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Dear Alison,

I welcome the Transport Committee's recent publication about Crossrail, the recommendations and contents of which will be considered carefully. As recognised in the report, this project will deliver huge benefits to London and the rest of the UK, and I would like to assure you and committee members that everyone involved in the project is united in their determination to deliver this railway as safely and as efficiently as possible.

We are in the complex and final stages of the delivery of the Elizabeth line and it is pleasing to report that we continue to be in line with the Delivery Control Schedule. Work continues across the project at pace and we are on track to open the line in the first half of 2022, and crucially to enter Trial Running at the earliest opportunity in 2021.

Entering Trial Running marks the project's key transition from construction to an operational railway. During this period, we will build reliability in our systems, signalling and trains; and identify and mitigate any issues in this immensely complex digital system. The length of time required for intensive testing of the railway is dependent on meeting the performance requirements, demonstrating growth in system reliability and achieving the mileage related reliability growth. We are now in the final countdown to entering Trial Running with the completion of safety documentation and approvals work remaining.

In parallel with the works associated with Trial Running, we are making good progress with the associated works for station handover. These huge and complex assets need to be handed over to the operator of the railway, TfL, to allow them to be fully integrated into the transport network ahead of passenger service. As mentioned in my previous update, Farringdon is our most advanced central section station and is still on schedule to be handed over to TfL by the end of the first quarter this year. Tottenham Court Road station has also now entered the 12-week handover process. Paddington, Liverpool Street and Woolwich stations have all achieved Staged Completion 3 (SC3) status, which is the step before entering the testing and commissioning phase leading to the T-12 milestone. Lessons learned from the Farringdon T-12 handover process will be applied to the remaining central section stations when they achieve this milestone.

**MOVING LONDON FORWARD**





## **Safety**

There has been a strong period of health and safety performance across the project with no harm being caused to any of our workforce. However, there has been two High Potential Near Misses (HPNM) on 15 and 21 January, one where there was an incorrect train movement in the sidings, and the other where an operative gained unauthorised access to a contractor's site. HPNMs are taken very seriously by the project and whilst there was no harm to operatives all incidents of this nature are investigated, and we use the valuable learnings to prevent them from happening again in the future.

The Gold Response Team continues to manage Crossrail's response to the COVID-19 pandemic, and this team is embedded within TfL's response structure. We are monitoring affected resource within Crossrail and across the supply chain on a daily basis. We continue to see a relatively low infection rate across the project compared to the general population. This is as a result of our rigorous procedures in place that ensure safe working conditions for the 2,000 people working on site.

## **Central Section Progress**

The last stage in the Trial Running pathway for stations is to have their assets assured and certified as ready for use. At the time of my last update, four of the nine stations had achieved this milestone. I am pleased to report that this number has now increased to eight, with Paddington station expected to achieve this shortly, following the final sign-off of documentation.

While our focus is very much on readiness for Trial Running, the stations need to achieve a number of additional, interim states of completion in order to support Trial Operations and entry into passenger service. These works continue, notably with five stations having achieved their 'SC3' state which represents the substantial completion of construction works, enabling the final complex systems integration and assurance activities.

Custom House, the first of our central section stations to be handed over to TfL, is in the final stages of testing and will shortly be fully integrated into the network. This will be a significant achievement for the project and for the Plateau 2 team, our collaborative commissioning team, which has been supporting the station. Testing and integration work at Farringdon, our most advanced central London station, are also progressing well. It has completed 50 hours of fault free testing and it remains on schedule for handover to TFL by the end of the first quarter of this year.

The routeway assets will be handed over to TfL when we transition to an environment governed by the Railway and Other Guided System regulations, just prior to entering Trial Running. As I reported last month, the key steps to achieving this handover are the acceptance of the Safety Justification assurance documents for each asset. With all of these documents having an endorsed status by the independent assurance board (RAB-C), activity is focused on translating this into acceptances through the closure of outstanding assurance work (dependencies). There is currently a huge focus and effort across the programme to close these dependencies. This is highly complex and safety critical work that is progressing well. Entry into Trial Running is vital but must be completed diligently and to the highest safety standards.

We continue to build reliability and mileage through System Integration Dynamic Testing (SIDT) of the central operating section. Over 150,000 miles of testing has been completed and the positive news is that we have not found any issues that we do not already have solutions for in future software releases.



## **Focus and Challenges**

Our focus remains on achieving the assured state of readiness for our infrastructure to enter into Trial Running and closing outstanding dependencies. The completion of this work is essential for the vital safety and assurance documentation to achieve accepted status. There is significant work involved to achieve this status and it is not without challenge, but there is an agile, daily management process in place between the technical and delivery teams. The status of closure is formally reviewed in our readiness for Trial Running meetings – operated on a T-Minus basis – with clear requirements for required confidence in the closure programme for dependencies, and when actual closure is necessary.

We are also focused on planning the work programme during Trial Running and the future entry to Trial Operations. While Trial Running largely sees the simulation and trialling of operating to a timetable, Trial Operations sees a simulation of train and station operations, including events such as emergency evacuations.

The handover and integration of nine major stations is critical to the delivery of the Elizabeth line and the stations completion team has been further augmented with leadership changes and additional specialist technical resources. Whilst on average TfL typically commissions and brings into use one large station a year, for the Elizabeth line they will have to receive nine stations over the same period of time. Working with the refreshed and augmented stations completion team, we will implement the experience and knowledge gained of the process from Farringdon station and apply it to our remaining stations.

## **Operational Readiness**

The Public Performance Measure (PPM) for TfL Rail was 96.4% in the period between 13 December – 9 January, with the Moving Annual Average now at 95.7%, the highest since TfL Rail took over operations. The nine car Full Length Units (FLU) introduced in December 2020 to the Reading route have achieved the forecast reliability improvement. The next significant uplift in reliability will be delivered by a further train software update to be applied to the fleet this month. The train software needed for entry into Trial Running has been loaded to FLUs in the central section (Paddington – Abbey Wood) for reliability trials.

Training of operations and maintenance staff continues on track against a tight plan but COVID-19 remains the biggest risk to both trainers and trainees. Lateral Flow testing has been introduced to bring an additional level of confidence for trainers and trainees. Distanced learning and classroom / simulator facilities are also being utilised as required and an additional training resource brought in to support Service & Infrastructure Manager (S&IM) training.

SIDT restarted on 18 January bringing benefits to the Traffic Managers and Real Time Infrastructure Manager who are deployed, whilst the Infrastructure Maintenance team have completed further Yellow Plant operating / maintenance demonstrations in the Central Operating Section.

## **Network Rail**

Network Rail's major upgrade work to surface stations on the eastern and western section of the railway continues. Over the past month at Acton Main Line station they have finished the platform reinstatement work and the platform shelters are nearing completion, the lift works have been completed and these are now being thoroughly tested. They have progressed the installation of the passenger lifts to platforms 1, 2 and 3 at Ealing Broadway station with the platform 4 lift nearing completion. At Southall station the cladding of the new station building, and platform steelwork has continued. The steel work and structural slab for the new station building has been installed at Hayes & Harlington station. Installation of the passenger lifts on platforms 2/3 and 4/5 has continued at West Drayton station.



There have been important achievements over the last period with everyone working extremely hard to keep the momentum going. It is essential that we maintain that drive and focus as we look to complete the remaining safety critical work for Trial Running, get the completed stations up and running and deliver this railway in the first half of 2022.

Kind Regards,



**Mark Wild**  
**CEO**