



Caroline Pidgeon
Chair
London Assembly Transport Committee
City Hall
Kamal Chunchie Way
London, E16 1ZE

Crossrail Limited
5 Endeavour Square
London E20 1JN
T: 0343 222 0000
Helpdesk
T: 0345 602 3813
www.crossrail.co.uk

Friday 11 March 2022

Dear Caroline,

Delivery of the Elizabeth line is in the complex final stages with phase 2 of Trial Operations well underway having commenced on 28 January 2022.

The Elizabeth line remains on schedule to open between Abbey Wood and Paddington in the first half of 2022.

Safety

With the project in the final complex stages of delivering the railway, the focus remains on ensuring that it is completed safely. Overall safety indicators remain within those set by the programme. On 18 February strong winds caused a fence to fall at Bond Street; no injuries were recorded. A second incident in this period involved contractors working in the tunnel at Canary Wharf station without the correct permission.

The programme continues to manage the coronavirus pandemic risk with continuing compliance with Government announcements and implementation of TfL guidance.

Trial Operations

A phased approach to Trial Operations has been adopted to build greater resilience into the railway and to allow for the earliest commencement of passenger services. The first phase of Trial Operations commenced on 20 November, in line with the earliest forecast dates, and progressed well, with the majority of exercises passing with comments. These comments have provided key learnings for the programme ahead of passenger service.

The second phase of Trial Operations commenced on 28 January 2022. This phase involves a range of organisations, including TfL and London Underground, MTR

MOVING LONDON FORWARD



Elizabeth line (as the operator), and Network Rail collaborating on the response to trial scenarios along with thousands of staff volunteers. Emergency services including the British Transport Police, London Fire Brigade and London Ambulance Service are also involved, demonstrating how they would respond to incidents on the network and in stations.

Four mass volunteer events have been completed, as part of this phase, with one more left to do before commencement of timetabled running. These have involved over 2,000 staff volunteers and have included the evacuation from a train at Custom House, evacuation from a train outside Farringdon station, and evacuation from a train into a tunnel via the emergency access shaft at Limmo Peninsula. The mass evacuations have been positive with all of the observations and learning informing subsequent exercises. The final mass volunteer event is scheduled to take place later this month at Paddington and will involve the largest number of participants, with more than 2,000 staff volunteers expected to take part.

Following the completion of mass volunteer exercises for Trial Operations, there will be a period of time dedicated to timetabled running, closely mirroring the Elizabeth line service timetable. This will be the final stage before the railway will open and its duration will be determined by the ability to demonstrate improved reliability across the railway.

Elizabeth line Opening (Stage 3)

In the first half of 2022, the Elizabeth line will launch with a new passenger service between Paddington to Abbey Wood, through new tunnels under central London. The launch will bring immediate benefits to passengers travelling between these stations with 12 trains per hour, in each direction, all day.

The opening of the Elizabeth line has always been planned to take place in stages to ensure the new central London stations, signalling and infrastructure can run safely and reliably before it fully links in with services out to the east and west.

Following the opening of the central section between Paddington and Abbey Wood and until the next phase of opening in Autumn 2022, the Elizabeth line will operate as three separate railways. The current TfL Rail services on the east and west will continue to run into the mainline stations, branded as Elizabeth line, and passengers wishing to continue their journey to one of the new Elizabeth line central London stations will need to change at Paddington or Liverpool Street Elizabeth line station.

Opening the Elizabeth line (Stage 3) during the first half of 2022 will enable the later stages to be delivered in line with our earlier forecast and achieve much of the benefit to passengers of a through-running service on the railway.

To support the transition to the opening of the railway there are further upgrades planned to the trains and signalling software over the Easter period, including the commissioning of the ELR200 software and Alstom 5.6 and 5.7 software upgrade. These upgrades are expected to provide increased operational reliability of the trains, routeway and signalling systems.



Full Elizabeth line Services

After the opening of the central section of the Elizabeth line, in the first half of this year, direct services from Reading, Heathrow and Shenfield are expected to connect with the central section in Autumn 2022 and full end to end services no later than May 2023.

In Autumn 2022, services from Reading and Heathrow will operate through to Abbey Wood. Services from Shenfield will operate through to Paddington.

The start date for full Elizabeth line services is linked to improved reliability growth, and successful commissioning of further upgrades to signalling and rolling stock software planned for after the opening of the central section of the railway.

Focus and Challenges

The focus continues to be on completing the necessary final safety assurance documentation and relevant assurance activities to support revenue service. The assurance team is working to full capacity to ensure the timely delivery of these products.

Reliability continues to be built to improve the railway's performance to a level that is acceptable for the opening of the Elizabeth line. Work is underway to fix the remaining bugs discovered with the signalling system and work has been already completed to remove the last restriction on the railway's infrastructure. Additional software upgrades for the tunnel vent system will coincide with commissioning of ELR200 around Easter 2022 which is expected to further enhance reliability.

The programme is also progressing with a refreshed Delivery Control Schedule (DCS) to provide further granularity on the path from opening to the commencement of full Elizabeth line services.

Operational Readiness

TfL Rail delivered an improved Public Performance Measure (PPM) of 94.3 per cent during period 11 (9 January – 5 February 2022). The eastern section of the line achieved 94.9 per cent with the western section achieving 93.5 per cent. The overall Moving Annual Average trend continues to be better than target at 94.6 per cent.

The Class 345 fleet has been loaded with the latest train and signalling control software and reliability has improved but is below the forecast level. Alstom are in the process of testing an upgraded train software, for loading to the fleet over Easter.

Surface Stations

Customers to the west of the central section have been benefitting from new station buildings and step-free access following the completion of Network Rail station enhancement works. The remaining construction activities and snagging works are forecast to be complete at the end of this month.

Network Rail enhanced station upgrade works on the east continue at Ilford and Romford. Ilford's entry into service is currently forecast for the summer, although this is under review pending the resolution of the structural issue in relation to the ticket hall slab. Romford station remains on track to enter service in the coming months.



Network Rail continues to assess the programme for both stations and their entry into service.

Over the last period, good progress has been made working through Trial Operations, but we are not being complacent, particularly with the need to improve reliability of the railway. This railway will only open when improved reliability can be demonstrated. There is a real determination to deliver this railway and we remain on schedule to open the Elizabeth line to passengers in the first half of 2022.

Yours sincerely,



Mark Wild
CEO, Crossrail Ltd