

**Date: 21 September 2022**

**Item: Elizabeth Line Programme Assurance Quarter 1 Report  
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 1 of 2022/23 (1 April 2022 to 25 June 2022) (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 train fleet and overall system continue to perform well in the Central Operating Section of the Elizabeth line. Additional train and signalling software upgrades and other interventions are providing further operational reliability improvements, in advance of the next significant stage of programme delivery, namely Stage 5b minus towards the latter part of the year.
- 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, the quality of the

service response to issues arising during service operation as well as the status of continued works and team readiness in preparation for Stage 5b minus and beyond.

- 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, although potential new cost pressures are being prudently recognised in the Anticipated Final Crossrail Direct Cost (AFCDC) as they arise, the Programme continues to maintain provision and contingency budgets. Following the recent Cost to Go reviews with the Commissioner, actions are ongoing across all areas to identify opportunities to reduce the AFCDC and minimise funding requirements beyond the £825m.
- 4.5 The project has made significant progress since the last report, key progress highlights include:
- (a) successful T minus 16-week Gateway review confirming readiness to proceed to Stage 5b minus on 6 November 2022;
  - (b) continued strong reliability performance since entry into Revenue Service;
  - (c) excellent team working across the Operations teams, leading to strong service recovery and implementation of lessons learnt from the handling of incidents; and
  - (d) software upgrades to signalling and fleet software enhancing performance further.
- 4.6 Key indicators of maintenance performance continue to be monitored to provide greater clarity around the average fault identification and diagnosis interval and the overall fault-to-fix cycle time. Experience during early Revenue Service is helping to shape the improvements required in terms of response and fix times and root cause analysis to support a 22/24 trains per hour (tph) service. An Access Improvement Programme has also been established with a focus on optimising the maintenance window, through increasing the deployment of automation to improve the efficiency of the maintenance workload and resource allocation. Progress improvements are being monitored on a week-by-week basis.
- 4.7 Both fleet and system performance reliability and availability are on a positive trajectory towards meeting the desired performance targets expected for Stage 5b minus.

## **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 In Q1 we issued one report, we have two in progress and there are three audits planned to commence in Quarter 2 of 2022/23 (26 June 2022 to 17 September 2022) (Q2).

### **Audit Delivery**

- 5.3 Summary information of the report issued in Q1 is set out below.
- 5.4 The Information Management and Transfer audit was rated as 'Requires Improvement'. Two high priority issues and one medium priority issue were raised. The high priority issues relate to the transfer of systems and information identified as part of the 2017 IT Transition Strategy not being managed as a formal programme, and governance arrangements for monitoring the programme of information transfer not being in place. Management actions for all issues have been agreed and are in the process of being addressed.
- 5.5 Audits in progress at the end of Q1 are included as Appendix 1, and work planned to start in Q2 is included as Appendix 2.

### **Management Actions**

- 5.6 The team monitors the implementation of all Internal Audit management actions and confirms whether they have been adequately addressed before closing them. There are no overdue actions at the end of Q1.

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

- 5.7 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 have been made in Q1.

## **6 Line of Defence 3 (LoD 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 areas of interest highlighted as part of the revised Integrated Audit and Assurance Schedule in February 2022 continues to apply. We also support the 'continuous assurance' process established by LoD2. This schedule is maintained and reviewed within the Elizabeth Line Programme Assurance Group which is co-ordinated by LoD2.
- 6.2 Since the introduction of Stage 3b Revenue Service, LoD3 has focused its attention on the preparations for the enhanced service level of Stage 5b minus, and the Stage 5c full 24tph service. The overall assessment by LoD3 is that the overall assurance framework has continued to operate effectively over the last quarter.

**List of Appendices:**

Appendix 1: Line 3 (TfL Internal Audit) Work in progress at the end of Q1 2022/23

Appendix 2: Line 3 (TfL Internal Audit) Work due to start in Q2 2022/23

**List of Background Papers:**

None

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