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Dear Caroline,

Delivery of the Elizabeth line has reached its next significant milestone with phase 2 of Trial Operations now underway. Trial Operations marks the final stage of the programme before the Elizabeth line opens for passenger services between Paddington and Abbey Wood in the first half of 2022.

Phase 2 of Trial Operations commenced on 28 January and involves a series of more complex exercises than that of phase 1, including evacuations of trains and stations using thousands of staff. The final step of Trial Operations will see a period of timetable demonstration, operating timetabled services ahead of the opening. The Elizabeth line is an immensely complex railway and this final stage will continue until it is clear that the railway can operate at the highest levels of reliability before the start of passenger services. Only then will a specific opening date for the railway be announced.

Nine of the ten new central section stations have now been commissioned and transferred to Transport for London with Canary Wharf the latest station to be handed over on 21 January. This means that the station can now be fully integrated into the operational network ahead of the line opening. It is the penultimate station to be handed over to TfL, with works remaining at Bond Street. The opening of the railway will be independent of whether Bond Street station is ready for use by passengers.

With the central section stations all now in an advanced state Tier 1 contractors have demobilised at all stations except Canary Wharf and Bond Street. Crossrail Ltd is also looking at the way it will continue to work on delivering the full capability of the railway, including reducing the size of the organisation that will deliver the final stages of the programme.

MOVING LONDON FORWARD



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 and the last period was incident-free. An ankle injury at Bond Street this period has been fully investigated and our procedures at this site have been updated to prevent a reoccurrence.

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 has progressed well, with the majority of exercises passing but with comments. These comments have provided key learnings for the programme as we iron out the service and systems ahead of passenger service.

The successful commissioning of various system software over the festive period and the recent handover of Canary Wharf station to TfL have allowed for the commencement of phase 2 of Trial Operations on 28 January 2022. This phase involves a range of organisations, including TfL and London Underground, MTR 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.

As a result, there will be times where police, fire and ambulance service vehicles may be seen near stations, testing and simulating what would happen in the event their staff were required to attend. In the run up to opening the Elizabeth line, activity will be taking place on most days including weekends. Other exercises will include responding to train, signalling, platform screen door and track simulations.

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 (5b & 5c) 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.

The commencement of passenger service is dependent on a number of factors. This includes the completion of the necessary assurance. It is also driven by system and rolling stock reliability. The successful commissioning of software during the festive period has resulted in improved system performance and we continue to tune the system performance to get it to the level that is suitable for customers.

Full Elizabeth line Services (Stages 5b & 5c)

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 dates for stages 5b and 5c are critically linked by reliability growth, and successful resolution of a number of technical matters that are currently under consideration by RfLI and MTREL.

Focus and Challenges

The sustained progress made across the programme continues to support the commencement of passenger service within the declared opening window. As works advance and with construction work largely complete, the focus turns to the integration of the numerous components of the railway and building reliability to ensure that when it does open, it is both safe and reliable.

There are further upgrades required to our systems to bring it up to revenue service standard. The timely delivery of assurance is also critical to the opening of the railway and this requires the completion of the remaining works, tests and the processing of assurance evidence. We are working closely with RfLI to progress the delivery of safety assurance, but we will not take any shortcuts that could impact the safety of the railway.

Operational Readiness

TfL Rail delivered a Public Performance Measure (PPM) of 93.4 per cent during period 10 (12 December – 8 January). The eastern section of the line achieved 92.1 per cent with the western section achieving 95.3 per cent – its highest level of performance since period 2. The overall Moving Annual Average trend continues to be better than target at 94.7 per cent.

Surface Stations

All Network Rail station enhancement works on the west of the central section 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 remain on track for completion in early 2022.

A new station building has opened at Burnham improving access and providing more space. TfL has worked to improve Burnham station ahead of its next chapter as a station on

the Elizabeth line. Improvements include the opening of a new, more spacious ticket office building with an accessible ticket window, new ticket vending machines, automatic ticket gates, and customer information screens with live travel information. At platform level, the existing canopy has been cleaned, repaired and redecorated, while the customer toilets have been completely refurbished. These improvements build on work completed by Network Rail in 2019 that included the installation of a lift, which provided step-free access to both platforms for the first time in its history.

The focus for Network Rail on the east continues to be on the enhanced station upgrade works at Ilford and Romford. Ilford's entry into service remains under review pending the resolution of a structural issue related to a damaged concrete slab in the concourse area. Romford station is currently forecast to enter service in the second quarter of this year, although Network Rail continues to assess the programme for both stations and their entry into service.

The next couple of months will be important for the programme as we progress through Trial Operations but also as we continue to build greater resilience into the railway. There is a real desire from everyone involved in the project to deliver this railway for passenger service in the first half of 2022 and we remain focussed on completing Trial Operations and the remaining works to ensure this happens.

Yours sincerely,



Mark Wild
CEO, Crossrail Ltd