

**Date:** 26 January 2022

**Item:** Elizabeth Line Programme Assurance Update

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**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 all the elements of the Elizabeth line comprising:
  - (a) Line 1 – Management functions of Crossrail, 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 3LoD IAF maintains an integrated plan of assurance activity coordinated through the Elizabeth Line Programme Assurance Group forum. The list of areas being covered prior to Revenue Service is attached in Appendix 1.
- 3.4 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 Overall, the Elizabeth line continues on the trajectory to a more mature level of readiness. While there continues to be several 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 the precise timings of its opening.
- 4.2 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 and operational teams. Additionally, where appropriate, a series of Targeted Assurance Reviews will be undertaken where there is evidence of a number of risks to either the entry into Revenue Service or to the live operation while in Revenue Service. Formal reporting is through the LoD2 Periodic Assurance Review (PAR) reports.
- 4.3 Since the last meeting of the Committee, LoD2 has issued PAR reports covering Periods 8 and 9 2021/22, which have provided input to the periodic Integrated Assurance Report to the Committee and the Elizabeth Line Delivery Group.
- 4.4 In relation to the timeline to complete, based upon our Period 9 assessment, it continues to be the opinion of LoD2 assurance that while the schedule for delivering the Elizabeth line is under significant pressure, considering the balance of risks, it is currently most likely to open within 'first half of 2022'.
- 4.5 A decision was taken in November 2021 to split the Trial Operations plan into two phases. Positive progress has been made both during Phase 1 of Trial Operations and during the Christmas blockades. Planned software upgrades (ELR110) were implemented as well as remaining critical infrastructure activities completed (example: TVS - Tunnel Ventilation System).
- 4.6 Phase Two of Trial Operations, which will enable mass evacuations using large numbers of public volunteers, has been delayed by two weeks and is due to commence in the coming weeks. In taking this approach, the integrity of the Trial Operations plan remains intact, while also allowing the completion of critical works.
- 4.7 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 works are ongoing, as are contract close out negotiations with the Tier 1 suppliers.
- 4.8 On completion of the works, the project has continued to make significant progress since the last report, key progress highlights including:
  - (a) the introduction of a new release of Siemens software ELR110, which facilitates further improvements to the system reliability performance;
  - (b) Trial Running in the Central Operating Section continues with increasing periods of 12 trains per hour;

- (c) two stations remain to be completed and handed over to their respective Infrastructure Manager; Canary Wharf to Rail for London (Infrastructure) Limited, and Bond Street to London Underground (LU); and
- (d) maintenance team productivity and access continue the trajectory to support projected Revenue Service requirements. Key indicators of maintenance performance continue to be refined to provide greater clarity around the average fault identification and diagnosis interval and the overall fault-to-fix cycle time.

## **5 Line 3 (TfL Internal Audit) Assurance**

- 5.1 This section covers the Internal Audit activities that were agreed in the Integrated Assurance schedule shared at the last meeting.
- 5.2 In Quarter 3 2021/22 (Q3) no audit reports were issued, two audits are in progress and five audits are planned to commence in Quarter 4 2021/22 (Q4).

### **Audit Delivery**

- 5.3 A reprioritisation exercise was recently completed of the audit plan to ensure assurance was being provided against the relevant risks.
- 5.4 As a result, three audits have been cancelled and replaced, both of which are detailed in Appendices 3 and 4.
- 5.5 Due to the move of assurance in this area to TfL and audit activities being widened to cover all the Elizabeth line not just the Crossrail Project. The focus of audits has changed, and these are reflected in the new audits planned in Q4.
- 5.6 A full list of audits in progress at the end of Q3 is included as Appendix 2, work planned to start in Q4 is included as Appendix 3, and details of changes to the Audit Plan is included as Appendix 4.

### **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. Changes are included in Appendices 3 and 4.

## **6 Line 3 (IIPAG-EL) Assurance**

- 6.1 The terms of reference of the IIPAG-EL 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 Elizabeth Line 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 continues to receive regular updates from LoD2, the Project Representative and other stakeholders with a particular interest in the transition period between Trial Operations and Revenue Service. Details have been reviewed and feedback provided to support the assurance activities for Entry into Phase 2 of Trial Operations;
- (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. This continues to be a key area of focus for the Assurance team; and
- (c) in conjunction with LoD2, LoD3 has supported a review of the Romford Control Centre operations.

6.2 The overall assessment by LoD3 (IIPAG-EL sub-group) is that the overall assurance framework has continued to operate effectively over the last quarter.

**List of Appendices:**

Appendix 1 – Integrated Audit and Assurance Plan prior to Revenue Service  
Appendix 2 - Line 3 (TfL Internal Audit) Work in progress at the end of Q3 2021/22  
Appendix 3 – Line 3 (TfL Internal Audit) Work due to start in Q4 2021/22  
Appendix 4 – Line 3 (TfL Internal Audit) Changes to the 2021/22 Audit Plan

**List of Background Papers:**

None

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