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Caroline Pidgeon
Chair
London Assembly Transport Committee
City Hall
The Queen's Walk
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Monday 20 December 2021

Dear Caroline,

The Elizabeth line remains on track to open in the first half of 2022. Trial Operations is now underway and is the final stage before passenger services can commence.

The Elizabeth line is an immensely complex railway and Trial Operations will continue for several months until it is clear that the railway can operate safely and reliably before the start of passenger services. Only then can we narrow the window for the opening of the railway.

Significant progress has been made across the project. Trial Running of 12 trains per hour has helped build reliability and flush out issues with our systems and signalling software. We have recently commissioned ELR100, one of the last major software upgrades for the railway before launch and will commission final upgrades over Christmas.

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 continue to build on the strong performance and deliver this railway for passenger service in the first half of next year.

Safety

With the project in the final complex stages of delivering the railway, the focus remains on ensuring that it is completed safely. Our safety performance this calendar year has been the most positive historically across the programme, with 24 green weeks, where there was no lost time accident or high potential incident, compared to 18 in 2020.

As we moved into Trial Operations, the last Safety Executive Leadership Team (SHELT) meeting was held in November 2021. Safety performance will now be monitored through other forums such

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as the Elizabeth line Health and Safety Executive Contractor Performance meeting. Over the years the SHELТ team, including our supply chain partners, have implemented significant initiatives such as Stepping Up Week and our Target Zero Improvement Plan; all of which have been integral to the safety and well-being of our workforce.

The project remains vigilant to the recent COVID-19 developments and will continue to closely monitor the situation across the programme.

Trial Operations

The first phase of Trial Operations commenced on 20 November, in line with the earliest forecast dates. 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 next year.

The phased approach will allow for the commissioning of the remaining tunnel ventilation system software upgrades prior to Christmas, the ELR110 signalling software update, the commissioning of the latest control and communications software (CMS28.0) and the replacement of voltage transformers over the New Year. All of these upgrades provide further increases in operational reliability of the routeway and signalling systems. Alstom will also be uploading the Alstom train fleet software update, providing improved fleet reliability. These final fixes are supporting a pivot to reliability and a focus on wider system issues which are important in the final completion of the railway for revenue service.

The first phase of Trial Operations has already begun with scenarios such as testing the response to an unwell passenger or an obstruction on the line. These will generally take place on four days each week with reliability running and any remaining system testing on the other days. The first week saw some days of high reliability and successful exercises but also some disruption caused by technical failures, notably in parts of the signalling system, which caused some exercises to be curtailed. The process of managing and reporting Trial Operations exercises has begun well.

The success of the commissioning of the software over Christmas and the transfer of Canary Wharf station is critical to commencing phase 2 of Trial Operations. Final modifications to the safety systems are being carried out at Canary Wharf station and it is now forecast to be transferred in the coming weeks. As mentioned previously, Bond Street has been decoupled from the opening of the railway and the team are working on a plan to get the earliest opening date for the station.

The programme is currently expecting to commence the second phase of Trial Operations in the new year. This will involve a series of more complex exercises, including evacuations of trains and stations. This will then be followed by a period of shadow running, operating timetabled services ahead of the Elizabeth line opening.

Focus and Challenges

Despite recent progress achieved across the programme, we do not underestimate the challenges that remain, which continue to be the focus of management attention. We remain committed to following our process for the start of the second phase of Trial Operations, which is planned to commence in the early part of 2022. Critical to this is the successful completion of the planned activities during the festive period. These activities include completion of the necessary assurance documentation for the tunnel ventilation system, the ELR110 and Alstom software updates and the completion of the required assurance documentation needed for phase 2.

There is also a focus on improving total system reliability, including rolling stock. The successful commissioning of software systems across the infrastructure and train systems is expected to deliver improved operability and significant reliability improvements.

Operational Readiness

The TfL Rail Public Performance Measure in Period 8 (17 October - 13 November) was 92.3 per cent, with performance impacted by several large service affecting incidents. Despite the disruption it is still one of the highest scores delivered across the industry. The east section of the line achieved 94.6 per cent and the west section achieved 89.4 per cent. The overall Moving Annual Average trend continues to better the target, recording 95.1 per cent.

Passenger services from Paddington are now being operated by nine-car (to Heathrow and Reading) and seven-car (to Reading) Class 345 trains. The seven car trains will be progressively converted to nine-car trains for the commencement of services from the east and west through the central section. The transition of the Liverpool Street to Shenfield service to a full nine-car Class 345 operation, will complete by the end of this year.

Surface Stations

On the west, all Network Rail station enhancement works 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, the focus is on the enhanced station upgrade works at Ilford and Romford. Delivery continues to progress at both sites. However, there is a structural issue at Ilford, which Network Rail and their contractor are working through. The target for entry into service and step-free access at both stations is the first quarter of 2022. This is of course dependent on the resolution of the issue at Ilford.

Despite the significant progress made throughout 2021, challenges still remain, and our teams continue to work hard to deliver a reliable Elizabeth line safely and as soon as possible. 2022 will be pivotal for the Crossrail programme as we launch the Elizabeth line and we look forward to providing further updates for you in the new year.

I hope you have a restful and enjoyable Christmas and New Year.

Yours sincerely,



Mark Wild
CEO, Crossrail Ltd