

Appendix 4

Integrated Audit and Assurance Schedule for Elizabeth line

March 2022

Audit and Assurance – Areas to be covered

Priority	Topic	Evidence of Need	Targeted Review / Continuous Assurance	Who	When	Objectives
1	Reliability of Performance (System, Train, Integration)	<ul style="list-style-type: none"> Rolling Stock - Evidence of mileage and reliability (MTIN / PPM) being significantly lower than planned going into Trial Operations phase two. Railway Systems – Significant number of Operational Restrictions. Understanding what ELR200 (signalling software upgrade) delivers and what the remaining delta is. Infrastructure Systems – Tunnel Vent System, Platform Screen Doors performing lower than required for Revenue Service. 	Continuous Assurance (via the Executive reporting process)	LoD2/ IIPAG-EL	Up to Revenue Service and ongoing until Stage 5b	<p>To understand what management decisions / interventions are being taken to get Reliability to where it needs to be for 24 trains per hour (tph).</p> <p>What if any further interventions are required?</p>
2	<p>Elizabeth line Operational Capability to cope with 24tph. Resilience of team (numbers, training, capacity) to deal with busy operations and incidents (in view of additional pressure a 24tph will bring)</p> <p>Effectiveness of all parties within Elizabeth line to positively and collaboratively deliver an effective, efficient and seamless passenger experience</p>	<ul style="list-style-type: none"> Sometimes disjointed relationships and unclear accountabilities. TfL managing direct contracts with Alstom and Siemens – MTR minimal opportunity to influence and together improve the service delivery. Workload of the Traffic Manager’s during disruption (alarms, operational restrictions). Complexity of multidimensional role (skillset) Driver numbers, capability and resilience. Mixed levels of experience of some of the business-as-usual railway operations team 	Continuous Assurance (via the Executive reporting process)	LoD2 / IIPAG-EL	Up to Revenue Service and ongoing until Stage 5b	<p>To understand how effective the management interventions are in building collaboration across all aspects and parties involved in the delivery of an effective operation.</p> <p>To make recommendations via Executive reporting which will improve the long-term resilience of the team.</p>
3	Rail for London (Infrastructure) Limited-Maintenance effectiveness (people, process, systems, suppliers)	<ul style="list-style-type: none"> Response and fix times required are much greater in a 24tph service than required during Revenue Service or 12tph. Metrics are only just being put in place to drive performance improvements. 	Continuous Assurance (via the Executive reporting process)	LoD2 / IIPAG-EL	Up to Revenue Service and ongoing until Stage 5b	<p>To assess the metrics and management processes in place to drive an effective, robust and resilient 24tph maintenance service.</p> <p>To assure performance against the metrics is being achieved or interventions planned to address any issues.</p>

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4	Service Recovery - Operations	<ul style="list-style-type: none"> The ability of the Operations teams to respond during service disruption for 12tph service has still to be proven. Trial Operations would attest to there being further work required in delivering a recovery performance acceptable in a live operations environment. 	Continuous Assurance (via the Executive reporting process)	LoD2 / IIPAG-EL	Up to Revenue Service and ongoing until Stage 5b	<p>To identify what management interventions are underway to improve the service recovery capability across the Operational teams.</p> <p>To have visibility of metrics being used to measure the improvement in Service Recovery.</p>
5	DCS1.2/1.3 – Assurance of the Schedule and Cost of the revised schedule	<ul style="list-style-type: none"> Previous scope change impacting on schedule delays and cost increase. Lack of visibility of detail for Stage 5b and 5c schedule. 	Continuous Assurance (via the Executive reporting process)	LoD2 / IIPAG-EL	Up to Revenue Service and ongoing until Stage 5b	To monitor any schedule movement and impact on cost.
6	<p>Gate process for readiness assessment as we go into Revenue Service, Stage 5b, c</p> <p>Assurance of the plan to get into Stage 5b/5c</p>	<ul style="list-style-type: none"> Evidence of entry into Trial Running and Trial Operations without the system being sufficiently reliable leading to a period of unproductive Trial Running and Trial Operations being split into two phases to enable infrastructure and systems upgrades to take place. 	Continuous Assurance (via the Executive reporting process)	LoD2 / IIPAG-EL	Up to Revenue Service and ongoing until Stage 5b	To provide assurance to the Gate process for entry into Revenue Service, Stage 5b. 5c and the plan for getting into Stage 5b/5c, through a Readiness ‘RAG’ status update report.

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7	Information transfer – (excluding asset data), Emails, Contract documents (hard copies), Contract negotiation information	Ensure TfL has all documents and information in place to continue to run and manage the Elizabeth line.	Audit	Audit Team	TBC	To review the effectiveness of controls around information management and transfer from Crossrail to TfL.
8	Cost verification - Engie	To certify that spend is accurate and appropriate.	Audit	Audit Team	Q1	To certify that spend is accurate and appropriate.
9	Annual Complaints Commissioners Accounts 2021/22	To provide assurance on the accuracy of the Crossrail Complaints Commissioners accounts for 2021/22.	Audit	Audit Team	Q1	To provide assurance on the accuracy of the Crossrail Complaints Commissioners accounts for 2021/22.
10	Complaints Commissioners Accounts 2022/23	An independent Crossrail Complaints Commissioner was appointed by the Secretary of State for Transport. This will cease in September 2022 and this is a final review of the Complaints Commissioner's accounts to ensure figures are correct, and that the accounts comply with the Accounts Direction issued on behalf of the Crossrail High Level Forum.	Audit	Audit Team	Q2	To provide a final review of the Complaints Commissioner's accounts to ensure figures are correct, and that the accounts comply with the Accounts Direction issued on behalf of the Crossrail High Level Forum.
11	Crossrail Act Obligations	To provide assurance that obligations in the Crossrail Act have been met.	Audit	Audit Team	Q2	To provide assurance that obligations in the Crossrail Act have been met.
12	Gateway Review – IPA (Infrastructure and Project Authority) Gateway 4 and 5 reviews	Driven by external Stakeholder requirements.	Continuous Assurance	IPA / IIPAG-EL	Before Stage 5c	To assess readiness for Stage 5c.