

# Agenda

**Meeting: Elizabeth Line Committee**

**Date: Thursday 14 July 2022**

**Time: 10:00am**

**Place: Conference Rooms 1 and 2,  
Ground Floor, Palestra, 197  
Blackfriars Road, London, SE1  
8NJ**

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In accordance with section 100(B)(4) of the Local Government Act 1972, the Chair has agreed to accept the following items of urgent business on the grounds that the information wasn't available for publication at the time of dispatch.

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Copies of the papers and any attachments are available on [tfl.gov.uk How We Are Governed](https://tfl.gov.uk/How-We-Are-Governed).

This meeting will be open to the public, except for where exempt information is being discussed as noted on the agenda. There is access for disabled people and induction loops are available. A guide for the press and public on attending and reporting meetings of local government bodies, including the use of film, photography, social media and other means is available on [www.london.gov.uk/sites/default/files/Openness-in-Meetings.pdf](https://www.london.gov.uk/sites/default/files/Openness-in-Meetings.pdf).

## Further Information

If you have questions, would like further information about the meeting or require special facilities please contact: Sue Riley, Secretariat Officer

For media enquiries please contact the TfL Press Office; telephone: 0845 604 4141; email: [PressOffice@tfl.gov.uk](mailto:PressOffice@tfl.gov.uk)

Howard Carter, General Counsel  
Friday 8 July 2022

**Supplementary Agenda  
Elizabeth Line Committee  
Thursday 14 July 2022**

**1 Apologies for Absence and Chair's Announcements**

**2 Declarations of Interest**

General Counsel

**Members are reminded that any interests in a matter under discussion must be declared at the start of the meeting, or at the commencement of the item of business.**

**Members must not take any part in any discussion or decision on such a matter and, depending on the nature of the interest, may be asked to leave the room during the discussion.**

**3 Minutes of the Meeting of the Committee held on 25 May 2022  
(Pages 1 - 6)**

General Counsel

**The Committee is asked to approve the minutes of the meeting of the Committee held on 25 May 2022 and authorise the Chair to sign them.**

**4 Matters Arising and Actions List (Pages 7 - 10)**

General Counsel

**The Committee is asked to note the updated actions list.**

**5 Safety Update (Pages 11 - 14)**

Director, Elizabeth line

**The Committee is asked to note the paper.**

**6 Elizabeth Line Operational Performance (Pages 15 - 18)**

Director, Elizabeth line

**The Committee is asked to note the paper.**

**7 Programme Status Update** (Pages 19 - 20)

Director, Elizabeth line

**The Committee is asked to note the paper and the supplementary information on Part 2 of the agenda.**

**8 Finance and Risk Update** (Pages 21 - 22)

Chief Finance Officer, Crossrail and Divisional Finance Director, Operations

**The Committee is asked to note the paper and the supplementary information on Part 2 of the agenda.**

**9 Elizabeth Line Programme Assurance Update** (Pages 23 - 30)

Director of Risk and Assurance

**The Committee is asked to note the paper and the supplemental information on Part 2 of the agenda**

**10 Project Representative Report** (Pages 31 - 32)

Director, Elizabeth line

**The Committee is asked to note the paper and the supplementary information on Part 2 of the agenda.**

**11 Crossrail Complaints Commissioner Report**

General Counsel

**The Committee is asked to note the paper and the Crossrail Complaints Commissioner's Report.**

**12 Members' Suggestions for Future Discussion Items** (Pages 33 - 36)

General Counsel

**The Committee is asked to note the forward plan and is invited to raise any**

**suggestions for future discussion items for the forward plan and for informal briefings.**

**13 Any Other Business the Chair Considers Urgent**

**The Chair will state the reason for urgency of any item taken.**

**14 Date of Next Meeting**

**Thursday, 29 September 2022 at 10.00am.**

**15 Exclusion of Press and Public**

**The Committee is recommended to agree to exclude the press and public from the meeting, in accordance with paragraph 3 of Schedule 12A to the Local Government Act 1972 (as amended), in order to consider the following items of business.**

**Agenda Part 2**

**16 Programme Status Update (Pages 37 - 40)**

**Exempt supplementary information relating to the item on Part 1.**

**17 Finance and Risk Update (Pages 41 - 46)**

**Exempt supplementary information relating to the item on Part 1.**

**18 Elizabeth Line Programme Assurance Update (Pages 47 - 60)**

**Exempt supplementary information relating to the item on Part 1.**

**19 Project Representative Report (Pages 61 - 86)**

**Exempt supplementary information relating to the item on Part 1.**

## Transport for London

### Minutes of the Elizabeth Line Committee

**Conference Rooms 1 and 2, Ground Floor, Palestra  
10am, Wednesday 25 May 2022**

#### **Members**

Heidi Alexander (Chair)  
Anne McMeel (Vice-Chair)  
Professor Greg Clark CBE (via Teams)  
Seb Dance  
Mark Phillips

#### **Executive Committee**

Andy Byford	Commissioner
Howard Carter	General Counsel
Mark Wild	Chief Executive Officer, Crossrail

#### **Staff**

Joan Buszewska	Head of Programme Assurance, Crossrail
Lorraine Humphrey	Director of Risk and Assurance
Rachel McLean	Chief Finance Officer, Crossrail and Finance Director, TfL Operations
Hannah Quince	Crossrail Chief of Staff
Howard Smith	Director, Elizabeth line
Sue Riley	Secretariat Officer

#### **Other Attendees**

Stephen Hill	Jacobs, Project Representative (via Teams)
Matthew Lodge	Department for Transport (via Teams)

### **29/05/22 Apologies for Absence and Chair's Announcements**

The Chair welcomed everyone to the meeting and spoke about the truly memorable day as the Elizabeth line opened for service on 24 May 2022. On behalf of the Committee the Chair thanked everyone who had been involved in this remarkable project which would transform travel across London and the southeast.

Apologies for absence had been received from Sarah Atkins, Dr Nelson Ogunshakin OBE and Kathryn Cearns OBE (Government representative) for whom Matthew Lodge was deputising and TC Chew, Chair of Elizabeth line Independent Investment Programme Advisory Group Sub-Group. Professor Greg Clark CBE was attending via Teams and was able to take part in the discussions but was not counted toward the quorum.

The Chair advised that this would be the last meeting of the Committee attended by Mark Wild, Hannah Quince and Stephen Hill and paid tribute to their hard work, dedication and achievements in realising the opening of the Elizabeth line.

The meeting was being broadcast live on TfL's YouTube channel to ensure the public and press could observe the proceedings and decision-making.

TfL maintained a priority focus on safety. The Chair highlighted that there was a specific agenda item on safety, which would be the first item considered at the meeting. She invited Members to raise any safety issues either under the specific agenda item or with the appropriate member of the Executive Committee after the meeting.

### **30/05/22    Declarations of Interests**

Members on the TfL Board confirmed that their declarations of interests, as published on [tfl.gov.uk](https://tfl.gov.uk), were up to date.

### **31/05/22    Minutes of the Meeting of the Committee Held on 24 March 2022**

**The minutes of the meeting of the Elizabeth Line Committee held on 24 March 2022 were approved as a correct record and the Chair was authorised to sign them.**

### **32/05/22    Matters Arising, Actions List and Use of Delegated Authority**

Howard Carter introduced the paper. All actions from previous meetings had been completed or were scheduled on the forward plan. Chair's Action was exercised to agree an amendment to the Crossrail Project Development Agreement as part of the substantial completion process for the project.

**The Committee noted the updated actions list and Chair's Action.**

### **33/05/22    Safety Update**

Mark Wild and Howard Smith introduced the paper, which provided an update on safety on the Crossrail project, TfL Rail (MTR EL) and the Infrastructure Manager, Rail for London (Infrastructure) Limited.

The safety records for Periods 12 and 13, 2021/22 were the strongest of the whole programme. Mark Wild remembered Rene Tkacik, who was tragically killed in this programme in 2014 and the four pedestrians and cyclists also killed during the programme, and the profound impact this had on staff.

Howard Smith reported on the continued vigilance in safety culture moving into an intensive maintenance period within the constraints of a passenger service.

**The Committee noted the paper.**

## **34/05/22 Elizabeth Line Readiness**

Howard Smith introduced the update on the performance of the TfL Rail operational service and the status of the readiness of the railway on the opening of the central section on 24 May 2022.

The report included an update on asset monitoring, as requested at the previous meeting. It was agreed that the remaining Element Outstanding Works List would be included in future performance reporting alongside maintenance.

**[Action: Howard Smith]**

Howard Smith confirmed that Romford Control Centre continued to perform well, despite some challenging circumstances. Close collaboration, while differentiating clear lines of responsibility, was critical. The turnover of staff would continue to be closely monitored and kept under review.

The Director of Operational Readiness had led on updating the huge range of network information, including signage and maps. The automated announcements were currently in the process of being updated.

The challenge would be to maintain a high level of performance across all services daily and for staff to transition into an operational mode mentality.

Future reports would reflect the operational status of the service and include updates on 5b minus delivery.

Members congratulated officers on the opening of the railway and welcomed future updates on providing a seven-day service, the operation of the central section and monitoring performance of all assets, including air conditioning, lifts and escalators.

The Commissioner confirmed that the focus and priority was now on the delivery of 5b minus for the autumn, alongside the completion of Bond Street station.

It was agreed that a representative from Network Rail would be invited to attend future meetings.

**[Action: Howard Smith/Secretariat]**

The unexpected evacuation during the first day of service was completed successfully and was attributed to an over sensitive tunnel beam which had since been adjusted.

Each operational day would be a learning and bedding down process for staff responding to passenger flows and other issues. Twice daily calls with senior staff were being held.

The professionalism of operational staff during this key opening period was praised by Members.

Provisional figures for passenger usage on the first day of service was 460,000 in total.

**The Committee noted the paper.**

## **35/05/22 Project Status Update**

Mark Wild presented the item and the supplementary information on Part 2 of the agenda, setting out an update on the status of the Crossrail project.

The Revenue Service Element Outstanding Works List had been completed and the organisational transition to the future state had been seamless. Mark Wild thanked the Delivery Director, the different assurance teams, including the Crossrail Engineering Safety Assurance Case Group, and all staff involved, for their hard work. He also thanked the Commissioner for his leadership.

The Chair sought confirmation that any lessons learnt would be made available for future infrastructure projects. It was confirmed that a detailed record of the project and lessons learnt had been developed as part of the Crossrail Learning Legacy Portal since 2012 to inform future major infrastructure projects. Information had already been shared with HS2. It was agreed that these documents would be shared with the Committee prior to publication. **[Action: Simon Bennett]**

**The Committee noted the paper and the supplementary paper on Part 2 of the agenda.**

## **36/05/22 Finance and Risk Update**

Rachel McLean presented the update on the financial performance at Period 13, 2021/22 and on risk management progress.

It was agreed that a discussion on the Cost to Go evaluation be reviewed by the Committee before the next meeting. **[Action: Rachel McLean/Secretariat]**

**The Committee noted the paper and the exempt supplementary information on Part 2 of the agenda.**

## **37/05/22 Elizabeth Line Programme Assurance Update**

Lorraine Humphrey and Joan Buszewska introduced the paper, which provided an update on progress with Elizabeth line Programme Assurance activity.

The report had been written prior to the opening of the Elizabeth line. Future reports would include updates on looking to the future and Stage 5 opening, including Bond Street station. Members requested that Element Outstanding Works List be included in future reports. **[Action: Lorraine Humphrey/Joan Buszewska]**

**The Committee noted the paper and the exempt supplementary information on Part 2 of the agenda.**



## **38/05/22 Project Representative Report**

Stephen Hill introduced the paper on the periodic reports from the Project Representative on the Crossrail project for Periods 12 and 13, 2021/22 and the management responses to these reports.

He congratulated staff on the successful opening of the Elizabeth line but highlighted the importance of maintaining performance in the central section so that a resilient and integrated end to end service could be provided to customers in future stages.

A final close out report would be submitted to the next meeting.

**[Action: Howard Smith]**

A factual correction was made to the Part 2 paper.

**The Committee noted the paper and the exempt supplementary information on Part 2 of the agenda.**

## **39/05/22 Members' Suggestions for Future Discussion Items**

Howard Carter introduced the item and the Committee's forward plan. Suggested future agenda items captured during the meeting would be included on the forward plan.

**The Committee noted the forward plan.**

## **40/05/22 Any Other Business the Chair Considers Urgent**

The Chair advised the Committee that she would continue to serve as a TfL Board Member and Chair of the Committee.

## **41/05/22 Date of Next Meeting**

The next scheduled meeting of the Committee would be held on Thursday 14 July 2022, at 10.00am.

## **42/05/22 Exclusion of the Press and Public**

The Committee agreed to exclude the press and public from the meeting, in accordance with paragraph 3 of Schedule 12A to the Local Government Act 1972 (as amended), when it considered the exempt information in relation to the items on the: Project Status Update; Finance and Risk Update; Elizabeth Line Programme Assurance Update; and Project Representative Report.

The meeting closed at 11.46am.

Chair: \_\_\_\_\_

Date: \_\_\_\_\_

## Elizabeth Line Committee

**Date:** 14 July 2022



**Item:** Matters Arising and Actions List

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**This paper will be considered in public**

### **1 Summary**

- 1.1 This paper informs the Committee of progress against actions agreed at previous meetings.

### **2 Recommendation**

- 2.1 **The Committee is asked to note the Actions List.**

#### **List of appendices to this report:**

Appendix 1: Actions List

#### **List of Background Papers:**

Minutes of previous meetings of the Elizabeth Line Committee

Contact Officer: Howard Carter, General Counsel

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## Actions from the meeting held on 25 May 2022:

Minute No.	Item/ Description	Action By	Target Date	Status/Note
<b>34/05/22 (1)</b>	<b>Elizabeth Line Readiness</b> Remaining Element Outstanding Works List to be included in future performance reporting alongside maintenance.	Howard Smith	14 July 2022 meeting.	Complete. Included in report on agenda.
<b>34/05/22 (2)</b>	A representative from Network Rail to be invited to attend future meetings.	Howard Smith/ Secretariat	14 July 2022 meeting.	Complete. Representative at the meeting.
<b>35/05/22</b>	<b>Project Status Update</b> A symposium of the completion of Crossrail to be shared with the Committee prior to publication.	Simon Bennett	September 2022 meeting.	Scheduled on Forward Plan. Oral update to be provided at the meeting.
<b>36/05/22</b>	<b>Finance and Risk Update</b> An informal briefing be held on the Cost to Go evaluation before the next meeting.	Rachel McLean/ Secretariat	5 July 2022.	Complete. Briefing held.
<b>37/05/22</b>	<b>Elizabeth Line Programme Assurance Update</b> Future reports to include updates on looking to the future and Stage 5 opening, including Bond Street station.	Lorraine Humphrey/ Joan Buszewska	5 July 2022 meeting.	Update in report on agenda. Complete.
<b>38/05/22</b>	<b>Project Representative Report</b> A final close out report to be submitted to the next meeting.	Howard Smith	14 July 2022 meeting.	Complete. Report on agenda.

**Actions from previous meetings:**

<b>Minute No.</b>	<b>Item/ Description</b>	<b>Action By</b>	<b>Target Date</b>	<b>Status/Note</b>
<b>56/07/21</b>	<b>Crossrail Complaints Commissioner's Report</b> Ahead of the office of the Commissioner closing, the Chair to be engaged in discussions on how outstanding complaints were either closed out or who they were assigned to.	Chair/Howard Smith	14 July 2022 meeting.	Complete. Report on agenda.

## Elizabeth Line Committee



**Date:** 14 July 2022

**Item:** Safety Update

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**This paper will be considered in public.**

### **1. Summary**

- 1.1. This paper provides an update on safety for Periods 1 and 2 2021/22.

### **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 Infrastructure Manager, Rail for London (Infrastructure) Limited (RfL(I)) and the Crossrail programme.
- 3.2. In summary, safety performance continues to see an overall positive improvement compared to previous years, which has been attributed to continued safety leadership and engagement across the Elizabeth line.
- 3.3. There were no Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDORs) or lost time cases recorded during this period on the Crossrail programme.
- 3.4. RfL(I) had zero Lost Time Injury events during this period.
- 3.5. There were no RfL(I) RIDDOR reportable events during this period.
- 3.6. During this period there were two significant incidents. These were classified as high potential near misses (HPNMs). The first incident occurred at Canary Wharf where a scaffolder was observed working at height in an unsafe manner. The second incident occurred at Bond Street where the temporary earth bonds on the non-public platform cages were not reinstated at the end of the night's work. There was no harm to people as a result of these incidents.
- 3.7. Since the last report to the Committee, the Crossrail HPNM rate has continued to decrease over the last 13 periods. Period 1's rate reduced to 0.20 however there was a small increase in Period 2 to 0.21 as a result of the two incidents described above. There has been a steady reduction in the HPNM rate over the 13 periods and this will continue if the current level of safety performance is maintained.
- 3.8. Since the last report to the Committee the Crossrail RIDDOR accident frequency rate (AFR) rose to 0.06 in Period 1 and remained at 0.06 for Period 2. The lost time case AFR also rose in Period 1 to 0.08, remaining at 0.08 for Period 2. The

risers are as a result of using the rolling 13 period calculation. Further data on Period 1 and Period 2 performance is available in the Health, Safety and Environment dashboards at Appendix 1.

- 3.9. The industry recognised frequency rates are calculated over a rolling 13 periods.
- 3.10. Focus remains on Crossrail's HSPI SMART metric, an engagement-led set of measures proportionate to the ongoing activities of the programme, with Period 2 scoring 3.00 for the first time since the new measure was launched back in Period 11.

**List of Appendices:**

Appendix 1: Crossrail Health, Safety and Environmental dashboards

**List of Background Papers:**

None

Contact Officer: Howard Smith, Director, Elizabeth line  
Email: [howardsmith@tfl.gov.uk](mailto:howardsmith@tfl.gov.uk)



## HSE Period Performance P01 22/23

### Significant Incidents

Zero Significant Incidents were reported during the period.

### RIDDOR & Lost Time Case (LTC)

The Accident Frequency Rates (AFR) for RIDDOR and LTC increased by 0.01 to 0.06 and 0.08 respectively, this is due to the industry standard AFR calculation method using hours worked which have reduced over the thirteen periods due to the changing profile of the programme.

### HPNM

The HPNM rate continues to trend down and is now at 0.20 having been 0.36 thirteen periods ago.

### HSPI SMART

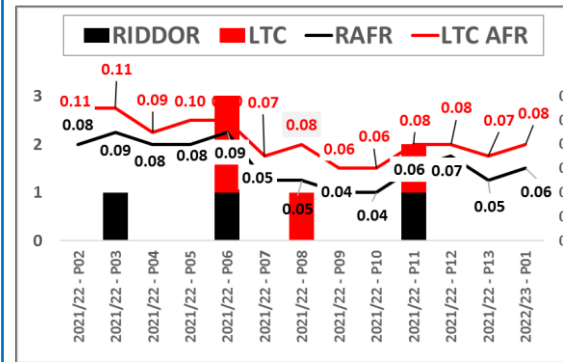
The HSPI SMART score is 2.90 for P01, with one contract missing their planned H&S Inspection score.

### Significant Incidents Overview

HSE CALENDAR 2022/23-P01						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1 Apr	2 Apr
3 Apr	4 Apr	5 Apr	6 Apr	7 Apr	8 Apr	9 Apr
10 Apr	11 Apr	12 Apr	13 Apr	14 Apr	15 Apr	16 Apr
17 Apr	18 Apr	19 Apr	20 Apr	21 Apr	22 Apr	23 Apr
24 Apr	25 Apr	26 Apr	27 Apr	28 Apr	29 Apr	30 Apr

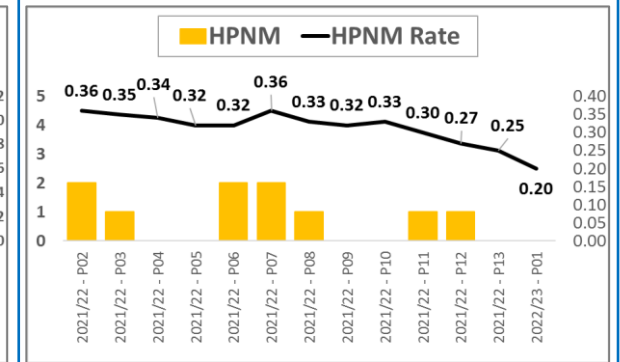
Zero Significant Incidents were reported for the second consecutive period.

### RIDDOR and LTC AFRs



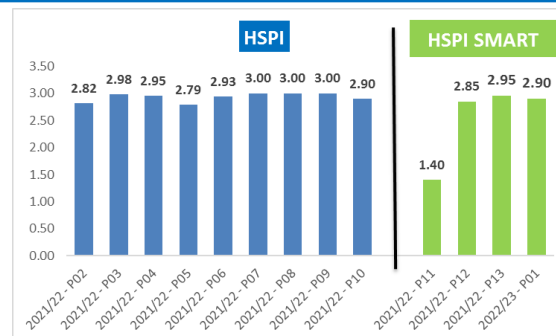
Zero RIDDOR and LTCs were reported this period. Both AFRs increased by 0.01 due to the reduction in hours worked.

### High Potential Near Miss



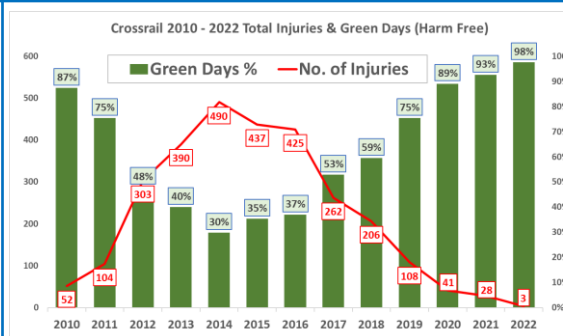
Zero HPNMs were reported during the period. The rate continues to trend down and has decreased by 0.16 over the year.

### HSPI SMART – Engagement



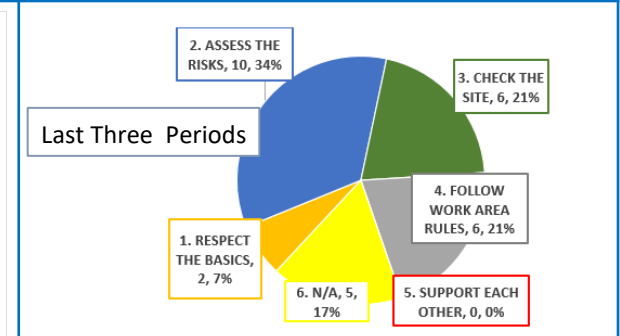
The HSPI SMART score for P01 is 2.90 a slight decrease from P13.

### Crossrail Injury Trend



Injuries continue to trend down with three injuries so far during 2022 compared to eleven injuries during the same timeframe in 2021 and fourteen during 2020.

### Behaviours - Golden Rules



Golden Rule 2 Assess the Risks continues to be the most reported breach over the last three periods with 10 at 34%.

## HSE Period Performance 2 22/23

### Significant Incidents

Two Significant Incidents were reported during the period, both HPNMs:

- Canary Wharf 4<sup>th</sup> May scaffolders observed to be working in an unsafe manner.
- Bond Street 5<sup>th</sup> May temporary earth bonds were not reconnected following works.

### RIDDOR & Lost Time Case (LTC)

The Accident Frequency Rates (AFRs) for RIDDOR and LTC remain at 0.06 and 0.08 respectively.

### HPNM

The HPNM rate increased by 0.01. The rate has trended down from 0.35 a year ago to 0.21 for P02.

### HSPI SMART

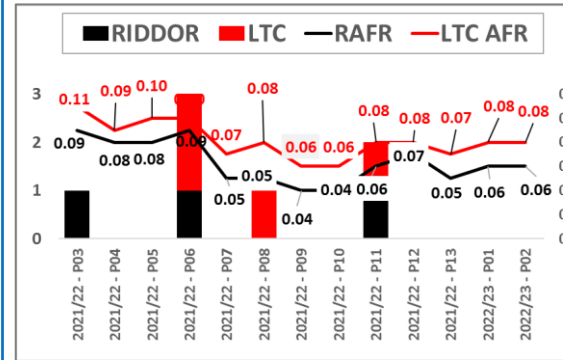
The HSPI SMART scored a maximum 3.00 for P02.

### Significant Incidents Overview

HSE CALENDAR 2022/23-P02						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
1 May	2 May	3 May	4 May HPNM CWF	5 May HPNM BOS	6 May	7 May
8 May	9 May	10 May	11 May	12 May	13 May	14 May
15 May	16 May	17 May	18 May	19 May	20 May	21 May
22 May	23 May	24 May	25 May	26 May	27 May	28 May

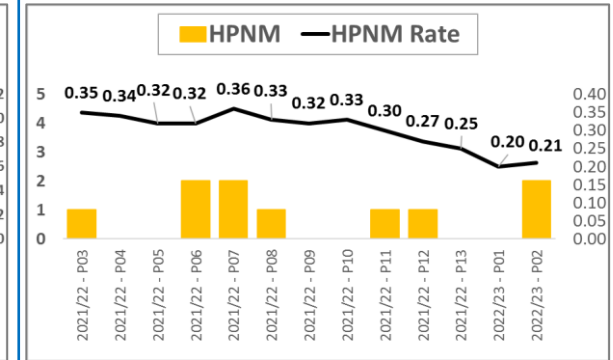
Two Significant Incidents were reported during P02, both High Potential Near Misses.

### RIDDOR and LTC AFRs



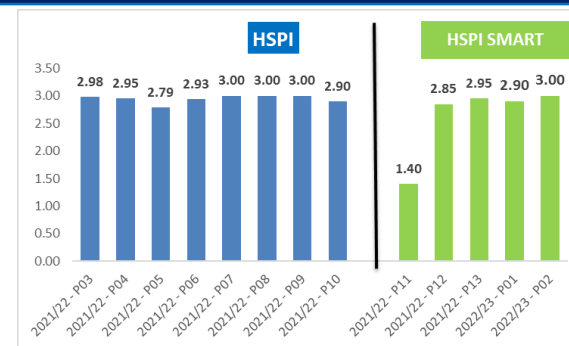
Zero RIDDOR and LTCs were reported for the fourth consecutive period. AFRs remained at 0.06 and 0.08.

### High Potential Near Miss



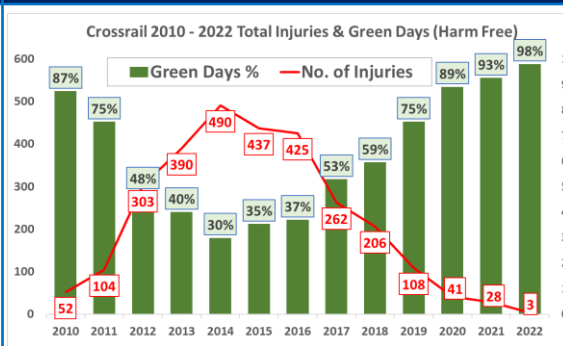
Two HPNMs were reported during the period. The rate increased slightly by 0.01 to 0.21.

### HSPI SMART – Engagement



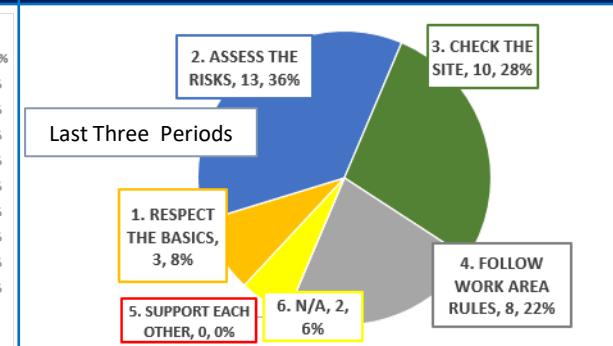
The HSPI SMART score for P02 increased to 3.00, all contracts achieved their targets.

### Crossrail Injury Trend



Injuries continue to trend down with three injuries so far during 2022 compared to twelve injuries during the same timeframe in 2021 and fifteen during 2020.

### Behaviours - Golden Rules



Golden Rule 2 Assess the Risks is the most reported breach over the last three periods with 13 at 37%.

## Elizabeth Line Committee



**Date:** 14 July 2022

**Item:** Elizabeth Line Operational Performance

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**This paper will be considered in public**

### **1 Summary**

- 1.1 On Tuesday 24 May 2022 the Elizabeth line opened, transforming travel across London and the South East. After the opening of the central section, direct services from Reading, Heathrow and Shenfield are expected to connect with the central section in Autumn 2022 with a full service across the entire route by May 2023.
- 1.2 The Elizabeth line is currently operating 12 trains per hour between Paddington and Abbey Wood from Monday to Saturday 06:30 to 23:00. Work continues in engineering hours and on Sundays to allow a series of testing and software updates in preparation for more intensive services from the autumn.

### **2 Recommendation**

- 2.1 **The Committee is asked to note the paper.**

### **3 Performance of Operational Service**

- 3.1 TfL Rail/the Elizabeth line delivered a Public Performance Measure of 95.1 per cent during Period 2 (1 – 28 May 2022). Following the start of revenue service on 24 May 2022, performance in the central section between Paddington and Abbey Wood was 97.8 per cent over the first five days of service, with 100 per cent delivered for three of those five days. Performance on the east was 95.9 per cent during period 02 whilst the west was 93.3 per cent. The overall Moving Annual Average trend was recorded at 94.0 per cent.
- 3.2 In the east, passenger services between Shenfield and Liverpool Street are being operated by nine-car class 345 trains. In the west, services to Heathrow are operated by nine-car class 345 train, while services between Reading and Paddington are operated by a combination of nine-car and seven-car class 345 trains. The seven-car trains are progressively being converted at Old Oak Common Depot to nine-cars, with this programme now complete with the exception of few seven-car trains which will remain in use until the start of through-running services into the Elizabeth line central section.

- 3.3 By the end of 20 June 2022, the Elizabeth line had seen around 10.25 million passenger journeys across the whole route since it launched on 24 May 2022, around five million are estimated to have involved the central section from Paddington to Abbey Wood. The central section of the Elizabeth line is currently seeing at least 200,000 journeys being made most weekdays.
- 3.4 Initially the service will operate 12 trains per hour (a train every five minutes) in each direction between Paddington and Abbey Wood from 06:30 to 23:00 Monday to Saturday. There will be no Sunday services from Paddington to Abbey Wood until later in the year. Services between Liverpool Street and Shenfield, and Paddington to Heathrow and Reading will continue to operate on Sundays as they do now aside from any planned closures.
- 3.5 Work will continue in engineering hours and on Sundays to allow a series of testing and software updates in preparation for more intensive services later this year. By using Sundays and some Saturdays, we anticipate that the next phase of the Elizabeth line will be complete this autumn, thereby enabling a much earlier near doubling of train service through the central section and direct journeys from the east and west through the central tunnels. One full weekend closure took place on 11/12 June 2022, with two additional closures scheduled for 30/31 July and 29/30 October 2022.
- 3.6 The programme has been focussed on further improving the reliability of the railway following the commissioning of the major signalling software update ELR200 software at Easter. A subsequent update, ELR201, was commissioned during the planned weekend closure on 11/12 June 2022 to restore some aspects of functionality that had regressed in ELR200.
- 3.7 Reliability performance continues to trend in the right direction, which is important looking ahead to Stage 5B-minus and the near doubling of the train service through the central section. Reliability had been expected to dip slightly at Stage 3 but has remained steady, despite the railway moving from a 12 trains per hour timetable running with no passengers into revenue service.

## **4 Surface Stations**

- 4.1 Customers on the west of the central section, between Paddington and Reading, have been benefitting from new station buildings and step-free access following the completion of Network Rail station enhancement works.
- 4.2 Network Rail continues their station upgrades on the eastern section, between Liverpool Street and Shenfield, focusing on completion of the station enhancement works at Romford and Ilford.
- 4.3 Although Romford has been affected by delays with gaining acceptance and assurance to enable handover, all parties are working collaboratively to deliver the ticket hall and lifts into use during the coming weeks, ahead of final completion. At Ilford, good progress has been made on the replacement of the concrete slab within the main concourse. Removal of the historical defective

slab elements is now completed, and Network Rail anticipates the station building and lifts being brought into use in summer 2022.

## **5 Stage 5B**

- 5.1 The plan to complete the end-to-end railway entails three steps: 5B-minus which will provide a 22 trains per hour peak (16 trains per hour off-peak) frequency in the central section (Paddington – Whitechapel) which can commence outside of a National Rail timetable change but requires a 16-week notice period; and stages 5B and 5C both of which step up the peak frequency to 24 trains per hour but require auto-reverse and will be implemented to align with the National Rail timetable change. A T-minus process is being established that builds on the approach taken to countdown to commence revenue service of the Elizabeth line.
- 5.2 Reliability will be a key factor in commencing and moving through the Stage 5 stages with the reliability on each of the west, central and east sections needing focus and management. A further timetable trial for 20 trains per hour was undertaken on 19 June 2022. Particular attention is also currently on the transitions which will be key to support Stage 5. The transition at Stratford between the central and surface sections is an important part of Stage 5 services and needs to be highly reliable. Work is underway, with our signalling supplier, to build this reliability to the level required for passenger services.

## **6 TfL Residual Works Programme**

- 6.1 The residual works team continue to progress post revenue service activities across the London Underground and Rail for London (Infrastructure) Limited estate.

### **List of Appendices:**

None

### **List of Background Papers:**

None

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## Elizabeth Line Committee



**Date:** 14 July 2022

**Item:** Programme Status Update

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### This paper will be considered in public

## 1 Summary

- 1.1 This paper provides an update on the status of the Crossrail project.
- 1.2 Following the initial phase of transition, the Elizabeth Line Delivery Group (ELDG) was formed to ensure appropriate oversight of the delivery of the Elizabeth line by Crossrail and TfL Executive. The ELDG is chaired by the Commissioner. In line with the commitments made by the Mayor for greater transparency of the Crossrail project, the minutes and actions from ELDG are available on our website<sup>1</sup>. Available reports will be uploaded to correspond to the meeting of this Committee.
- 1.3 A paper is included on the Part 2 agenda which contains supplementary information that is exempt from publication by virtue of paragraph 3 of Schedule 12A of the Local Government Act 1972 in that it contains information relating to the business affairs of TfL. Any discussion of that exempt information must take place after the press and public have been excluded from this meeting.

## 2 Recommendation

- 2.1 **The Committee is asked to note the paper and the supplementary paper on Part 2 of the agenda.**

## 3 Programme Update

- 3.1 On Tuesday 24 May 2022 the Elizabeth line opened, transforming travel across London and the South East. The opening of the central section was achieved within the committed window of the first half of 2022. Over one million passengers used the central section in the first five days of operation. The line is initially operating as three separate railways, in the east, west and through central London. Services from Reading, Heathrow and Shenfield are expected to connect with the central tunnels from autumn this year.
- 3.2 After the successful launch of the railway, Mark Wild has, as planned, stepped down as Chief Executive Officer and the Crossrail organisation has slimmed down. Jim Crawford, Chief Programme Officer, will lead the completion of the remaining programme works, including Bond Street station, and Howard Smith, as Elizabeth line Director, will continue to be accountable for the railway.

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<sup>1</sup> <https://tfl.gov.uk/corporate/publications-and-reports/elizabeth-line-delivery-group>



- 3.3 Work will continue in engineering hours and on Sundays to allow a series of testing and software updates in preparation for more intensive services later this year.
- 3.4 The programme has been focussed on further improving the reliability of the railway following the commissioning of the major signalling software update ELR200 software at Easter 2022. A subsequent update, ELR201, was commissioned during the planned weekend closure on 11/12 June to restore some aspects of functionality that had regressed in ELR200.
- 3.5 Nine of the 10 new central section stations have now been commissioned and transferred to Transport for London. Bond Street is now the only station site with a substantial number of workers still on-site. The station continues to make good progress and the team at Bond Street are working hard to open the station to customers later this year.
- 3.6 Crossrail Ltd remains focussed on delivering the full capability of the railway and the final stages of the programme. The start date for full Elizabeth line services is linked to improved reliability growth, and successful commissioning of further upgrades to signalling and rolling stock software planned for after the opening of the central section of the railway.
- 3.7 The plan to complete the end-to-end railway entails three steps: 5B-minus which will provide a 22 trains per hour peak (16 trains per hour off-peak) frequency in the central section (Paddington – Whitechapel), which can commence outside of a National Rail timetable change but requires a 16-week notice period; and stages 5B and 5C, both of which step up the peak frequency to 24 trains per hour, but require auto-reverse, and also will be implemented to align with the National Rail timetable change. A T-minus process is being established that builds on the approach taken to countdown to commence revenue service of the Elizabeth line. Stage 5C marks the completion of the Crossrail project.
- 3.8 Reliability will be a key factor in commencing and moving through the Stage 5 stages with the reliability on each of the west, central and east sections needing focus and management. To support this a further timetable trial for 20 trains per hour was undertaken on 19 June 2022. Particular attention is also currently on the transitions which will be key to support Stage 5. The transition at Stratford between the central and surface sections is an important part of Stage 5 services and needs to be highly reliable. Work is underway, with our signalling supplier, to build this reliability to the level required for passenger services.

#### **List of Appendices:**

Exempt supplementary information is contained in a paper on Part 2 of the agenda

#### **List of Background Papers:**

None

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## Elizabeth Line Committee



**Date:** 14 July 2022

**Item:** Finance and Risk Update

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### **This paper will be considered in public**

#### **1 Summary**

- 1.1 This paper provides an update on the financial performance at Period 2 2022/23 and on risk management progress.
- 1.2 A paper is included on the Part 2 agenda which contains supplementary information that is exempt from publication by virtue of paragraph 3 of Schedule 12A of the Local Government Act 1972 in that it contains information relating to the business affairs of TfL and other parties. Any discussion of that exempt information must take place after the press and public have been excluded from the meeting.

#### **2 Recommendation**

- 2.1 **The Committee is asked to note the paper and the supplementary information on Part 2 of the agenda.**

#### **3 Financial Performance**

- 3.1 Spend in Period 2 was £26m and is £52m for the financial year to date. The period spend was £7m below the Delivery Control Schedule 1.2 (DCS1.2) Budget and the Programme is £21m below the DCS1.2 Budget for year to date.
- 3.2 On average the Programme has seen an underspend of £11m a period in this financial year.
- 3.3 The number of Crossrail full time equivalent staff is 468 (note this excludes consultancy resource). This was 21 lower than had been forecast in the DCS1.2 Workforce Plan, driven by vacancies.

#### **4 Anticipated Final Crossrail Direct Cost (AFCDC)**

- 4.1 The current P50 (50th percentile) AFCDC is £15,963m, £23m higher than DCS1.2, and unchanged since that which was previously reported in P13.
- 4.2 The P50 AFCDC is currently £174m above the additional funding of £825m, £23m higher than as at DCS1.2. When the £825m additional funding was confirmed, the funding package was £91m lower than the P50 AFCDC at the time.
- 4.3 At higher levels of probability, current estimates of up to £1.1bn additional funding are consistent with previous estimates.

- 4.4 Although potential new cost pressures are being prudently recognised in the AFCDC as they arise, the Programme continues to maintain significant provisions and contingency budgets. Actions are ongoing across all areas to identify opportunities to reduce the AFCDC and mitigate cost pressures.

## **5 Funding**

- 5.1 On 30 November 2020, a funding and financing agreement was reached between TfL, Greater London Authority and the Government providing £825m of additional funding for the Crossrail Programme.
- 5.2 Following the funding and financing agreement of November 2020 and the TfL Board's approval of Programme and Project Authority, as at Period 2, Programme and Project Authority drawn down is £15,780m.
- 5.3 This means of the additional £825m funding, £816m has been drawn down as at Period 2.
- 5.4 The authority currently drawn down by the Programme covers commitments over a number of future periods, and in some instances, particularly in relation to resources, for the remainder of the Programme.
- 5.5 Cost to date recognised on the Programme is £15,661m versus the total Programme and Project Authority available of £15,789m, indicating there is no short-term concern that the Project will not be able to continue to meet its commitments.

## **6 Risk**

- 6.1 There are 17 Level 1 Programme Risks at Period 2.
- 6.2 The Level 1 Programme Risks summarise the significant risks that face the Programme. The review and update of Level 1 risks is now a well-established part of the Executive Group cadence, with a substantive review of risks and interventions on a four-weekly basis. Risks are also tracked and monitored by the Elizabeth Line Delivery Group.

### **List of appendices to this report:**

Exempt supplementary information is contained in a paper on Part 2 of the agenda.

### **List of Background Papers:**

None

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## Elizabeth Line Committee



**Date:** 14 July 2022

**Item:** Elizabeth Line Programme Assurance Update

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### This paper will be considered in public

## 1 Summary

- 1.1 This paper reports on progress with programme assurance activity across the Elizabeth line during Quarter 1 (Q1) of 2022/23 (1 April to 25 June 2022).
- 1.2 A paper is included on the Part 2 agenda which contains supplementary information that is exempt from publication by virtue of paragraph 3 of Schedule 12A of the Local Government Act 1972 in that it contains information relating to the business affairs of TfL. Any discussion of that exempt information must take place after the press and public have been excluded from this meeting.

## 2 Recommendation

- 2.1 **The Committee is asked to note the paper and the exempt supplementary information in Part 2 of the agenda.**

## 3 Background

- 3.1 The Elizabeth line Integrated Assurance Framework (IAF) is based on a Three Lines of Defence (3LoD) model comprising:
  - (a) Line 1 – Management functions of Crossrail, Rail for London (Infrastructure) Limited and key interfaces;
  - (b) Line 2 – Project and Programme Assurance Elizabeth line (PPA-EL); and
  - (c) Line 3 – TfL Internal Audit and a sub-group of the Independent Investment Programme Advisory Group (IIPAG-EL).
- 3.2 This paper reports specifically on Line 2 (PPA-EL), Line 3 (Internal Audit) and Line 3 (IIPAG-EL) assurance progress.
- 3.3 The teams meet periodically with a panel of advisers and Line of Defence 3 (LoD3), to ensure that assurance is carried out by the right team, at the right time and to avoid duplication and minimise overlap of effort.

## 4 Line 2 (PPA) Assurance

- 4.1 Excellent progress has been made since the last report. Entry into Revenue Service was successfully achieved on 24 May 2022, and operational performance since then has been good with no significant delays to passenger services each day.

- 4.2 Based upon the Line of Defence 2 (LoD2) Period 2 assessment, and with the positive reliability performance trajectory, LoD2 support the decision for the Elizabeth line to target the next phase of Revenue Service to open in autumn this year. However, in order for Stage 5b minus to proceed, a solution for transition at Stratford is required as well as a final solution for auto-reverse, essential to support a 24 trains per hour railway at Stage 5b in December.
- 4.3 LoD2 Assurance has continued to provide assurance on an ongoing continuous basis as well as carrying out Targeted Assurance Reviews on key areas where there are risks identified, which may impact upon the later stages of Revenue Service (Stages 5b minus, 5b and 5c). Formal reporting continues to be through the LoD2 Periodic Assurance Review (PAR) Reports.
- 4.4 Since the last meeting of the Committee, LoD2 has issued PAR Reports covering Periods 1 and 2 of 2022/23 (1 April to 28 May 2022), which have provided input to the periodic Integrated Assurance Report to the Elizabeth Line Delivery Group and this Committee.
- 4.5 Regarding cost to complete, although potential new cost pressures continue to be prudently recognised in the Anticipated Final Crossrail Direct Cost (AFCDC) as they arise, the Programme has continued to maintain provision and contingency budgets. Actions are ongoing across all areas to identify opportunities to reduce the AFCDC and mitigate cost pressures.
- 4.6 The project has continued to make significant progress since the last report, key progress highlights include:
- (a) entry into Revenue Service on 24 May 2022 with successful operations continuing over the Queen's Jubilee celebration;
  - (b) the introduction of a new release of signalling software ELR201 on 11 June 2022, and new train software H5.7 continue to contribute to the improvements in the overall system reliability performance;
  - (c) station works continue at Bond Street working towards bringing into use in autumn 2022; and
  - (d) maintenance productivity and access continue to improve and support the projected Revenue Service requirements.
- 4.7 Key indicators of maintenance performance are being monitored to provide greater clarity around the average fault identification and diagnosis interval and the overall fault-to-fix cycle time.

## **5 Line 3 (TfL Internal Audit) Assurance**

- 5.1 This section covers the Internal Audit activities that were agreed in the Integrated Audit and Assurance schedule shared on 24 March 2022.
- 5.2 In Q1 we issued one report, we have two in progress and there are three audits planned to commence in Quarter 2 of 2022/23 (Q2).

## **Audit Delivery**

- 5.3 Summary information of the report issued in Q1 is set out below.
- 5.4 The Information Management and Transfer audit was rated as 'Requires Improvement'. Two high priority issues and one medium priority issue were raised. The high priority issues relate to the transfer of systems and information identified as part of the 2017 IT Transition Strategy not being managed as a formal programme, and governance arrangements for monitoring the programme of information transfer not being in place.
- 5.5 Audits in progress at the end of Q1 are included as Appendix 1, and work planned to start in Q2 is included as Appendix 2.

## **Management Actions**

- 5.6 The team monitors the implementation of all Internal Audit management actions and confirms whether they have been adequately addressed. There are currently no overdue actions.

## **Changes to the Audit Plan**

- 5.7 TfL Internal Audit regularly review and update the Audit Plan throughout the year, in liaison with management, to reflect changing business priorities. No changes to the Audit Plan have been made.

## **6 Line 3 (IIPAG-EL) Assurance**

- 6.1 IIPAG-EL continue to focus on the key areas identified as part of the Integrated Audit and Assurance Schedule and supports the 'continuous assurance' process established by LoD3. This schedule is maintained by LoD2 and reviewed within the Elizabeth Line Programme Assurance Group which is co-ordinated by LoD2/PPA.
- 6.2 The overall assessment by LoD3 (IIPAG-EL sub-group) is that the overall assurance framework has continued to operate effectively over the last quarter.

## **List of Appendices:**

Appendix 1: Line 3 (TfL Internal Audit) Work in progress at the end of Q1 2022/23  
Appendix 2: Line 3 (TfL Internal Audit) Work due to start in Q2 2022/23

Exempt supplementary information is contained in a paper on Part 2 of the agenda.

## **List of Background Papers:**

None

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## Elizabeth Line Committee

### Work in progress at the end of Q1 2022/23

### Appendix 1

- There were two audits in progress at the end of the quarter

Enterprise risk	Directorate	Ref	Audit title	Objective	Current Status
ER7 Financial Sustainability	Crossrail	22 012	Cost verification – Engie	To certify that payments to Engie are accurate and appropriate.	In Progress
ER7 Financial Sustainability	Crossrail	22 015	Crossrail Complaints Commissioners Accounts 21/22	To provide assurance on the accuracy of the Crossrail Complaints Commissioners Accounts for 2021/22.	In Progress

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## Elizabeth Line Committee

### Work planned to start in Q2 2022/23

### Appendix 2

- There are three audits planned to start during the quarter

Enterprise risk	Directorate	Ref	Audit title	Objective
<b>ER14 Opening of the Elizabeth Line</b>	Crossrail	22 014	Crossrail Act Obligations	To provide assurance that obligations in the Crossrail Act have been met.
<b>ER7 Financial Sustainability</b>	Crossrail	22 018	Crossrail Complaints Commissioners Accounts 22/23	To provide assurance on the accuracy of the Crossrail Complaints Commissioners Accounts for 2022/23.
<b>ER12 Asset Condition unable to Support TfL Outcomes</b>	RfLi	TBC	Obsolescence of Critical Operational Systems	To provide assurance that adequate controls are in place to prevent critical operational systems becoming obsolete.

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## Elizabeth Line Committee



**Date:** 14 July 2022

**Item:** Project Representative Report

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### **This paper will be considered in public**

#### **1 Summary**

- 1.1 Following the start of revenue service in the central section, Sponsors have now demobilised the P-Rep team.
- 1.2 This paper provides an update on the final periodic report and the close out report from the Project Representative (P-Rep) on Crossrail and a redacted copy will also be published.
- 1.3 A paper is included on the Part 2 agenda which contains supplementary information that is exempt from publication by virtue of paragraph 3 of Schedule 12A of the Local Government Act 1972 in that it contains information relating to the business affairs of TfL. Any discussion of that exempt information must take place after the press and public have been excluded from this meeting.

#### **2 Recommendation**

- 2.1 **The Committee is asked to note the report and the supplementary paper on Part 2 of the agenda.**

#### **3 Project Representative**

- 3.1 The P-Rep was in place to provide the Sponsors, TfL and the Department for Transport, with oversight of project delivery, advise and raise points of challenge to the Sponsors and scrutinise progress.
- 3.2 Building on plans developed over a year ago with the DfT to reduce the size of the P-Rep team at key project milestones as the risk profile of the remaining work decreases and changes, Sponsors have demobilised the P-Rep team after the start of revenue service in the central section. The P-Rep remains on a call-off arrangement until the end of the contract term (end of 2022/23) to provide support as required.
- 3.3 Project and independent assurance will continue to be provided by the Elizabeth line Programme Assurance team and the Crossrail sub-group of the Independent Investment Programme Advisory Group to respond to the remaining risks on the programme, maintain an appropriate level of independent review and maintain our commitments to transparency.
- 3.4 In line with the commitments made by the Mayor for greater transparency of the Crossrail project, the most recent P-Rep reports are included as part of the

regular update to the Committee and are available on our website<sup>1</sup>. The reports include observations highlighted by the P-Rep for Sponsor attention.

- 3.5 The P-Rep observations are shared with Crossrail and are discussed in detail by Crossrail, P-Rep and the Commissioner at the regular meetings of the Elizabeth Line Delivery Group. Crossrail also produces a written response to the P-Rep report that is included with the P-Rep reports on our website.
- 3.6 As with all the P-Rep reports, it has been necessary to make some redactions to the reports prior to publication to protect commercially sensitive material. We have sought to keep such redactions to a minimum. Unredacted versions of the P-Rep reports and Crossrail responses have been included in the paper on Part 2 of the agenda.

### **List of Appendices**

Exempt supplementary information is contained in a paper on Part 2 of the agenda

### **List of Background Papers:**

None

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<sup>1</sup> <https://tfl.gov.uk/corporate/publications-and-reports/crossrail-project-updates>

## Elizabeth Line Committee



**Date:** 14 July 2022

**Item:** Members' Suggestions for Future Discussion Items

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### **This paper will be considered in public**

#### **1 Summary**

- 1.1 This paper presents the current forward plan for the Committee and explains how this is put together. Members are invited to suggest additional future discussion items.

#### **2 Recommendation**

- 2.1 **The Committee is asked to note the forward plan and is invited to raise any suggestions for future discussion items.**

#### **3 Forward Plan Development**

- 3.1 The Board and its Committees and Panels have forward plans. The content of the plans arises from a number of sources:
- (a) standing items for each meeting: minutes; matters arising and actions list; and any regular reports, including the Project Representative report;
  - (b) regular items which are for review and approval or noting;
  - (c) matters reserved for approval or review; and
  - (d) items requested by Members: The Deputy Chair of TfL and the Chair of this Committee will regularly review the forward plan and may suggest items. Other items will arise out of actions from previous meetings (including meetings of the Board or other Committees and Panels) and any issues suggested under this agenda item.

#### **4 Current Plan**

- 4.1 The current list of standing items is attached at Appendix 1. Like all plans, it is a snapshot in time and items may be added, removed or deferred to a later date.

#### **List of appendices to this report:**

Appendix 1: Elizabeth Line Committee Forward Plan 2022/23

#### **List of Background Papers:**

None

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## Elizabeth Line Committee Forward Plan 2022/23

## Appendix 1

**Membership:** Heidi Alexander (Chair), Anne McMeel (Vice-Chair), Professor Greg Clark CBE, Seb Dance, Dr Nelson Ogunshakin OBE, Mark Phillips, Sarah Atkins, Kathryn Cairns OBE (Department for Transport Representative)

Standing Items		
Safety Update	Director, Elizabeth line	
Elizabeth Line Programme Update	Director, Elizabeth line	
Elizabeth Line Operational Performance	Director, Elizabeth line	
Project Representative Report	Director, Elizabeth line	
Elizabeth Line Programme Assurance Update	Director of Risk and Assurance	
Finance and Risk Update	Chief Finance Officer, Crossrail	
<b>29 September 2022</b>		
Crossrail Information Sharing	Head of Learning Legacy	

### Dates of Future Meetings

29 September 2022

24 November 2022

26 January 2023

16 March 2023

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