

Date: 26 January 2022

Item: Elizabeth Line Readiness

This paper will be considered in public

1 Summary

- 1.1 This paper provides an update on the performance of the TfL Rail operational service and the status of the transition and readiness of the Infrastructure Managers for the operations and maintenance of the railway after handover from Crossrail.
- 1.2 In response to a request from the Committee, we are developing a suite of measures to monitor our progress as we move towards Revenue Service. We will start reporting on these from the next meeting.

2 Recommendation

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

3 Performance of Operational Service

- 3.1 TfL Rail delivered a Public Performance Measure of 91.7 per cent during Period 9, the four-week period between 14 November and 11 December 2021. The eastern section of the line achieved 90.7 per cent with the western section achieving 92.9 per cent. There were several large service impacting incidents on the eastern section largely related to the infrastructure on the Anglia route. The overall Moving Annual Average trend continues to be better than target at 94.9 per cent.
- 3.2 The last of the seven-car Class 345 trains operating between Liverpool Street and Shenfield were replaced with nine-car Class 345 trains in December, and all of the seven-car trains are now based at Old Oak Common depot for use on the Reading to Paddington TfL Rail service while they are progressively converted to nine-car trains by the summer of 2022 for the start of Elizabeth line Stage 5b.
- 3.3 The current nine-car Class 345 train control and signalling software is not delivering the expected fleet reliability. The first of two reliability-focussed software upgrades has been approved for passenger service and is in the process of being loaded to the Class 345 fleet, due to be complete in mid-January 2022; an update on the effectiveness of the upgrades will be given at the meeting.

4 Operational Readiness

- 4.1 The first phase of Trial Operations commenced, as planned, on 20 November 2021, including the simpler and small scale exercises such as testing the response to an unwell passenger or an obstruction on the line. These scenarios generally took place over four days each week with reliability and system testing carried out on the other days. Seventy-three exercises were planned for the period up to the Christmas blockade although 16 of these were aborted, principally as a result of reliability impacts on the day. Further Trial Operations exercises in the first phase commenced on 11 January 2022.
- 4.2 The T-Minus programme bought focus on the key deliverables to enable a Go/No Go series of gates. During December 2021, the decision was made to delay introduction of the second phase of Trial Operations for at least two weeks to allow for further testing and critical evidence of improved reliability. The new date for the start of Phase 2 is now the end of January and will involve more complex volunteer exercises, including evacuations of trains and stations
- 4.3 Performance has generally been positive following the completion of the latest blockade for tunnel ventilation system works and commissioning of ELR110 signalling software, which commenced on 4 January 2022.
- 4.4 Eight of the 10 central stations are now under our control with Canary Wharf station due to be handed over within the next few weeks. Operational readiness continues to be a key focus and the operations training and assessment 'end to end' programme continues to plan. The next stage of further recruitment for Traffic Managers is in full progress with initial assessments completed. A detailed tracking programme for each successful applicant is in place to monitor their progress to full competence. The strengthening of Incident Response Manager resources is also underway with the aim to recruit into an additional four posts.
- 4.5 Network Rail station enhancement works in the west have been successfully completed with the new station buildings and step free access bringing benefits to customers. The completion of the remaining construction activities and snagging works are also on track for early 2022. On the east, focus on the close-out of remaining works at both Ilford and Romford continues with delivery progressing at both sites, although Ilford's entry into service date is currently under review pending resolution of an issue associated with the Ticket Hall slab. Romford's entry into service is forecast during April, and Network Rail continues to assess the latest programme and support a robust works close out for both stations.

5 Joint Trial Operations Plan

- 5.1 With the first stage of Trial Operations successfully completed, we are now focusing on the second, and perhaps most important, phase, which includes a series of more complex exercises, including evacuations of trains and stations. In preparation for the next phase we will be running a desktop exercise to ensure any potential issues are identified and resolved as well as undertaking a joint Emergency Services exercise with the emergency services.

5.2 Once Trial Operations is completed there will be a period of Shadow Running, which will be essential to ensure that operation of the timetable can be robustly and reliably performed, ahead of the Elizabeth line opening.

6 TfL Residual Works Programme

6.1 The residual works team continue to progress a number of pre and post revenue service activities across the London Underground and Rail for London (Infrastructure) Limited estate. Weekly meetings attended by senior representation from all areas are occurring to finalise post revenue scope in addition to removing any blocks to pre revenue delivery.

List of Appendices:

None

List of Background Papers:

None

Contact Officer: Howard Smith, Chief Operating Officer

Email: howardsmith@tfl.gov.uk