

This paper will be considered in public

1 Summary

- 1.1 This paper provides a status update on Elizabeth line. The meeting of the Customer Service and Operational Performance Panel, on 4 October 2023, also considered a deep-dive paper on the Elizabeth line, with a focus on customers and operational performance. A senior representative from Network Rail also attended that meeting.

2 Recommendation

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

3 Timetable Development

- 3.1 The final phase of the Elizabeth line's staged opening timetable was introduced on Sunday 21 May 2023. Compared to the November 2022 timetable, it included a number of improvements: 24 trains per hour instead of 22 trains per hour between Paddington and Whitechapel in the peak periods; longer peak periods; the removal of 'dwells' at the transition to and from Network Rail tracks in the West; and through services from the Shenfield line to Heathrow Terminal 5.
- 3.2 Connectivity, especially in southeast London, has dramatically improved. The Elizabeth line almost halves journey times from stations in southeast London to central London. Passengers can now travel from Abbey Wood to Farringdon in around 20 minutes, a journey that would have previously taken at least 39 minutes.

4 Customers

- 4.1 Over 225 million journeys have now been taken on the Elizabeth line since opening in May 2022.
- 4.2 The week ending 30 September 2023 saw a record number of passenger journeys, with a total of 4.5 million.
- 4.3 Thursday 28 September 2023 recorded the highest overall daily number since opening with 738,000 journeys.
- 4.4 On average, ridership on the line is over 600,000 journeys made each day, with around 700,000 daily journeys now being seen in the Tuesday to Thursday period.

- 4.5 Customer satisfaction for the line remains very high, with the Elizabeth line scoring 82 in the Quarter 2 Customer Satisfaction Survey. This is the fifth consecutive quarter with a score of 82 or over.
- 4.6 Crossrail/Elizabeth line won a special award at the National Rail Awards. The award recognised Crossrail/the Elizabeth line's excellence in multiple categories and reflected the incredible efforts of everyone who worked collaboratively to achieve a year packed with innovations and milestones for the line as well as for London. MTR Elizabeth Line also took home the Passenger Operator of the Year award, reflecting the Elizabeth line's many innovations in customer service.

5 Performance of Operational Services

- 5.1 The periods since through running began have seen some very high performing days, and the timetable itself is robust.
- 5.2 The Elizabeth line performance is measured by two separate metrics. Rail Journey Time Metric (JTM), which is a demand-weighted average of all Elizabeth line customer journey times and comprises wait time and in-vehicle time, weighted by customers' perceived values for waiting on platforms, crowding, and on-train delays.
- 5.3 In Period 3 (28 May – 24 June 2023) JTM was 25.4 minutes, in Period 4 (25 June – 22 July 2023) was 25.1 minutes, in Period 5 (23 July – 19 August 2023) was 25.8 minutes and Period 6 (20 August – 16 September 2023) was 24.9 minutes, all performing much better than the target of 26.4 minutes.
- 5.4 The increased frequency delivered by the new timetable supports delivery of the JTM target.
- 5.5 We also monitor our performance against the long-standing Public Performance Measure (PPM), also used by Network Rail and other Train Operating Companies, which combines figures for punctuality and reliability into a single measure.
- 5.6 The PPM score for the Elizabeth line for Period 3 was 87.5 per cent, Period 4 was 88.9 per cent, Period 5 was 83.6 per cent and Period 6 was 86.3 per cent, which is below historical performance and expected levels. Performance in Period 7 is significantly better and, as of 4 October 2023, stood at 91.5 per cent.
- 5.7 A significant focus remains on maximising performance and reliability, working collaboratively with all the parties helping to deliver the Elizabeth line, and in addition to the day-to-day operational management, there are a number of additional performance focussed meetings between Network Rail Great Western, MTR Elizabeth Line, Network Rail Great Eastern and Alstom.
- 5.8 The key issues in terms of reliability have been:
- (a) Network Rail infrastructure in the West, where failures of points, axle counters (part of the signalling system) and problems with the Overhead Line Electrification on the Western surface section have disrupted services. In particular, a major signalling outage resulted in very significant delays and train cancellations between 25 and 27 July 2023. This was eventually traced

to issues with Network Rail's signalling communications (datalink). Network Rail has a number of initiatives underway to mitigate and manage these failures. In addition to day to day operational management, there are a number of additional performance focused meetings with Network Rail right up to the Commissioner. The performance of Network Rail's Anglia route remains very good and ahead of target;

- (b) while availability of trains has been good, with no services affected by lack of rolling stock, the reliability of the trains has been below target. There have been a number of further software upgrades and in recent weeks reliability, while still below target, has shown steady improvement. Alstom, the train manufacturer, has two further reliability-focused software releases this year as well as a hardware modification which will speed recovery from incidents. Again, an intensive programme of meetings is in place to align Alstom, TfL, and MTR Elizabeth Line;
- (c) the period since 21 May 2023 saw a small number of disruptive incidents in the Central Operating Section including damage to axle counters and a leak of hydraulic fluid from a maintenance train. These took time to resolve. Reviews of each of incident have been completed and actions put in place, both to address the root causes and to speed response and recovery when these relatively infrequent incidents occur; and
- (d) there were some non-safety affecting issues with the signalling software (ELR400) rolled out at Easter in readiness for the new timetable. These were relatively quickly addressed by Siemens, the supplier, and the schedule for next year's software release, ELR500, includes additional time for testing 'live' in the Central Operating Section.

5.9 The forthcoming software and wiring updates on the trains are key and are expected to deliver further benefits to reliability. Contingency plans continue to be refined to minimise disruption when events do occur.

6 Programme Finance

- 6.1 The Period 5 (50th percentile) Anticipated Final Crossrail Direct Cost (AFDCDC) stands at £15,903m, which is unchanged since Period 12 2022/23.
- 6.2 The current gap between the P50 AFDCDC and the £15,887.5m revised funding package remains at £15.5m. The Elizabeth line team are working hard to identify opportunities for reducing this.

7 Governance

- 7.1 Given the significant public expenditure, high-profile and need to protect the benefits of the Crossrail investment, we have agreed to establish the Elizabeth line Strategic Direction Group in-line with the recommendations of the Infrastructure and Projects Authority's review into the closeout and management of benefits of the Crossrail project.
- 7.2 The Commissioner will Chair the biannual meeting to bring together the senior executives of the key organisations including the Department for Transport,

Network Rail, High Speed 2 and the operators with the aim to secure continued investment in the network, manage the integration with other projects including High Speed 2 and coordinate the development of proposed schemes. The executive-level strategic oversight forum will provide direction for future activities and decisions.

- 7.3 In addition, the Elizabeth Line Oversight Group, chaired by the Director, Elizabeth line, is a periodic cross-industry Director-level group, including the Department of Transport, to consider the performance of the Elizabeth line, review performance improvement and the development of future timetables and plans. The forum also has a standing agenda item where lessons learnt are shared and discussed for the benefits of industry colleagues.
- 7.4 We look forward to continuing our work to ensure that the benefits of investment in our travel network supports the growth and people of London, the South East and the UK as a whole.

List of appendices to this report:

None

List of Background Papers:

None

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