

Date: 30 September 2021

Item: Project Status Update

This paper will be considered in public

1 Summary

- 1.1 This paper provides an update on 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 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.
- 1.3 A paper is included on the Part 2 agenda which contains supplementary information that is exempt from publication by virtue of paragraph 3 of Schedule 12A of the Local Government Act 1972 in that it contains information relating to the business affairs of TfL. Any discussion of that exempt information must take place after the press and public have been excluded from this meeting.

2 Recommendation

- 2.1 **The Committee is asked to note the paper and the supplementary paper on Part 2 of the agenda.**

3 Crossrail Update

- 3.1 Crossrail Limited is in the complex final stage of delivery of the Elizabeth line with Trial Running making good progress and preparations for Trial Operations advancing. The project remains aligned to the scheduled opening of the railway to passengers in the first half of 2022.
- 3.2 The Trial Running of trains through the central tunnels began in May 2021 as part of the major railway trials taking place throughout this year. The number of trains operating in the tunnels has increased from four trains per hour (tph) in May to eight tph in June 2021 and reached 12 tph on 12 July 2021. This is a significant milestone for the programme as this is the configuration that will be in operation when the railway opens to passenger service.
- 3.3 Trial Running has broadly been positive and although there have been a number of expected settling down issues encountered, they relate to known issues in the

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

current software configuration. These are expected to be resolved with the upcoming software release known as ELR100.

- 3.4 The ELR100 software should be the last major configuration before revenue service and is pivotal to the programme advancing through to the next stage, known as Trial Operations. It is expected that the software will be assured and commissioned in October.
- 3.5 The next couple of months will see the continuation of Trial Running 12 tph in order to build train mileage and identify any defects and bugs in the systems and software. There will also be timetable demonstrations that stimulate 24 tph during this period. This will be the service frequency in the central section when the full end-to-end Elizabeth line is operational.
- 3.6 The final railway integration tests to ensure all of the components work seamlessly together will also be completed during this period. These tests apply to the tunnel ventilation system, trains, software, signalling and power systems and can only be done at this stage now that the completed railway is available.
- 3.7 In autumn 2021, works will take place to complete elements of outstanding works in the tunnels, including the commissioning of the tunnel ventilation system upgrade works.
- 3.8 Once Trial Running is complete, ELR100 is commissioned and all final remaining works completed, it will demonstrate that the Elizabeth line can run at the performance levels necessary to move to the next phase of the programme, known as Trial Operations.
- 3.9 The countdown process for Trial Operations has commenced reflecting on the lessons learnt from the Trial Running countdown. Senior stakeholders from all organisations involved have attended the countdown meetings that have taken place so far.
- 3.10 It is forecasted that Trial Operations will commence in November 2021, at the earliest, however several key milestones need to be met before this important and final phase of the programme can commence.
- 3.11 The project completed an 18-day blockade in July 2021. During this period, Trial Running services were suspended to allow work activity to proceed uninterrupted. The objective of the blockade was to reduce the number of the remaining intricate activities in the tunnels and stations. It was a successful blockade with productivity at 95 per cent. The significantly reduced number of items that remain are being reprofiled and will be completed in the coming months.
- 3.12 The central section stations need to reach specific states of completion for the programme to be able to commence Trial Operations. On 23 August 2021, Whitechapel became the latest central section station to be transferred to TfL. As a result of the transfer, a new ticket hall and lifts have opened for customers at the station, reopening the previous entrance on Whitechapel Road with the addition of step-free access to London Underground and London Overground platforms.

- 3.13 In addition, Paddington station was transferred to TfL on 6 August 2021. With both stations now transferred, seven of the new central section stations have been transferred to TfL in little over a year – an overview of key achievements is shown in the dashboard in Appendix 1. This significant progress is the result of collaborative efforts between everyone involved in the delivery of the stations and our focus is on the remaining stations to be transferred.
- 3.14 The next station to be transferred is Canary Wharf. It is expected that, alongside the final integration of Abbey Wood station, Canary Wharf will be transferred in autumn 2021. Bond Street is on target to achieve the configuration necessary to be able to support Trial Operations, and works are continuing at the station for it to be ready for passenger service.
- 3.15 The Delivery Control Schedule (DCS) 1.2 has been agreed and forms the new baseline for all future reporting. It covers all remaining work through the opening of the central section and full Elizabeth line services from Reading and Heathrow through the central section to Shenfield and Abbey Wood.
- 3.16 The latest plans bring forward the delivery of key Elizabeth line benefits by ensuring that services from Reading, Heathrow and Shenfield can connect with the central tunnels sooner than previously planned after the opening of the central section of the railway. The earliest expected date for this is autumn 2022. Full end-to-end services are planned to commence no later than May 2023.
- 3.17 Ahead of advancing to the next stage in the programme, discussions have taken place to ensure that there is a shared agreement on the process for entering into Trial Operations, as distinct from the process set out in the Project Development Agreement (PDA), which was a product of being written prior to the Crossrail Handover Strategy and Plan. The PDA states that Trial Operations shall not commence before Handover. However, in order to facilitate a timely entry into Trial Operations, the DCS 1.2 records the decisions by each of Rail for London (Infrastructure) Limited (RfL(I)) and London Underground (LU) to commence Trial Operations at Elements prior to the full requirements of Handover. In agreement with the Joint Sponsor Team, Crossrail has detailed its support for the position taken by RfL(I) and London Underground.
- 3.18 Following the completion of the platform extension works at Liverpool Street mainline station and the introduction of the nine-car Class 345 Full Length Unit trains between Liverpool Street and Shenfield in May 2021, there are now six in operation alongside seven-car Reduced Length Units (RLU) and Class 315 'legacy' trains. Replacement of the remaining RLUs and the Class 315 trains will commence in November 2021.
- 3.19 The major redevelopment of West Drayton was completed and opened to passengers on 20 July 2021. The station enhancement works have transformed the station providing a revamped ticket hall and two new lifts enabling step-free access to the main platforms serving TfL Rail and Great Western. It will be fully step-free by the end of the year for the first time in the station's 183-year history.
- 3.20 On 26 August 2021, a new station building opened to passengers at Southall station. Constructed from glass and steel, the new ticket hall will provide a more spacious station entrance. As part of the works at the station, there are also three

new lifts and a new footbridge, which will provide step-free access to all four platforms at the station.

- 3.21 Following the completion of station works at Hayes & Harlington earlier this month, passengers can now benefit from major improvements at the station including a redeveloped station entrance made from glass and steel, a new, more spacious ticket hall and new ticket machines. Step-free-access to all platforms has now been made possible with three new lifts at the station and this now allows passengers to make step-free journeys across TfL Rail between Paddington, Reading and Heathrow.
- 3.22 Station enhancement work continues on the eastern section at Ilford and Romford stations, with entry into service of the new station buildings anticipated in early 2022.

List of Appendices:

Appendix 1: Elizabeth Line Committee: Crossrail Dashboard

List of Background Papers:

None

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