

RESPONSE TO THE CROSSRAIL SPONSORS ON THE PROJECT REPRESENTATIVE SPONSOR SUMMARY REPORT – PERIOD 1 REPORT

Date of Issue (this paper): 17 September 2020

Issued to: Simon Adams, Head of Crossrail Joint Sponsor Team - Transport for London

Author: Liam Hewitt, Head of Reporting – Crossrail. [REDACTED]

Approved by: Mark Wild, Chief Executive Officer – Crossrail

1. Purpose

- 1.1. The purpose of this paper is to provide the Crossrail Sponsors with Crossrail's response to the Project Representative's ("PRep") Sponsor Summary report. It has been produced in consultation with Crossrail's Subject Matter Experts. A list of consultees is attached as Appendix 1.
- 1.2. The report responded to in this paper is the Period 4 FY2020-21 (28 June 2020 – 25 July 2020) report, issued and received on 19 August 2020.

2. Health & Safety (H&S)

- 2.1 Safety continues to be the upmost priority of the Crossrail project. However, in Period 4, there was one accident resulting in the Lost Time Case (LTC) and Reporting of Injuries, Disease, Dangerous Occurrences Regulations (RIDDOR). There was also one High Potential Near Miss. As a result, the RIDDOR and LTC Accident Frequency Rates increased to 0.10 and 0.15 respectively; both increases exceeded the maximum tolerance set for the Programme.
- 2.2 The Safety and Health Executive Leadership Team (SHELT) has been extensively engaged in designing the interventions for working at height improvement and frontline supervision has been a key target for SHELT.

3. Delivery Control Schedule and Recovery Planning

- 3.1. The Delivery Control Schedule (DCS) detail continues to be developed particularly regarding stations and integration. The bottom up contractor resource loaded schedules are due in mid-September and these will provide necessary detail and contractor buy-in. The staggered stations strategy has been incorporated into the schedule with the adoption of two swim lanes for Rail for London (RfL) and London Underground (LU) stations.

3.2. [REDACTED]

- 3.3. A 'Plateau 2' team is being introduced, learning from the success of Plateau 1 on the train and signalling software, to cover the integration of the Station systems with the Integrated System Network and Route Control Centre. A lead for Plateau 2 has been identified and will report directly into the Head of Systems Integration and the Chief Engineer. The

Asset/Element scope split between Plateau 1, 2 and the Systems Integration Group across all assets has been defined with the Head of Systems Integration and will form part of Module 10 in the Recovery Execution Plan.

- 3.4. The Bond Street station plan is undergoing regular Executive weekly reviews in order to determine the programme to completion. As such, Bond Street is excluded from the requirement to be complete at Stage 3 opening, and the Staged Completion 2 (SC2) work scope is being progressed such that SC2 can be achieved by Trial Operations.
- 3.5. The Project Representative raises a Key Issue about Crossrail's detailed plan for all scope activities to complete Trial Running. A draft Trial Running execution plan is available and will be finalised in the coming weeks. A Trial Running schedule has been developed to complete the required Trial Running test scripts. A software development plan has been developed to integrate the software upgrades with the Trial Running plan and allocate time for software uploads and testing. Following the August/September blockade, the remaining trace affecting scope will be identified and allocated to disruptive access windows between TR2 testing and Systems Integration Dynamic Testing (SIDT), and during SIDT if required. All trace elements affecting scope is targeted for completion before Trial Running commences.
- 3.6. The Project Representative raises a Key Issue about how Crossrail will manage the essential minimum scope for Station openings. The essential minimum scope for Trial Running, Trial Operations and Stage 3 opening is defined in each of the SC1, SC2 and SC3 station configuration states. Each Station has a top down scope completion programme, and a bottom up resource loaded contractor schedule is due from each of the Tier 1 contractors by mid-September 2020. This will be used to underpin the assured DCS1.1 and set the target dates for the completion of these essential minimum scope definitions. For the first three major stations (Farringdon, Paddington and Tottenham Court Road) the works will be managed using the blockade-type approach adopted in the current 2020 blockade. This will ensure close monitoring and closeout of activities linked to Element Outstanding Works Lists (EOWs) and Acceptance Certificates (ACs) sign off. Lessons learned from this process will be used to drive the completion of the remaining stations.
- 3.7. The Project Representative raises a Key Issue regarding how, in absence of an assured control schedule, Crossrail is going to manage ongoing scope and cost activities. The emerging DCS1.1 which includes the Blockade and other elements of the Recovery Strategy is being used as the Base Plan and so allows progress to be measured against the most up-to-date position.

4. Blockade

- 4.1. The construction blockade continues to achieve the targeted rates, with 97% productivity achieved in the fifth week, 40% of the EOWs closed out, seven of the 17 ACs signed off and 97 out of 100 planned milestones achieved. This includes 13 milestones recovered from previous weeks and 33 achieved early.
- 4.2. All EOWs are targeted to be signed off two weeks after the construction blockade ends. Daily scope reviews continue between Technical and Delivery with a high degree of challenge around new scope and alignment on scope close out. With 11 days left to the end of the blockade, no new scope is allowed into the blockade and the critical resource availability risk is reducing.

5. Trial Running and Reliability Growth

- 5.1. The DCS1.1 incorporates refined Routeway Chapter delivery and Station commissioning. Work is in hand to build in bottom up contractor resource loaded schedules to underpin the DCS. All trace affecting works are targeted to be complete before entry into Trial Running, leaving any non-trace works to be completed as required. As stated, all critical EOWs will be completed as part of the programmes to achieve SC1, SC2 and SC3 by the required phase changes. The Trial Operations programme is coordinated by RfL within which the programme of scenario testing is well documented.
- 5.2. Stage 4a activities are incorporated in the DCS1.1. With the target of achieving Trial Running by [REDACTED], providing sufficient time to commission Stage 4a. Should entry into Trial Running not be achieved in time, the mitigation plan will be to commission Stage 4a in [REDACTED].

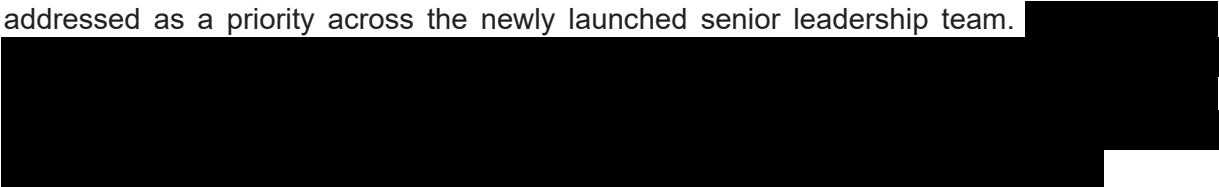
6. Assurance

- 6.1. The remaining handover dates have been reviewed considering the blockade and emerging technical and critical resource issues. As a result, the dates have been recast in the DCS1.1. The working groups for Operations & Maintenance, Asset Data and H&S Files are meeting weekly to review how to expedite these deliverables and meet the revised DCS1.1 [REDACTED] for Trial Running to commence [REDACTED].
- 6.2. Crossrail notes the comments by the Project Representative regarding lessons learned; the lessons learned from the Shafts and Portals Handover process is also being used to develop the Stations Handover process. Working groups continue to be targeted at critical path activities.
- 6.3. An overall schedule of Assurance deliverables will be made available as part of the Crossrail Engineering Safety Assurance Case evidence work currently being coordinated. DCS1.1 was endorsed as a basis for planning by the August Board and is being used to report scope, schedule and cost. Assurance of the DCS1.1 continues and assurance reports will continue to be provided through Board-level governance.

7. Cost and Risk

- 7.1. Crossrail anticipate that the Period 6 position will be proposed for acceptance as a Baseline. Considering the new strategy, the timing will allow for supply chain inputs. Additionally, progress on the Blockade to be reflected in schedule and cost.
- 7.2. In Period 4, the Anticipated Forecast Crossrail Direct Costs (AFCDC) forecast was updated for the latest developments in the DCS along with clarified assumptions on COVID-19 and opportunities, [REDACTED].

8. Resources and Organisation

- 8.1. The first phase of the organisation transition formally launched on 02 September 2020. Linked to this is the ongoing work on the roll out of the Work Force Plan which will allow Crossrail to allocate and monitor all resourcing across the project, including the identification and direct management of critical resource and talent required for each phase of the programme. By doing this, there will be further resilience built into the programme by allocating all members of the workforce to 'phases' of the programme, rather than end dates.
- 8.2. A process for managing the on-going work force plan in more detail with the Crossrail Executive is being developed, along with a dedicated workforce plan tool. This is due to be launched by the end of September 2020. Finally, throughout the development of the Organisation Transition Plan and Work Force Plan, there is close engagement with TfL Human Resources leads to allow critical resource gaps to potentially be filled by TfL staff where appropriate, and to ensure all transition activities are aligned.
- 8.3. Crossrail's management systems are in the process of being updated. A focused Working Group has been launched with key Crossrail leaders who will oversee and complete updates to Crossrail Management Systems and the wider Delivery Strategy by mid-October 2020. Stations Close Out Strategy and the process for managing scope of works to go will be addressed as a priority across the newly launched senior leadership team.
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END

APPENDIX 1 – LIST OF CONTRIBUTORS

RESPONSE TO THE CROSSRAIL SPONSORS ON THE PROJECT REPRESENTATIVE SPONSOR SUMMARY REPORT

Period 4 FY2020-21 (28 June 2020 – 25 July 2020) report, issued and received on 19 August 2020.

Chief Finance Officer
Chief of Staff
Chief People Officer
Chief Programme Officer
Communications Director
Crossrail Operations Business Manager
Deputy Programme Controls Director
Head of Finance
Head of Risk
Lead Reliability Engineer
Operations Business Manager
Programme Integration Director
Reporting and Governance Support Manager