

Date: 7 December 2022

Item: Elizabeth Line Operations and Further Opening Stages

This paper will be considered in public

1 Summary

- 1.1 This paper provides the status update of the Elizabeth line operations and on the readiness for further opening stages of the Elizabeth line railway including the remaining work on the Crossrail project.

2 Recommendation

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

3 Performance of Operational Service

- 3.1 Through-running and seven day a week services were introduced on the Elizabeth line on Sunday 6 November 2022. This marks a major milestone and provides significant benefits for passengers, particularly those travelling to and from the surface sections in the east and west. Operating hours were also extended. Services on the opening day and in the first week of service were successful with excellent customer feedback and performance around the levels anticipated.
- 3.2 The other major event of the period was the opening of Bond Street station on Monday 24 October 2022, meeting the targeted autumn opening and marking the full opening of all central section stations.
- 3.3 The Elizabeth line continues to contribute to London's recovery from the coronavirus pandemic and between 24 May and 31 October 2022, there were 60 million journeys on the whole line with 250,000 journeys a day in the Central Operating Section (COS). There has been a further significant increase in the period following through-running on 6 November 2022. Further details and insights into usage of the Elizabeth line are included in the Travel in London paper elsewhere on the agenda.
- 3.4 Prior to through-running, the overall Elizabeth line Public Performance Measure during Period 7 (18 September to 15 October 2022) was at 94.1 per cent. This was an increase from Period 6, with performance recovering from some major issues on the surface sections of the line, including damage to Overhead Line Electrification on the western section of the route. Network Rail has an extensive programme of works and interventions designed to increase the resilience of infrastructure between Paddington and Reading but in the short term this remains a vulnerability for through-running.

- 3.5 Following the start of through-running there were some temporary issues at Stratford with a small number of trains failing to transition successfully between the surface and tunnel signalling systems. These issues were addressed by slightly reducing the speed of trains over a short section and a full software fix will be provided by Siemens, the signalling supplier, in a future upgrade.
- 3.6 The remaining three seven-car trains that were retained for services operating in and out of Paddington main line station are now being converted into full-length (nine-car), at which point the Elizabeth line will be running a homogeneous fleet of 70 nine-car trains. In the run up to through-running, the class 345 MTIN figure (miles per service affecting faults of three or more minutes), which measures train reliability, remained consistently above the 10,000-mile mark which was the minimum target for 5b minus services. Work continues with the manufacturer, Alstom, to further improve the reliability of the fleet, with interventions to electro-mechanical systems such as the door mechanisms, as well as introducing new software to upgrade the Train Control and Management System.
- 3.7 Step-free access in the COS has remained reliable since entry into revenue service although there were earlier issues with the inclined lift at Liverpool Street which were resolved by the changing of electrical components.
- 3.8 Customer satisfaction for the line is extremely high, with the Customer Satisfaction Survey (CSS) score for the Elizabeth line at 83 in Quarter 2, up from 77 in Quarter 1 – the highest score across all TfL modes. Quarter 2 is the first period where the COS has been up and running throughout. The score for the COS was exceptional at 87, while the east and west saw CSS scores of 82 (up from 79) and 80 (up from 75) respectively.

4 Project completion update

- 4.1 The opening of Bond Street station, described above, was the major Crossrail project milestone and success of the period.
- 4.2 Updated “SCADA” communications software was successfully commissioned at the end of October, and ELR300 signalling software has undergone successful ‘over and back’ testing. A further signalling upgrade, ELR400 will take place in Easter 2023.
- 4.3 The station and remaining routeway contracts are now in the process of being closed out, a process that is targeted to take place in the first quarter of 2023.
- 4.4 Stage 5c remains on track to deliver 24 trains per hour in the COS at peak times. The signalling functionality to support this will be delivered by the ELR300 and ELR400 software update, but the timetable will remain the same until May 2023 to align with National Rail timetable changes.
- 4.5 The Crossrail project will move to its Close Out Organisation from 16 January 2023 when Jim Crawford will step down as Chief Programme Officer for Crossrail, transferring responsibility to Kim Kapur as the Crossrail Close Out Director, reporting to the TfL Elizabeth line Director. This is timed to follow the major signalling commissioning at Christmas. At this point, the Crossrail Close Out Organisation will be a full part of the TfL Elizabeth line team.

List of Appendices:

None

List of Background Papers:

None

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