

Appendix 1

Audit and Assurance Plan (November 2021)

Audit and Assurance – Areas to be covered

Priority	Topic	Evidence of Need	Targeted Review / Continuous Assurance	Who	When / How Many Days?	Objectives
1	Reliability of Performance (System, Train, Integration)	<ul style="list-style-type: none"> Rolling Stock - Evidence of mileage and reliability (MTIN) being significantly lower than planned going into TO. Railway Systems – Significant No. of Operational Restrictions. ELR100 has removed some, but potentially introduced new challenges. Understanding what ELR110 delivers and what the remaining delta is. Infrastructure Systems – TVS, PSD all performing lower than required for Revenue Service 	Continuous Assurance	LoD2/ IIPAG	Ongoing	<p>To understand the plan to get us to the reliability required for a successful Revenue Service.</p> <p>What if any further interventions are required?</p>
2	Romford Control Centre (RCC). Resilience of team (nos, training, capacity) to deal with busy operations & incidents (in view of no. of ORs, Alarms during the transition)	<ul style="list-style-type: none"> High level of Operational Restrictions and Alarms adding to the workload of the TM's Complexity of multidimensional role (skillset) Time to train new starters Low levels of experience of BAU railway operations Attrition rate – given more attractive salaries and less demanding roles elsewhere 	Targeted Review	LoD2 / IIPAG	Nov/Dec 1 day in RCC 3 days reviewing docs & writing report	<p>To fully understand the issues (root cause) impacting upon the resilience of the RCC team</p> <p>To make recommendations which will improve the long-term resilience of the team, including the prioritisation of the reduction of ORs.</p>
3	Gate process for readiness assessment as we go through the Phases of Trial Operations, Revenue Service and into Stage 5b, c.	<ul style="list-style-type: none"> Evidence of entry into Trial Running without the System being sufficiently reliable leading to period of unproductive railway operations. 	Continuous Assurance	LoD2 / IIPAG	Ongoing	To provide assurance to the Gate process for entry into Phase 2 TO and Revenue Service.

Audit and Assurance – Areas to be covered

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4	Technical and Safety Assurance and Approvals for EiTO and Passenger Service – including ORR, RfLi acceptance	Lag in Assurance and Approvals following the blockade. Significant works still to be completed in time for Phase 1 Trial Operations achieving a Red RAG status	Continuous Assurance	LOD2 / IIPAG	Ongoing	To assure the appropriate completion of the Assurance and Approvals activities in time for EiTO & Revenue Service
5	RFLI Maintenance effectiveness (People, Process, Systems, Suppliers)	Response and fix times greater than required during Revenue Service Lack of metrics in place to drive performance improvements	Targeted Review	LoD2 / IIPAG	Dec/Jan 2 days with Team	To develop a targeted improvement plan to establish resilience in the team
6	DCS1.2 – Assurance of the Schedule and Cost of the revised schedule	Previous scope change impacting on schedule delays and cost increase.	Continuous Assurance	LoD2 / IIPAG	Ongoing	To monitor any schedule movement and impact on cost.
7	TfL Procurement and Supply Chain Capacity to take on the procurement of EL's existing contracts	Ongoing transformation in P&SC means the team may not have the capacity to take on additional work	Audit	Audit Team	Dec/Jan	To provide assurance that TfL's P&SC team have the capacity to take on the procurement of EL's existing contracts
8	Residual Works Team (RWT) readiness and ongoing operational workarounds needed and associated costs	RWT is being formed, so there is no visibility of readiness plans or plans to manage ongoing operational workarounds and costs	Continuous Assurance	To be included as part of No. 11. Assurance Review & TfL Project Assurance	TBC	To get visibility and therefore assurance that RFLI will be ready to take on the works and deliver them effectively and efficiently.
9	Information transfer – (excluding asset data), Emails, Contract documents (Soft & hard copies), Contract negotiation information	Ensure TfL has all documents and information in place to continue to run and manage the EL.	Audit	Audit Team	Dec/Jan	To review the effectiveness of controls around information management and transfer from CRL to TfL

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10	Obsolescence of critical operational systems	BMS system on stns – out of Siemens support. Recommend an Audit	Audit	Audit Team	TBC	To ensure that all critical operational systems have a roadmap and are supported.
11	Org Effectiveness & Operational Readiness (People, process, interfaces etc) of all parties to receive the EL (RFLi, LU, NR, TfL, MTR) as we integrate the later Stages 5b, 5c.	Shift of focus from delivery to RFLI acceptance and management of the railway Stages 5b & 5c involve a significant step up in terms of complexity of organizational interfacing in a live operational environment.	Targeted Review	LoD2 / IIPAG	Nov/Dec	To provide assurance that RFLI governance to run the Elizabeth Line is adequate. To identify any gaps / issues with clarity of R&R, in particular during incident mgmt.
12	Management of Direct Contracts (BOS & CAW) (Under Review due to potential overlap)	Final two stations to be completed. Are deliverables being managed and monitored.	Audit	Audit Team	Feb/Mar	To provide assurance that the controls around the management of CRL Direct Contracts are adequate and effective