

Date: 24 January 2023

Item: Elizabeth line Operations and Programme Completion Update

This paper will be considered in public

1 Summary

- 1.1 This paper provides an update on Elizabeth line performance and the status of the Crossrail project.
- 1.2 Following the initial phase of transition, the Elizabeth Line Delivery Group (ELDG) was formed to ensure appropriate oversight of the delivery of the Elizabeth line by Crossrail and the Transport for London (TfL) Executive. The ELDG is chaired by the Commissioner. In line with the commitments made by the Mayor for greater transparency of the Crossrail project, the minutes and actions from ELDG are available on our website¹. Available reports will be uploaded to correspond to the meeting of this Committee.

2 Recommendation

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

3 Operations and Programme Update

- 3.1 The Crossrail project is now in the final phase with the stage known as Stage 5c on track to be delivered by the end of May 2023.
- 3.2 At this point, the line will move to a peak service frequency of 24 trains per hour (tph) in the central section – up from the current 22 tph. This increase will be facilitated by delivery of the auto reverse functionality. This uplift will take place in line with the National Rail timetable change scheduled for 21 May 2023.
- 3.3 A full closure of the Elizabeth line's Central Operating Section (COS) took place during the Christmas period with a number of works successfully completed.
- 3.4 The blockade (Westbourne Park – Pudding Mill Lane – Abbey Wood) took place between 01:10 on Sunday 25 December and 04:00 Wednesday 28 December 2022, allowing for commissioning of the major ELR300 signalling software update, as well as upgrades to Central Management System and Station Management System software.

¹ <https://tfl.gov.uk/corporate/publications-and-reports/elizabeth-line-delivery-group>

- 3.5 Additionally, no services ran between Whitechapel and Shenfield between Wednesday 28 December 2022 and Tuesday 3 January 2023 to allow National Rail power upgrades to take place.
- 3.6 A further signalling upgrade, ELR400, is planned for Easter 2023 to deliver the final configuration for auto reverse and 24 tph.
- 3.7 The handover of Bond Street Elizabeth line station to London Underground took place on 12 January 2023. All contracts are expected to be closed out by Easter 2023 with the exception of signalling and communications software contracts with Siemens and Alstom, which are core to delivering the project's final stage (5c) in May 2023.
- 3.8 As planned, the Crossrail organisation moved into its Close Out phase on 16 January 2023, with Jim Crawford stepping down as Chief Programme Officer. Responsibility for Crossrail now transfers to Kim Kapur as the Crossrail Close Out Director, reporting to Howard Smith, Director, Elizabeth line.

4 Operational Service

- 4.1 Period 9 (13 November to 10 December 2022) represented the first full period of through-running, and of the new, enhanced timetable. Since 6 November 2022, the service has been operating 22 tph in the COS at peak times, Monday to Sunday (seven days per week) and from 05:30 to 23:30. 22 tph represents a near-doubling of services from 12 tph since opening, more than six months ago.
- 4.2 Minor timetable changes were delivered in December 2022. These included an additional early morning service from Whitechapel to Paddington and faster journeys between Heathrow Terminal 2/3 and Terminal 5. Service impacts affecting wait and journey times for some customers will remain until the May 2023 timetable change.

5 Performance and Reliability

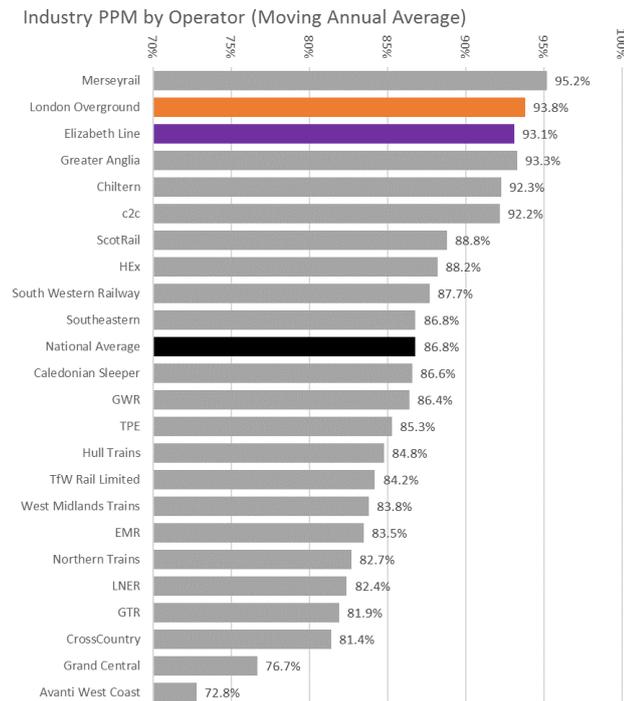
- 5.1 Following the successful launch of the new timetable in November 2022, initial performance has been slightly below target, but in a period of disruption of rail services nationally. Good collaborative working with the operator, MTR Elizabeth line and Network Rail teams on preparing for it has followed through into timetable delivery and management of incidents and we have a good process to capture learnings.
- 5.2 The overall Public Performance Measure (PPM) scores on the Elizabeth line for Periods 8 and 9 (16 October – 12 November and 13 November – 10 December 2022) were 91.8 per cent and 86.4 per cent respectively. PPM for Period 10 (11 December 2022 – 7 January 2023) was 92.7 per cent.

5.3 Charts showing Elizabeth line PPM, trips run and delays over 15 minutes to end of Period 10:



5.4 The Moving Annual Average (MAA) performance in Period 10 was 93.1 per cent – with the Elizabeth line the third best in the sector.

5.5 Chart showing industry PPM by operator (MMA) – long-term performance indicator up to 7 January 2023:



5.6 Fifteen days of industrial action on Network Rail and TfL impacted the Elizabeth line between 6 November 2022 and 7 January 2023 with reduced services available on strike days and late start up on days following a strike. All partners are working closely together to deliver the best possible service levels and information to customers during these times.

5.7 Strike action taken by RfLI staff resulted in a reduced service being available on 12 January 2023. Eight tph ran on the eastern section between Shenfield and Liverpool Street and six tph on the west, departing from Paddington high level platforms. No service was available in the COS.

5.8 Industrial action short of a strike is being undertaken by members of Prospect, TSSA and RMT unions between 12 January and 28 February 2023. Additional training and contingency plans have been put in place to minimise the impact on passenger services.

5.9 The key issues in terms of reliability have been:

- (a) Network Rail infrastructure in the West, where there have been a significant number of points failures, which are disrupting and take time to recover the service; and
- (b) the reliability of the class 345 trains. A further train software upgrade to support this is expected to be delivered by Alstom in February 2023.

5.10 All 70 class 345 trains have now been converted into nine-car full length units. Since the autumn, the final three seven-car or 'reduced length' units have been converted to nine-car trains, with the last brought into service in December. A full fleet of nine-car units supports improved railway performance, for instance by

allowing greater resilience in the event of service disruption or unit failures. It has also allowed for the withdrawal of all class 315 trains as of December 2022.

6 Customer Experience

6.1 Passenger journeys continue to exceed projections and continue to rise, with journeys along the whole of the line exceeding 3.5 million per week throughout Period 9.

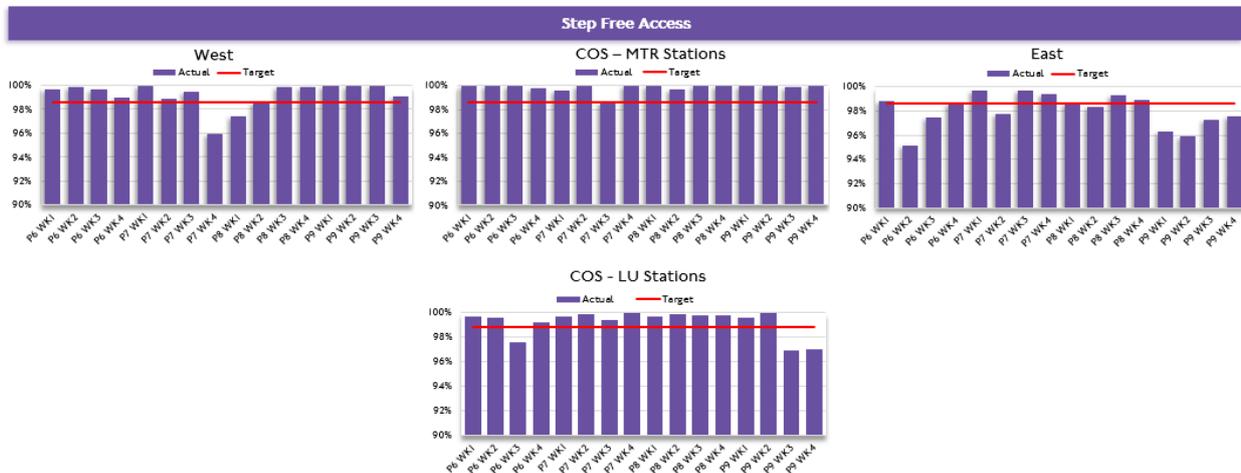
6.2 Chart showing weekly passenger journeys in millions vs budget: (data date 21 August – 10 December 2022):



6.3 Step-Free Access was better than target for Period 8 with 99.05 per cent performance.

6.4 In Period 9, Step-Free Access was close to target at 98.5 per cent. Performance of assets on the western and central sections remained extremely high. However, access in the east was substantially impacted by failures, notably an intermittent fault at Stratford (which did not impact Step-Free Access due to its pair lift still being operational) and a four-day outage of a lift at Goodmayes. Both have now been resolved.

6.5 Chart showing weekly step-free access availability by section/operator:



(Data date 21 August 2022 – 10 December 2022)

- 6.6 An extensive programme of activities and training aimed at improving accessibility and customer experience is in place. This is being delivered by MTR Elizabeth line, mainly through its Travel Ambassadors, and is linked to other TfL accessibility work. Recent examples include providing additional information to assist customers around strike action and supported train rides for wheelchair users to build confidence using the Elizabeth line.
- 6.7 Customer satisfaction for the line has to date been extremely high, with the Customer Satisfaction Survey (CSS) score for the Elizabeth line in Q2 (the first full period in which the COS was running) was at 83 – the highest score across all TfL modes. The score for the central section was exceptional at 87, while the east and west saw CSS scores of 82 (up from 79 in Q1) and 80 (up from 75 in Q1) respectively.
- 6.8 Period 9 saw a higher number of complaints than Period 8, however the same period saw a large number of staff commended for going above and beyond to support Elizabeth line customers.
- 6.9 Customers continue to provide positive feedback around their experiences on the Elizabeth line both on social media and directly to the TfL contact centre. Common themes include short journey times to central London following the start of through-running, and staff members' enthusiasm for the benefits of the line and commitment to supporting customers where disruption occurs.

List of appendices to this report:

None

List of Background Papers:

None

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