Elizabeth Line Committee



Date: 30 September 2021

Item: Safety Update

This paper will be considered in public.

1 Summary

1.1 This paper provides an update on safety.

2 Recommendation

2.1 The Committee is asked to note the paper.

3 Safety Update

- 3.1 This paper includes a performance update for the Crossrail Programme and Infrastructure Manager, Rail for London (Infrastructure) Limited (RfL(I)) for Periods 3, 4 and 5.
- 3.2 Accident Performance in Period 3, 4 and 5:
 - (a) there were no reportable or lost time accidents on Crossrail; and
 - (b) there were no RfL(I) employee or contractor reportable or lost time accidents.
- 3.3 Incident Performance in Period 3, 4 and 5:
 - (a) there was one Crossrail Reportable Incident in Period 3;
 - (b) there was one RfL(I) Reportable Incident in Period 4; and
 - (c) there was one RfL(I) Reportable Incident in Period 5.
- 3.4 All the above were reportable under the RIDDOR regulations.
- 3.5 The Reportable Incidents are summarised below:

On 21 July and 3 August 2021 respectively, two Voltage Transformers (VTs) failed. The purpose of the VTs is to provide the SCADA system with the status of the Over Head Line Equipment (OHLE) e.g. whether a section is live or not. The signalling system checks that the power is present before routing a train into an OHLE Section. If the SCADA tells the signalling system there is no power then the route will not be automatically set, and signaller needs to manually set the route.

- (a) Both VTs were located on the same structure and an assessment of other VTs across the routeway has been undertaken. A formal technical investigation is underway to ascertain the root cause in coordination with the manufacturer and an independent UK laboratory; and
- (b) on 15 June 2021, at the Bond Street Station Project, an engineer commenced inspection and testing of an Uninterruptible Power Supply (UPS) panel located inside a communications room. During the task there was some arcing across terminals. The instrument probe was not connected to the oscilloscope at the time and one end had been connected to a live component. There was damage to the UPS by-pass and low voltage supplies and the system was immediately isolated. Following a detailed investigation and forensic analysis, the manufacturer confirmed there were no equipment or component failures. The safe system for conducting wave form testing, which is an infrequent activity, has been reviewed, verified and re-instructed to all testing engineers.
- 3.6 There was one Operational Incident in Period 5, summarised as: on 28 July 2021, a Signal Passed at Danger incident occurred in the Abbey Wood area, this is under investigation by the operator, MTR Elizabeth Line.
- 3.7 There have been three consecutive periods of zero reportable or lost time accidents. The focus and emphasis on Target Zero is evident and remains the priority in safely delivering the Elizabeth line.
- 3.8 The Health and Safety elements of the transition planning are being defined for the project as it enters its final phases. This includes the arrangements for the management and interface coordination between stakeholders and final project works. Contractor safety performance will remain a key area of focus as part of any revised governance structure
- 3.9 As part of the transition planning, a review of the future of the Safety and Health Executive Leadership Team has commenced to draw this leadership team to a considered close. A detailed impact assessment and mapping to the future Elizabeth line Health and Safety meeting cadence is underway.
- 3.10 Following several incidents at the start of Trial Running the investigation findings concluded that Planning was an underlying factor. In response to this, an independent review was commissioned across all access planning arrangements. The review recommended the appointment of a senior director to lead the Access Improvement Programme which has provided benefits for safety and it is positive to note that planning and coordination has improved, and incident numbers continue to decline. The dedicated workstream, reverting to business as usual and steady state from Period 3, should be considered a success and is providing the efficient and safe access necessary to conduct maintenance and close out work across the infrastructure.
- 3.11 Since the last report to the Committee, the Accident Frequency Rate has remained stable at 0.08. The Lost Time Index has decreased from 0.11 to 0.10. The High Potential Near Miss rate has decreased from 0.36 to 0.32. The industry recognised frequency rates are calculated over a rolling 13 periods.

- 3.12 The final Stepping Up Week begins on 26 September 2021. An extensive programme of activity is scheduled throughout the Elizabeth line. The theme is 'Safely Transitioning the Elizabeth Line' and Committee Members have been sent programme invitations.
- 3.13 The programme continues to manage the coronavirus pandemic risk with many of the measures implemented by the supply chain remaining in place. There has however been some relaxing of arrangements, agreed between the principal contractors and client where aligned with the national changes. The programme has successfully reverted to home testing as a priority in lock step with the Infrastructure Manager's strategy. Controls continue to be assured weekly by independent inspections. The programme is preparing detailed plans for a controlled return to the programme offices, in line with TfL's approach.

List of Appendices:

None

List of Background Papers:

None

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