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Dear Caroline,

It has been a significant couple of months for the project where we have transitioned into an operational environment, commissioned the Great Eastern and Western fringes, handed over Tottenham Court Road station and started train movements in the central operating section. This has given us a very stable platform to move forward and is consistent with our schedule to deliver the railway for passenger service in the first half of 2022.

Following the controlled start to the Trial Running phase, which allowed for the operations and maintenance teams to mobilise and transition, we have commenced operating four trains per hour in the 42 kilometres of newly built tunnels under central London and on the surface railway. This phase is critical for increasing mileage across the network, supporting reliability growth of the railway and flushing out any issues with the systems and signalling software. Once completed, it will demonstrate that the Elizabeth line can run at performance levels necessary to move to the next phase of the programme.

During Trial Running, we remain busy finishing off our stations before handing each of them over to TfL. We have handed over a third of the new central section stations and the next tranche will be handed over in the coming months. All outstanding works have been scheduled into the programme with the majority being completed during the Trial Running period.

Safety

We are resolute in our determination to open this railway in a safe way. Since transitioning to a 'live railway', where the safety profile is very different to a construction environment, we have been focused on compliance and checking understanding of the changes in the ways of working. It is encouraging that the project teams continue to have a healthy culture for reporting any incidents and a 'fail safe' culture has been embedded. All safety incidents that are reported are investigated and the learnings are shared throughout the organisation.

Trial Running Phase

The Trial Running phase is progressing well with four trains per hour in operation on the central operating section. This initial phasing of trains has allowed for the bedding down of people, systems and process. It is being used to help identify and iron out any glitches and faults that may arise with our software and systems. The number of trains will gradually increase to 8 trains per hour and then 12 trains per hour.

MOVING LONDON FORWARD





Transitioning from a construction environment to an operational environment has brought about significant changes to the organisation's ways of working. With trains running during the day, essential maintenance work is taking place at night and dedicated access arrangements, necessary for the works to take place on an operational railway, are being managed by a dedicated team concentrating on safety, planning, productivity and prioritisation.

There is an 18-day period for construction work, focussed on stations and routeway, planned for the end of June that will help mitigate pressures to the Trial Operations schedule. As mentioned in my previous update, there were some challenges with the front end of the Trial Running phase, related to maintenance activities; however, we have been able to maintain our schedule to open the railway to passengers in the first half of 2022.

Trial Operations

A critical milestone for the project to be able to commence Trial Operations is station handover. Despite the current progress with stations, the scale of the challenge with respect to handing over the remaining number should not be underestimated. These are big and complex assets and to successfully handover nine of these structures in one year is unprecedented, but both Crossrail and TfL are working closely together to support this.

The handover sequencing schedule has been amended, altering the positions of Paddington and Woolwich to protect the Trial Operations schedule. Challenges at Paddington station have arisen during the T-12 handover preparation process and it serves as a reminder of the complexity that is involved in the testing and commissioning of these vast structures. Woolwich station will now therefore be handed over to TfL ahead of Paddington in early summer. Station teams are working tremendously hard to ensure that handover of the stations is achieved to schedule however Canary Wharf station and Bond Street station are not yet at the required level. To address these concerns the planned period of construction work scheduled for the end of June will be focussed on mitigating the challenges at these stations.

Woolwich and Liverpool Street stations are progressing well through their T-12 processes and will be the next stations to be handed over in the coming weeks. Following these stations will be Paddington station, Abbey Wood station and then Whitechapel station, all scheduled to be handed over in the summer.

Before commencing Trial Operations, we will be uploading the passenger-quality software, called ELR100, onto the central operating section. The ELR100 software is the last major configuration before revenue service and it is pivotal to the programme advancing through to Trial Operations. Although the software is ready, there are a series of software engineering works that need to be completed by Siemens. There is contingency in our schedule to mitigate against potential slippage and Siemens are working hard to ensure that the software is commissioned as soon as possible.

Focus and Challenges

On current performance the project remains on target to achieve opening to passenger services in the first half of 2022. After successfully entering Trial Running, the focus remains on completing the necessary works at stations to allow for handover to TfL as well as ensuring that the next version of the train and signalling software is commissioned to the planned schedule.

Work continues on the development of the refreshed Delivery Control Schedule (DCS). The refreshed version will build upon the existing logic. It will also provide an opportunity to consider lessons learnt in the build up to Trial Running, strengthening previous planning assumptions on assurance processes and define the conditions required for the successful transition into Trial Operations and Revenue Service.

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Operational Readiness

The Public Performance Measure (PPM) and the Moving Annual Average trend were both better than target at 95.0% and 95.8% respectively.

The Class 345 nine-car Full Length Units (FLU) operating the Reading and Heathrow services are delivering a good service, although reliability growth is below the forecast levels – this is being investigated. On 26 May, we successfully commenced the first nine-car Class 345 FLU trains between Liverpool Street and Shenfield, supplementing the seven-car Class 345 trains currently operating on that route. The Trial Running timetable using FLUs has also successfully commenced in the Central Operating Section under Automatic Train Control by the Siemens Communications Based Train Control (CBTC) signalling system.

Network Rail

The new ticket hall at Ealing Broadway station opened for customers on 27 May with new lifts enabling step-free journeys on TfL Rail, London Underground (District and Central lines) and Great Western Railway. As the latest station to reach this milestone ahead of the Elizabeth line opening, Ealing Broadway has undergone a significant transformation to build a large new ticket hall, extended platforms to accommodate the longer Elizabeth line trains as well as better signage and customer information screens providing a better customer experience.

West Drayton, Hayes & Harlington, and Southall stations remain on forecast to be step-free by the Summer of 2021. Work is also progressing on the eastern section at Ilford and Romford stations. They are both forecast to enter service before the opening of the central section.

The next few months are critical for the project as we gain further certainty in our systems and software. There is confidence that our progress over the past few months has given the project a firm footing to deliver this railway in the first half of 2022.

Kind Regards,



Mark Wild
CEO