary information on the two reports issued in Q1 is set out below.
- 5.4 The Management of Staff Costs audit was found to be 'Requires Improvement' and has issues relating to inconsistencies in the approval of contract extensions and verification of timesheets, staff changes are not consolidated at Directorate level and Conflicts of Interest declarations did not cover all levels of personnel. Actions and response dates were agreed and the management team has responded. The management response covered all the issues in detail and changes have been made to reflect the Internal Audit report findings. Some actions are still outstanding but they will be closed by the agreed dates.
- 5.5 The Demobilisation of Tier 1 contractors audit looked at the strategy of demobilising Tier 1 contractors early and it was found to be 'Well Controlled'. As early demobilisation had not been put into practice, it was not possible to test the effectiveness of the strategy at that time. In order to do so, a new audit was added to the 2021/22 plan in Q1 to look at effectiveness, this is one of the audits that will complete in Q2.
- 5.6 A full list of audit reports issued during Q1 is included as Appendix 3. Audits in progress at the end of Q1 is included as Appendix 4, work planned to start in Q2 is included as Appendix 5, and details of changes to the Audit Plan is included as Appendix 6.

Management Actions

- 5.7 There were no actions overdue.

Changes to the Audit Plan

- 5.8 Line of Defence 3 (LoD3) (TfL Internal Audit) regularly review and update the Audit Plan throughout the year, in liaison with management, to reflect changing business priorities. There were three changes to the plan in Q1.
- 5.9 One audit covering Trial Running was cancelled in Q1 as it was felt other lines of defence such as IIPAG and the PPA team were better placed to do that work and avoid duplication. Two new audits were added to the plan to cover management requests and to undertake the second audit on Tier 1 demobilisation.

6 Line 3 (IIPAG-EL) Assurance

- 6.1 The Terms of Reference of the IIPAG-Elizabeth Line sub-group require the group to provide a look ahead of its proposed areas of interest and work. The work plan has been integrated into the overall Integrated Audit and Assurance Plan, which is maintained by LoD2 and is reviewed and coordinated regularly within the Crossrail Programme Assurance Group coordinated by LoD2/ PPA. Progress with the three main areas of focus is summarised as follows:
 - (a) Baseline 1.2 (BL1.2) – the sub-group has received regular updates from LoD2, the Project Representative and other stakeholders with a particular interest in the transition period between Trial Running and Trial Operations. At the time of writing, we understand the schedule has been produced but other BL1.2 products are still in development, however they should now be available for review from mid-September 2021;
 - (b) supporting the work of the Railway Assurance Board - Crossrail (RAB-C) and its successor, the Integrated Technical Assurance Panel (ITAP) – the sub-group has engaged with RAB-C and ITAP, gaining an understanding of the planning arrangements and implications for closing out the remaining assurance dependencies; and
 - (c) digital railway – the sub-group has completed its review of this area including an assessment of cyber security concerns and the report is on-track to be issued shortly, by the end of Q2.
- 6.2 Work in these areas does not seek to duplicate other assurance that is happening elsewhere, but to provide and establish a degree of confidence in these critical areas for getting the railway into passenger service.
- 6.3 The overall assessment by LoD3 (IIPAG-EL sub-group) is that the overall assurance framework has continued to operate effectively over the last quarter. We note the progress responding to our recommendations in our January 2021 report into effectiveness of programme assurance.

7 Infrastructure and Projects Authority Critical Friend Review

- 7.1 The Infrastructure and Projects Authority (IPA) is the Government's centre of expertise for infrastructure and major projects reporting to the Cabinet Office and HM Treasury. The IPA conducts regular independent reviews of selected major UK projects.

- 7.2 In November 2020, the IPA conducted a follow-up critical friend review of Crossrail and recommended seven actions of which four are complete and the remaining three are being addressed progressively as part of Crossrail's delivery and completion programme.

8 Integrated Audit and Assurance Plan

- 8.1 The 3LoD IAF maintains an integrated plan of assurance activity coordinated through the Crossrail Programme Assurance Group forum. A summary of planned assurance activities is summarised in Appendix 2.

List of Appendices:

- Appendix 1 – Integrated Assurance Approach to Elizabeth Line Readiness and Crossrail Transition
- Appendix 2 – 3LoD Assurance Forward Look
- Appendix 3 – Line 3 (TfL Internal Audit) Reports issued in Q1 2021/22
- Appendix 4 – Line 3 (TfL Internal Audit) Work in progress at the end of Q1 2021/22
- Appendix 5 – Line 3 (TfL Internal Audit) Work due to start in Q2 2021/22
- Appendix 6 – Line 3 (TfL Internal Audit) Changes to the 2021/22 Audit Plan

List of Background Papers:

None

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