Dear Caroline,

Last month the project hit a critical milestone with the start of Main Dynamic Testing (MDT) on 14 January as planned. Dynamic testing is essential as it enables the team to find any errors or defects in the software in both the trains and the signalling systems. Dynamic testing remains one of two critical paths for the project alongside the completion of stations (including testing and integration of their systems) and this was an important step forward for the project.

Leaders from across the project and MTR (the operator) continue to undertake work to define the priority tasks needed to deliver the earliest opening programme (EOP). They reported back to the Crossrail Ltd (CRL) Board at the end of January 2019 and will now progress with the development of a more detailed delivery plan.

Please find below the rest of this month’s update on the Crossrail project for the Transport Committee of the Assembly.

Safety
The periodic Safety Health Environment Leadership Team meeting was held at Bond Street station with a strong focus on the new safety risks across the project. This is more important than ever as the project transitions further towards systems integration and the live railway running for four days each week for MDT.

In January, there was one reportable safety incident at Whitechapel station which involved an operative tripping on floor protection. In addition there were three incidents causing lost time injuries and there were seven high potential near miss incidents across the project. All incidents are investigated, lessons learned shared across the project and safety alerts issued where appropriate.

Programme and Funding
As you will be aware, the Joint Sponsors, Transport for London (TfL) and the Department for Transport (DfT), commissioned independent reviews into our governance and finance and commercial arrangements. The reviews identify some key points about the delay to the opening of the central section of the Elizabeth line. These include that performance
monitoring and reporting at CRL did not provide adequate advance notice of the need to revise the opening date and the resulting cost impact. They also find that demobilisation at the project led to a reduced level of coverage in critical areas of risk oversight and reporting around commercial and financial risks. TfL has published the KPMG Governance and Financial & Commercial reviews of the project. They can be found on the TfL website: (https://tfl.gov.uk/corporate/publications-and-reports/crossrail-project-updates).

We are looking at the reports in detail now they have been published and are developing a response plan. Several of the recommendations are already being implemented including a refreshed leadership team and taking steps to ensure Sponsors have confidence in the quality of programme and performance data provided by CRL.

Central Section Progress
The delivery schedule includes Tier 1 suppliers Substantial Demobilisation dates (TOSD), staged completion and handover dates for the stations, shafts and portals. Achieving the TOSD dates is critical in reducing CRL’s periodic spend. We are making good progress with a total of eleven (of twenty-two) TOSDs for stations, shafts and portals now achieved. Whitechapel Crossrail areas were achieved on 18 January 2019 as planned and Plumstead Portal achieved on 31 January.

Further work has been undertaken to gain clarity on completion dates on stations, shafts and portals which are critical to the standing up of the infrastructure managers and readiness for trial operations and passenger services.

The current rate of static testing in stations remains behind plan and is a significant focus of the new programme and technical leadership on the project. At this time less than 50% of stations systems installation is completed and we are focused on improving productivity at each site.

Train Testing & Systems Integration
As mentioned, MDT commenced on 14 January as planned. The pattern going forward is four continuous days testing with the tunnels fully energised, followed by three days of maintenance and tunnel fit out work.

The first week of testing involved a single train in one tunnel section in automatic operation completing basic functional signalling testing (route accessibility and radio coverage testing). Tests undertaken were successful. We have now moved to testing two trains, one in each tunnel section.

This incremental approach to building up system-testing and verification will continue for several months with increasing intensity and complexity. It is very early days and too early to fully define when the testing will complete but it is an encouraging start. The focus and logistical planning will need to be maintained, software availability managed, and the requisite approvals gained (for example to enable multi train testing to commence).
Testing of the new rolling stock was undertaken in the Heathrow tunnels using European Train Control System (ETCS) during two weekends in January 2019. This was helpful in making progress towards Stage 2 Phase 2 where the 4tph service between Heathrow and Paddington will be provided by the Class 345 rolling stock.

**Network Rail works**

Network Rail (NR) has now awarded Package 3 (Southall, Hayes and Harlington and West Drayton) station enhancement works to Hochtief. These enhancements include step-free access works to ensure that all surface stations on the Elizabeth line will be step-free to platform level.

Kind regards,

Mark Wild
CEO