

**Date:** 5 June 2023

**Item:** Elizabeth Line Programme Assurance Report Quarter 4  
2022/23

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## **This paper will be considered in public**

### **1 Summary**

- 1.1 This paper provides an overview of programme assurance activity in relation to the Elizabeth line during Quarter 4 of 2022/23 (11 December 2022 to 31 March 2023) (Q4).

### **2 Recommendation**

- 2.1 **The Committee is asked to note the paper.**

### **3 Background**

- 3.1 The Elizabeth Line Integrated Assurance Framework (IAF) is based on a Three Lines of Defence (3LoD) model comprising:
- (a) Line 1 – Management functions of Crossrail, Rail for London (Infrastructure) Limited and key interfaces;
  - (b) Line 2 – Project and Programme Assurance Elizabeth Line (PPA-EL); and
  - (c) Line 3 – TfL Internal Audit and a sub-group of the Independent Investment Programme Advisory Group (IIPAG-EL).
- 3.2 This paper reports specifically on Line 2 (PPA-EL), Line 3 (Internal Audit) and Line 3 (IIPAG-EL) assurance progress.
- 3.3 The teams meet periodically with a panel of advisers 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 of Defence 2 (LoD2) – Assurance**

- 4.1 The successful introduction, on 6 November 2022, of train services running directly from Reading and Heathrow to Abbey Wood, and from Shenfield to Paddington, using Network Rail (NR) infrastructure on the Great Western lines and Great Eastern lines has added a further degree of infrastructure complexity which has resulted in occasional days of Public Performance Measure below that required to maintain a resilient 24 trains per hour (tph) service in May 2023. The continuing operating challenge going forward is to improve the reliability and resilience of the end-to-end railway to achieve the required tph.

- 4.2 Work has continued on a continuous assurance basis with formal reporting via the LoD2 Periodic Assurance Review (PAR) Reports. Of particular focus has been the overall system and fleet reliability and availability and the quality of the service response in preparation for Stage 5c.
- 4.3 Since the last meeting of the Committee, LoD2 PAR Reports have provided input to the periodic Integrated Assurance Report to the Elizabeth Line Delivery Group and papers submitted to the Elizabeth Line Committee.
- 4.4 Regarding cost to complete, any emerging new cost pressures are being prudently recognised in the Anticipated Final Crossrail Direct Cost (AFCDC) as they arise, and the Programme continues to maintain provision and contingency budgets. Ongoing reviews of any emerging pressures are being completed to enable reductions of the AFCDC towards the target AFC and minimise funding requirements beyond the £825m.
- 4.5 The project has made significant progress since the last report, key progress highlights include:
- (a) commissioning of Siemens software ELR400 over Easter 2023;
  - (b) the Employers Completion Process (ECP) completed at Bond Street station. All station ECPs are now complete with defects responsibilities transferred to London Underground and Rail for London (Infrastructure) Limited;
  - (c) continued engagement, planning and the implementation of improvement initiatives with NR on the Great Western Main Line to support the continued reliability performance improvements since merging the three railways at Stage 5b minus and with the run up to full 24tph service in May 2023; and
  - (d) further software development, testing and upgrades to signalling, fleet and infrastructure software, improving performance resilience further.
- 4.6 The scope of maintenance work includes the routeway infrastructure handed over by Crossrail and the stations on the NR sections of infrastructure. The performance of maintenance activities is subject to continuous improvement learning to maximise the outputs in the available time. Further improvements will be delivered as more automated asset data becomes available.

## **5 Line of Defence 3 (LoD3 – TfL Internal Audit) Assurance**

- 5.1 This section covers the Internal Audit activities that were agreed in the Integrated Audit and Assurance schedule shared at the last meeting.
- 5.2 Two reports were issued in Q4.

### **Audit Delivery**

- 5.3 Summary information of the reports issued in Q4 is set out below, all actions have been accepted and are being actioned on both audits.

- 5.4 The 'Obsolescence of Critical Operational Systems on the Elizabeth line' audit was rated as 'Requires Improvement'. Three high priority issues and one medium priority issue were raised. The high priority issues related to no end-to-end view of obsolescence risk across the Elizabeth line, the need to implement the obsolescence standard for all critical assets and ensure obsolescence plans are in place for all critical systems.
- 5.5 The audit on 'Information Management and Transfer – Hardcopy Documents' was rated as 'Requires Improvement' with two high priority issues raised. The two issues relate to the lack of an agreed transfer plan for hardcopy documents and the monitoring arrangements in place to track progress.
- 5.6 There were no audits in progress at the end of Q4 but there was one audit in planning. This audit will start in Quarter 1 of 2023/24 (1 April to 24 June 2023) Q1 and details are provided in Appendix 1.

### **Management Actions**

- 5.7 The team monitors the implementation of all Internal Audit management actions and confirms whether they have been adequately addressed before closing them. There were no overdue actions at the end of Q4.

### **Changes to the Audit Plan**

- 5.8 TfL Internal Audit regularly review and update the audit elements of the Integrated Audit and Assurance Audit Plan throughout the year, in liaison with management, to reflect changing business priorities. No changes to the plan were made in Q4.

## **6 Line of Defence 3 (LoD 3 – IIPAG-EL) Assurance**

- 6.1 The terms of reference of the IIPAG-EL sub-group continue to provide "look ahead" overviews and areas of interest highlighted as part of the Integrated Audit and Assurance Schedule. We also support the assessment conducted by LoD2 to ensure adequacy and consistency. This schedule is maintained and reviewed regularly with the Elizabeth Line Programme Assurance Group which is co-ordinated by LoD2.
- 6.2 The focus by LoD3 over the reporting period has been on the performance of the enhanced service level of Stage 5b minus in terms of service and fleet reliability as well as software upgrade implementation. At the same time, also ensuring the process in place for transition to the Stage 5c full 24tph service is adequately managed and progressed.
- 6.3 In general, the overall assurance framework for the Elizabeth line has continued to operate effectively.

**List of appendices to this report:**

Appendix 1: Line 3 (TfL Internal Audit) Work due to start in Q1 2023/24

**List of Background Papers:**

None

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