

# Agenda

**Meeting: Audit and Assurance Committee**

**Date: Wednesday 17 March 2021**

**Time: 10.00am**

**Place: Teams Virtual Meeting**

## Members

Anne McMeel (Chair)

Dr Lynn Sloman (Vice-Chair)

Cllr Julian Bell

Kay Carberry CBE

Dr Mee Ling Ng OBE

Dr Nelson Ogunshakin OBE

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).

To maintain social distancing in the current circumstances, the meeting will be held by videoconference or teleconference. The meeting remains open to the public, except for where exempt information is being discussed as noted on the agenda, as it will be webcast live on the [TfL YouTube channel](#).

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; telephone: 020 7983 4392;.

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  
Tuesday 9 March 2021

**Agenda  
Audit and Assurance Committee  
Wednesday 17 March 2021**

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

**2 Declarations of Interests**

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 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 2 December 2020  
(Pages 1 - 8)**

General Counsel

**The Committee is asked to approve the minutes of the meeting of the Committee held on 2 December 2020 and authorise the Chair to sign them.**

**4 Matters Arising and Actions List (Pages 9 - 12)**

General Counsel

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

**External Audit Items**

**5 Silvertown Tunnel Project - Ernst & Young Report on Silvertown Tunnel (Pages 13 - 72)**

Chief Finance Officer

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

## **Audit, Risk and Assurance Items**

### **6 Risk and Assurance Quarter 3 Report 2020/21 (Pages 73 - 112)**

Director of Risk and Assurance Report

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

### **7 Independent Investment Programme Advisory Group Quarterly Report (Pages 113 - 130)**

Director of Risk and Assurance

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

### **8 Integrated Assurance Plan 2021/22 (Pages 131 - 148)**

Director of Risk and Assurance

**The Committee is asked to approve the Plan.**

### **9 Elizabeth Line Audit and Assurance Quarter 3 Report 2020/21 (Pages 149 - 158)**

Director of Risk and Assurance

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

### **10 Elizabeth Line Programme Assurance Quarter 3 Report 2020/21 (Pages 159 - 164)**

Crossrail Chief Finance Officer

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

### **11 Elizabeth Line Internal Audit Plan 2021/22 (Pages 165 - 168)**

Director of Risk and Assurance

**The Committee is asked to note the paper and approve the Plan.**

## **Accounting and Governance**

### **12 Finance Control Environment Trend Indicators (Pages 169 - 174)**

Chief Finance Officer

**The Committee is asked to note the dashboard at Appendix 1.**

### **13 Finance and Business Services - End to End Processes (Pages 175 - 178)**

Chief Finance Officer

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

### **14 Procurement Update (Pages 179 - 184)**

Chief Procurement Officer

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

### **15 Critical Accounting Policies (Pages 185 - 188)**

Chief Finance Officer

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

### **16 Engineering Standards Improvement Programme (Pages 189 - 196)**

Director of TfL Engineering

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

### **17 Personal Data Disclosure to Police and Other Statutory Law Enforcement Agencies (2020) (Pages 197 - 200)**

Director of Compliance, Policing, Operations and Security

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

**18 Enterprise Risk Update - Governance and Controls Suitability (ER13)**  
(Pages 201 - 206)

General Counsel

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

**19 Register of Gifts and Hospitality for Members and Senior Staff**  
(Pages 207 - 210)

General Counsel

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

**20 Members' Suggestions for Future Discussion Items** (Pages 211 - 214)

General Counsel

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

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

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

**22 Date of Next Meeting**

Monday, 7 June 2021 at 10am.

**23 Exclusion of Press and Public**

**The Committee is recommended to agree to exclude the press and public from the meeting, in accordance with paragraphs 3, 5 & 7 of Schedule 12A to the Local Government Act 1972 (as amended), in order to consider the following items of business.**

**Agenda Part 2**

**Papers containing supplemental confidential or exempt information not included in the related item on Part 1 of the agenda.**

**24 Silvertown Tunnel Project - Ernst & Young Report on Silvertown Tunnel** (Pages 215 - 236)

Chief Finance Officer

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

**25 Risk and Assurance Quarter 3 Report 2020/21** (Pages 237 - 250)

Director of Risk and Assurance

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

**26 Independent Investment Programme Advisory Group Quarterly Report** (Pages 251 - 254)

Director of Risk and Assurance

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

**27 Procurement Update** (Pages 255 - 258)

Chief Procurement Officer

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

**28 Enterprise Risk Update - Governance and Controls Suitability (ER13)**  
(Pages 259 - 266)

General Counsel

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

## Transport for London

### Minutes of the Audit and Assurance Committee

#### Teams Virtual Meeting 10.00am, Wednesday 2 December 2020

##### Members

Anne McMeel	Chair
Dr Lynn Sloman	Vice Chair
Kay Carberry CBE	Member
Dr Mee Ling Ng OBE	Member
Dr Nelson Ogunshakin OBE	Member

##### Executive Committee

Howard Carter	General Counsel
Simon Kilonback	Chief Finance Officer

##### Staff

Mushtaq Ali	Interim Head of Internal Audit
Alex Batey	Director of Investment Planning (for Minute Reference 56/12/20)
Emily Clark	Direct Tax Manager (for Minute Reference 64/12/20)
Andy Ferrar	Head of Finance Controls and Systems (for Minute Reference 63/12/20)
Charles Frost	Indirect Tax Manager (for Minute Reference 64/12/20)
Siwan Hayward OBE	Director of Compliance, Policing and On-Street Services (for Minute Reference 62/12/20)
Lorraine Humphrey	Head of TfL Project Assurance
Tony King	Group Finance Director and Statutory Chief Finance Officer
Nico Lategan	Head of Enterprise Risk
Rachel McLean	Chief Financial Officer, Crossrail
Rachel Shaw	Head of External Reporting, Finance
Mike Shirbon	Head of Integrated Assurance
Clive Walker	Director of Risk and Assurance
Sue Riley	Secretariat

##### Also In Attendance

Karl Havers	Partner, Ernst & Young
Caroline Mulley	Associate Partner, Ernst & Young
Alison Munro	Independent Investment Programme Advisory Group, Chair
Joanne White	Independent Investment Programme Advisory Group, Member

#### 52/12/20 Apologies for Absence and Chair's Announcements

The Chair welcomed everyone to the meeting. The meeting was being broadcast live on YouTube, except for the discussion of the information on Part 2 of the agenda, which was exempt from publication.

There were no apologies for absence.

The Chair reminded those present that safety was paramount at TfL and encouraged Members to raise any safety issues during discussions on a relevant item or with TfL staff after the meeting.

The Chair informed Members that, subject to approval by the TfL Board, at its meeting on 9 December 2020, Councillor Julian Bell would be appointed as a Member of the Committee.

At the close of the meeting, Members were due to meet informally with the Director of Risk and Assurance and the Interim Head of Internal Audit for the annual informal discussion. Prior to the start of the meeting, Members had also met informally with EY, the External Auditors, for the annual informal discussion.

### **53/12/20    Declarations of Interest**

The Chair declared that, as Vice Chair of the Elizabeth Line Committee, she would not participate in any discussion on the Elizabeth Line Audit and Assurance item (Minute Reference 61/12/20) and the Vice Chair of the Audit and Assurance Committee would Chair the discussion of that item. Dr Nelson Ogunshakin OBE was also a member of the Elizabeth Line Committee.

Members confirmed that their declarations of interests, as published on [tfl.gov.uk](http://tfl.gov.uk), were up to date and there were no additional interests that related specifically to items on the agenda.

### **54/12/20    Minutes of the Meeting of the Committee held on 11 September 2020**

**The minutes of the meeting held on 11 September 2020 were approved as a correct record and for signing by the Chair.**

### **55/12/20    Matters Arising and Actions List**

Howard Carter introduced the paper, which set out progress against actions agreed at previous meetings of the Committee.

**The Committee noted the Actions List.**

### **56/12/20    Update on TfL's Approach to Delivering Value for Money Across the Investment Programme**

Alex Batey introduced the paper reporting on TfL's approach in ensuring value for money was optimised in delivering the investment programme, progress made to date and work underway.

Alison Munro endorsed the work completed to date on improvements to the value for money culture within TfL, led by Alex Batey, and stressed the importance of prioritising projects with clear benefit outcomes throughout the life cycle of a programme. The



Independent Investment Programme Advisory Group would undertake a review of progress on value for money delivery next year.

Work was ongoing to develop monitoring and measuring of performance against the value for money objectives, including reporting to the Finance and the Programmes and Investment Committees.

Members welcomed the report and asked that social and economic benefits also be considered as part of the overall business case for each project. Prioritisation of projects, in a challenging financial climate would be difficult. Lessons learned from other programmes were also being incorporated with rigorous oversight and financial authority at a much earlier stage of each programme than previously.

All projects were being reviewed with this new approach and any significant changes that occurred within the business case would automatically trigger a review. There was a clear focus on value for money at each of the approval gate stages.

The Chair welcomed the approach and the inclusion of OPEX as well as CAPEX projects and noted that specification, scope and change control management were included in the issues being addressed.

**The Committee noted the paper and endorsed the approach.**

## **57/12/20 External Audit Plan TfL, TTL and Subsidiaries - Year Ending 31 March 2021**

Tony King introduced the report and Karl Havers presented the external audit plan for TfL and its subsidiaries for the year ending 31 March 2021.

As was the case for the audit for year ended 31 March 2020, the challenges posed by the coronavirus pandemic and the funding uncertainties had impacted on the development of the plan and would likely impact EY's delivery of the audit. These key risks were highlighted in the report, including the impact on assumptions, capitalisation and accruals.

In relation to value for money assessments, correspondence had been received, which had been circulated to the Committee and the External Auditors, on the Silvertown Tunnel project and TfL's Data Centre Contract. This would be reviewed and reported back to the Committee at its meeting on 21 March 2021.

It was agreed that EY's work would include climate related risks and costs.

**[Action: Karl Havers]**

Due to the reduction in planning materiality, there would inevitably be an increase in sample testing. If any weaknesses in the control environment were identified this would result in further testing.

TfL was committed to delivering a Financial Sustainability Plan to the Department for Transport by 11 January 2021, which would help set out the future funding requirement and a path to financial sustainability in the medium term. This would help EY make assessments around going concern and the impact on the capital programme.

At the previous meeting, EY had been tasked with developing a successor plan for Karl Havers, who had extended his time as lead audit partner due to the pandemic. It was agreed that Tony King and Karl Havers would discuss the arrangements off-line and schedule a meeting, with selected Committee Members, for early in the New Year.

**[Action: Tony King/Karl Havers]**

**The Committee noted the paper.**

### **58/12/20 EY Report on Non-Audit Fees for Six Months ended 30 September 2020**

Tony King introduced the report on fees billed by EY for non-audit services for six months ended 30 September 2020.

**The Committee noted the paper.**

### **59/12/20 Risk and Assurance Quarter 2 Report 2020/21**

Clive Walker introduced the quarterly report, informing the Committee of work completed, work in progress and work planned to start.

Quarter 2 reporting had been light due to the coronavirus pandemic and staff furloughed, but work was now returning to normal.

The Chair reminded Members that the Director of Risk and Assurance would be retiring at the end of March 2021 and an appointment process would be established in discussion with the Chair with Member involvement.

There were no poorly controlled reports and audit planning for next year was underway.

The Project Assurance team had focused on closing out recommendations, including projects which had either been paused or cancelled. Two specialist vacancies had been filled, which would further strengthen the team's focus on value for money.

The Chair welcomed the pro-active work carried out by the Fraud team and the improvements to the procurement process. She stressed the importance of filling any staff vacancies within the Risk and Assurance Directorate.

**The Committee noted the report and the supplemental information on Part 2 of the agenda.**

## **60/12/20 Independent Investment Programme Advisory Group Quarterly Report**

Alison Munro and Joanne White jointly presented the Independent Investment Programme Advisory Group (IIPAG) Quarterly Report.

A cross-cutting review of the Procurement and Supply Chain Improvement programme had been delayed due to the Coronavirus pandemic but a report would be submitted to the next meeting. Internal Audit was also reviewing this process and would liaise with IIPAG to avoid any duplication.

**The Committee noted the report and the management response.**

## **61/12/20 Elizabeth Line Audit and Assurance**

The Vice Chair chaired the meeting for this item.

Howard Carter and Clive Walker presented the overview of the role of Internal Audit in relation to the Crossrail project.

The Elizabeth Line Delivery Group and the Elizabeth Line Committee were managing all the appropriate risks.

**The Committee noted the paper.**

## **62/12/20 Enterprise Risk Update - Major Security Incident (ER4)**

Siwan Hayward OBE introduced the newly created risk on Major Security Incident (ER4).

The Committee endorsed the approach being taken.

**The Committee noted the update and the supplemental information on Part 2 of the agenda.**

## **63/12/20 Finance Control Environment Trend Indicators**

Tony King presented the report on the financial control environment trend indicators. Andy Ferrar was also present for this item.

It was agreed that a report on end to end processes in Finance and Business Services would be submitted to a future meeting. **[Action: Tony King]**

## **64/12/20 Annual Tax Governance Framework Update**

Rachel Shaw introduced the report on the key policies and documents for TfL's tax governance framework. Emily Clark and Charles Frost were also present for this item.

**The Committee noted the paper, endorsed the Anti-Tax Evasion Policy and the Anti-Tax Evasion Statement, noted the Annual Tax Strategy and noted the Senior Accounting Officer Policy.**

## **65/12/20 Legal Compliance Report (1 October 2019 - 30 September 2020)**

Howard Carter introduced the Legal Compliance Report for 1 October 2019 – 30 September 2020.

Further information in relation to the deposit of controlled waste outside Moorgate Underground station and the notice issued at Shepherd's Bush station would be provided to the Committee. **[Action: Howard Carter]**

**The Committee noted the report.**

## **66/12/20 Register of Gifts and Hospitality for Members and Senior Staff**

Howard Carter presented the details of gifts and hospitality declared by the Board and senior staff.

**The Committee noted the paper.**

## **67/12/20 Members' Suggestions for Future Discussion Items**

Howard Carter presented the current Forward Plan and invited any suggestions for future discussion items.

**The Committee noted the forward plan.**

## **68/12/20 Any Other Business the Chair Considers Urgent**

There was no urgent business.

## **69/12/20 Date of Next Meeting**

The next scheduled meeting was due to be held on Wednesday 17 March 2021 at 10.00am.

## **70/12/20 Exclusion of Press and Public**

**The Committee agreed to exclude the press and public from the meeting, in accordance with paragraphs 3, 5 & 7 of Schedule 12A to the Local Government Act 1972 (as amended), in order to consider the following items of business: Risk and Assurance Quarter 2 Report 2020/21; and Enterprise Risk Update – Major Security Incident (ER4).**

The meeting closed at 1pm.

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

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

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## Audit and Assurance Committee



**Date:** 17 March 2021

**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 Audit and Assurance Committee.

Contact Officer: Howard Carter, General Counsel  
Email: [HowardCarter@tfl.gov.uk](mailto:HowardCarter@tfl.gov.uk)

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## Audit and Assurance Committee Actions List (reported to 17 March 2021 meeting)

### Actions from last meeting:

Minute No.	Item/Description	Action By	Target Date	Status/Note
57/12/20	<p><b>External Audit Plan TfL, TTL and Subsidiaries - Year Ending 31 March 2021</b> EY's work to include climate related risks and costs.</p> <p>Tony King and Karl Havers to discuss the arrangements and schedule a meeting, with selected Committee Members, to recruit a successor.</p>	<p>Karl Havers</p> <p>Tony King/ Karl Havers</p>	<p>Following the meeting.</p> <p>17 March 2021 meeting.</p>	<p>Oral update to be provided at the meeting.</p> <p>Interviews have taken place for two candidates, by the Chair and Vice Chair and a proposed candidate has been communicated back to Karl Havers. An oral update will be provided at the meeting.</p>
63/12/20	<p><b>Finance Control Environment Trend Indicators</b> A report on end to end processes in Finance and Business Services to be submitted to a future meeting.</p>	Tony King	17 March 2021 meeting.	Item on agenda. Complete.
65/12/20	<p><b>Legal Compliance Report (1 October 2019 - 30 September 2020)</b> Further information in relation to the deposit of controlled waste outside Moorgate Underground station and the notice issued at Shepherd's Bush station to be provided to the Committee.</p>	Howard Carter	Following the meeting.	A note was circulated to Committee Members on 30 December 2020. Complete.

## Actions from previous meetings

Minute No.	Item/Description	Action By	Target Date	Status/Note
38/09/20	<p><b>Procurement Update</b> A further update on procurement to be submitted to the meeting of 17 March 2021, including matrix and key performance indicators.</p>	Jonathan Patrick	17 March 2021 meeting.	Item on agenda. Complete.
42/09/20	<p><b>Independent and Investment Programme Advisory Group Quarterly Report</b> The Engineering Standards Improvement Programme to be submitted to a future meeting.</p>	Caroline Sheridan	17 March 2021 meeting.	Item on agenda. Complete.

## Audit and Assurance Committee



**Date:** 17 March 2021

**Item:** Silvertown Tunnel Project – Ernst & Young Report on Silvertown Tunnel

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

#### **1 Summary**

- 1.1 This paper presents Ernst & Young's (EY's) report on the Silvertown Tunnel Project. The report was commissioned by the Audit and Assurance Committee and prepared in EY's capacity as external statutory auditors of TfL in response to objections raised by the Stop Silvertown Tunnel Coalition (SSTC) and select concerns from the Greater London Authority Oversight Committee.
- 1.2 A paper is included on Part 2 of the agenda, which contains exempt supplemental information, namely the termination cost estimate, which is commercially sensitive. The information is exempt 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 information on Part 2 of the agenda.**

#### **3 Background**

- 3.1 The Blackwall Tunnel is London's most important river crossing by volume, but it suffers from regular congestion, poor reliability and a lack of resilience, creating a "barrier effect" from the Thames that inhibits sustainable growth in South and East London.
- 3.2 Following public consultation and an extensive approval process (running from 2012 to 2019), the Silvertown Tunnel Scheme, a twin bore tunnel adjacent to the Blackwall Tunnel, was approved and has begun construction.
- 3.3 The project is structured as a public private partnership (PPP), under which a private consortium will design build and finance the Silvertown Tunnel, then maintain and operate it for 25 years. During the operation period TfL will make availability payments to the consortium. The availability payments are indirectly funded by charges on users of Blackwall and Silvertown. Following the 25-year operation period, ownership will transfer to TfL.

- 3.4 Since the contract award to the Riverlinx consortium in 2019, and as set out in Appendix 2 to the related Part 2 paper, TfL have received a number of objections in relation to the optioneering and Value for Money (VfM) assessment. This report has been prepared by EY, in their capacity as external statutory auditors of TfL, in response to some of those objections and concerns.
- 3.5 The report focuses on:
- (a) the governance process to which the Silvertown Tunnel Business Case has been subjected;
  - (b) a review of optioneering carried out by TfL, with a specific focus on the alternate options of tolling Blackwall Tunnel alone (i.e. no Silvertown Tunnel) and wider London road pricing;
  - (c) Value for Money (VfM) considerations with regard to the treatment of toll revenues and traffic sensitivities; and
  - (d) a review of the voluntary termination provision in the Silvertown contract and a high-level review of TfL's termination cost estimates.

## **4 Summary Findings**

- 4.1 The EY report noted the following:
- (a) the extensive approvals and scrutiny the scheme has gone through, including the Development Consent Order (DCO) process that involved a lengthy Examination In Public, which considered all of the key impacts and business case issues for the project. After which the Planning Inspectorate and the Secretary of State gave their consents.
  - (b) the project's business case has been constructed in line with Green Book guidance and has been through extensive internal independent governance, including the challenge provided by TfL's independent assurance teams;
  - (c) EY are satisfied that the option comparison carried out by TfL was reasonable. This led to a situation where options (including those promoted as alternatives by SSTC) that did not meet the project objectives were not taken forward for a full economic VfM analysis;
  - (d) EY also recognises that it was not possible to assess the impacts of any Wider London Road Charging (WLRC) scheme on Silvertown, although it is suggested that further sensitivities / analysis could be undertaken to assess the MTS mode share targets. However, they noted that "Such analysis would have been highly unlikely to eliminate the need for Silvertown Tunnel" "as key problems which are addressed by the scheme remain";

- (e) EY agreed with the VfM assessment that the scheme's net benefits are positive and noted several areas where the assessment was conservative. They also noted TfL's sensitivity tests on high and low growth scenarios. However, as noted above, EY suggests that a further sensitivity ought to have been carried out for completeness on a modal shift scenario; and
- (f) the voluntary termination provisions in the contract with Riverlinx are in line with market standards, and the current level of these costs would make the project uneconomical to cancel. (Note that commercially sensitive detail relating to the estimation of project termination costs are included in Appendix 1 to this Part 2 paper).

4.2 EY also noted that :

- (a) neither a single-bore tidal flow tunnel at Silvertown nor a Blackwall-only option with tolls (i.e. no Silvertown Tunnel) were viable alternatives as neither met the project's objectives;
- (b) TfL's approach to treating the revenue from charges as a net economic nil on Blackwall Tunnel users in the VfM assessment was correct and there is no flaw (i.e. this money should not be treated as freely available to TfL as it imposes a cost on users);
- (c) TfL could not have undertaken substantial analysis on the impact of the MTS's mode shift targets due to the early stage of consideration of these at the time decisions were being taken on the project; and
- (d) the termination conditions are aligned to market standard and produce a fair outcome. (TfL additionally notes for clarification that the contractor has financed all their project costs to date and therefore the termination provisions are designed to repay those costs incurred, plus any of their unforeseen costs which would be incurred upon termination and therefore ought not to put them in any better position than they would have been under the contract).

4.3 The summary recommendations of the report note that for future projects the following points should be considered:

- (a) With the introduction of the modal shift target in the 2018 MTS, an update to the 2016 traffic modelling would have been beneficial, or alternately TfL could have considered a position paper explaining why this was not needed. TfL agrees that a position paper would have been helpful explaining the how the dis-aggregation of the MTS mode share targets needs to be applied and how this is being fed into the subsequent scheme modelling and analysis that TfL has committed to within the DCO;

- (b) Revalidation of the accuracy of VfM (given policy changes) in the 2019 FBC prior to entering into the contract. This is not accepted by TfL, as the FBC and VfM assessment was updated in 2019 prior to the decision to award the contract taken at the Programmes and Investment Committee in May 2019; and
- (c) EY notes some variances between their termination cost estimates and those done by TfL and cautions against relying on termination cost estimates where several elements of the calculation are unknown. TfL notes that any variances are not material to the conclusion that termination is uneconomic/unaffordable and agrees that more accurate estimates would be required should termination be considered, which it currently is not.

**List of appendices to this report:**

Appendix 1: EY's Report on the Silvertown Project ('Project Telford') dated 8 March 2021

Supplementary information on Part 2 of the agenda.

**List of Background Papers:**

Correspondence in relation to the Silvertown Tunnel Project

Contact: Tony King, Group Finance Director  
Statutory Chief Finance Officer

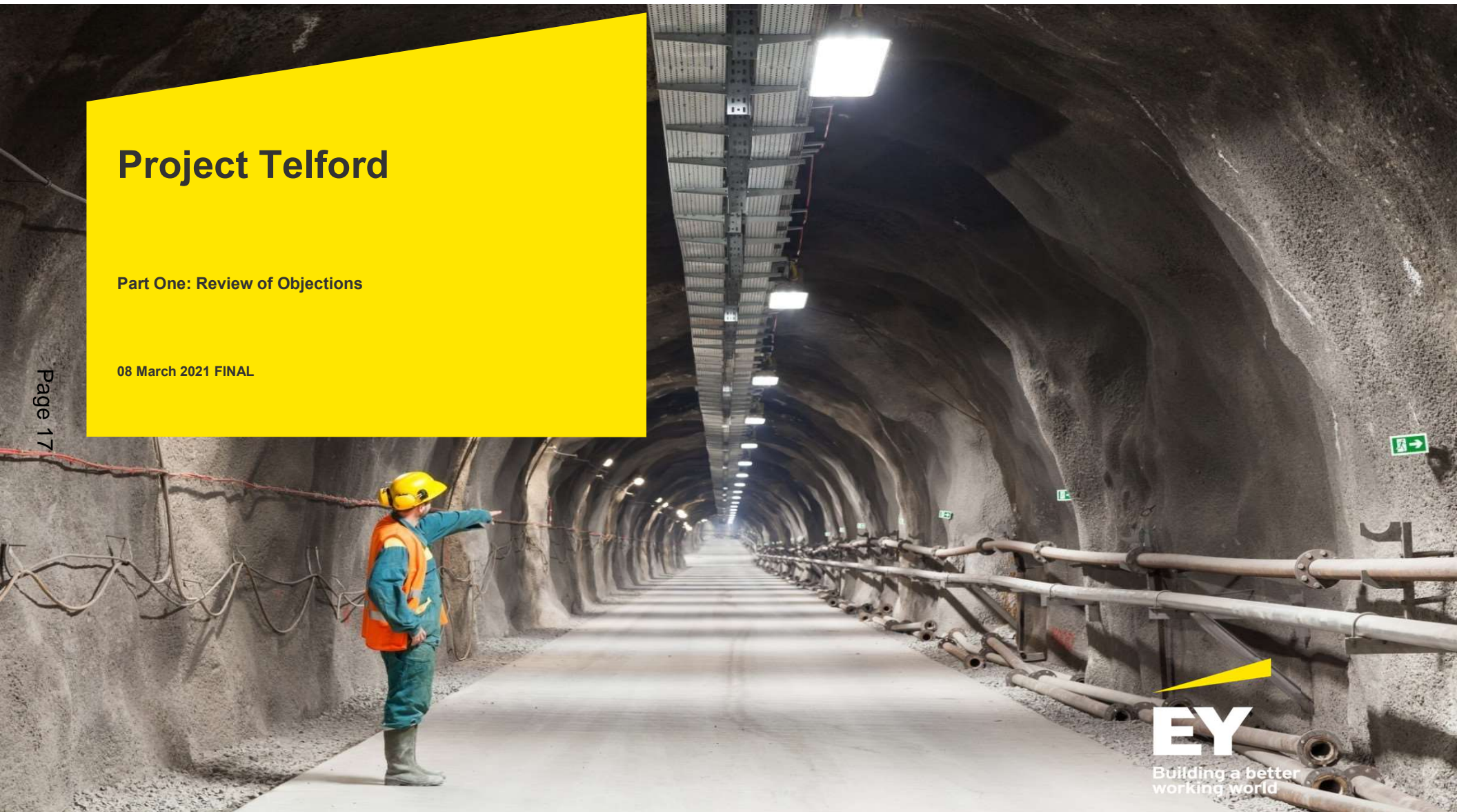
Email: [AntonyKing@tfl.gov.uk](mailto:AntonyKing@tfl.gov.uk)

# Project Telford

Part One: Review of Objections

08 March 2021 FINAL

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**EY**  
Building a better  
working world



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## **Reliance Restricted**

Karl Havers  
EY Partner  
Transport for London External Audit  
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London  
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**23 February 2021**

### **Project Telford – Corporate Finance Assistance to the Transport for London Audit Team**

In accordance with the agreed scope of work, EY Corporate Finance have supported EY Audit in investigating objections received regarding the Silvertown Tunnel (“Project”) as part of the broader Transport for London (TfL) audit engagement.

This report details our findings on reviewing the Silvertown Tunnel Scheme Business Case in the context of challenges received by the Silvertown Tunnel Coalition (SSTC) around (i) the optioneering (ii) value for money and (iii) contractual termination provisions.

#### **Purpose of our Report and restrictions on its use**

This report was prepared on the specific instructions of the EY TfL Audit team solely for the purpose of responding to Stop SSTC objections received and should not be used or relied upon for any other purpose.

This report and its contents may not be quoted, referred to or shown to any other parties without our prior written consent.

We accept no responsibility or liability to any person other than to Transport for London, or to such party to whom we have agreed in writing to accept a duty of care in respect of this report, and accordingly if such other persons choose to rely upon any of the contents of this report they do so at their own risk.

#### **Nature and scope of the services**

The nature and scope of the services, including the basis and limitations, are detailed on Slide 16 & 17.

Our work is in response to the specific objections raised by the Stop Silvertown Tunnel Coalition (STTC) and select concerns from the Greater London Authority (“GLA”) Oversight Committee, as such, is restricted to the areas set out in the Scope of Work. As part of the review process, we only considered information available at the time decisions were made. This excluded the impact of COVID-19, at this stage, which would have been unforeseeable at the business case / procurement stage.

The contents of our report have not been reviewed by TfL’s management and therefore they have not confirmed to us the factual accuracy of the Report.

Whilst each part of our report addresses different aspects of the work we have agreed to perform, the entire report should be read for a full understanding of our findings and recommendations .





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## **Reliance Restricted**

Our work commenced on 20 November 2020 and for the purposes of this report was completed on 22 February 2021. Our work is subject to change following discussions and confirmation of the factual accuracy of the report. Our final report will record our definitive findings and recommendations. Our report does not take account of events or circumstances arising, or information made available, after 22 February 2021 and we have no responsibility to update the report for such events or circumstances or information.

Yours faithfully,

**EY Corporate Finance Partner**

Ernst & Young LLP



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## Glossary

Abbreviation	Full Name	Abbreviation	Full Name	Abbreviation	Full Name
AMCP	Analysis of Monetised Costs and Benefits	HMG	Her Majesty's Government	PFI	Private Finance Initiative
AQMA	Air Quality Management Areas	IAR	Internal Assurance Review	PF2	Private Finance 2
AQP	Air Quality Plan	IIPAG	Independent Investment Programme Advisory Group	PPD	Projects and Programmes Delivery
BPH	Buses Per Hour	IP	Interpeak Traffic Period	PPP	Public Private Partnership
CAPEX	Capital Expenditure	KEXIM	Export-Import Bank of Korea	Project Co	Project Company
CO <sub>2</sub>	Carbon Dioxide	LGV	Light Good Vehicle	PT Max	Maximum Public Transport
DCO	Development Consent Order	MTS	Mayor's Transport Strategy	PV	Present Value
DfT	Department for Transport	NPSNN	National Policy Statements for National Networks	SOBC	Strategic Outline Business Case
DSR	Debt Service Ratio	NOx	Nitrogen Oxides	SoS	Secretary of State
EE	External Experts	NPV	Net Present Value	SPV	Special Purpose Vehicle
EPC	Engineering Procurement and Construction	NSIP	Nationally Significant Infrastructure Project	SSTC	Stop Silvertown Tunnel Coalition
ExA	Examining Authority	OBC	Outline Business Case	TAG	Transport Analysis Guidance
FBC	Full Business Case	OHV	Over Height Vehicle	VfM	Value for Money
GHG	Green House Gases	OPEX	Operating Expenditure	VoT	Value of Time
GLA	Greater London Authority	O/S	Outstanding	WebTAG	Web based Transport Analysis Guidance
HGV	Heavy Good Vehicle	PA	Project Agreement	WLRC	Wider London Road Charging

# 1

## Executive Summary



## 1 Executive Summary

### Executive Summary

#### Background

- ▶ Following high levels of development and expansion in East London in recent years, the Blackwall Tunnel, London's most important river crossing by volume, is unable to accommodate current demand leading to traffic issues (i.e. congestion, closures, lack of resilience), and more broadly a "barrier effect" from the Thames inhibiting the growth of East London.
- ▶ Following public consultation and an extensive approval process (running from 2012-2019), the Silvertown Tunnel Scheme, a twin bore tunnel adjacent to the Blackwall Tunnel, was approved and has begun construction.
- ▶ The project is structured as a private public partnership (PPP), with the concessionaire assuming DBFOM responsibilities. TfL will make availability payment for 25 years following construction (funded by tolls), subsequent to which ownership will transfer to TfL.
- ▶ Since the award in 2018, TfL have received a number of objections against the project in relation to the optioneering and Value for Money ("VfM") assessment.

#### Purpose & Scope

- ▶ This report has been prepared by EY Corporate Finance to assist EY Audit in reviewing the objections raised by the Stop Silvertown Tunnel Coalition ("SSTC") and select concerns from the Greater London Authority ("GLA") Oversight Committee.
- ▶ This report focuses on:
  - ▶ The governance process which the Silvertown Tunnel Business Case has been subjected to (including stakeholder challenges in the DCO process);
  - ▶ A review of optioneering carried out by TfL, with a specific focus on the alternate options of tolling Blackwall Tunnel option (i.e. no Silvertown Tunnel) and wider London road pricing
  - ▶ VfM considerations with regard to the treatment of toll revenues and traffic sensitivities
  - ▶ A review of the voluntary termination provision (i.e. termination by TfL) in the Silvertown contract and a high-level review of TfL's termination cost calculation

#### Business Case Process

- ▶ The project development has been underway for nearly a decade. During this period, the project has been through an extensive governance process, most notably:
  - ▶ Review by TfL Project Assurance, Independent Investment Programme Advisory Group and External Assurance Experts
  - ▶ Review by Her Majesty's Government's (HMG) Infrastructure Planning Inspectorate
  - ▶ Review by the Secretary of State for Transport
- ▶ The Business Case was drafted in line with Her Majesty's Treasury Green Book guidance, which guarantees a reasonable level of quality control for the business case and optioneering process.

#### Business Case Review

- ▶ TfL defined the Core Project Objectives as solving the specific issues around capacity (for growth), congestion and resilience of the road network in East London. Thus, there was focus on the area around the Blackwall Tunnel, as this is the main strategic river crossing in East London.
- ▶ TfL drew up a long list of options in the first stage of the options appraisal process (incorporating both road demand reduction (e.g. through new public transport, tolls, etc..) and new road infrastructure. Most options did not address the qualitative Project Objectives and/or were not technically feasible. This resulted in a select number of options being considered viable. This logic flow is highlight on Figure 1-1 overleaf.
- ▶ Specifically with regard to SSTC challenges:
  - ▶ The option for a Silvertown single bore tidal flow tunnel was omitted from the long list due to safety and engineering constraints (e.g. emergency service access and escape routes); and,
  - ▶ A Blackwall Tunnel toll only option (i.e. no Silvertown Tunnel) was not considered further as it could not meet the resilience and growth objectives and only partially addressed congestion (without creating unacceptable side-effects). Alternate options incorporating a tolled Blackwall Tunnel were investigated and found unsuitable following traffic modelling. In light of this, we consider the TfL decision not to perform a full NPV analysis as reasonable.



# 1 Executive Summary

## Executive Summary

### Business Case Review (cont'd)

- ▶ Given the limited extent to which the Wider London Road Charging (WLRC) scheme has progressed, developing a precise scenario to assess the impacts of the WLRC was not possible. On a broader level, the growth and resilience objectives could not be met solely by implementing WLRC. As such, detailed consideration could not and was not given to the WLRC scheme.
- ▶ The 2018 MTS policy goal around the modal shift was announced fairly late into the approvals process (i.e. shortly before the Secretary of State for Transport granted their approval and two years after the DCO application, but prior to the FBC and contract signing).
- ▶ We note that broad scenarios/sensitivities analysis around modal share shifts in line with the 2018 MTS objectives have not been carried out, with the most recent modelling undertaken in 2016, and we have not received documentation to set out why the analysis was not possible or not considered necessary.
- ▶ While the implications of a modal shift are not explicitly considered, the resilience and growth Project Objectives could not be met in the absence of the Silvertown Tunnel.

Figure 1-1 – Overview of Decision Process by TfL

**Overview of Problem:** Current road river crossings in East London are limited and not fit for purpose, especially given Olympic Legacy requirements and re-generation/growth of the East

### Problem Statements & Project Objectives (PO)

- 1 PO1: Improve the **resilience** of East and South East London river crossings  
*The Northbound bore of the Blackwall Tunnel was designed in the Victorian era, and has height restrictions, which cause frequent closures due to over height vehicles attempting the crossing.*  
  
*Road river crossings in the East are c.8 km apart, and already operate at capacity, as compared to in West London where they are spaced c.2 km apart. Traffic following incidents at Blackwall cannot easily be diverted to other crossings.*
- 2 PO2: Improve the road network performance of the Blackwall Tunnel and its approach road (i.e. tackle **congestion**)  
*Congestion at Blackwall adds c. 20 minutes on average to peak journey times. Blackwall is a key East London artery and the busiest cross-river link with 91k crossings per day.*
- 3 PO3: Support economic and population **growth** by providing improved cross-river transport links  
*Congestion at Blackwall creates a Thames barrier effect limiting economic growth. Population in neighbouring boroughs was forecasted to grow 40-60% between 2011-2041. The current tunnel cannot accommodate the increased population, and more specifically an increase in bus services.*

### Options

- Demand reduction options not viable
- 1. **Tolling only** – not appropriate because creates unacceptable congestion in alternative crossings + hampers cross-river connectivity
- 2. **Public transport options** – do not produce the modal shift desired and therefore do not help congestion
- Therefore, a **fixed crossing** is required
- 1. **Bridges** are not viable due to visual and physical impact on surrounding area and marine river traffic on the Thames
- Only viable option is therefore a **tunnel**, and twin bore sub-option is most feasible from engineering / safety standpoint

### Financing

- Funding options limited given allocation of TfL existing budget to other commitments and other borrowing
- Project nature suited a PPP structure (i.e. scope for creating a dedicated user pay model)
- PPP structure therefore pursued



## 1 Executive Summary

### Executive Summary

#### Value for Money Assessment Summary

- ▶ VfM analysis assumed no material increase in traffic on the road network throughout the day (although there are higher peak flows and a slight rerouting towards Blackwall and Silvertown from other routes)
- ▶ The primary scheme benefits are travel time savings (c. £1.7 Bn PV in 2010 prices). As businesses and private car users pay a user charge (together of c. £1.0Bn PV in 2010 prices), the primary beneficiaries of the scheme are coach and bus users (who benefit from a new bus lane, increased frequency / capacity and new routes).
- ▶ A secondary scheme benefit accrues in the form of reliability benefits of c. £0.2Bn PV (in 2010 prices)
- ▶ Investment and operating costs of the road infrastructure (of PV £0.4Bn and £0.6Bn respectively) are offset by Availability Payments (c. PV £1.0Bn), which leaves a net cost of PV £0.1Bn corresponding to the net cost of operating bus services (after including bus fare revenue).
- ▶ In our review of select inputs (and associated sensitivities) in the VfM analysis, we found that the analysis included several areas of conservatism:
  - ▶ Use of the national value of time against the London value of time, which would increase the NPV by c. £300m (note TAG guidance specifies the use of the National value of time so as not to concentrate all investment in affluent areas)
  - ▶ Conservative modelling of scheme enforcement income (note: effect is not quantified but is suspected to be substantial)
  - ▶ Non-inclusion of Wider Economic Impacts and role in fostering regeneration of East London
  - ▶ For bus users, use of current cross-river travel times as opposed to post-Silvertown Tunnel construction travel times
- ▶ We were not presented with traffic (including bus) modelling prepared post 2016, which explicitly reflects or tries to approximate the impact of the 2018 MTS modal shift targets.
- ▶ Even if the shift away from cars accelerates in London, the Silvertown Tunnel is very likely to still be needed as key problems which are addressed by the scheme remain (lack of resilience, inability to support growth through step change in bus services, persistent car traffic at Blackwall which evidence suggests is difficult to shift to other modes, etc.)

#### Contractual Obligations on Project Termination

- ▶ The full findings on Project Termination have been included as Appendix B, due to the inclusion of commercially sensitive information, and to permit this section of the report to be issued separately.
- ▶ The PPP Contract for the Project includes Termination provisions, whereby payments for voluntary termination by TfL include Senior Debt repayment, staff redundancy, sub-contractor losses and the market value of equity plus subordinated financing.
- ▶ The termination conditions are market standard, and designed to ensure a fair outcome where the Project Authority (TfL) terminates for no default by the Project Co.
- ▶ TfL takes an approach to estimating the termination cost which differs from the contractual provisions, by omitting the Senior Debt repayment, taking a historical as opposed to forward looking view, and applying a more limited definition of sub-contractor breakage costs.
- ▶ Termination costs make a voluntary termination at this point expensive. In addition to the costs of Contractual Termination, we note that there will be additional costs following termination to bring the site back to the original condition, which in itself could be substantial.



## 1 Executive Summary

### Executive Summary

Summary of EY Findings in relation to SSTC Challenges	Challenge	EY Conclusion
	<b>Single-bore tidal flow tunnel at Silvertown was a viable alternative</b>	This was not considered viable for safety, engineering and economic reasons (i.e. requires an associated escape bore in any case) and did not meet the resilience and growth Project Objectives set out by TfL
	<b>Toll revenue is fungible and available to TfL from existing Blackwall users</b>	The VfM correctly considers the toll on its own to be a net nil (income for TfL and cost for road users)
	<b>A Blackwall only option with tolls (i.e. no Silvertown) was a viable alternative to building Silvertown Tunnel</b>	Further to traffic modelling, TfL did not consider this option further as a short-listed option as it would not meet the project's fundamental objectives around resilience (i.e. does not address height restrictions which contribute to accidents or provide spare road capacity) and growth (i.e. does not support economic and population growth through facilitating a step change in bus services). We therefore conclude the TfL decision not to run a full economic analysis is reasonable. We note for completeness that TfL did run more limited economic analysis on the option, which is of limited value because the option does not address the scheme objectives (i.e. NPVs are not comparable).
	<b>Traffic forecasts underpinning the Business Case are incompatible with MTS 2018's modal shift targets (and proposals for WLRC)</b>	We have not been provided with clear documentation on TfL's rationale to rely on pre 2018 traffic forecasts (following a major policy shift on modal shift). We understand that due to the early stage of policy development, at the point of assessment, substantial analysis would have been difficult to undertake and would not have changed the underlying need for Silvertown. On WLRC, given the limited extent to which the Wider London Road Charging (WLRC) scheme has progressed, developing a precise scenario to assess the impacts of the WLRC was not possible.
	<b>The termination conditions are not market standard and too onerous on TfL</b>	The termination conditions are aligned to PF2 and market standard to produce a "fair" outcome. The termination costs (+ the remedial costs) of the project make termination an uneconomic outcome.
<b>Summary of EY recommendations</b>	<p>Our assessment concluded that the Business Case was well constructed, in line with Green Book guidance, and went through an extensive governance process. However, there are some observations we make where further attention could be beneficial and TfL should consider these in future projects:</p> <ul style="list-style-type: none"> <li>▶ The introduction of an ambitious modal shift target in the 2018 MTS was a significant change in policy that could affect traffic and project economics. Despite the uncertainty around the implementation roadmap of the modal shift policy, further scenario analysis and an update to the 2016 traffic modelling would have been beneficial. Alternately, TfL could have considered a position paper explaining why the aforementioned steps were not needed.</li> <li>▶ Revalidation of accuracy of VfM (given policy changes) in the 2019 FBC prior to entering into the contract</li> <li>▶ We note that TfL have developed a preliminary estimate for termination costs. We observe that the calculation is not in line with the contractual provisions, and so amendments are required if the numbers are to be relied upon</li> </ul>	



# 2

## Background



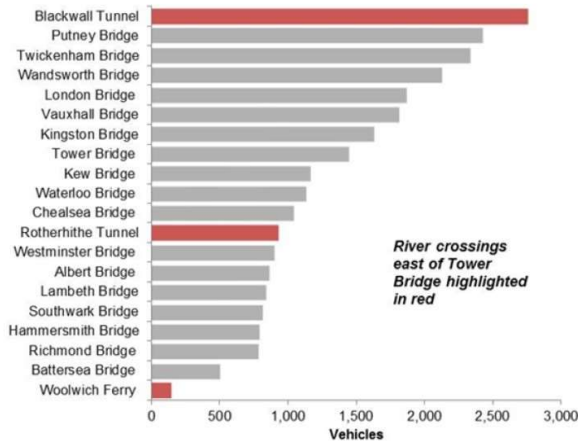
## 2 Background – Drivers for the Silvertown Tunnel Scheme

Following high levels of development and expansion in East London in recent years, the Blackwall tunnel is unable to accommodate current demand leading to traffic issues (i.e. congestion, closures, lack of resilience), and more broadly a “barrier effect” from the Thames.

### Road Links in East London

- On average, Central and West London river crossings are spaced 1km apart and 2km apart respectively. **In East London, there are only four highway crossings spaced 8km apart.**
- However, population and population density are now not dissimilar between East and West London
- The Outline Business Case (OBC), dated 2016, forecasts **growth in the East Sub Region of 28% (2011-2031), with even higher growth of 40-60% across Tower Hamlets, Greenwich and Newham.** Despite a forecasted increase in the modal share of Public Transit, there is expected to be growth in demand for road river crossings

Figure 2-1: Weekday AM peak hour northbound traffic on GLA river crossings



### Blackwall Tunnel

- The Blackwall Tunnel (a two-lane two bore tunnel) is the busiest Greater London Thames crossing with an average of 91,000 daily trips. It is also the **sole strategic river link in the East.**
- The Blackwall Tunnel operates at capacity, resulting in **congestion and low speeds, adding 20 minutes** on average to peak journey times
- The Northbound tunnel bore dates from the Victorian era and does not meet modern tunnel design standards for size, safety or curvature. The narrowness of the tunnel means that vehicles over 4 metres high (in the right hand lane) and 2.8m (in the left hand lane) cannot be accommodated. This means that **large lorries and double decker buses are not able to use the tunnel.** However, unsuitable vehicles continue to attempt to use the Tunnel leading to a **high rate of incidents and closures.**
- TfL compared the closure rate of the Blackwall Tunnel with similar tunnels in the UK and noted that there were almost **four times as many closures compared to other tunnels** with 25 unplanned closures occurring for every million km travelled.
- Incidents in the Blackwall Tunnel often lead to closures which require a significant number of vehicles to seek alternative routes.
- Alternative crossings to the Blackwall Tunnel are: (i) Rotherhithe Tunnel (5km west) (ii) the Woolwich Ferry (7.5 km east) (iii) Tower Bridge (9km west); and (iv) Dartford Crossing (25 km east)
- The nearest alternative to the west is the Rotherhithe Tunnel which cannot accommodate heavy good vehicles (HGVs).
- In events of longer closures, the only option for many users of the Blackwall Tunnel is to travel to the Dartford Crossing. The Dartford Crossing however does not have the capacity to accommodate the additional volumes of traffic.
- The lack of viable alternatives to the Blackwall Tunnel highlights its lack of resilience.**
- There is currently **only one bus route through the tunnel.** Additionally, about 90 commuter coaches from Kent also use the northbound route in the morning peak. It is important to note that there are 47 cross-river bus routes west of Vauxhall Bridge but only a single 108 bus route east of Tower Bridge via Blackwall Tunnel which only allows single decker buses.
- In sum, the lack of road links and issues with the Blackwall Tunnel were seen to **create a “barrier effect” from the River Thames** with repercussions for businesses, commuters (both on public transit and in private vehicles), employment and economic activity.



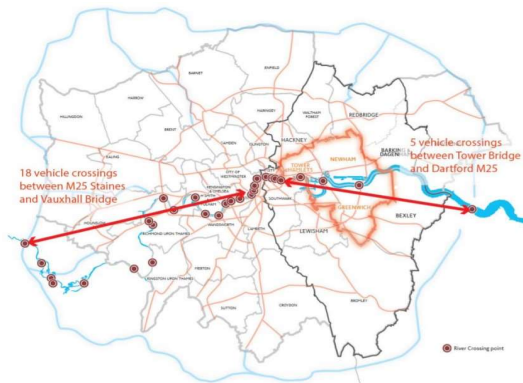
## 2 Background – Overview of the Silvertown Tunnel Scheme

Following public consultation and an extensive approval process, the Silvertown Tunnel Scheme was approved and has begun construction, however it continues to receive objections...

Figure 2-2 Blackwall Tunnel



Figure 2-3: Vehicle crossings in east and west London



Source: Silvertown Tunnel Outline Business Case (2016)

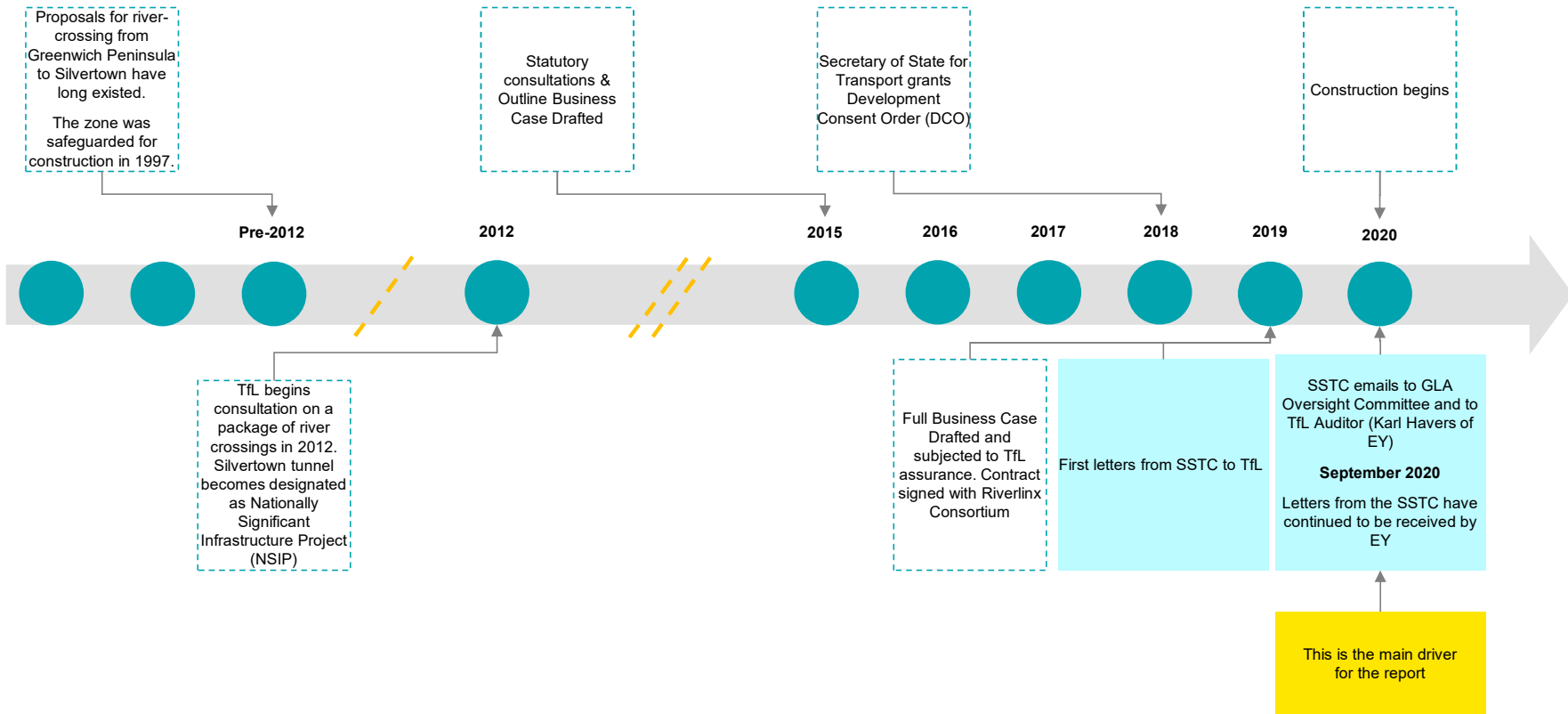
### Overview of the Silvertown Tunnel Scheme

- The Silvertown Tunnel Scheme consists of a twin bore road tunnel connecting the A102 Blackwall Approach on the Greenwich Peninsula (Royal Borough of Greenwich) with the Tidal Basin roundabout junction on the A1020 Lower Lea Crossing/Silvertown Way (London Borough of Newham).
- The case for the scheme was brought forward to address a perceived need for additional road crossings in East London.
- **It was designated as a Nationally Significant Infrastructure Project (NSIP)** in 2012 by the Secretary of State for Transport under (s)35 of the Planning Act 2008, as a result of the scheme being nationally significant but falling outside the definition of an NSIP. The reasons why it was designated as an NSIP are:
  - London being an engine room for growth nationally;
  - The projected growth of London;
  - Current congestion at the Blackwall Tunnel having a direct impact on the strategic road network; and
  - The size and nature of the Silvertown Tunnel and comparison to other NSIPs.
- Following feedback from the statutory consultation, changes were then made to the scheme prior to submission of the scheme application to the Planning Inspectorate. Technical reports were also drafted, including an assessment of needs and options (described in greater detail in Section 4), where the key criteria were (i) improved resilience (ii) improved performance (i.e. decreased congestion) (iii) enabler of growth in East London.
- **Solutions not creating additional road capacity were dismissed on the basis that they would not enable growth and meet the growing needs of East London which were key objectives for the project.** Other solutions creating capacity (i.e. 3rd Blackwall tunnel bore, Silvertown bridge and Silvertown immersed tunnel) were dismissed due to engineering challenges or local environmental considerations.
- The project was approved under a Development Consent Order process in 2018 and a contract awarded 2019 to the Riverlink Consortium. **The tunnel is presently under construction.**
- The scope of the scheme is to be delivered through a Public-Private Partnership (PPP) where the Riverlink consortium would be responsible for the detailed design, construction, financing and maintenance of the tunnel and supporting infrastructure for 25 years post-construction.
- The scheme has however received a number of objections, around the optioneering, Value for Money (VfM) assessment, and contract termination clauses some of which are addressed in this paper.



## 2 Background – Timeline

In September 2020, EY, as auditor, received direct requests to investigate certain aspects of the project. At this point the Silvertown Tunnel has been in development for nearly a decade and has recently begun construction, as detailed below.





## 2 Background – Purpose, Scope & Sources of Information

### Purpose

EY Audit has engaged EY Corporate Finance as subject matter specialists to investigate objections received regarding the Silvertown Tunnel (“Project”) as part of the Transport for London (TfL) audit. EY Corporate Finance will review the project, and specifically the business case prepared by TfL.

### Objections

Following a series of emails from the Stop Silvertown Tunnel Coalition (SSTC), with TfL and with the Greater London Authority Oversight Committee, SSTC further emailed on 3 September 2020 Karl Havers, who represents EY as TfL’s auditor, with a request to investigate a number of issues below:

- Flaws in the optioneering process and economic VFM, more specifically with regards to
  1. The option to toll the Blackwall Tunnel only
  2. The effect on the scheme of Wider London road Charging which is being considered to address congestion and pollution challenges
- The treatment of toll revenues from Blackwall/Silvertown (i.e. the contention is that this is a pre-existing revenue source for TfL)
- Implicitly (and explicitly in other emails – i.e. on 7 September 2020 to TfL) around the possibility and conditions of termination i.e. that TfL has entered into a contract with onerous termination provisions

Len Duvall, Chair of the GLA Oversight Committee also raises concerns from fellow committee members (email dated 2 September 2020) with respect to (i) cancellation costs and (ii) the financial viability of the project when it was approved

### Scope

In light of the aforementioned objections, we have covered the following areas in our review

1. The governance process which Silvertown Tunnel was subjected to (i.e. approvals and reviews the Project has undergone and format of the Full Business Case)
2. A review of the optioneering process from the conception of objectives to the identification of the shortlisted options, including the treatment of the Blackwall Tunnel toll only (i.e. no Silvertown Tunnel) and of Wider London Road Charging.
3. A high-level review of the Economic Value for Money (VFM) assessment with specific regard to (i) the treatment of toll revenues as a pre-existing revenue source, and (ii) the

interaction with modal shift objectives in the 2018 MTS (i.e. traffic forecasting)

4. The termination provisions, with a focus solely on (i) whether the terms are market standard (ii) a high-level review of TfL’s estimated termination costs and (iii) how these termination costs could impact the decision at the current point in time as to whether to terminate (note we do not opine on whether TfL should terminate the project)

Our assessment is based on information known at the time the decision was made, as opposed in the present day, and with regard to Covid-19.

*Cont’d*



## 2 Background – Purpose, Scope & Sources of Information

### Sources of information

As part of the work performed, we have reviewed the following Silvertown documentation listed below provided between 20th November 2020 – 01st February 2021:

#### Governance Arrangements

1. Silvertown Crossing Project – Gate A Review (2011)
2. Corporate Gateway Approach Process – Gate B (2013)
3. Options Integrated Assurance Review (2015)
4. Interim (DCO Application) Integrated Assurance Review (2015)
5. TfL Finance and Policy Committee Meeting Minutes (21 January 2016)
6. TfL Board Meeting Minutes (3 February 2016)
7. Planning Inspectorate’s Examining Authority’s Report of Findings and Conclusions and Recommendation to the Secretary of State (2017)
8. Secretary of State Decision Letter (2018)
9. TfL Programmes and Investment Committee Meeting Minutes (17 July 2019)

#### Business Case Process and Review

1. Outline Business Case (2015)
2. Full Business Case (2019)
3. Silvertown Crossing Assessment of Needs and Options (2014)
4. Mayor Transport Strategy 2010 & 2018
5. DCO Documents labelled:
  - 6.5 (Transport Assessment), 7.1 (Case for the Scheme);
  - 7.5 (Charging Statement), 7.8.1 (Economic Assessment Report);
  - 7.9 (Traffic Forecasting Report) (2018); and
  - 8.119 (Applicant’s response to question regarding Option Appraisal (Five Case) from the Issue Specific Hearing on 28 March 2017)

#### Value for Money Assessment

1. Silvertown Tunnel Growth Assumptions Report (2016)
2. Financial Model (Tower – Financial Model – 21.11.2019.FC.XLSB)
3. Limited Economic Model

#### Project Termination

1. Schedule 27 on Termination of the Project Agreement
2. Financing agreements (high-level review only for relevant clauses)
3. Termination cost estimate by TfL dated 20 November 2020

We have also engaged with TfL, having a series of calls with relevant staff having participated in the Scheme on

- 23 & 27 November 2020 (regarding Termination Conditions and Cost);
- 7 December 2020 (regarding the Economic Case and touching briefly on the Termination Estimate);
- 26 January 2020 (regarding Governance Arrangements)
- 27 January 2020 (regarding Traffic Forecasting and Modelling)

We have not had any engagement with the Riverlinx consortium while carrying out this review.

#### Limitations

Whilst TfL have provided EY with access to staff and project documentation, there are a handful of areas where we have requested documents but have not received them. We outline the impact on our work.

Document	Impact
Impact of modal shift targets in the 2018 MTS on the Silvertown Scheme	Medium Impact - Obscures the quantitative impact on the VfM NPV. Such analysis would have been useful to support the case for Silvertown against the backdrop of the 2018 MTS modal shift policy for less cars.
Impact of raising the toll on Blackwall (no Silvertown) beyond the level of charges in the assessed case	Low Impact - We have had to rely on assertions from the traffic modelling consultants (Jacobs), as well TfL’s modelling team that raising the toll at Blackwall (with no Silvertown) would have an unacceptable level of impact on traffic on other East London crossings.
Documentation evidence detailing safety, engineering and operation concerns for the Silvertown single-bore with tidal flow option	Low Impact - We have had to rely on commentary from TfL that a single-bore at Silvertown is equivalent to a 3 <sup>rd</sup> bore at Blackwall. Scheme documentation reviewed consistently refers to possible safety issues with a 3 <sup>rd</sup> bore at Blackwall, but we have not had sight of underlying health & safety reports.
Termination costs breakdown specifically possible sub-contractor costs and financing break costs	Low Impact - We have relied on high level TfL calculations of sub-contractor and financing break costs, and we have not sought to validate these, which affects the total contractual termination cost
Full visibility of car ownership and modal share in the sensitivities of traffic modelling	Very low Impact - Has partially limited our understanding of the Low Growth Case. However, we still conclude that it is not a representative proxy for traffic in a scenario where the 2018 modal shift targets are realised.

# 3

## Business Case Process



### 3. Business Case Process – Introduction

#### Methodology

- We have sought to understand the Project Lifecycle, Governance Structure and Approval process for the Silvertown Tunnel scheme.
- We reviewed and gained an understanding of the Internal (TfL) and External governance arrangements, and how the findings from the various processes meet the challenges from the Stop Silvertown Tunnel Coalition.
- The Full Business Case has been reviewed for compliance with the HM Treasury Greenbook 'Five Case Model' and, we have commented on the robustness of the Business Case.
- **Note there were no specific in scope challenges received on the governance arrangements for the Silvertown Tunnel from the SSTC, however it is useful to review this process to understand the level of rigour and challenge the scheme has been subjected to.**

#### Findings

- The Governance arrangements for the Silvertown Tunnel Scheme cover both internal (TfL) and external processes (**Planning Inspectorate and Secretary of State for Transport**)
- TfL governance required independent assurance assessments of the project including the development of its Business Cases and obtained this through work performed by **TfL Project Assurance, the Independent Investment Programme Advisory Group (IIPAG)** and **External Experts**
- The Optioneering assurance was covered early on in the **Gate A, Gate B and Integrated Assurance reviews** carried out by **External Experts**
- On reviewing the reports, we conclude that TfL's assurance teams provided **scrutiny and assurance over the optioneering process.**
- The VfM and Economic Case are covered in the Integrated Assurance Reviews. From the documentation reviewed, the VfM review carried out by the EE appeared topical, however this is complemented by the much more in-depth review by the Planning Inspectorate
- It was noted from our discussion with representatives of TfL Project Assurance that the focus on reviewing the Traffic Model centred around the inputs, methodology and outputs.

#### Findings (Cont'd)

- Key areas of the Planning Inspectorate's Examining Authority's (ExA) work included: Transport/Traffic Forecasting, Options Appraisal, Socio-Economic Impacts and Environmental & Air Quality.
- **The areas considered above (in particular the Options Appraisal and Traffic Forecasting) were significantly challenged by the ExA, lending credibility to the scheme's Options Appraisal and VfM.**
- The ExA concluded that in light of their conclusions and findings, DCO be granted by the SoS in a findings report dated 11 July 2017.
- The SoS considered the report, alongside late representations and further consultations.
- DCO was granted to TfL for the Silvertown Tunnel Scheme on 10 May 2018.
- The Outline Business Case was one of the major documents considered in the DCO application process. The document first underwent an assurance process within TfL then additional scrutiny by the Planning Inspectorate's ExA and ultimately, the SoS for Transport.
- The Project has **benefitted from extensive stakeholder input and challenge, and has gone through an extensive governance process prior to contract signing, which guarantees a minimum level of quality to the business case and optioneering**
- The Silvertown Tunnel **Business Case follows guidance prescribed by the Green Book**, which is designed to **ensure a certain level of quality**. The challenges received mostly centre on the VfM modelling in the Economic Case.





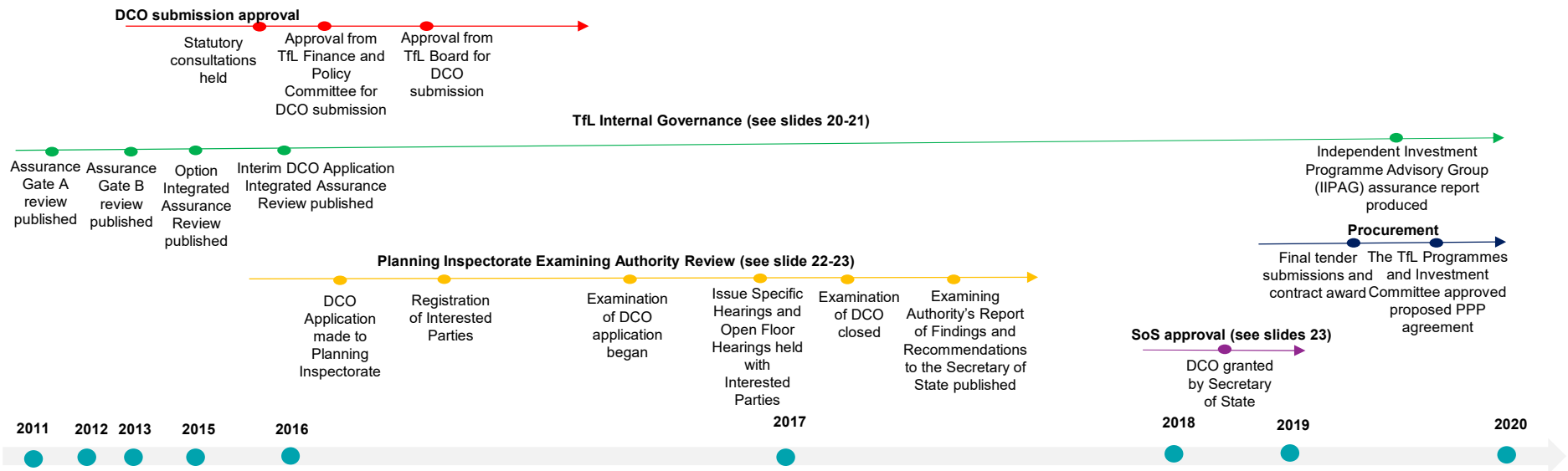
### 3 Business Case Process – Overview of Project Lifecycle and Approvals

The Project lifecycle details a timeline between 2011 and 2019 illustrating the long history of the project. The timeline highlights governance arrangements overseeing the project, DCO application, DCO examination by the Planning Inspectorate, SoS approval and procurement.

**Methodology:** We have first sought to understand governance processes to gain an understanding of its robustness, and therefore by extension the strength of the optioneering and Business Case. First, we consider the project lifecycle including reviews and key approvals, then we consider whether the Business Case follows Green Book guidance.

**KEY**

- DCO submission approval
- Planning Inspectorate Examining Authority Review
- Secretary of State Approval
- Procurement
- TfL Internal Governance





### 3 Business Case Process – Project Lifecycle and Approvals (TfL)

TfL governance required independent assurance assessments of the project including the development of its Business Cases. The process focusses on the most active area of work at each stage, beginning with needs and options and then progressing onto VfM, procurement and finally the bid evaluation.

#### Silvertown Tunnel Governance Arrangements

- The Governance arrangements for the Silvertown Tunnel Scheme cover both internal (TfL) and external processes (Planning Inspectorate and Secretary of State for Transport) carried out to review, scrutinise and approve the scheme. This structure is detailed in the diagram below.

Figure 3-1 – Governance Arrangements Structure

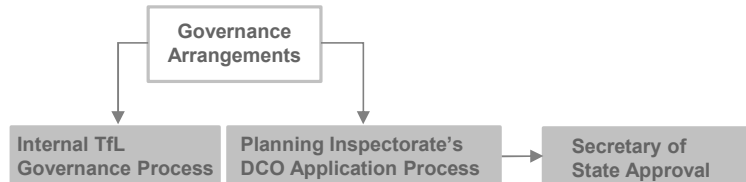
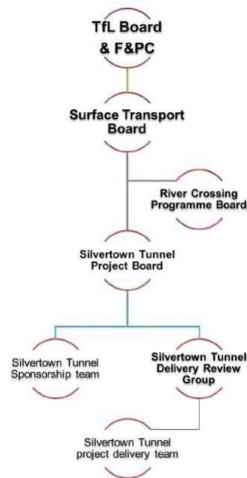


Figure 3-2 – TfL Internal Governance Arrangements Structure<sup>1</sup>



#### TfL Internal Governance Arrangements

- The diagram 3-2 details the TfL authority levels which oversaw the drafting and approval of the scheme's Outline Business Case (OBC) and Full Business Case (FBC).
- TfL governance required **independent assurance assessments** of the project including the **development of its Business Cases** and obtained this through work performed by **TfL Project Assurance, Independent Investment Programme Advisory Group (IIPAG) and External Experts**.
- Reports produced as part of independent assurance engagements were fed back through the hierarchy of various oversight boards.

#### Timing of TfL Governance Processes

- The assurance process was focussed on the most active area of work;
  - At the start, the governance process was focussed on the needs and options to allow for production of the SOBC.
  - It then moved onto the VfM considerations in the Economic Case during the DCO submission and OBC drafting.
  - This then moved onto the procurement design and documentation process
  - And finally, the bid evaluation
- The main objections raised by the SSTC considered within the governance process relate to the business case and optioneering (see below)
  - The Optioneering assurance was covered early on in the Gate A, Gate B and Integrated Assurance reviews (detailed below)
  - The VfM and Economic Case are covered in the Integrated Assurance Reviews (detailed below)

#### Assurance on Optioneering Processes

- Gate A Review** - An initial review was carried out by an External Expert (EE) in 2011. The findings of the review are detailed in a report titled (Cont'd)

1. Source: TfL Silvertown Tunnel Option Integrated Assurance Review | Page 20



### 3 Business Case Process – Project Lifecycle and Approvals (TfL)

TfL's Assurance teams provided scrutiny and assurance over the optioneering process. The extent of optioneering was found to be adequate. VfM was last scrutinised in 2015 by the External Experts on a topical basis. At the FBC stage, focus gravitated towards the VfM of the different bids received as opposed to the VfM of the project itself.

#### TfL Internal Governance Arrangements (Cont'd)

- "Silvertown Crossing Project – Gate A Review" dated February 2011. This initial review formed part of the River Crossings Programme. The review was undertaken prior to drafting the scheme's OBC.
  - The report highlighted that more detailed explanations of the various options assessed were required. This was accepted by the Project Board and resulted in Jacobs being commissioned to draft the 2014 "Assessment of Needs and Options" report.
- **Gate B Review** - A further review was carried out by an EE in 2013 and a report titled "Corporate Gateway Approach Process – Gate B" was drafted.
- At this stage, the EE was provided with a draft OBC (dated 21 August 2013)
- The EE recommended that TfL's roadmap **documentation** summarising how the long list options were sifted into a shortlist and how the shortlist to the selection of the preferred option be made clearer. It was also recommended that the roadmap be used consistently across all plans and reports.
- However, the EE's overall conclusion was that there had been **extensive underlying technical optioneering** which in turn **informed the development of the business case and the selection of a preferred option.**
- A further Options Internal Assurance Review ("IAR") by an Independent EE was carried out with a report drafted in July 2015. Among other issues, this review considered the Assessment of Needs and Options Report completed by another External Expert, Jacobs, and **deemed that an adequate range of options were considered** (4.2).
- **We therefore observe that TfL's assurance teams concluded favourably on the robustness of the optioneering process.**

#### Economic Case/VfM with a focus on Traffic Forecasting Options IAR (July 2015) -

- The EE considered the traffic modelling in the context of readiness for a DCO consultation, and concluded that there was sufficient traffic modelling information to undertake this process (10.1)

- The review also considers the ability of existing infrastructure to handle the new tunnel and its sizing (four lanes as opposed to two) (10.1 & 10.4)
- The VfM considerations reviewed at this stage were focused around cost (4.3 & 6.1)
- **Interim (DCO Application) IAR (November 2015) –**
  - An EE carried out a further review to determine the Scheme's readiness for the DCO, this included challenging the TfL team on the work done on forecasting traffic. The report quotes the PPD Programme Manager saying "Silvertown is essentially a congestion relief scheme rather than a new river crossing scheme" (4.1)
  - The EE checks the alignment of the Scheme against strategic objectives, with no adverse findings (4.3)
  - The VfM challenge at this stage is again mainly around cost given that the full analysis was still a work in progress (4.4)
  - The EE noted from interviews with TfL representatives that the future demand for the tunnel was not expected to change given the current levels of congestion at the Blackwall Tunnel. Modelling had thus been carried out for the year 2021, 2031 and 2041. The EE concluded that they were satisfied with the approach. (11.3)
  - The EE accepted the presence of significant resilience benefits (11.3)
  - The EE noted from reviews that the single most important factor in managing the traffic demand for both Blackwall and Silvertown tunnels including any induced traffic would be the power of TfL to control and vary the level of user charges (11.3).
  - It was noted from our discussion with representatives of TfL Project Assurance on 26 January 2021, that the EE and TfL Project Assurance review of the traffic model was centred around inputs, methodology and outputs, rather than on the detailed functionality.
- **Overall, VfM was last scrutinised in 2015 by the External Experts commissioned. At the FBC stage, focus gravitated towards the VfM of the different bids received as opposed to the VfM of the project itself. Note the VfM review appears topical, from the documentation reviewed, however this is complemented by the much more in-depth review by the Planning Inspectorate (see next slide for governance on the VfM and Section 5 for our commentary on the VfM).**



### 3 Business Case Process – Project Lifecycle and Approvals (Planning Inspectorate)

The Examining Authority's Panel examined the traffic modelling and concluded on its appropriateness. It also agreed that the scheme represented acceptable Value for Money. With regard to the options appraisal, the ExA also agrees with the need for the scheme and the selected Project Objectives.

#### Planning Inspectorate's Examination

##### A. Overview

- The Silvertown Tunnel Scheme was designated as Nationally Significant Infrastructure Project (NSIP) by a direction given by the Secretary of State (SoS) for Transport on 25 June 2012.
- This direction specified that the Silvertown Tunnel Scheme would require a Development Consent Order (DCO), resulting in significant scrutiny from the Examining Authority (ExA) on behalf of the Secretary of State for Transport (SoS).
- The DCO Examining process comprises of the following:
  - **Documentation Submitted** – the OBC and supporting documentation i.e. Traffic/Transport forecasting, Economic Assessment, Consultation report etc.
  - **Examining Panel** - three examining inspectors appointed with expertise in infrastructure, transport economics and environmental planning. All inspectors had previously been on other Planning Inspectorate panels.
  - **Extensive Consultations:** 383 Interested Parties (Individuals, Businesses, Local Authorities, Interest Groups) participated in consultations, with significant contribution from the host boroughs.
  - **Timeline:** examination began 11 October 2016 and concluded 11 July 2017 with recommendations made to the SoS.
- In relation to the challenges received by the SSTC, key areas of work/ assurance are as follows below (detailed summary in Appendix A)

##### B. Traffic/Transport Modelling and Forecasting

The ExA and Interested Parties (IPs) carried out a broad examination of the scheme's VfM, particularly in relation to traffic forecasting. The ExA concluded that the modelling was guided by best practice:

*“The Panel has found that the approach and techniques used by the Applicant in the modelling work are in line with the appropriate DfT guidance for the Proposed Development. Although the Applicant has demonstrated to the satisfaction of the Panel that it has broadly followed WebTAG guidance, it is clear that there are inevitably significant uncertainties in the traffic forecasting and modelling” (5.2.90)*

- Consideration was given to **possible issues with the forecasting** - e.g. failure of the traffic forecasts to address both **latent and induced demand** due to the new tunnel, **inability of user charging to control traffic** to the required level, the **level of uncertainty within the traffic forecasting** and the **assumptions** underpinning the modelling.
  - Regarding the underpinning Network Assumptions the ExA states the following:  
*All committed and funded infrastructure with available plans was included and the Applicant explained that the list of schemes was agreed with the Boroughs on multiple occasions (e.g. Nov 2014 and Feb 2015). No schemes judged to materially change the scheme [Silvertown Tunnel's] impacts had come forward since that time. (5.2.62)*
- **TfL engagement and model assurance** - TfL responded to all questions raised and re-audited its traffic models  
*“Furthermore, in 2015, the Applicant supported the host boroughs requests in undertaking a further audit of the modelling suite. This audit concluded that the models were suitable for the purpose of assessing the traffic and transport impacts of the scheme (5.2.27)*
- It was **concluded by the ExA that TfL being able to adjust user charges would maintain equilibrium between traffic flow demand and supply in the tunnel.**
- **VfM Conclusion** - Finally, further to all the challenge the ExA concludes that it sees no reason to question whether the scheme represents acceptable value for money (4.6.48)

##### C. Options Appraisal

The ExA considers the project optioneering, we highlight key findings below:

- **Setting of Project Objectives** – The ExA is satisfied on the need for the scheme as well as the Project Objectives  
*“[...] we are satisfied that there are real transport, economic and environmental problems that need to be addressed and we can see no reason to disagree with the objectives set by the Applicant for identifying a solution” (4.5.23)*



### 3 Business Case Process – Project Lifecycle and Approvals (Planning Inspectorate, SoS & Conclusion)

The ExA concludes that sufficient alternatives have been canvassed (including a tolled Blackwall with significant public transport upgrades). The Project has benefitted from extensive stakeholder input and challenge, and has gone through an extensive governance process prior to contract signing, which guarantees a minimum level of quality to the business case and optioneering.

- **Availability of alternatives** - The ExA considers the argument on whether a comprehensive package of alternative measures was sufficiently considered. It considers that TfL successfully refuted the suggestion by pointing to a **Public Transport Max scenario, where additional cross-river public transport improvements are combined with Blackwall tolling**. The option was shown **not to produce the desired resilience** (4.3.34). This is directly **relevant to the SSTC challenge on the viability of tolling Blackwall only**.
- **Economic modelling** - a number of IPs argued that insufficient consideration had been given by TfL to **economic appraisal of alternatives** as specified in the Treasury 'Five case model'. It was noted by the ExA in TfL's response that a full economic appraisal had only been undertaken on the final two tunnel options because **none of the other options met the defined Project Objectives** (4.6.35). In relation to the SSTC challenge, limited economic analysis on tolling Blackwall only was undertaken because it did not meet the Project Objectives.
- The **ExA concluded that given the long history of the of the project**, and in line with paragraphs 4.11 and 4.27 of the National Policy Statements for National Networks (NPSNN), there had been **sufficient assessment of alternatives** (4.6.37).

D. Socio-Economic Impacts – (not directly relevant to SSTC challenge)

E. Environmental and Air Quality – (not directly relevant to SSTC challenge)

F. ExA Conclusions

- In light of their findings and conclusions, the ExA recommended that the SoS grant the Silvertown Tunnel Scheme DCO.
- The areas considered were significantly challenged, lending credibility to the scheme's Options Appraisal and VfM.

#### Secretary of State for Transport Decision

- The Planning Inspectorate's ExA presented a report on its findings, conclusions and recommendations to the SoS dated 11 July 2017.
- The SoS considered the report, alongside late representations and further consultations. The following key areas were noted:
  - **Need for Proposed Development** – the scheme meets the core strategic Project

Objectives of reducing congestion and incidents and providing resilience.

- **Traffic Forecasting** – SoS was of the view that the ExA had undertaken detailed critique. It was noted that the flexibility in user charging would allow for TfL to meet the desired traffic requirements.

- **User Charging** - The SoS agreed with the Panel that the inclusion of the full charging provisions in the DCO was appropriate and necessary to manage traffic flows and mitigate environmental concerns.
- Air quality, Health and Socio-Economic impacts were also considered.
- Taking all of the above into consideration, the SoS granted the Silvertown Tunnel Scheme DCO to TfL, in a letter dated 10 May 2018.
- The Outline Business Case was one of the major documents considered in the DCO application process. The document first underwent an assurance process within TfL then additional scrutiny by the Planning Inspectorate's ExA and ultimately, the SoS for Transport.

#### EY Conclusions

- The Silvertown Tunnel Scheme's Outline Business Case went through both internal and external reviews.
  - The need for the scheme was broadly challenged;
  - Options to address the issues and meet Core Project Objectives were challenged, with a detailed Needs and Options report published;
  - The process by which Options were eliminated was adequately challenged; and
  - The project's economics, particularly with regards to traffic forecasting and modelling was extensively challenged.
- In summary, the Project has benefitted from extensive stakeholder input and challenge, and has gone through an extensive governance process prior to contract signing, which supports a level of quality to the Business Case and optioneering



### 3 Business Case Process – 5 Case Business Plan

The Silvertown Tunnel Business Case is structured using guidance prescribed by the Green Book, which is designed to ensure a minimum level of quality. The challenges received mostly centre on the VFM modelling in the Economic Case.

**Methodology:** For Silvertown, TfL has prepared a series of Business Cases structured in line with the Green Book. Below we present the 5 Cases from the Silvertown Tunnel Full Business Case (March 2019) and key points from each.

Five Case Model	Green Book Purpose	Business Case Summary	EY Commentary
<b>Strategic Case</b>	Establishing the case for change and how it fits in with wider government policy objectives	<ul style="list-style-type: none"> <li>Significant population growth and commercial activity in East London has given rise to a need for more road crossings.</li> <li>The main road crossing, the Blackwall Tunnel is unreliable due to congestion, user incidents and closures, lack of network resilience, effects on public transport and environmental impacts due to inefficient travel.</li> <li>The Silvertown tunnel fits into the 2010 Mayor’s Transport Strategy (MTS) which sets out to consider a new fixed link at Silvertown to provide congestion relief to the Blackwall Tunnel and provide local links for vehicle traffic. It also fits into the local policies of the host boroughs which all consider crossing projects across the Thames.</li> <li>The increased capacity and demand management solution aims at the new capacity being maximised through the delivery of new cross-river bus services, fostering economic growth.</li> </ul>	The case for change was clearly set out in the Business Case. The outcome expected and how it fits in with wider national, regional and local government policy was also explored and detailed.
<b>Economic Case</b>	Establishing the net value to society of the intervention compared to continuing with Business as Usual	<ul style="list-style-type: none"> <li>The Silvertown bored tunnel presents the optimal net value to society. It effectively addresses congestion and resilience problems and supports economic and population growth.</li> <li>This option has minimal adverse impacts on surrounding urban areas and the river environment</li> <li>Risk and costs identified are in relation to noise, air quality, accidents and greenhouse gases.</li> <li>The overall outcome is that the Scheme is shown to have an initial positive Net Present Value of £519m (without reliability benefits) and an adjusted NPV of £708m (with reliability benefits), with user charges covering costs.</li> </ul>	TfL sought to demonstrate Value for Money (VfM) to society within the Economic Case. An options analysis was carried out and has been explored in more detail within the section 4 of the report. Risks, costs and benefits have been identified and where possible monetised, giving rise to the Net Present Value (NPV). This is explained in more detail in section 5 of the report.
<b>Financial Case</b>	Quantifying the impact of the proposal on the public sector budget in terms of the total cost of both capital and revenue	<ul style="list-style-type: none"> <li>Capex and Opex are assumed by the private sector through a PPP arrangement.</li> <li>Availability Payments (AP) are expected to be fully funded from new user charging revenues over the 25 years of operations.</li> <li>Under the March 2019 projections, in the base case, there is an annual deficit of between £6m in 2026, growing to £10m in 2034 and then reducing until the project reaches a breakeven point (i.e. where the toll revenue equals the AP) in 2040, plus the net cost of providing the new bus services. Beyond that point the Scheme will generate surplus revenue. This assumes the proposed charging regime remains in place.</li> </ul>	TfL sought to demonstrate that the project is financially affordable within the Financial Case. Forecast project development, design, construction, maintenance and financing costs were detailed. A comparison of forecast user charging income to Availability Payments was illustrated to show affordability.

The challenge received centres around the optioneering and VFM traffic considerations



### 3 Business Case Process – 5 Case Business Plan (cont'd)

The Silvertown Tunnel Business Case is structured using guidance prescribed by the Green Book, which is designed to ensure a minimum level of quality.

Five Case Model	Green Book Purpose	Business Case Summary	EY Commentary
<p><b>Commercial Case</b></p>	<p>Demonstrating that a realistic and credible commercial deal can be struck</p>	<ul style="list-style-type: none"> <li>• A Private Public Partnership (PPP) delivery model has been established to deliver the main scope of the Scheme where a Project Company will be responsible for Designing, Building, Financing and Maintaining the Silvertown Tunnel ensuring it meets the standards set by TfL to be available for use.</li> <li>• TfL will retain responsibility for 'traffic operations' and the final decision on tunnel opening/closing.</li> <li>• TfL will be responsible for the operation and maintenance of the user charge system and the associated back office function.</li> <li>• Allocation of risk has been established to transfer substantial risk to the private sector whilst creating a clear structure for management of the public sector's retained risks.</li> </ul>	<p>TfL sought to demonstrate the commercial viability of the Silvertown Tunnel scheme within the Commercial Case. It established that a PPP delivery model would be used and explored the scope of the PPP including termination rights. The termination conditions are further explored in section 6 of the report.</p>
<p><b>Management Case</b></p>	<p>Establishing that delivery plans are realistic and robust</p>	<ul style="list-style-type: none"> <li>• Enabling works have begun and Construction which was due to start in December 2019 has been delayed to 2021. Construction is estimated to be completed in 2025. The Silvertown Tunnel Programme is split into a number of projects each with their own delivery structures with appropriate governance, assurance and resourcing. The Project Agreement sets a structure for management of the PPP relationship with clearly defined roles, responsibilities and risks for both the construction and operational phases.</li> </ul>	<p>TfL sought to demonstrate the achievability of the scheme within the Management Case. Within the Business Case, the scheme was split into a range of projects with resourcing, governance and assurance detailed.</p>

There is a further challenge around the termination conditions

# 4

## Business Case Review





## 4 Business Case Review – Introduction & Findings

**Methodology:** As much of the challenge from the SSTC revolves around the optioneering, we review and analyse the Project Objectives, the determination around the long-list of options and those advanced to the short-list (on which a full Cost Benefit study was performed). We also specifically address two SSTC challenges.

### Challenges

- The initial decision by TfL not to do a cost/benefit analysis of the various options at Silvertown, instead, only ranking options on their ability to reduce congestion at the tunnel mouths. In particular, **the decision not to do a full cost/benefit comparison of the options of 'toll Blackwall Tunnel only' to fully remove congestion** versus 'build Silvertown and toll both Silvertown and Blackwall (the Silvertown Project)'
- TfL **failing to consider the option of Wider London Road Charging** as an alternative to the scheme.

### Analysis

In order to assess the challenges, we have utilised a Q&A approach to focus the narrative and draw out key points. The key questions we have answered are:

1. The policy context of the objectives, the Project Objectives TfL set out to address, their impact on project selection, their reasonableness and how leading in nature they are
2. The completeness of the long list of options based on our understanding
3. Compliance of the short listing process with Green Book requirements
4. The specific work done by TfL to toll Blackwall Tunnel only (no Silvertown Tunnel)
5. Consideration given to Wider London Road Charging

### Findings

- **Objectives** - Project Objectives were aligned to key themes and proposals from the 2010 MTS, TfL business drivers and the River Crossings Programme objectives. However, considering the Core Project Objectives and further constraints (around safety and engineering), the fact emerged (following optioneering) that only a few of the long-list options would be viable.
- **Focus Area** - The broad issue being tackled is the lack of connectivity in East London. Consideration then narrows down to the Blackwall Tunnel being the only strategic crossing in East London. In light of this, we consider the objectives are reasonable and do not bias

the choice of options towards a pre-determined solution.

- **Shortlist option set** – The shortlist option set was reasonably broad, taking into account both road demand reduction (e.g. new public transport, cycle ways and tolls) as well as new road infrastructure (both at Silvertown and in neighbouring areas, and in different formats (i.e. ferries, bridges, tunnels))
- **Alternate short-list options (not in FBC):**
  - **Silvertown single-bore tidal flow-** The option for Silvertown Tunnel with single bore tidal flow was not explicitly presented in the FBC. However, from conversations with TfL we understand there are safety, engineering and operational concerns around single-bore tunnels.
  - **Wider London Road Charging** – The do-maximum option was not considered as a potential solution in the FBC. This is likely driven by the limited development of such a scheme and its aims.
- **Shortlisting** - options not meeting core priorities were dismissed
  - **Blackwall Toll Only** - Was dismissed on qualitative grounds of not meeting resilience and growth Core Project Objectives. Alternatives incorporating a tolled Blackwall Tunnel were investigated and found unsuitable. TfL's decision not to pursue further economic analysis on qualitative grounds (i.e. option not meeting Project Objectives) following traffic modelling is therefore reasonable
  - **Do-Minimum Option** – There was no viable lower commitment option addressing the qualitative Project Objectives – therefore no “Do-Minimum” option. This is in line with Green Book guidance.
- **Examining Authorities** – TfL Assurance, the Examining Authority and the Secretary of State in his conclusion on granting the DCO noted the options appraised and alternatives canvassed. The SoS agreed with the Panel of the Examining Authority that sufficient options appraisal was conducted.



## 4 Business Case Review – Project Objectives

The Core Project Objectives are tailored to solving the specific issue around capacity (for growth), congestion and resilience of the road network in East London, which quickly results in a focus on the Blackwall Tunnel area which is the critical artery for East London.

### Q1-A: What is wider policy context in which the Project Objectives were developed?

- The London Plan and 2010 MTS specifies a policy to adapt London's transport system to accommodate sustainable population and employment growth (Policy 1), including with enhancement to the strategic road network (Policy 2). The 2018 MTS is still geared toward “good growth”, albeit it is less explicitly focused on enhancing the strategic road network.
- The 2010 MTS identifies the lack of river crossings (beyond rail) in East London, the growth of East London through major developments (i.e. Canary Wharf, Excel, Stratford), and congestion of existing road infrastructure proposing a package of river crossing options (Proposal 39) to address the issue.
- TfL's East London River Crossings (December 2012) – Assessment of Options identifies issues at Blackwall tunnel and begins investigating options to address the issue
- The 2018 MTS's Proposal 93 supports the construction of Silvertown Tunnel to address the issue of road crossings in East London, and the scheme is treated as a committed project.

### Q1-B: What were the Project Objectives that TfL sought to address through the Silvertown Tunnel project? And, how did they impact project selection?

TfL sought to address the following objectives:

- PO1 (CORE):** To improve the resilience of the river crossings in the highway network in east and southeast London to cope with planned and unplanned events and incidents
- PO2 (CORE):** To improve the road network performance of the Blackwall Tunnel and its approach road (i.e. tackle congestion)
- PO3 (CORE):** To support economic and population growth, in particular in east and southeast London by providing improved cross-river transport links
- PO4:** To integrate with local and strategic land use policies
- PO5:** To minimise any adverse impacts of any proposals on communities, health, safety and the environment
- PO6:** To ensure where possible that any proposals are acceptable in principle to key stakeholders, including affected boroughs
- PO7:** To achieve value for money and, through road user charging, to manage congestion

The Project Objectives were aligned to key themes and proposals from the Mayor's 2010 Transport strategy, TfL business drivers and the River Crossings Programme objectives.

Considering the set of Core Project Objectives above and further constraints (around safety and engineering), a situation where only a few of the long-list options would be viable was created.

### Q1-B: Are the objectives reasonable and not leading in nature?

Per the Green Book, identifying objectives begins with making the case for change.

The TfL objectives cover the case for why, how and where.

- **Why?** To improve resilience, improve road network performance and support economic and population growth.
- **How?** Provide improved cross-river transport links and manage congestion through road user charging.
- **Where?** The highway network in East and South East London.

The Green Book suggests that 5 or 6 SMART objectives be established to allow focus and delivery.

Objectives will often be described as the changes experienced by people receiving a service. Objectives may also be described as increases in existing service levels, the delivery of new services or changes to service efficiency and effectiveness.

The objectives however, should not bias the choice of options towards a particular pre-determined solution.

- Core Project Objectives PO1-3 are focused on resolving connectivity problems in East London (a change in service efficiency), and specifically at the Blackwall Tunnel as a key transport artery.
- PO4 to PO7 are based on the wider River Crossings Programme
- As seen in Q2, the objectives in principle leaves the door open to a range of solutions beyond a new road at Silvertown to address connectivity issues in East London. In practice however, once options are evaluated, owing to the existing approach roads at the Blackwall Tunnel, the only options which meet the stated goals are new road infrastructure at Silvertown.

The objectives set are also in line with national, London-wide and local policy objectives, with a particular reference to the London Plan and Mayor's Transport Strategy (excluding modal shift objectives).

The objectives are reasonable and do not bias the choice of options towards a pre-determined solution. The lack of connectivity in East London narrowed down consideration to issues facing the Blackwall Tunnel specifically due to its strategic position and utility, as well as the location of approach roads.



#### 4 Business Case Review – Long list of options

In line with guidance from the Green Book, a long list of options with a broad range of solutions was developed. While challenging to assess due to being in its infancy stages, there is the notable omission of Wider London Road Charging, and whether new road infrastructure in this context is ultimately needed (see slide 34).

##### Q2-A: What were the long list options considered?

There are two broad categories of options: i) Demand Reduction and ii) New Highway Infrastructure

###### Demand Reduction

These are options focussed on reducing the level of cross-river highway demand, through the provision of enhanced alternatives (such as walking, cycling and public transport improvements) and/or through direct demand management (such as road user charging). The options considered were:

- **DLR extension to Falconwood**
- **Local links for pedestrians and cyclists**
- **Congestion charging at Blackwall Tunnel**

###### New Highway Infrastructure

These are options involving the provision of new highway infrastructure capacity/connections at various locations. The options considered were:

- **Ferries** – Woolwich, Gallions Reach and Silvertown
- **Lifting Bridges** – Woolwich and Silvertown
- **Bridges** – Thames Gateway, Gallions Reach
- **Tunnels** – Woolwich, Gallions Reach, Blackwall third tunnel bore, Silvertown bored and Silvertown immersed tunnel

##### Q2-B: Was the longlist option set complete?

- Green Book Guidance specifies with regard to longlist options generation:  
*“Proposals should initially be considered from the **perspective of the service needed to deliver the required policy outcome** and not from the perspective of a preconceived solution or asset creation”*
- We believe the longlist option set to be sufficiently broad and open-ended in considering how to address concerns around congestion, resilience and growth at the Blackwall Tunnel. In other words the range of options was broad including (i) possible modal shifts through non-road infrastructure (ii) alternate locations (iii) different forms of infrastructure.

- There are however two options we have identified in reviewing project documentation and challenges from the SSTC, which merit further discussion:

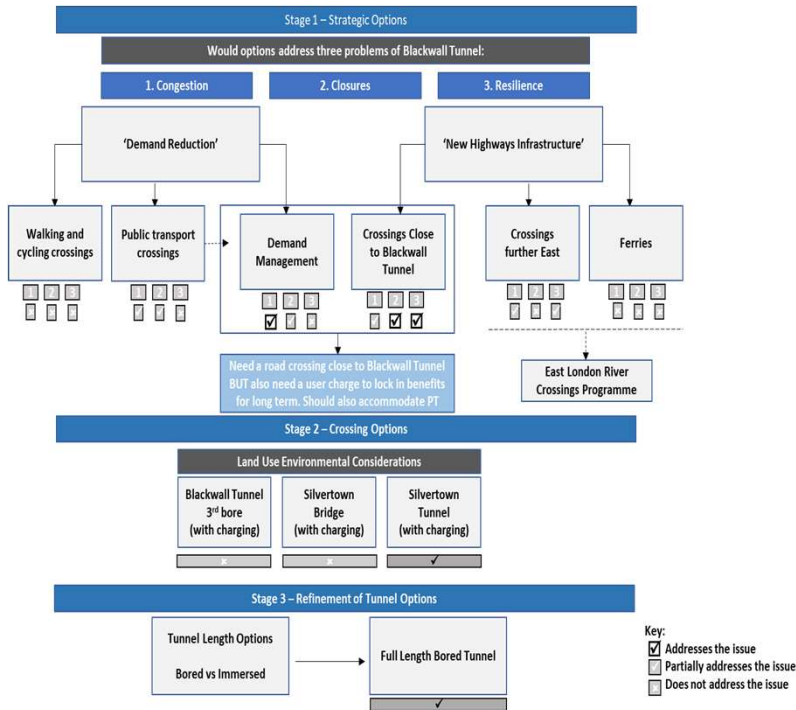
1. The option for a **single bore tidal flow tunnel at Silvertown** is not explicitly considered in the Needs and Options Report. However, per discussion with TfL, there are safety, engineering and operational concerns as a single bore **does not meet the design standards for new tunnels**. Specifically, a single bore **requires a parallel evacuation and emergency services tunnel**. This becomes in effect similar to a twin bore tunnel without the benefits.
2. The (Do-Maximum) option for **Wider London Road Charging** was also not considered in the Needs and Options report (this issue is discussed further on Slide 34). However, this issue was subsequently considered as part of the review process. It was noted that wider road pricing would impact on traffic modelling undertaken and the outcomes delivered, however **as the Wider London Road Charging scheme was not yet been developed or confirmed, the quantitative impacts were speculative, and it was therefore not considered further** (see slide 34)



## 4 Business Case Review – Shortlisting of options

TfL filters down a broad list of options using a qualitative criteria centred around the Core Project Objectives (congestion, resilience and growth). This in effect shortens the list to new fixed river crossing infrastructure coupled with demand management (i.e. tolls).

Figure 4-1 – TfL Qualitative Shortlisting Process



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### Q3-A: What does the Green Book say about taking options forward to the shortlist?

Per the Green Book, once a long-list is developed it can then be filtered down to a set of viable short-list options ahead of detailed economic analysis. Viability can be assessed from the perspectives of **strategic fit to wider policy objectives**, potential Value for Money, affordability and achievability. Dependencies and constraints (e.g. legal frameworks) should also be considered.

The short-list should include a “preferred way-forward”, the **Business as Usual benchmark**, and a viable “do-minimum option that meets minimum core requirements to achieve the objectives identified” and at least **one viable alternative option**.

### Q3-B: Which options were taken forward and assessed and which were not and why?

The long list of options was first presented at the 2012 East London River Crossings consultation and then refined to 8 options (plus “Do Nothing”) in the 2014 Silvertown Needs and Options report. Options were shortlisted based on their ability to address the three key problems: (i) congestion; (ii) closures; and (iii) resilience faced at the Blackwall tunnel (see diagram)<sup>1</sup>.

**Walking and cycling crossings** were dismissed on the basis that they were not capable of reducing demand sufficiently to overcome the problems in relation to the Blackwall Tunnel.

The **DLR extension to Falconwood** was dismissed because although it would provide an alternative for some trips, there would still be a substantial number of trips requiring use of the Blackwall Tunnel. This is supported by historical data showing constant capacity issues at the Blackwall Tunnel despite significant investment in East London cross-river public transport connectivity.

A number of options were not taken forward based on geographic location, because by virtue of their location, they would not be able to meet the objectives of reducing congestion, providing resilience and mitigating closures at the Blackwall Tunnel (and the network of approach roads). The options dismissed were:

- **Ferries** – Woolwich and Gallions Reach
- **Bridges** – Woolwich, Thames Gateway, Gallions Reach
- **Tunnel** – Woolwich, Gallions Reach

1. Note the objectives are slightly different in that addressing closures is a separate objective in the diagram but result in the same outcome, as this inextricably linked to PO1 (resilience), PO2 (performance including congestion and closures), and PO3 (growth)

Source: Silvertown Tunnel Outline Business Case (2016)



#### 4 Business Case Review – Shortlisting of options (cont'd)

From a qualitative standpoint, a twin bore at Silvertown emerges as the preferred option. Despite the absence of full economic analysis on alternative options, owing to inability of other options to meet the Project Objectives, the Examining Authority and SoS concluded that sufficient options appraisal had been conducted.

##### Q3-B: Which options were taken forward and assessed and which were not and why? (Cont'd)

A Blackwall Tunnel only with toll (no Silvertown) option is dismissed on a qualitative basis – while it could meet the congestion/performance objective (through very high tolls which may not be politically acceptable, move traffic to untolled crossings and/or impede crossings altogether contrary to Scheme's objectives), it does not materially increase resilience, and foster growth (i.e. still cannot run HGVs on Northbound bore and precludes double-decker and bendy buses)

As is clear from the diagram, only fixed road crossings at/around Blackwall with Demand Management could address the Project Objectives.

Other road crossing options at Silvertown were dismissed for the following reasons:

1. A **ferry at Silvertown** was deemed not to provide sufficient capacity (and thereby resilience)
2. A **third bore at Blackwall** was deemed to have operational and engineering constraints (due to deep piled foundations of neighbouring buildings)
3. A **lifting bridge** was deemed to be suboptimal from an aesthetic/planning perspective and from a resilience standpoint

**An twin bore or immersed tunnel are left as the only with strong positive performance across resilience, congestion and growth objectives.**

4. A immersed tunnel is however dismissed due to an adverse impact on the local community (requires more visible excavation) and on the river environment

**From a qualitative standpoint a twin bore tunnel at Silvertown quickly emerges as the preferred way forward.**

##### Q3-C: What scrutiny did the selection of a twin bore at Silvertown receive?

- The documentation (Outline Business Case, Needs and Options Assessment and Full Business Case) do not perform economic VfM appraisals on a shortlist of options as one would expect
- The Examining Authority Panel probes this omission, and we have reviewed TfL's written response dated 17 January 2017 and commented below.
- TfL answers that there have only been full NPV appraisals for the two tunnel options,

however economic appraisals have underpinned the optioneering at various stages. NPV estimates are provided for

1. Silvertown Immersed Tunnel
2. Silvertown Lifting Bridge
3. Silvertown Tunnel plus uncharged Blackwall Tunnel
4. The economic benefits are also quantified for FY 2021 only for a Blackwall only toll option (discussed further on Slide 31)

- In TfL's response it is specifically stated that "**a very wide set of options was considered and consulted on, very few of which were considered to meet the above core project objectives of solving the problem of congestion at the Blackwall Tunnel, and addressing the critical issue of resilience**"
- The Examining Authority in its recommendation to the Secretary of State concludes "*given the long history of this project that has been detailed earlier in this part of 32 Paragraphs 3.23 to 3.27 Report to the Secretary of State 68 Silvertown Tunnel our report, we are satisfied that there has been sufficient assessment of alternatives to satisfy paragraph 4.27 of the NPSNN*"
- In the **Secretary of State's** subsequent DCO decision letter dated 10 May 2018, **concurrs that there has been sufficient consideration of alternatives and options appraisal.**
- See Section 3 for a more complete description of the assurance process undergone.

##### Q3-D: What are conclusions regarding the shortlist?

- The shortlist includes the twin bore Silvertown Tunnel as the preferred way forward
- Modelling was also performed on a number of Silvertown fixed-crossing options (Immersed Tunnel, Lifting Bridge)
- As expected, a Business as Usual (Do Nothing) case is included
- It should be noted that a viable **Do Minimum Scenario does not exist**, as meeting the qualitative goals around resilience, congestion and growth through cross-river connectivity requires new infrastructure – **this is consistent with Green Book guidance.**
- The option of tolling the Blackwall Tunnel only does not the Project Objectives and is therefore dismissed – again, in line with Green Book guidance
- It follows that a **full economic VfM analysis is only conducted on options shortlisted**, those options which meet the Project Objectives



#### 4 Business Case Review – SSTC Challenges (Blackwall Tunnel Toll Only)

Following traffic modelling of the option to toll Blackwall Tunnel only (with an without public transport improvements), the option was dismissed on the basis of not meeting Project Objectives at the point of moving from the long-list to the short-list. The decision to not perform a full NPV is then reasonable.

#### Q4 - Challenge 1: Investigate TfL’s decision not to carry out a full cost/ benefit NPV of the option to toll Blackwall Tunnel only (i.e. no Silvertown Tunnel) and dismissing the option too early on

**Sources of evidence:** TfL’s Silvertown Crossing Assessment of Needs and Options report, TfL’s response to Examining Authority dated 5 April 2017<sup>1</sup>, DCO submissions<sup>2</sup>, and discussions with TfL.

#### Q4-A: Why was the option of tolling the Blackwall Tunnel only ultimately dismissed (Recap)? And how does this impact whether to perform a full NPV?

- A Blackwall Tunnel toll would ultimately **only help with one of three Core Project Objectives** and was therefore felt to be unsuitable to meet the scheme’s objectives:
  1. **Performance/Congestion (Slight Positive)** – a toll would reduce traffic levels; however owing to very high demand TfL found tolls needed to be set very high and thought this unlikely to be politically acceptable. More specifically, as explained in discussion with TfL, a high toll either pushes traffic to other crossings (with an unacceptable impact on network performance) or users stop crossing the river, which is contrary to the spirit of the scheme.
  2. **Resilience (Slight Positive)** – a toll would slightly reduce incidents but would not address the issue of the Northbound bore being unsuitable for certain HGVs leading to continued incidents
  3. **Growth (Neutral)** – A toll without new infrastructure is unlikely to support increased demand from a growing East London population (e.g. Blackwall Tunnel cannot support high-frequency cross river bus services due to congestion, absence of a dedicated bus lane and no double-decker/bendy-busses due to design constraints)
- Substantial work was performed to understand whether a Blackwall Tunnel only option with and without tolls coupled with a large package of public transport initiatives (targeted at Blackwall users) could resolve the qualitative objectives. It was found that
  - There was “**no discernible drop**” in Blackwall Tunnel traffic volumes in the **uncharged PT Max scenario** and reductions in traffic in the PT Max charged scenario were driven by the toll as opposed to new public transport infrastructure.
  - “A large proportion of the London based car drivers currently using the Blackwall

*Tunnel already have good public transport access (the implication being that these users would be unlikely to be encouraged to use public transport by the provision of further infrastructure)”<sup>3</sup>*

- This appears borne out by the fact that the Blackwall Tunnel remains congested despite sustained public transport cross-river connectivity improvements over the past 20 years.
  - TfL indicates that **users of the Blackwall Tunnel are hard to shift** because of (i) the dispersed origins/destinations of trips through the tunnel and (ii) the purpose of trips (e.g. trade employment which requires a car).
- Given the **option was incompatible on a qualitative basis with Project Objectives, TfL’s decision** to not perform a full economic NPV is **reasonable**.

#### Q4-B: What work was done specifically by TfL on the VfM of tolling the Blackwall Tunnel only with no Silvertown project?

- In its response to the Examining Authority, TfL presents a high-level economic assessment to charge the Blackwall Tunnel only for 2021 only (presented against the Assessed Case to build the Silvertown Tunnel and charge both the Blackwall and Silvertown Tunnels)
- The results are shown in Table 4-2 below.
- Option to charge Blackwall only would offer lower benefits at a lower cost. The option would however, not achieve the Core Project Objective of improving resilience of the local network. It would also offer only limited benefits for public transport provision as the extent to which the bus network can be improved would be limited.

**Table 4-2 – Economic Summary - 2021 assessment (PV 2010)**

Public Transport and Highway Benefits (£ m) – 2021 Only	Charge Blackwall and Silvertown Tunnel (Assessed Case)	Charge Blackwall Tunnel Only	Differential
Commuter	£ 21.36	£10.12	£11.24
Business	£4.87	£2.33	£ 2.54
Other	£12.25	£6.11	£ 6.14
<b>Total</b>	<b>£38.48</b>	<b>£18.56</b>	<b>£ 19.92</b>

1. 8.119 Applicant’s response to question regarding Option Appraisal (Five Case) from the Issue Specific Hearing on 28 March 2017  
 2. Documents 6.5, 7.1 and 7.9 of the DCO Submission  
 Source: DCO Submission – 7.1 Case for the Scheme



#### 4 Business Case Review – SSTC Challenges (Blackwall Tunnel Toll Only)

Had a full NPV been performed, the NPV from tolling Blackwall only may have been higher than the option implemented; however, this would not address the scheme objectives, and is therefore not comparable. The decision to dismiss the option early on without performing a full NPV is reasonable and in line with Green Book guidance.

##### Q4-C: What does TfL's limited economic modelling imply?

- A rudimentary calculation in Table 4-3 (below) using the PV Differential in the 2021 reference year suggests that had a full NPV been performed on the toll Blackwall Tunnel only option, it may have outperformed the Silvertown + Blackwall option on a pure VfM basis.
- However, the VfM are not fundamentally comparable as a toll Blackwall Tunnel does not address the Project Objectives.

##### Q4-D: What were the key findings and recommendations from our review?

- The toll Blackwall Tunnel was dismissed on qualitative grounds (meeting only 1 of 3 Project Objectives), and therefore **does not qualify as a viable “Do Minimum” option per Green Book guidance.**
- Traffic modelling was performed on a scenario including a tolled Blackwall Tunnel with a significant package of public transport improvements, where PT improvements were not found to materially improve congestion.
- As a result, limited economic analysis was carried out for the Blackwall Tunnel toll only, with analysis on a single reference year 2021 (see Table 4-2).
- While the limited economic analysis suggests to us (see output of Table 4-3) that the Blackwall Tunnel toll offers value in excess the status-quo (“Do Nothing”) and possibly in excess of the Silvertown Tunnel, it does not address the fundamental problems the scheme is attempting to address.
- **Business case evaluation begins with solutions that meet Project Objectives**, as opposed to starting with the option with the highest VfM NPV.
- The NPV of the toll Blackwall Tunnel option is therefore fundamentally not comparable to the NPV of the Silvertown scheme.
- **In summary, a toll Blackwall Tunnel only option did not meet the Core Project Objectives, and the decision not to perform a detailed Economic Appraisal is therefore reasonable.**

Table 4-3 – Net Present Value Consideration

Differential Net Present Value Consideration	£m
Differential in 2021 (PV 2021)	£38.97
Discount rate (per TfL Business Case)	6.29%
Growth rate (assumed inflation)	2%
Years	60
Present Value of Differential in perpetuity (PV 2020)	£908.34
Annuity reduction factor	0.9156
Revised Present Value of Differential (PV 2020)	£861.65
Revised Present Value of Differential (PV 2010)	£451.88
PV of Additional Costs (Capex and Opex) (PV 2010)	£832.00
<b>Differential Net Present Value</b>	<b>£ (380.12)</b>



#### 4 Business Case Review – SSTC Challenges (London Wider Road Charging)

As the WLRC scheme aims and mechanics were not developed, concrete traffic modelling around WLRC was not possible. The impact of the scheme was considered at a high level. There is however the wider question of how the modal shift policy away from cars was considered, given the policy changed in 2018 just prior to the 2019 FBC and contract signing. Traffic modelling from 2014-2016 was not updated to reflect the changed policy.

#### Q5- Challenge 2: Investigate the extent to which TfL considered Wider London Road Charging (WLRC)

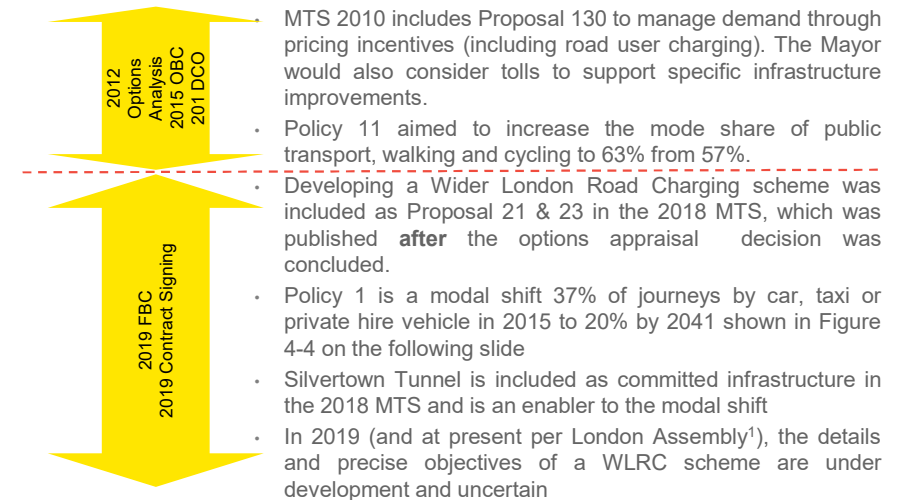
**Sources of evidence:** Silvertown Charging Statement, information provided to the TfL Programmes and Investment Committee on the consideration of wider road pricing, Mayor Transport Strategy 2010 & 2018, miscellaneous information on the state of the Wider London Road Charging scheme and discussions with TfL.

#### Q5-A: What work was done specifically by TfL on the consideration for wider road pricing?

- During the review process, questions around the impact of a Wider London Road Charging scheme were raised in the Programmes and Investment Committee.
- From correspondence shared with us by TfL, a specific question on how the Wider London Road Charging scheme might affect the user charges for Silvertown and Blackwall tunnels was asked. It was further asked if:
  - (i) **TfL had worked on the assumption that a distance-based London wide road user charge scheme could have add-on fixed charges for use of the tunnels; or**
  - (ii) **If the charges for use of the tunnels would be abolished**
- TfL stated that the response of user charging at the tunnels to a Wider London Road Charging scheme would depend on the specific objectives of the WLRC scheme (e.g. schemes geared toward air quality versus demand reduction would produce different Silvertown charging responses)
- **TfL believe the charging policies and procedures provide flexibility to adapt to a Wider London Road Charging scheme.** Regardless of the scheme, TfL would be required to assess the impacts of the user charge at Blackwall and Silvertown and make changes to ensure it continuously meets the environmental and economic objectives set out within the DCO.
- From an **affordability standpoint, revenue from the WLRC scheme could be used to meet Availability Payments** and reduced toll revenues at Silvertown/Blackwall following the introduction of the WLRC scheme, and the corresponding decrease in traffic.
- **As the WLRC scheme aims and mechanics were not developed, concrete traffic modelling around WLRC was not possible**

#### Q5-B: How has policy with regard to WLRC and a desire to reduce car usage evolved alongside the Silvertown scheme?

- Our review considers the point in time at which appraisal decisions were made and the relevant policy.



#### Q5-C: How was the traffic modelling more broadly impacted by the 2018 MTS?

- The latest traffic modelling dates from 2014-2016, and was not refreshed for the 2018 MTS.
- It was explained by TfL on our call on 8 December 2020 that the Silvertown Tunnel was included as committed infrastructure in the 2018 MTS (i.e. it enables the 2018 MTS), and that (i) the outcomes of the modelling would not change as a result of the 2018 MTS and (ii) that TfL would need to revisit the traffic modelling at a later date in any case as a result of DCO obligations
- It was also stated that it was not appropriate to reflect the 2018 MTS modal shift targets (see Figure 4-4) in the traffic modelling as the scheme objectives were not developed for analysis on individual roads but more as a holistic goal across London

1. London Assembly 6 July 2020

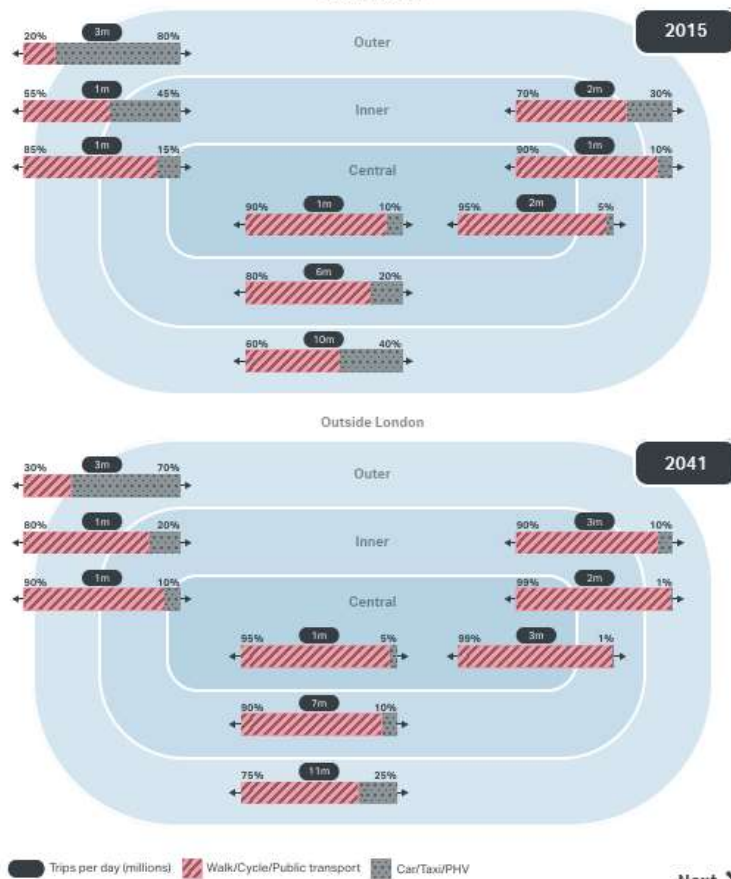




#### 4 Business Case Review – SSTC Challenges (Wider London Road Charging)

The impacts of WLRC could not be modelled due to the limited extent to which the scheme was developed. It should be noted that such a scheme on its own does not address the qualitative Silvertown objectives (around resilience and growth). Sensitivity analysis around the modal shift policy ambition was not performed as part of the FBC.

Figure 4-4 – MTS 2018 – Policy 1 – Modal Shift Objectives  
Outside London



#### Q5-D: What were the key findings and recommendations from our review?

- **WLRC was not contemplated as a potential “Do Maximum” option that could address capacity constraints at the Blackwall Tunnel because it was not developed as a scheme (i.e. no firm proposal to model) and could not address the resilience and growth Project Objectives.**
- The OBC and associated traffic forecasting (2014-2016) was prepared based on the 2010 MTS where targets with regard to a modal shift away from cars were less ambitious and less specific.
- Following the DCO in 2018, Silvertown Tunnel was included as committed infrastructure in the 2018 MTS; however, the **affordability and VfM of the tunnel were not re-tested in 2019 in the context of the new 2018 MTS modal shift objective as part of the Full Business Case**, prior to contract signing.
- Note downside sensitivities were performed with between 5-10% less traffic, but there is no clear link between the 2018 MTS modal shift goal and the sensitivities.
- We contend that the
  - **The FBC is designed to revalidate the scheme** in the context of the **latest information** and policy at the time;
  - **We have not seen documentation from the time justifying why the modelling was not updated following the change in modal share targets**
- **Such analysis would however, have been highly unlikely to eliminate the need for Silvertown Tunnel given**
  - The delay in implementing a WLRC scheme (or other mechanism to reduce car traffic);
  - The achievability of such a drastic modal shift;
  - The degree to which users of Blackwall Tunnel can be shifted to other modes (note users persist in using the tunnel despite severe congestion and, for many users, the availability of public transport alternatives);
  - A growing population;
  - Constraints with regards to HGVs and implementing a step change in bus services in the Blackwall Tunnel; and,
  - A lack of alternative routes creating issues with resilience.

# 5

## Value For Money Assessment



## 5 Value For Money Assessment – Introduction & Findings

**Methodology:** The Value for Money (“VfM”) assessment is an integral part of the Business Case which has received challenge by the SSTC. We outline the build-up of the VfM and review sensitivities performed, with a particular focus on traffic forecasting.

This section covers our review of the VfM assessment and the key challenges around this area raised by the Stop Silvertown Tunnel Coalition (SSTC)

### Challenges

- Broader concern around the financial viability of the project as a whole (including VfM) – GLA concern
- Treatment of tolling income at Blackwall – SSTC claims this income is already available to TfL, which could be spent on other schemes
- Economic analysis failing to take account of scenarios with significant traffic reductions and modal shift

### Analysis

In order to assess the challenges, we have utilised a Q&A approach to focus the narrative and draw out key points. The key questions we have answered are:

1. How is the Economic Case constructed and what is a Value for Money Assessment (VfM)?
2. What are the conclusions from the VfM Assessment?
3. What are the key inputs / assumptions feeding into the VfM Assessment?
4. What sensitivities have been performed?

### Findings

- **VfM construction** – A VfM calculation includes the broader business, social and public sector account impact of the scheme
- **Treatment of Blackwall toll revenue** – TfL treats the Blackwall toll revenue correctly. Ignoring the impact on traffic and congestion, the toll is a net economic nil (i.e. negative to toll road users but positive to public sector accounts)
- **NPV**- TfL calculates an NPV of £519m (excluding reliability benefits) and £708m (including reliability benefits)

- **Benefits** – Principally composed of reduced travel time with reliability as a secondary benefit. Private road users (private cars and businesses) are charged for using the tunnels, meaning the main beneficiaries of the scheme are bus and coach users (capture £603m of the benefit). Note traffic flows are assumed to stay materially consistent.
- **Costs** – user charging of £1,091m offsets operation and construction costs of £440m and £635m respectively. The net cost of £68m is mainly comprised of the net cost in operating bus routes.
- **Conservatism** – our review reveals a number of areas of conservatism with regards to:
  - Use of a National Value of Time (VoT) as opposed to the London VoT
  - Conservative estimates into the modelling of enforcement income
  - Undervaluing bus time savings by using current congested travel times as opposed to post-construction reduced travel times
  - Omission of Wider Economic Impacts and role in regenerating East London
- **Environmental impact** – there is a marginal increase in traffic coupled with decreased congestion driving a net reduction in CO<sub>2</sub> and a small (imperceptible ) increase in NO<sub>x</sub>
  - User charging gives TfL the flexibility to control traffic flows, types of vehicles, enabling it to minimise the Scheme’s adverse environmental impact
- **Traffic modelling** – The Low Growth scenario includes c. 5% less traffic than the Assessed/Base Case. It is therefore unlikely that this scenario can be used a proxy for a scenario where the 2018 MTS ambitions around modal shift are realised (there would likely be more bus users and less passenger cars).



## 5 Value For Money Assessment – What is a VFM Assessment?

A Vfm assessment is an economic assessment that includes broader non-financial costs and benefits and subsequent sensitivity analysis. SSTC's challenge regarding the pre-existing fungible source of income from the Blackwall crossing is not valid, as the toll on its own (i.e. ignoring impacts on traffic levels) is regarded as an economic net nil for the purposes of the Vfm.

### Q1 - How is the Economic Case constructed and what is a Value for Money Assessment (Vfm)?

The Economic Case assesses the Value for Money (Vfm) implications of the shortlisted options appraised in the Business Case.

The Vfm assessment follows a four stage process as follows:

1. **Monetised Impacts:** Impacts are valued to provide an initial assessment in an Analysis of Monetised Costs and Benefits (AMCB) table. **This includes business impacts, social impacts, environmental impacts and public account impacts.** Costs assessed include the investment and operating costs including capital renewal and maintenance costs.
2. **Qualitative and Quantitative Information:** Secondly, further quantitative and qualitative information is added – this provides an adjusted assessment. The relevant adjustment by TfL was the adjustment for reliability.
3. **Vfm category:** This adjusted assessment provides an initial Vfm assessment.
4. **Vfm Statement:** Finally, the benefits, costs, risks and sensitivities of the project are combined to provide a Vfm statement.

Note the Transport Analysis Guidance (TAG) recommended 60 year appraisals for projects deemed to have an 'Indefinite Life', such as tunnels, was used.

**SSTC Challenge: The user charge income from tolling Blackwall users is a fungible source of income available to TfL (i.e. the Silvertown Tunnel NPV should not include tolling income from Blackwall because this is already accessible to TfL)**

*First, all the income used to build the scheme is fungible - it comes from tolling the crossing at Blackwall/Silvertown, so can be accessed whether or not a new tunnel is built. [...] So money being spent on the tunnel could equally be spent on other schemes, and spending it on the tunnel means it's not available for these other schemes. – Email from Victoria Rance dated 3 September 2020.*

The Economic Vfm considers both the benefits (income to TfL) and cost (societal cost to motorists) of imposing a toll at the Blackwall Tunnel. **In other words, in absence of benefits to the congestion, resilience and the environment, the toll in itself is treated as an economic net nil rather than a positive.**

This concept has been correctly applied to the Silvertown Tunnel Vfm assessment.

In this respect, we consider that TfL has correctly constructed its Business Case and there is no fundamental flaw as claimed by the Stop Silvertown Tunnel Coalition.

**5 Value For Money Assessment – What are the conclusions from the VFM Assessment?**

The VFM assumes no material increase in traffic. The bulk of the economic benefit accrues to coach and bus users, arising from a reduction in travel time and new routes. Reduced travel time is the primary benefit of the scheme (although private vehicles are charged for this benefit), followed by reliability benefits.

**Q2- What are the conclusions from the Vfm Assessment?**Present Value of Benefits

- It should be noted that the key Project Objectives for the tunnel are to improve resilience, improve road performance (i.e. reduce congestion) and foster growth without increasing the level of traffic (controlled through user charging) and environmental impacts.
- The reliability benefits account for reductions in the variations of journey times that individuals are unable to predict such as congestion or non-recurring events such as incidents. It is calculated based on the standard deviation of travel time.

- As there is **no material increase in traffic** (c. +6% due to a re-routing of existing traffic), the environmental impacts are minimal with bus services driving a small increase in NO<sub>x</sub>
  - Local bus services drive a small increase in NO<sub>x</sub> – overall an “imperceptible change in pollutants” is forecasted
  - The FBC outlines a **reduction in GHG worth £12m** although this is not included in the final NPV – we understand this improvement to be due to decreased congestion
- The **primary beneficiaries of this scheme are Coach and Bus users**, who do not pay user charges) **benefiting by £603m** (note no reliability uplift is included for this user group and the overall benefit is conservatively modelled)
- Secondary benefits accrue to private cars and businesses:
  - Private car small benefit by £41m** (£120m with reliability); and,
  - Businesses benefit by £58m** (£167m with reliability)
- A loss in indirect taxation has been included as a result of estimated reduction in fuel duty and other vehicle related taxes (PV over 60 years)
- The total **present value of benefits comes to £587m** (representing mostly travel time savings) with an **additional £189m of reliability benefits (for a total of £776m)**

Table 5-1 - Analysis of monetised costs and benefits PV (2010 Prices)

£m	No Reliability Adjustment	With Reliability Adjustment
Noise	(5.6)	(5.6)
Local Air Quality	(3.0)	(3.0)
Greenhouse Gases	-	-
Journey Quality		
Physical Activity		
Accidents	12.4	12.4
Travel time & Vehicle operating costs (Private cars)	423.9	503.6
User charges & other (Private cars)	(383.5)	(383.5)
Travel time and other (Coach and Bus Passengers)	603.2	603.4
Travel time & Vehicle operating costs (Business)	676.9	786.4
User charges & other (Business)	(619.0)	(619.0)
Wider Public Finances (Indirect Taxation Revenues)	(118.8)	(118.8)
<b>Present Value of Benefits (PVB)</b>	<b>586.7</b>	<b>775.9</b>
User charge revenue (Road Infrastructure)	(1,090.9)	(1,090.9)
Operating cost (Road Infrastructure)	439.9	439.9
Investment cost (Road Infrastructure)	634.8	634.8
Bus revenue (Bus)	(157.7)	(157.7)
Operating Cost (Bus)	241.4	241.4
<b>Present Value of Costs (PVC)</b>	<b>67.5</b>	<b>67.5</b>
<b>Net Present Value (NPV)</b>	<b>519.2</b>	<b>708.4</b>

**5 Value For Money Assessment – What are the conclusions from the VFM Assessment?**

The total economic NPV is £519m and £709m (with reliability benefits). Net economic costs are minimal with user charging offsetting the investment and operating costs of the tunnel. The PVC is mainly comprised of operating loss making bus routes.

**Q2- What are the conclusions from the Vfm Assessment (cont'd)?**Present Value of Costs

- 7** The investment cost of £635m and operating costs £440m is fully offset by the user charging revenue of £1,091m (all in PV terms)
- 8** The new bus routes result in a net loss of £83m
- 9** Therefore, the vast majority of the PV of costs (£68m), is comprised of loss making bus routes offset by a slight benefit on the road infrastructure

Net Present Value

- 10** The NPV with and without reliability benefits is £519m and £708m respectively

Table 5-1 - Analysis of monetised costs and benefits PV (2010 Prices)

£m	No Reliability Adjustment	With Reliability Adjustment
Noise	(5.6)	(5.6)
Local Air Quality	(3.0)	(3.0)
Greenhouse Gases	-	-
Journey Quality		
Physical Activity		
Accidents	12.4	12.4
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Travel time and other (Coach and Bus Passengers)	603.2	603.4
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User charges & other (Business)	(619.0)	(619.0)
Wider Public Finances (Indirect Taxation Revenues)	(118.8)	(118.8)
<b>Present Value of Benefits (PVB)</b>	<b>586.7</b>	<b>775.9</b>
User charge revenue (Road Infrastructure)	(1,090.9)	(1,090.9)
Operating cost (Road Infrastructure) <b>7</b>	439.9	439.9
Investment cost (Road Infrastructure)	634.8	634.8
Bus revenue (Bus) <b>8</b>	(157.7)	(157.7)
Operating Cost (Bus)	241.4	241.4
<b>Present Value of Costs (PVC)</b> <b>9</b>	<b>67.5</b>	<b>67.5</b>
<b>Net Present Value (NPV)</b> <b>10</b>	<b>519.2</b>	<b>708.4</b>



## 5 Value For Money Assessment – What are the conclusions from the VFM Assessment?

There are a number of additional benefits not included in the NPV, including around facilitating local regeneration and productivity increases. Another source of additional benefit are fuel cost savings to road users, owing to higher speeds which were explained to have not been included.

### Q2- What are the conclusions from the Vfm Assessment (cont'd)?

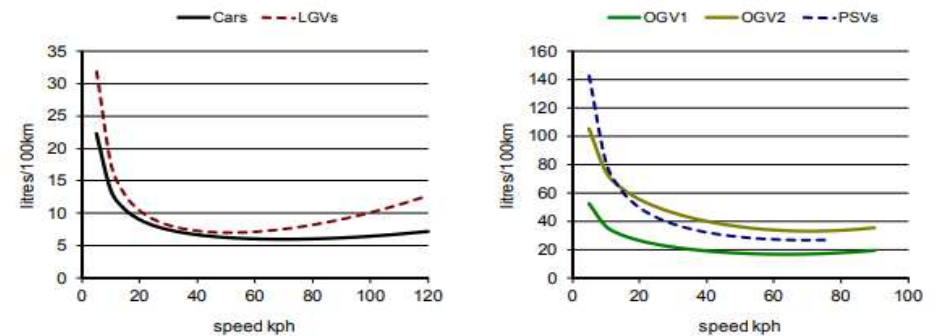
#### Wider Economic Impacts

- Wider Economic Impacts (e.g. Agglomeration, Increase in Output, Tax revenues from additional labour) were last calculated in 2016 under the old methodology, equating to £92m of benefit in PV terms. These have not been included in the NPV presented – highlighting a degree of conservatism
- Note the Wider Impacts outlined above mainly correspond to increased productivity c. £40m from increased accessibility to labour, products and knowledge) and c. £51m from increased consumer welfare (i.e. additional local output) resulting from more profitable products (i.e. less delivery cost) in imperfectly competitive markets
- The scheme also encourages regeneration of East London (the benefits of which have not been quantified)

#### Miscellaneous benefits which are excluded from the Vfm

- The Business Case includes a reduction in indirect taxation revenue of £118m, mainly in respect of reduced fuel duty from increased fuel efficiency arising from higher speeds.
  - TfL has clarified in responses to EY that the corresponding reduction in fuel costs to users has not been included.
  - This is an area of conservatism, as we would expect the change in vehicle operating costs to reflect a benefit in excess of £118m (i.e. fuel duty + underlying fuel cost) per TAG Unit A1.3 (March 2017)
- The ancillary benefit to private bus operators, is not attributable to the public sector accounts and cannot be claimed, but has a benefit of c. £24m
- The benefit to existing coach and bus (single-route) users was deemed small and not quantified
- The GHG reduction benefit of £12m was calculated, but omitted in error
- Journey quality benefits flowing from a reduction in congestion are qualitatively described but not quantified

Figure 5-2 – TAG Unit A1.3 Fuel consumption at different speeds (2010 fleet)





## 5 Value For Money Assessment – Key Assumptions – Overview and Traffic Assumptions

Per our understanding, the Base Case (Assessed Case) for the traffic forecasting, last performed in 2014-2016, assumes significant population growth 40-60% between 2011 and 2041 in the host boroughs, with a backdrop of reduced car usage. Even the Low Case appears far from the 2018 MTS's policy ambition for a 20% car modal share by 2041.

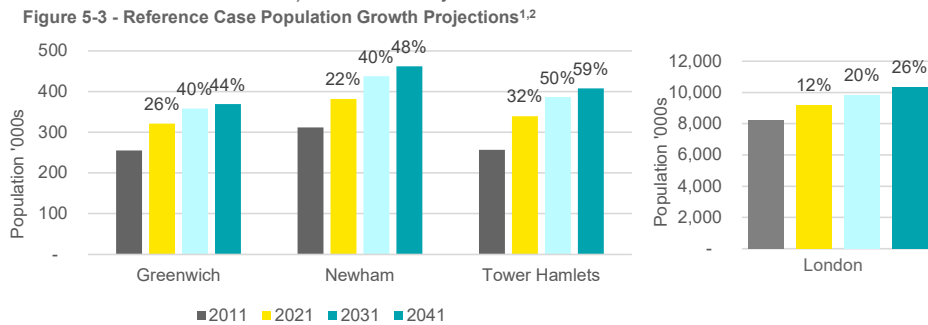
### Q3A - What are the key inputs / assumptions feeding into the VfM Assessment?

In our view the project has received the most challenge from a benefit quantification standpoint. We will therefore choose to focus our attention on the following areas:

- Traffic forecasting – this is one of the areas which has received the most challenge from the SSTC, particularly around modal share sensitivities
- User charging
- Value of time
- Benefit to bus users

### Q3B – What are the traffic assumptions?

- The last traffic modelling dates from April 2016, and was submitted alongside the DCO application (DCO granted in 2018)
- The traffic modelling begins with a forecast for population and employment growth (see chart)
  - While the models anticipate London population growth from 2011-2041 of 20%-30%, growth in the three Silvertown Tunnel host boroughs (Greenwich, Newham and Tower Hamlets) is cumulatively forecasted between 40-60%



- Modal share and car ownership assumptions are then applied, over which we have limited visibility. TfL has clarified that the Low Case uses projections for London car ownership, which are lower than the High Case national car ownership projections.

- The October 2014 version of the Traffic Forecasting Report shows a modal share for private cars which is slightly decreasing with a decrease of 2 percentage points (between 2012 and 2021)
- Over 2021-2041, the Assessed Case (Base Case) shows an increase in passenger car unit / hr in demand terms, from 6k, 7k and 9k (in the IP, AM-peak and PM-peak respectively) to 7k, 8k and 11k
- The 2014 Traffic Forecasting Report explains
  - The forecast increase at Blackwall and Silvertown Tunnels combined was around 1,200 vehicles in the morning peak hour compared to the reference case. Most of this increase comes from the release of previously queued traffic at Blackwall and re-routing of traffic that previously used other crossings
  - Daily (0600-2200) weekday traffic is expected to increase by around 4% northbound and 3% southbound
  - Modelling showed that across the host boroughs delays would reduce by around 8% in the morning peak and 7% in the evening peak.

### In other words, forecasted demand reflects a quickly growing population against a backdrop of reduced car usage

- The 2016 Traffic Forecasting Report also looks to a low growth scenario with low car ownership
  - Under this Low Case, demand for the Blackwall Tunnel over 2021-2041 is only 3-5% lower than the Assessed Case. Actual flows are 0-5% lower than the Assessed Case.
  - In other words, **the Low Case (S214, S234 and S215) is not materially different to the Assessed Case, and not reflective as a sensitivity of the 2018 MTS's goal to reduce the modal share of cars** (inner/inner London from 20% to 10% and inner/outer London from 30% to 10% by 2041)

1. Note % increase are relative to 2011 IN Figure 5-3

2. Source: 7.9 Traffic Forecasting Report – Sensitivity Testing (April 2016)





### 5 Value For Money Assessment – Key Assumptions – User Charging Input Assumptions

User charging serves two purposes, to manage demand (thus limiting congestion and environmental harms) and to finance the scheme. It should be noted that enforcement income accounts for 25% of revenues in the opening year and appears to have been modelled conservatively. TfL has discretion to modify the charge to ensure objectives around congestion, resilience and environmental targets are met.

#### Q3C- What are the user charging inputs?

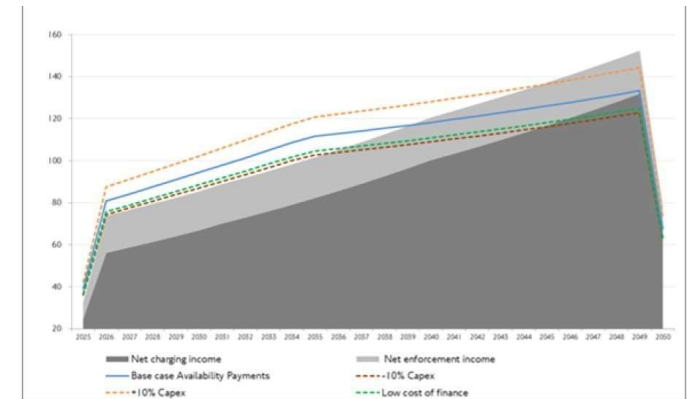
- Both the Silvertown and Blackwall Tunnels will be tolled to avoid increased traffic flows (and associated environmental impact) and/or traffic re-routing to the uncharged tunnel
- A secondary, but important, benefit of user charging is that users of the new infrastructure pay. Note that **user charging underpins the financeability of the scheme.**
- Exemptions exist for NHS and emergency services vehicles, while there is a 100% discount for taxis & private hire vehicles, low emission vehicles and busses & coaches. Note coaches and minibuses are included as the scheme also tries to encourage public transport commuting. 8% of all car trips were modelled as exempt.
- The application concludes that no local resident discount is appropriate – as giving free access to large neighbouring populations would undermine the demand management, coupled with the fact that only a narrow proportion of residents utilise the tunnel crossing on their commute (i.e. public transit is the preferred mode). A low-income discount for residents of host boroughs will however be implemented.
- It should be noted that enforcement income, from penalty charge notices (for delayed payment), accounts for c. 25% of revenue in the opening year (declining gradually – see light grey area in chart). It assumes 1.5% of trips pay an average Penalty Charge Notice (PCN) of £50. This is based on 50% of the Congestion Charge (CC) Zone penalty rate and reflects two conservative forecasting assumptions: (i) PCN charge is not increased by inflation in the Availability Period (i.e. the first 25 years of operation) and (ii) a lower PCN charge than for the CC zone and parking fines.
  - We note for completeness that Dartford Crossing issues PCNs to between 4-5% of users, at c. £25/PCN, and generates c.38% (2018/19 financial year) of its income from enforcement. PCN charges are currently set at £35/£70 (early payment/normal payment). **There therefore appears to be a slight element of conservatism in the modelling of enforcement income.**
- It should also be noted that the charging statement pricing is broadly consistent with the charges assumed in the 2014-2016 traffic modelling and build up of costs
- **It should be stressed that the DCO allows TfL discretion in setting the user charges in life to ensure that Project Objectives around congestion, resilience and the environment are met.**

Table 5-4- Charging Statement used in the Assessed Case<sup>1</sup>

Charge per trip in 2015 prices (during charging hours: 6 am to 10 pm – no charge from 10pm to 6am)			
User type	Account holder		Non account holder
Charge rates	Off peak charge	Peak charge	Headline charge
Time	Weekdays outside of peak period and all times on weekend	Weekday peak periods between 6-10am going Northbound and 4-7 pm going Southbound	At all times
Motorcycle , moped, motor tricycle	£1.00	£2.00	£3.00
Car and small van	£1.00	£3.00	£4.00
Large van	£1.65	£5.00	£6.00
HGVs	£4.00	£7.50	£8.50
Bus ,Coach and minibus	Zero charge (100% discount)		

Table 4-1: Charges for the assessed case

Figure 5-5 - Revenue and Availability Payment Projection (£m)<sup>2</sup>



1. Source- Full Business Case p.46  
2: Source - Business Case p.114



### 5 Value For Money Assessment – Key Assumptions – Value of Time

The national value of time is used, which we understand is per TAG guidance. The actual benefit, owing to higher earnings in London, is however greater as seen in the following slide when using the London value of time.

#### Q3D- What are the value of time assumptions?

##### Key inputs (cont'd) – Value of Time

- The Assessed Case (i.e. Base Case) assumes the national value of time (VoT) as presented to the right
  - Different values of time are applied to different vehicle types, income groups and time periods
- Sensitivities have been applied with the London Value of Time (London VoT) - reflecting a 34% uplift on the users' value of time** (corresponding roughly to a c.1.4x multiple on the median annual earnings in London versus the UK as a whole)
- As noted later, **this an area of in-built conservatism, but is by design** (i.e. Web TAG guidance specifies the use of the national value of time so as not to disadvantage development in low income areas which are likely to be less well connected)

Table 5-6 - Values of Time by group

	PPM 2021 - National VoT (2015 prices) <sup>1</sup>			PPM 2021 - London VoT (2015 prices) <sup>1</sup>		
	AM Peak	Inter Peak	PM Peak	AM Peak	Inter Peak	PM Peak
Car (low Income)	13.51	16.11	15.49	17.5	20.8	20.0
Car (medium)	18.12	19.92	19.92	23.4	25.8	25.8
Car (high income)	23.49	24.02	24.91	30.4	31.1	32.2
Car in work time	56.48	57.59	58.66	78.6	80.1	81.6
Taxi	56.48	57.59	58.66	78.6	80.1	81.6
LGV	25.40	25.40	25.40	35.3	35.3	35.3
HGVs	51.38	51.38	51.38	71.5	71.5	71.5

Adjusted for inflation

Source: 7.9 Traffic Forecasting Report – Sensitivity Testing (April 2016)



### 5 Value For Money Assessment – Key Assumptions – Benefits to Bus Users

Bus users are the primary beneficiaries of the scheme saving time worth c. £0.6 in PV terms. This time saving benefit is likely understated owing to conservative modelling assumptions. Note the scheme benefits not just cross-river connectivity but also same side of the river journeys.

#### Q3E- How are benefits to users quantified?

##### Changes in route network

Per TfL, Silvertown enables a step change in bus connectivity that is not possible with Blackwall Tunnel alone. The bus service upgrade package includes

- Two new routes (Eltham-Beckton and Grove Park- Canary Wharf)
- Increased frequency to the 108 from 6 buses per hour (bph) to 7.5
- Extensions of the 129 (including a doubling of frequency), 104, 309 to cover the other side of the river
- The Silvertown Tunnel as we understand it, includes a dedicated bus lane

##### Key elements of modelling methodology

- Looks at time saving benefits (distinguishing between in work-time and out of work time)
- Time is saved for both existing bus users (through increased frequency and capacity); and,
- Attracting new demand from other modes (note rule of half applies here)
- Only the benefit/disbenefit to the neighbouring 12 councils are quantified
- Travel times used are existing travel times for existing bus segments (e.g. 108) and SATURN software journey times for other segments – therefore Jacobs concludes the journey times are likely overstated

##### Summary of outputs

- The scheme gives bus passengers a time saving benefit with a PV of c. £0.6Bn
- The savings due to reductions in bus journey times are likely understated, reflecting once again an element of conservatism
- Interestingly, connectivity on the same side of the river also benefits sharply from increased frequency and capacity of bus services, with same side of the river bus users (taking c.60% of the PV benefit)
- The Assessed Case forecasts show that by 2021 c. 25-30% of person trips through the tunnels will be by bus or coach as opposed to c. 10% in 2012 (the Base Year).

Figure 5-7 – Map of bus route improvements<sup>1</sup>



Table 5-8 -Assessed Case – 2021 Bus User Time Benefit (minutes pre-annualization)<sup>2</sup>

	Cross-river		Same-side of river		Total	
	IWT	OWT	IWT	OWT	IWT	OWT
AM	481	18,323	1,892	30,721	2,373	49,044
IP	1,571	51,640	4,268	80,890	5,839	132,530
PM	1,128	29,009	1,899	34,033	3,027	63,042
<b>Total</b>	<b>3,180</b>	<b>98,972</b>	<b>8,059</b>	<b>145,644</b>	<b>11,239</b>	<b>244,616</b>

1 & 2 - Source: 7.8.1 Economic Assessment Report



## 5 Value For Money Assessment – Sensitivities

The London value of time sensitivity shows the schemes offers c. £300m of NPV upside owing to higher wages in London (this is an area of inbuilt conservatism). The Low Growth Case shows that the NPV is sensitive to traffic reductions, however the sensitivity is not representative of a world where the 2018 MTS's policy ambitions regarding modal shift are realised.

### Q4A - What sensitivities have been performed?

1. The Assessed Case – Base Case on which the Economic Case has been constructed
2. Use of London Value of Time (“London VoT”) – reflecting a 34% uplift on the users’ value of time (corresponding roughly to a c.1.4x multiple on the median annual earnings in London versus the UK as a whole)
3. Increasing and decreasing the operating and capital costs by +/- 10%
4. High and low growth scenarios were performed (but the NPV result is not presented in the FBC, so we have included the change in NPV per the OBC)
5. Sensitivities were also applied to user charging which has not been shown

### Q4B - What are the results of those sensitivities?

- A. Using the London VoT, a reasonable proposition albeit East London’s borough’s are amongst the most disadvantaged, **reveals c. £300m of NPV upside. This is a major source of conservatism.**
- B. A +10% higher cost reduces the NPV by c. £130m . The project could therefore tolerate c. 40% higher costs and still break-even from an Economic NPV perspective. Note however, that a 40% higher cost scenario could have adverse budgetary implications for TfL.
- C. The Low Growth Case (with Assessed Case charges) shows **demand that is roughly 5% lower than the Assessed Case.** This was at the OBC stage (2015) thought to reduce the project NPV by c. £300m.

### Q4C - And, are the sensitivities adequate specifically in regard to traffic forecast?

- **We note that broad scenarios/sensitivities analysis around modal share shifts in line with the 2018 MTS objectives have not been carried out and we have not received documentation from TfL justifying why this analysis was not possible or considered unnecessary.**
- We recognise that the modal shift goal is aspirational, that the 2018 MTS was released during the DCO process after key workstreams had been completed, that the 2018 MTS incorporates Silvertown as committed infrastructure and that there was much uncertainty around enabling policies such as Wider London Road Charging.

Table 5-9 –NPV Sensitivity Analysis Summary (2010 Prices)

£m	1. Assessed Case	2. London VoT	Low Cost (-10%)	High Cost (+10%)	Low Growth + Low Car + w/ Assessed Case Charges	High Growth + High Car w Higher Charges
With no reliability benefit						
PVB	587	917	587	587		
PVC	(67)	(67)	64	(199)		
<b>NPV</b>	<b>519</b>	<b>849</b>	<b>651</b>	<b>388</b>	<b>Δ (278)</b>	<b>Δ 155</b>
With reliability benefit						
PVB	776	1,106	776	776		
PVC	(67)	(67)	64	(199)		
<b>NPV</b>	<b>708</b>	<b>1,039</b>	<b>840</b>	<b>577</b>	<b>Δ (304)</b>	<b>Δ 170</b>

### We would stress that the proposed analysis is likely to have shown that the Silvertown Tunnel was still required as the scheme’s key challenges remained:

- Relieves congestion while work is done to attain the modal shift target
- Evidence suggests that users of Blackwall are hard to shift to public transport due to occupations, dispersed trip origins/destinations, etc.
- Provides optionality if the aspirational goal is not met
- Provides the East London road network with resilience
- Accommodates future growth beyond 2041 (it is very possible that even with an aggressive modal shift by 2041 Blackwall would be at overcapacity) as the population of the three host boroughs is forecasted to rise by c. 50% (over 2011-2040)
- Creates value for users of new and existing bus routes, which in turn supports the 2018 MTS aims. The Scheme provides TfL the possibility of scaling public transport bus alternatives at scale (as double-deckers can be run with a dedicated bus lane), and if the modal shift is successful then more users would be beneficiaries of the project (as bus rather than car users)
- VfM currently incorporated multiple areas of conservatism

# 6

## Appendix A: Business Case



## 6 Appendix A - Business Case Process – Project Lifecycle and Approvals

The areas considered by the Planning Inspectorate's Examining Authority were significantly challenged, lending credibility to the scheme's Options Appraisal and VfM.

### Planning Inspectorate Examining Authority

#### Application

- The Silvertown Development Consent Order (DCO) was made by Transport for London (TfL) to the Planning Inspectorate on 3 May 2016. It was accepted for examination on 31 May 2016.

#### Documents

- The relevant documents included in TfL's application include:
  - Draft DCO
  - Consultation Reports
  - Environmental Statement
  - Case for the Scheme
  - Charging Statement
  - Outline Business Case
  - Traffic Impacts Mitigation Strategy
  - Economic Assessment Report
  - Transport Assessment; and
  - Traffic Forecasting report

#### Initial Assessment of Principal Issues

- All submissions were reviewed by the Examining Authority (ExA) who carried out an initial assessment of Principal issues. The ExA sought to test the following:
  - Air quality, noise and other environmental impacts (4.1.1)**
    - whether the scheme would materially worsen air quality in breach of statutory requirements
    - whether there would be adverse noise impacts; and
    - whether there would be any other significant effects on human health
  - Biodiversity, ecology an natural environment – (not directly relevant to scope of work)**
  - Policy and objectives (4.1.1)**
    - whether the scheme would meet the objectives set in terms of relieving congestion, improving resilience of the road and effectiveness of cross-river (cont'd)

- Public transport and benefitting the local economy
- Consistency of the scheme with the London Plan and local plan documents, the National Planning Policy Framework (NPPF), the National Policy Statement for National Networks (NPSNN) and other relevant policy documents

- Redevelopment, urban renewal and other socio-economic issues (not directly relevant to scope of work)**
- Traffic and Transport (4.1.1)**
  - the soundness of baseline data and modelling, and the appropriateness of the forecasting techniques to factor in the proposed user charging
  - the effects on public transport; and
  - the adequacy of alternatives assessed.
- User Charging (4.1.1)**
  - if the proposed charging in both tunnels would result in the vehicles flow sought
  - concessionary charges for local residents; and
  - the economic impact on different classes of users.

#### DCO Examination

- The DCO Examination began on 11 October 2016. Several Issue Specific Hearings (ISHs) and Open Floor Hearings (OFHs) were held between October 2016 and March 2017, the most relevant being:
  - ISH on DCO held on 12 October 2016
  - ISH on Traffic/Transport Modelling held on 7 December 2016
  - ISH on Traffic/Transport Modelling, Forecasting and User Charging and Economic Issues held on 17 January 2017
  - Issue Specific Hearing on Air Quality, Noise and Other Environmental Issues held on 18 January 2017
  - ISH on any other outstanding issues including Environmental Matters held on 28 March 2017
- Key findings from the DCO examination as detailed in the ExA report are explored in the subsequent page.



**6 Appendix A - Business Case Process – Project Lifecycle and Approvals**

A further audit of the traffic modelling suite by TfL concluded that the models were suitable for assessing transport and traffic impacts. The Examining Authority's Panel examined the traffic forecasting and modelling and concluded on its appropriateness.

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Hearings	Areas considered in Examination	TfL Response	Examining Authority's conclusion
<p><b>Traffic/ Transport Modelling and Forecasting Hearings</b></p>	<p>TfL was questioned by over 150 IPs during the examination on the Traffic/Transport Modelling. Areas considered include (5.2.39):</p> <ul style="list-style-type: none"> <li>the assumed Values of Time (VoT) used in modelling</li> <li>failure of the traffic forecast to address both latent and induced demand and population growth</li> <li>potential increase in the number of Heavy Good Vehicles (HGVs) in the area due to removal of height restrictions in the Silvertown Tunnel</li> <li>inability of user charging to control traffic to the required level</li> <li>The host boroughs 2015 request for an audit of the modelling suite</li> <li>the level of uncertainty within traffic modelling; and</li> <li>assumptions made on journey lengths, impacts on other crossings and worst case scenarios</li> </ul>	<p>In view of the IP's questions, TfL responded as follows:</p> <ul style="list-style-type: none"> <li>the VoT used had to reflect the local characteristics of existing and potential users of the tunnel. Given the disparity in income levels, it was their view that the WebTAG National VoT was more representative than the London VoT. (5.2.61)</li> <li>the trip frequency demand with the addition of the Silvertown tunnel scheme was estimated to be minor (5.2.54)</li> <li>provided a report considering the impacts of an additional 400 HGV's would not materially change long and short term operational noise effects (5.4.29)</li> <li>the ability to adjust the user charge would provide a 'very powerful means of altering the Scheme's effects, should circumstances differ from those forecast' (5.2.60)</li> <li>The modelling assumptions reflect the effects that would be most likely to occur when the scheme is implemented. The modelling approach is also in accordance with industry wide guidance and good practice. (5.2.101)</li> <li>TfL responded to all questions raised and also re-audited its traffic model. In 2015, TfL supported the host boroughs requests in undertaking a <b>further audit of the modelling suite</b>. This audit concluded that the models were suitable for the purpose of assessing the traffic and transport impacts of the scheme (5.2.27)</li> </ul>	<ul style="list-style-type: none"> <li>The Examining Authority found that the approach used by TfL in the modelling work were in line with the appropriate DfT guidance for the Proposed Development (5.2.90)</li> <li>It however acknowledged IP's concerns regarding the potential for an undefined level of errors, which could potentially lead to actual traffic levels exceeding those projected (5.2.94)</li> <li>The Panel accepted that the availability of a user charging would enable any uncertainty and unexpected outcomes that might present themselves to be monitored and mitigated against. <i>"The availability of such a mechanism would allow the Applicant to adjust user charges to maintain equilibrium between demand and supply in relation to traffic flow through the Tunnel."</i> (5.2.95)</li> </ul>



## 6 Appendix A - Business Case Process – Project Lifecycle and Approvals

Hearings	Areas considered in Examination	TfL Response	Examining Authority's conclusion
<p><b>Environmental and Air Quality Hearings</b></p>	<p>The Examining Authority and a number of IPs raised concerns about the impact of the scheme on ambient air quality, noise and health impacts Areas considered include:</p> <p><b>Air Quality (5.3.105)</b></p> <ul style="list-style-type: none"> <li>the potential for uncertainties in modelling both traffic forecasts and in the air quality assessments</li> <li>the significance of impacts of the Proposed Development on air quality in respect of specific receptors and the use by TfL of Design Manual for Roads and Bridges (DMRB) and Interim Advice Note (IAN) 174/13 for the assessment of significance</li> <li>whether the Proposed Development would result in breaches of statutory requirements in relation to the EU directives</li> </ul> <p><b>Noise (5.4.29)</b></p> <ul style="list-style-type: none"> <li>Consideration given to noise impacts of additional Over Height Vehicles (OHV)</li> </ul> <p><b>Health Impacts (5.6.18)</b></p> <ul style="list-style-type: none"> <li>impacts of air pollutants from vehicles in terms of causing asthma and other respiratory diseases.</li> </ul>	<p>In view of the IP's questions, TfL responded as follows:</p> <p><b>Air Quality</b></p> <ul style="list-style-type: none"> <li>reiterated that uncertainty is inherent in any forecasting but substantial evidence was submitted to provide assurance that it can be managed by the design of the scheme and mitigation strategy (5.3.114)</li> <li>argued that the proposed development would not affect the three host boroughs Air Quality Management Areas (AQMA) (5.3.127)</li> <li>TfL was also very confident that the impact of the scheme on air quality would not be significant and would not delay the date that the Greater London Urban Agglomeration will become compliant with the EU Air Quality Directive.(5.3.145)</li> </ul> <p><b>Noise</b></p> <ul style="list-style-type: none"> <li>provided a report considering the impacts of an additional 400 OHV's would not materially change long and short term operational noise effects (5.4.29)</li> <li>proposal for noise barriers submitted for specific communities (5.4.28)</li> </ul> <p><b>Health Impacts</b></p> <ul style="list-style-type: none"> <li>Public Health England noted that following a population exposure to NO<sub>2</sub> or particulate matter as a result of the scheme. Also reiterated that TfL would re-run the air quality assessment prior to the scheme opening using latest evidence at the time. (5.6.20)</li> </ul>	<p><b>Air Quality</b></p> <p>The Examining Authority's conclusion was that there would be no significant impact on Air Quality overall, on the basis that the input data used for the air quality assessment is based on the assessed case traffic levels reflecting the scheme being operational. (5.3.159)</p> <p><b>Noise</b></p> <p>The Examining Authority The Panel concluded that TfL's proposed mitigation measures including low noise surfacing, barriers and mitigation during construction would be sufficient to ensure that a significant noise (5.4.44)</p> <p><b>Health Impacts</b></p> <p>The Examining Authority was satisfied that the scheme would not give rise to any harmful impacts upon human health (5.6.29)</p>





**6 Appendix A - Business Case Process – Project Lifecycle and Approvals**

Hearings	Areas considered in Examination	TfL Response	Examining Authority’s conclusion
<p><b>Socio-Economic Impacts</b></p>	<p>The Examining Authority and a number of IPs raised concerns about the socio-economic impacts of the scheme (5.13.61). Areas considered include:</p> <ul style="list-style-type: none"> <li>• Concerns were raised by host boroughs and other boroughs over the effect of the scheme on certain groups in the population, notably lower income groups.</li> <li>• Absence of assurance that the bus routes, on which socio-economic benefits are predicated, are an integral part of the proposal</li> <li>• Disproportionate impact on RBG residents and businesses of paying a peak charge in both peak periods in the absence of a discount scheme within charging proposals, despite high levels of local deprivation.</li> <li>• IPs sought a committed and funded public transport element to a quantum that, at least, matches the public transport modal increase forecast in the Transport Assessment</li> </ul>	<p>In view of the IP’s questions, TfL responded as follows:</p> <ul style="list-style-type: none"> <li>- the impact of the scheme on low income highway users would depend on the time of day they travel, the availability of alternative river crossing options and the frequency with which they travel (5.13.77)</li> <li>- projections indicate no difference in the total change in cross-river trips by low income users compared to medium and higher income users as a result of the DCO scheme. (5.13.77)</li> <li>- Low income residents also receive the majority of the user benefits of the DCO scheme. Although there is a forecast reduction of 550 low income cross-river highway trips, this is offset by an increase in 2,020 cross river public transport trips – a significant proportion of which are low income users.(5.13.78)</li> <li>- a general residents’ discount for the host boroughs would significantly increase demand for use of the tunnel thereby requiring user charges to be increased to manage flows resulting in reduced user benefits.(5.13.87)</li> <li>- A discount would thus be limited to qualifying residents of the host borough. (5.13.88)</li> </ul>	<p>The Examining Authority was satisfied that the overall robustness of the economic case indicates that there would be economic benefits to society as a whole from the implementation of the scheme. (5.13.97)</p> <p>The Examining Authority welcomed an updated charging Policies document to be included within the DCO which granted a 50% discount on charges for qualifying residents of the host borough (5.13.89)</p> <p>The Examining Authority also highlighted the importance of securing bus services through the tunnels that would maximise the economic benefit to low income residents. (5.13.98)</p>



**6 Appendix A - Business Case Process – Project Lifecycle and Approvals**

With regard to the options appraisal, the ExA agrees with the need for the scheme and satisfactory level of optioneering.

Hearings	Areas considered in Examination	TfL Response	Examining Authority's conclusion
<p><b>Other Outstanding Issues</b></p>	<ul style="list-style-type: none"> <li>• <b>Appraisal Process</b> – The Examining Authority sought to understand whether TfL had properly undertaken the economic appraisal of alternatives as specified in the Treasury 'Five case model'. (4.6.35)</li> </ul>	<ul style="list-style-type: none"> <li>- TfL provided a response document which illustrated that they had only undertaken a full economic appraisal of the final two tunnel options because none of the other options met the defined key scheme objectives. (4.6.35)</li> <li>- The additional documents submitted also indicated that limited economic appraisals were undertaken in the elimination process of some other options, reiterating that the other options did not meet the defined key scheme objectives. (4.6.35)</li> </ul>	<p>The Examining Authority was satisfied that there had been sufficient assessment of alternatives to satisfy requirements within the National Policy Statement for National Networks (NPSNN) (4.3.66)</p>



## 6 Appendix A - Business Case Process – Project Lifecycle and Approvals

The SoS considered that there was a clear justification for authorising the proposed development and therefore decided to accept the Panel's recommendation to grant the DCO.

### Secretary of State for Transport Approval

#### Documents

- The Secretary of State for Transport gave consideration to:
  - the report dated 11 July 2017 of the Examining Authority, a Panel of three examining inspectors consisting of Peter Robottom, Lillian Harrison, and Austin Smyth (“the Panel”) who conducted an examination into the application made by TfL for the Silvertown DCO;
  - late representations received by the Secretary of State following the close of the examination; and
  - further consultation undertaken by the Secretary of State following the close of the examination in respect of the application.

#### SoS’s Consideration of the Panel’s Report

- Legal and Policy Context:** in line with assigning the Silvertown Tunnel development as “nationally significant”, the SoS considered the application in accordance with the designated National Policy Statement for National Networks (“NSPNN”).
- Legal Agreements:** separate development consent undertakings were to be put in place between TfL and the Host Boroughs (Royal Borough of Greenwich, London Borough of Tower Hamlets and London Borough of Newham). The SoS noted that agreements had been executed for RBG and LBTH but no agreement had been reached for LBN. LBN argued that an agreement should be secured under section 106 of the Town and Country Planning Act. The SoS agreed with the Panel that an agreement under section 106 was not an absolute necessity.
- User Charging:** The SoS agreed with the Panel that the inclusion of the full charging provisions in the DCO was appropriate and necessary to manage traffic flows and mitigate environmental concerns. It is also lawful and within the powers available to the SoS under the 2008 Act.
- Need for the Proposed Development:** The SoS noted that whilst there were concerns from IP’s, there was no challenge to the fact that Blackwall Tunnel had existing problems. The SoS agreed with the Panel that there are no reasons to disagree with the objectives set by the Applicant for identifying a solution.

### SOS’s Consideration of Potential Impacts on the Development

#### • Traffic and Transport

- The SoS noted that the Panel had undertaken a detailed critique of TfL’s traffic forecasting work in order to assess the reliability of the results
- The SoS was of the view that once operational, with the user charge in place, the scheme would help reduce congestion and provide resilience for vehicles currently using the Blackwall Tunnel

#### • Air Quality

- ClientEarth took legal action against the government in 2016 and was successful leading to the publishing of a new Air Quality Plan (AQP). This updated AQP was published after the close of the examination, it was not considered during the examination.
- The Panel highlighted that the updated AQP would need to be taken into account in the SoS’s decision
- The SoS was satisfied with the approach taken and the assessment provided by TfL with regard to air quality and how the scheme would impact the updated AQP and the Zone Plan for the Greater London Urban area.
- The SoS placed weight on the fact that while some receptors will experience a worsening in air quality but the scheme overall will have a beneficial impact on air quality.

#### • Noise Vibration

- The SoS noted that TfL’s Environmental Statement identified that there would not be a significant effect upon noise levels as a result of the scheme
- The SoS noted that TfL committed to providing acoustic barriers along Seibert Road to attenuate existing noise from the A102 due to additional Over height vehicles. This is to be secured as part of a legal agreement with the RBG.
- The SoS agreed with the Panel that the range of noise mitigation measures are sufficient to ensure that significant noise impact does not occur at ant identified noise sensitive receptors. Mitigation measures are also in line with planning policy guidance on noise.



## 6 Appendix A - Business Case Process – Project Lifecycle and Approvals

The SoS considered that there was a clear justification for authorising the proposed development and therefore decided to accept the Panel's recommendation to grant the DCO.

### SOS's Consideration of Potential Impacts on the Development

#### - Health Impacts

- The SoS noted that Public Health England (PHE) encouraged TfL to make continued efforts to identify air quality improvement opportunities or mitigate adverse effects.
- The SoS further noted that TfL had addressed PHE's concerns through mitigation measures in the DCO
- The SoS thus agreed with the Panel that the scheme would not give rise to any harmful impacts upon human health

#### - Socio-Economic Impacts

- The SoS noted that the Host and Neighbouring Boroughs considered the implementation of local discount schemes, enhanced bus services and enhanced crossing facilities to mitigate the effect of the road user charge on lower income groups
- The SoS agrees with the Panel that Blackwall and Silvertown tunnels need to be managed in such a way that does not induce demand. However, it was also noted that the latest version of the Charging Policies and Procedures document grants a 50% discount on charges for qualifying residents of the Host Boroughs.
- The SoS agreed with the Panel that the same consideration given to possibly widening the local residents discounts scheme needs to be given to concession for motorcyclists.
- The SoS concurred with the Host Boroughs' aspiration of a higher level of bus service consistent with the assessed case

### SoS Decision

- The SoS considered that there is a clear justification for authorising the proposed development and has therefore decided to accept the Panel's recommendation to grant the DCO.
- The Development Consent Order was granted to TfL in a letter dated 10 May 2018.

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## Audit and Assurance Committee



**Date:** 17 March 2021

**Item:** Risk and Assurance Quarter 3 Report 2020/21

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

#### **1 Summary**

- 1.1 The purpose of this report is to inform the Committee of the work completed by the Risk and Assurance Directorate during Quarter 3 of 2020/21 (Q3), the work in progress and planned to start, and other information about the Directorate's activities.
- 1.2 A paper is included on Part 2 of the agenda, which contains exempt supplemental information and documentation. Subject to the decision of the Committee, this paper is exempt and is therefore not for publication to the public or press by virtue of paragraphs 3, 5 and 7 of Schedule 12A of the Local Government Act 1972 in that it contains information relating to the business and financial affairs of TfL, that is commercially sensitive and likely to prejudice TfL's commercial position; and information relating to ongoing fraud and criminal investigations and the disclosure of this information is likely to prejudice the prevention or detection of crime and the apprehension or prosecution of offenders.

#### **2 Recommendation**

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

#### **3 Background**

- 3.1 This is the quarterly report to the Committee highlighting the activities of the five teams making up the Risk and Assurance Directorate, namely: Enterprise Risk; Internal Audit; Integrated Assurance; Project Assurance; and Counter-Fraud and Corruption.

#### **4 Enterprise Risk Management**

- 4.1 TfL's risk management processes are now well established and each of the newly framed Level 0 Enterprise Risks will have been reviewed by the Executive Committee and the relevant Board Committee or Panel at least once by the end of 2020/21. A list of the Level 0 and Level 1 risks is included in Appendix 1.

- 4.2 Modal mix misaligned to strategic policy objectives (ER9) has been renamed to 'Changes in customer demand'.
- 4.3 Since the last meeting of the Committee the following Enterprise Risks have been fully developed and papers detailing the contents of these risks and their mitigations have been presented to the Executive Committee for review:
- (a) Loss of stakeholder trust (ER6);
  - (b) Changes in customer demand (ER9);
  - (c) Inability to support new ways of working (ER10);
  - (d) Disparity leading to unequal or unfair outcomes (ER11); and
  - (e) Governance and controls suitability (ER13).
- 4.4 Major service disruption (ER3) has materialised and a paper detailing the approach to mitigation of this risk as well as lessons learned was submitted to the Customer Services and Operational Performance Panel on 24 February 2021.
- 4.5 The Enterprise Risk Management Framework has been updated to reflect minor organisational and process changes and is included in Appendix 2.
- 4.6 The schedule for Enterprise Risk reviews by the relevant Board Committee or Panel for 2021/22 has been agreed and is included in Appendix 3.
- 4.7 The Enterprise Risk team is working with the Elizabeth Line Risk team to develop all Elizabeth Line Level 1 risks. Similarly, they are working with the Security team to develop all security related Level 1 risks across TfL.
- 4.8 The Major Projects Directorate Level 1 risks are in the process of being redefined, and all Professional Services Level 1 risks are being reviewed, rationalised and re-assessed as appropriate.
- 4.9 Following completion of the 2020/21 cycle of reviews, we intend to undertake a further review of the Enterprise Risk process and will seek to identify common themes, interdependencies and areas for improvement which will be reported to the next meeting of the Committee. We also propose to arrange an Enterprise Risk workshop with the Board to review the Enterprise Risk Framework.

## **5 Audit and Assurance**

- 5.1 In TfL, assurance is delivered in accordance with the 'three lines of defence' model:
- (a) First line of defence – control and monitoring arrangements carried out by the functions responsible for managing the risks/ controls;

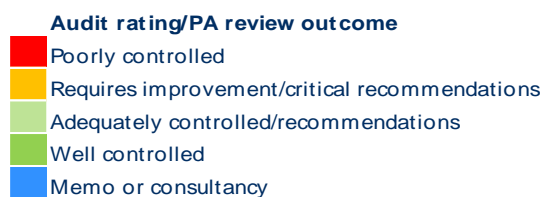


- (b) Second line of defence – typically audit and inspection regimes carried out by teams separate from those responsible for managing the risks/ controls, but reporting through the TfL management hierarchy; and
- (c) Third line of defence – fully independent audit and review activities, typically with a strategic focus, and reporting to Executive Committee, Audit and Assurance Committee and other Board Committees and Panels.

5.2 Within the Risk and Assurance Directorate, the Internal Audit function provides third line assurance, whilst the Integrated Assurance and Project Assurance teams provide second line assurance. Further information on the work of these teams during Q3 is set out below.

5.3 The table below maps the outcomes of audit and project assurance reviews carried out by the teams in Risk and Assurance up to Q3 against the TfL Enterprise Risks. If a risk is not listed, this means that no work has been completed against it in the year to date.

	←2nd line assurance		Total	←3rd line assurance		Total
ERI Major health, safety or environmental	2	1	9	1		1
ER2 Protecting the wellbeing of TfL's workforce				1		1
ER3 Major service disruption						
ER4 Cyber and protective security				1		1
ER6 Loss of stakeholder trust						
ER7 Financial sustainability	2		2	4	3	7
ER8 Delivery of key projects and programmes	4		16			20
ER10 Inability to support new ways of working				2		2
ER11 Disparity leading to unequal or unfair outcomes				1		1
ER12 Asset condition	1		1			2
ER13 Governance and controls suitability				2	1	3
ER14 Opening of the Elizabeth Line				1		1
LTM				4	2	6

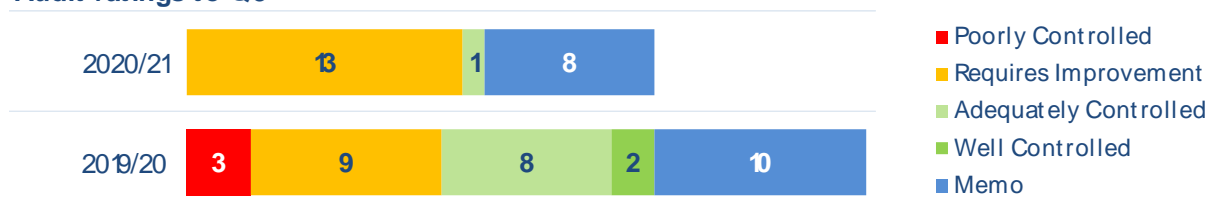


### Internal Audit

5.4 The Internal Audit plan forms part of the integrated assurance plan that the Committee approved initially on 16 March 2020. A revised plan taking account of the impacts of the coronavirus pandemic on the Internal Audit team's work was approved by the Committee on 11 September 2020. Schedule 1: Internal Audit Q3 summary includes highlights from work completed during the quarter, an overview of the delivery of the audit plan, a summary of the reports issued and conclusions and information on overdue audit actions.

5.5 The chart below summarises the reports issued up to the end of Q3 2020/21, together with comparative figures for 2019/20:

#### Audit ratings to Q3



5.6 By the end of Q3, we had delivered 22 audits (Q3 2019/20: 32 audits) in the year to date. In the current circumstances this is a good performance from the team. There were 22 audits in progress at the quarter end, so we expect the rate of delivery to increase during Q4.

5.7 A full list of audit reports issued during the quarter can be found as Appendix 4. Audits in progress at the end of Q3 can be found in Appendix 5, work planned to start in Q4 can be found in Appendix 6, and details of changes to the audit plan can be found in Appendix 7.

#### Mayoral Directives

5.8 Mayoral Directions fall into three broad categories: those addressing technical issues relating to statutory powers; those related to commercial development activities; and those related to projects and programmes.

5.9 There have been two recent directions to TfL, both of which do not affect Internal Audit activity:

- (a) Directing TfL to provide direct financial assistance of up to £500,000 to the traders from Seven Sisters Market. The financial support is intended to see the traders through the transition period since the closure of the TfL owned building that housed the market and the provision of a temporary market at Apex Gardens in 2021. (MD2724 on 30 November 2020); and
- (b) As part of the funding settlement with Government, dated 31 October 2020, the Mayor committed to implementing an overall increase on fares of Retail Price Index (RPI) +1 per cent. On 14 January 2021, the Mayor approved a Fares Revision to deliver this commitment, while ensuring the increase in fares is as affordable as possible for Londoners. The fares increase was implemented from 1 March 2021. (MD2730 on 14 January 2021).

#### Management Actions

5.10 Internal Audit monitors the completion of all management actions and confirms whether management has adequately addressed them. We report by Directorate, on the percentage of actions closed on time over the past six periods. Schedule 1 provides additional information relating to action management trends over the last six periods.

5.11 Schedule 1 shows overdue actions at the end of Period 10. There were no actions more than 60 days overdue at that date, which is the same as the previous quarter. Discussions are being held with the business to ensure that overdue actions are addressed.

### **Changes to audit plan**

5.12 The ability to adapt the plan in order to respond to changing risk and business priorities is a key part of delivering a valuable Internal Audit service to TfL.

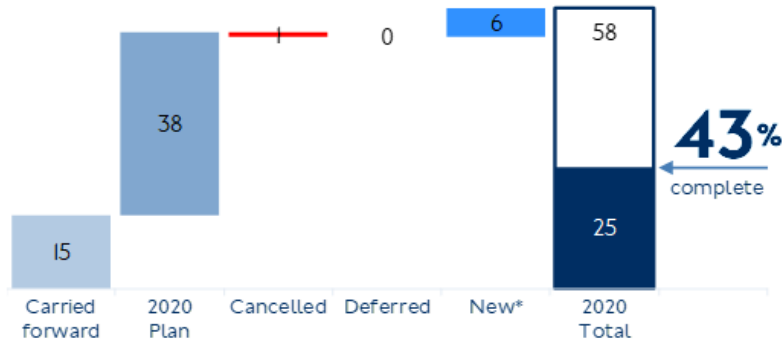
5.13 We added four new audits to the plan in the quarter to better align with business requirements. There were no cancellations or deferrals. The full list of changes can be found in Appendix 7.

### **Crossrail Audit Service Delivery**

5.14 With effect from 1 October 2020, governance of the Crossrail project transferred into TfL. There is a separate paper on this agenda relating to Elizabeth Line Audit and Assurance Activity.

# Schedule I: Internal Audit Q3 summary

## Audit plan 2020/21 (to Period 10 2020/21 end)



## Key highlights

There were no poorly controlled reports issued during Q3 2020/21. We issued ten reports concluded as requires Improvement. Of particular interest are those where we identified high priority issues; End User Computing (EUC) hardware stock management. We identified four high priority issues, including no formal governance framework, out of date policies and procedures, control weaknesses in logical security of EUC assets and assignment of asset tags

### Use of Whole Life Costings In Procurements (T&D)

We identified four high priority issues including no standard Whole Life Costing Model in place and a lack of, formalised project documentation in place

## Reports

**17** Issued in Q3      **25** Issued (to Period 10 end)

### Audit ratings by Directorate – rolling 13 period view

	PC	RI	AC	WC	M/C*
Crossrail		6			2
CCT		9	1		1
Finance		2	3		2
Gen. Counsel					1
HR		4			1
LU		1			
Major Projects					
Surface		1			4
TfL Engineering					
HSE					1
Pan TfL					
<b>TOTAL</b>	0.0%	59.0%	10.3%	0.0%	30.8%

**KEY**  
 PC: poorly controlled  
 RI: requires improvement  
 AC: adequately controlled  
 WC: well controlled  
 M/C: memo/consultancy

## Action management (to Period 10 end)

### Overall TfL performance

Measure	#	%	6-period trend	65 overdue
Closed on time*	91	47%		
Extended*	127	65%		246 open

### By Directorate

Directorate	Overdue	Closed on time*
Crossrail		52%
CCT	2 (0-30 days), 4 (31-59 days)	40%
Finance	1 (0-30 days)	63%
Gen. Counsel		
HR	5 (0-30 days)	23%
LU		11%
Major Projects		100%
Surface	1 (0-30 days), 1 (31-59 days)	24%
TfL Engineering		
HSE	6 (0-30 days)	
Pan TfL		

\*based on actions due in the last six periods

## **Integrated Assurance**

- 5.15 The Integrated Assurance team carries out second line of defence audits, primarily in relation to health and safety and engineering compliance, and compliance with Payment Card Industry Data Security Standard (PCI DSS). Audit reports issued by the team follow a similar system of audit conclusions and priority ratings for issues as the Internal Audit team.
- 5.16 A summary of work carried out by Integrated Assurance can be found in Schedule 2: Integrated Assurance Q3 Summary.

## **Project Assurance**

- 5.17 The Project Assurance team carries out assurance reviews of projects and programmes across TfL's Investment Programme, with individual projects selected for review following a risk-based assessment. Generally, projects with an Estimated Final Cost over £50m are also subject to (third line) input from the Independent Investment Programme Advisory Group (IIPAG). However, IIPAG's agreed work-bank is determined by the project's risk profile, which includes some projects less than £50m, and not all sub-programmes are reviewed. The IIPAG Quarterly Report is included separately on the Committee agenda. Reports from Project Assurance Reviews are considered alongside the Authority request at the sub-programme board or operating business board depending on the size of the project.
- 5.18 Project Assurance also conducts reviews of the sub-programmes to inform their annual request for Authority at the Programmes and Investment Committee.
- 5.19 Project Assurance reviews do not carry an overall conclusion in the same way as audit reports, however, issues raised may be designated as critical issues. The Project Assurance team follows up on all recommendations to ensure they have been addressed.
- 5.20 A summary of the work completed by Project Assurance during Q3 can be found in Schedule 3: Project Assurance Q3 summary.

# Schedule 2: Integrated Assurance Q3 Summary

## Audit plan 2020/21 to end of PI0



### Work of note

Twenty six audits were delivered in quarter 3 as we look to get the audit programme back on track. Nine audits have been cancelled in quarter 3 as they require operational site visits contrary to current guidance. As an alternative we have provided lessons learnt from audit of other locations so that improvements can still be made.

One audit was given a 'poorly controlled' conclusion: 'track risks from vegetation' which was a follow up from a previously 'poorly controlled' 2019 audit. The previous actions had not been embedded and staffing level issued identified by management had not been addressed. The relevant Director is aware and monitoring action completion.

Four audits were given a 'requires improvement' conclusion. Two related to implementation of the SHE management system by Dial-a-ride and London River Services. The other two concerned the management of LU rail surface cracks and management of substandard highway structures in accordance with Highways

### England guidance.

Of the other audits there were two 'well controlled', five adequately controlled and 11 supplier or integrated system audits that are not given a conclusion as they addressed a variety of risks and therefore cannot be easily given a meaningful overall conclusion.

Two pieces of consultancy work were concluded in quarter 3: one concerned the suitability of and future function of the TfL Engineering Approved Products Register, the other supporting the development of the TfL Security Strategy (continuing in quarter 4).

### Work of note in quarter four includes:

Following the Review of LU, Network Rail and third party operator interfaces, we are working with the RSSB to develop LU assurance regimes with other duty holders using existing RSSB forums.

Audit planning is underway for 2021/21, we are encouraging greater use of risk registers and management system controls.

## Reports last 13 periods

	PC	RI	AC	WC	M/C*
Crossrail					
CCT			3		
Finance			1		1
Gen. Counsel			1		
HR					
LU	1	3	3	3	22
Major Projects					
Surface		5	5		1
TfL Engineering			1		1
HSE					
Pan TfL		1			
<b>TOTAL</b>	<b>1.9%</b>	<b>17.3%</b>	<b>26.9%</b>	<b>5.8%</b>	<b>48.1%</b>

KEY  
 PC: poorly controlled  
 RI: requires improvement  
 AC: adequately controlled  
 WC: well controlled  
 M/C: memo/consultancy

## Action management (to Period 10 end)

### Overall TfL performance

Measure	#	%	6-period trend	20 actions overdue	9 due this period
Closed on time*	35	53%			
Extended*	42	64%			

### By Directorate

Directorate	Overdue	Closed on time*
Crossrail		
CCT		
Finance		0%
Gen. Counsel		75%
HR		
LU		54%
Major Projects		
Surface		4%
TfL Engineering		33%
HSE		
Pan TfL		

\*based on actions due in the last six periods

## Audit Ratings by Strategic Risk Last 13 Periods



Reviews undertaken in the quarter showed that not all projects had identified full funding for the proposed works, so at that point they were not affordable. The reviews also highlighted a need to consistently put in place robust risk management and that challenges exist around ensuring the required commercial capability and resources are available to support programmes.

**Sub-Programme Reviews**

	Recommendations (Critical Issues)	Commentary
DLR Rolling Stock Replacement	8 (0)	Programme well managed and issues being mitigated effectively. Analysis should be undertaken on the impact of the pandemic on the business case for the base DLR rolling stock programme, and the additional Housing Investment Fund (HIF) elements. As soon as there is stability in the programme, HIF and the construction programme must be shown to be aligned.
Surface Technology	4 (0)	Good progress has been made in implementing the recommendations from the last full review, but it was noted that resourcing, particularly for emerging projects, remains a risk.
LU Technology & Networks	6 (0)	First submission of the LU Technology Sub Programme, which includes renewals and enhancements of technology assets and systems. Sub-programme governance and documentation in early stages with significant development required over the next year. Pipeline of future projects requires further refinement and synergies with Surface Technology should be kept under review.
Healthy Streets	6 (0)	The Programme and Project Authority request covered the £95m <u>workbank</u> for H2 (October 2020 to March 2021). Review covered Healthy Streets and the London <u>Streetspace Programme</u> . Recommendations made focussed on value for money, scheme prioritisation and the setting of a detailed roadmap to deliver the Healthy Streets objectives.
Four Lines Modernisation	2 (0)	The 4LM programme is currently facing challenges with signalling upgrade across the programme. The primary focus for this review evaluated the programme’s readiness for the planned commissioning of Signal Migration Area 3 which had been planned for March 2021. A further review, with support of an external expert, assessing root cause of software challenges, risks to achieving current delivery schedule, and likely impacts is due to conclude in March 2021.

	Recommendations (Critical Issues)	Commentary
Major Stations	2 (0)	Limited current sub-programme level documentation or strategies exist for Major Stations. Bank Station: EFC increased (£668m to £701m) due to safe stop and termination of the Mechanical & Electrical sub-contractor. No agreed programme with contractor and commercial matters still to be resolved (post review: likely completion slipped from Sep-22 to Mar-23. Blockade further delayed from 26/10/21 to possibly start Jan-22. Plan to re-baseline in March 2021). Elephant & Castle: Funding gap to be resolved prior to entering into the Developer Agreement and Supplementary Section 106 agreement.
Barking Riverside Extension	5 (2)	The project is well managed. However, the impact of uncharted buried utility services and the COVID-19 pandemic has significantly increased cost and extended the schedule. Difficult commercial circumstances require a revised commercial strategy and increased commercial resource. Risks involving Network Rail should be reviewed and re-evaluated.
LU Signalling & Control	5 (1)	Central Line signalling and control life extension required to complete detailed design and delivery works and to commence feasibility work for incremental upgrade works on Bakerloo and Central lines. Although systems are relatively modern, obsolescence is increasing on Jubilee and Northern lines. Cost estimates were high level, derived from rough order of magnitude from incumbent supplier. Business case still being developed.
Air Quality & Environment	5 (0)	Programme in good shape generally and has met critical milestones over the past 12 months. Recommendations relate to developing a bus electrification strategy and delivery plan, programme prioritisation and use of metrics to ensure value for money.

### Overdue Recommendations

As at the end of Q3 there were 62 open recommendations covering 13 sub-programmes, with 39 of these recommendations overdue against their original completion date, none of the overdue recommendations are critical issues.

### Project Reviews

TfL Project Assurance completed 13 project reviews in Q3, IIPAG participated in five of these reviews. From the reviews undertaken a total of 55 recommendations were made. These consisted of 49 raised by Project Assurance, of which three were critical issues relating to affordability and not clearly demonstrating value for money. IIPAG raised six recommendations of which none were critical issues.



## **Customer Feedback**

- 5.21 At the end of every audit (including internal audits and integrated audits), we send a feedback form to the principal auditee requesting their views on the audit.
- 5.22 We issued 16 customer feedback forms and received five returns during Q3. Although this is a small sample size, the majority of the feedback was positive.

## **6 Counter-Fraud and Corruption**

- 6.1 The Counter-Fraud and Corruption team carries out investigations in all cases of suspected and alleged fraud. They also carry out a proactive programme of fraud awareness, prevention and detection activities designed to minimise TfL's exposure to fraud risk. A summary of the team's activities during Q3, including information on significant closed fraud investigations is set out in Schedule 4: Counter-Fraud and Corruption Q3 Summary.
- 6.2 Details of significant new and ongoing fraud investigations during Q3 can be found in the paper on Part 2 of the agenda.

## Schedule 4: Counter-Fraud and Corruption Q3 Summary

### Fraud investigation

During Q3, two new cases were opened (2019/20 Q3: 11 new cases) and eight cases were closed. Of the two newly opened cases, one allegation related to suspected fraud within procurement & supply chain activities. Two financial investigations were conducted on two subjects and three bank accounts. One Suspicious Activity Report (SAR) check was undertaken during the quarter.

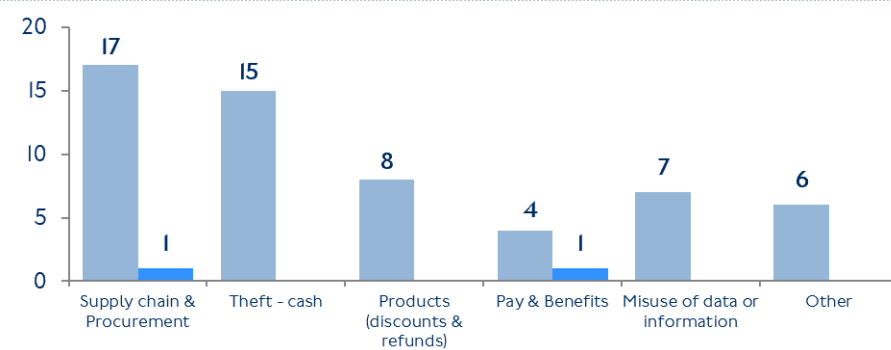
### Fraud prevention

- Following the conviction and sentencing of a high-profile concessionary oyster-card fraudster the Counter-fraud & Corruption Team (CF&C), in collaboration with BTP and the TfL Press Office, prepared a pro-active press release, which was published by a number of major news agencies. The release was designed to report on the conviction and deter others from committing oyster fraud against TfL in the future
- The Counter-fraud & Corruption Team (CF&C) hosted their annual Fraud Awareness Week remotely, which took place in conjunction with National Fraud Awareness Week. To raise awareness of fraud, the CF&C team worked with the Comms Team to produce a 'click-bait' Platform article, that resulted in over 4000 views and healthy debate about online fraud and phishing scams. Other activities included daily Yammer posts from the Head of Counter-fraud & Corruption on fraud related topics, fraud quizzes, daily drop-in sessions with the Fraud & Corruption Prevention Manager and a short video highlighting the work of the CF&C Team and notable recent convictions
- Members of the CF&C Team completed the fraud risk prioritisation exercise, as part of the ongoing security culture improvement programme. Three significant organisational fraud risks have been identified (fraud within the end-to-end procurement process, revenue related fraud and payment diversion fraud) and these formed the basis of presentations to the Executive Security Group (ESG) in January 2021. The ESG were asked to recognise the potential impacts of these risks and support necessary mitigations required to prevent these frauds

### Cases by directorate

Investigations	B/F	New	Closed	C/F
LU	33	1	6	28
Surface Transport	6	0	0	6
CCT	10	1	1	10
Crossrail	2	0	0	2
Major Projects	1	0	0	1
Commercial Dev.	1	0	0	1
General Counsel	1	0	0	1
Finance	3	0	1	2
<b>Total</b>	<b>57</b>	<b>2</b>	<b>8</b>	<b>51</b>

### Cases by type **New and Brought Forward**



### Significant closed cases

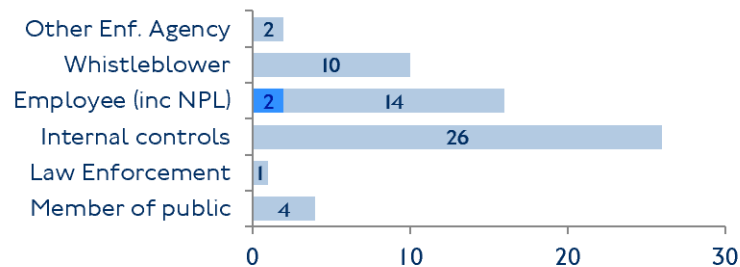
#### Case 20-912 Allegation of Train Operator service delay refund fraud

A Fraud Manager at a Train Operating Company (TOC) reported that an LU Customer Service Manager (CSM) was suspected of applying for over 1200 delay repay refunds to a value of £4,500 over a two-year period. This information was passed to Counter-fraud and Corruption Team for investigation. It was clear from the data that the majority could not be genuine claims. Evidence was gathered and a fact find interview was conducted. He at first denied the allegation but faced with overwhelming evidence he admitted to making fraudulent delay repay claims. Following this he subsequently resigned from the business. His resignation was accepted.

#### Case 19-915 Theft from Passenger Operated Machine (POM) – Oval

A Customer Service Assistant (CSA) stole £14,865 from POMs between 22 July and 4 August 2019. The CSA was arrested by the BTP prior to internal disciplinary action being taken. He was dismissed from TfL at a later date. On 26 August 2020, the former CSA appeared at Inner London Crown Court, whereby he pleaded guilty to offences of theft from employee and fraud by false representation. He was sentenced to 6-months imprisonment (suspended for 18 months) and 80 hours of unpaid community work. He was also ordered to pay TfL compensation to the value of £18k. The compensation figure reflected both the sums stolen from POMs and an unpaid season ticket loan, which he had obtained fraudulently. A Customer Services Manager (CSM) was also dismissed from TfL for failing to follow correct procedures by allowing the CSA access to a secure POM suite, which resulted in additional losses of £2,775 that could have been avoided. This case has now been closed.

### Cases by source **New and Brought Forward**



## **7 Resources**

- 7.1 At the beginning of Q3 the Directorate was carrying six vacancies: four in Internal Audit and one in each of Project Assurance and Integrated Assurance.
- 7.2 During Q3 we filled the Project Assurance vacancy and a Technology and Information Security Auditor has joined Internal Audit.
- 7.3 We have been using our co-source providers to cover for two Technology and Information Security Auditor vacancies in Internal Audit. However, we have recently begun a process to recruit for these two posts.

## **8 Control Environment Trend Indicators**

- 8.1 The Q3 indicators are attached as Appendix 8.

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

Appendix 1 – Level 0 and Level 1 Risks  
Appendix 2 – The Enterprise Risk Management Framework  
Appendix 3 – Enterprise Risk review 2021/2022 Schedule  
Appendix 4 – Internal Audit reports issued in Q3 2020/21  
Appendix 5 – Work in Progress at the end of Q3 2020/21  
Appendix 6 – Work Planned for Q4 2020/21  
Appendix 7 – Changes to the audit plan at the end of Q3 2020/21  
Appendix 8 – Control Environment Trend Indicators

A paper containing exempt supplemental information is included on Part 2 of the agenda.

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

Audit reports, Project Assurance reports.

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Level 0 TfL Enterprise Risks				
#	Risk	Owner	Manager(s)	Mayor's Transport Strategy / Corporate Strategy
ER1	Major Safety, Health or Environmental incident or crisis	Chief Safety, Health & Environment Officer	Head of Insights & Direction; Head of Corporate Environment; Head of Occupational Health & Wellbeing; Head of Transport Strategy & Planning	MTS: Healthy streets and healthy people
ER2	Protecting the wellbeing of our employees	Chief People Officer	Head of Strategic Planning and Governance; Head of Occupational Health & Wellbeing	CS: People and stakeholders
ER3	Major service disruption	Managing Director - LUL	Director of Network Management; Director of Bus Operations; Director of Rail and Sponsored Services; Director of Asset Operations; Chief Operating Officer; Director of Business Partnering & ER	MTS: A good public transport experience
ER4	Major security incident	Managing Director - ST	CTO & Director of CE; Director Compliance Policing & On-Street; Director of Line Operations - LUL	MTS: Healthy streets and healthy people
ER5	Supply chain disruption	Chief Finance Officer	Chief Procurement Officer	MTS: A good public transport experience
ER6	Loss of stakeholder trust	MD Customer, Communications & Technology	Director of News and External Relations; Group Finance Director; Director of Legal	CS: People and stakeholders
ER7	Financial sustainability	Chief Finance Officer	Group Finance Director	CS: Finance
ER8	Delivery of key projects and programmes	Director of Major Projects	Director of Project & Programme Delivery; Director, Network Extensions; LU Director of Renewals & Enhancements	MTS: A good public transport experience
ER9	Changes in customer demand	MD Customer, Communications & Technology	CTO & Director of CE; Director of City Planning; Director of Innovation; Director of Public Transport Service Planning	CS: Finance
ER10	Inability to support new ways of working	MD Customer, Communications & Technology	CTO & Director of CE; Chief People Officer; Estates Management Director	MTS: A good public transport experience

## Level 0 and Level 1 Risks

Level 0 TfL Enterprise Risks				
#	Risk	Owner	Manager(s)	Mayor's Transport Strategy / Corporate Strategy
ER11	Disparity leading to unequal or unfair outcomes	Director of Diversity, Inclusion & Talent	Chief Safety, Health & Environment Officer; CTO & Director of CE; Director of City Planning; MD Customer, Communications & Technology; Diversity & Inclusion Lead	CS: People and stakeholders
ER12	Asset condition unable to support TfL outcomes	Managing Director - LUL	Director of TfL Engineering Delivery	MTS: A good public transport experience
ER13	Governance and controls suitability	General Counsel	Director of Legal	MTS: All MTS themes
ER14	Opening of the Elizabeth Line	Managing Director - LUL	Chief Operating Officer; Operations Business Manager	MTS: A good public transport experience

Level 1 London Underground Strategic Risks				
#	Risk	Owner	Manager(s)	Mayor's Transport Strategy / Corporate Strategy
LU 01	LU Ineffective relationship with colleagues	Director of Line Operations	Head of Business Partnering; Head of Employee Comms & Engagement	CS: People
LU 02	LU Diversity and Inclusion	Director of Customer Services	Head of Business Partnering (HR)	CS: People
LU 03	LU Service issues worsen customer perceptions	LU Managing Director	Director of Line Operations, Director of Asset Operations, Director of Customer Services	MTS: A good public transport experience
LU 04	LU Failure to deliver our budget	Chief Financial Officer - Crossrail	Senior Divisional Financial Controller (LU)	CS: Finance
LU 05	LU Inability to keep assets safe and operable	Director of TfL Engineering Delivery	Director of Asset Operations, Engineering Heads of Profession	MTS: A good public transport experience
LU 06	LU Major Incident	Director of Line Operations	Head of Network Delivery	MTS: Healthy Streets and Healthy People
LU 07	LU Inability to Restart and Recover	Director of Operational Readiness	Head of Network Command	MTS: All themes
LU 08	LU Cyber Security Incident	Director of TfL Engineering	Head of Central Engineering	MTS: A good public transport experience
LU 09	LU Risk of fatality or serious injury	LU Managing Director	Head of SHE BP – LU & PS	MTS: Healthy Streets and Healthy People
LU 10	LU Inability to establish strategy and governance	LU Chief of Staff	Head of LU Business Strategy; Head of LU Secretariat	MTS: All themes
LU 11	LU Major programmes readiness and integration	Director of Operational Readiness	TBC (Currently Director of Operational Readiness)	MTS: A good public transport experience
LU 12	LU Failure to deliver asset investment	Director of Renewals & Enhancements	Head of Enhancements	MTS: A good public transport experience

		(LU)		
LU <sub>13</sub>	LU Inability to operate Control Centres	Director of Line Operations	Head of Line Operations (Circle & Hammersmith and District lines); Head of Profession Service Control)	MTS: A good public transport experience

Level 1 Surface Transport Strategic Risks				
#	Risk	Owner	Manager(s)	Mayor's Transport Strategy / Corporate Strategy
ST-03	Inability to deliver the Investment Programme	Director of Project & Programme Delivery	Head of Projects & Programmes Delivery (Assets)	MTS: All MTS outcomes
ST-04	Inability to maintain and renew the condition of ST assets	Director of TfL Engineering Delivery	Head of Asset Investment, Head of Asset Operations, Head of Engineering Surface	MTS: Healthy streets and healthy people
ST-07	Disruption to quality of service	Director of Network Management	Head of Control Centre Operations	MTS: A good public transport experience
ST-08	Protecting the wellbeing and inclusion of our people	Director of CPOS	Senior HR Business Partner	CS: People
ST-10	Disruptive technology undermines core business	Director of Innovation	Senior Policy Manager	All MTS themes: All MTS outcomes
ST-11	Risk of injury, death and poor health and wellbeing	Managing Director - ST	Head of SHE BP – ST	MTS: Healthy streets and healthy people
ST-12	Major cyber security incident	CTO & Director of CE	Head of T&D – Surface	MTS: A good public transport experience
ST-16	Inability to source new revenue stream for roads	Divisional Finance Director (ST)	Head of Finance (Rail & Other Ops)	CS: Finance
ST-17	Protective Security	Director of CPOS	Snr Op Security & Crime Reduction Manager	MTS: Healthy streets and healthy people
ST-20	Inability to achieve net bus income target	Director of Bus Operations	Head of Buses Business Development, Senior Finance Business Partner (Bus Ops)	MTS: A good public transport experience

Level 1 Professional Services Strategic Risks				
#	Risk	Owner	Manager(s)	Mayor's Transport Strategy / Corporate Strategy
<b>Commercial Development</b>				
CD-01	Inability to deliver predicted revenue growth	Director of Commercial Development	Divisional Finance Director (CD)	MTS: New homes and jobs
CD-02	Landlord compliance with legislation	Director of Commercial Development	Estates Management Director	MTS: Healthy streets and healthy people
CD-03	Compliance with Mayor's housing strategy	Director of Commercial Development	Property Development Director	MTS: New homes and jobs
CD-04	Building security	Director of Commercial Development	Estates Management Director	MTS: Healthy streets and healthy people
<b>City Planning</b>				
CP-01	Changes in legislation	Director of City Planning	Head of Transport Strategy and Planning	All MTS themes: All MTS outcomes

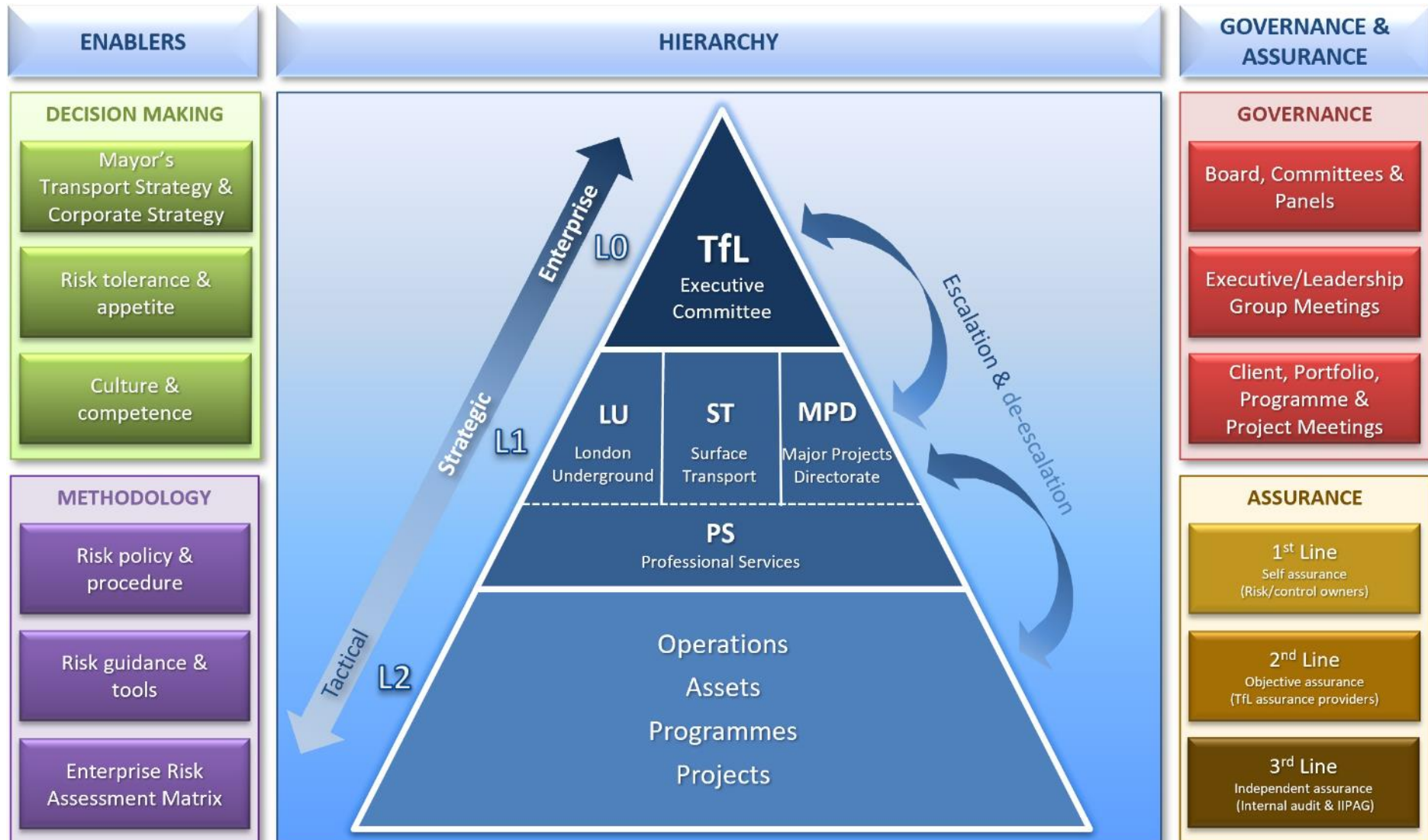
Level 1 Professional Services Strategic Risks				
#	Risk	Owner	Manager(s)	Mayor's Transport Strategy / Corporate Strategy
CP-02	Insufficient project funding	Director of City Planning	Head of Transport Planning and Projects	CS: Finance
CP-03	Insufficient progress in meeting the MTS	Director of City Planning	Head of Transport Strategy and Planning	All MTS themes: All MTS outcomes
CP-04	Changes in economic factors	Director of City Planning	Head of Strategic Analysis	All MTS themes: All MTS outcomes
<b>Engineering</b>				
ENG-01	Engineering not understood or consulted	Director of TfL Engineering	COO Engineering	All MTS themes: All MTS outcomes
ENG-02	TfL is not compliant with its ROGS regulations	Director of TfL Engineering	Head of Technical Engineering	MTS: Healthy streets and healthy people
ENG-03	Engineering is unable to deliver its provision	Director of TfL Engineering	COO Engineering	MTS: A good public transport experience
ENG-04	Engineering is unable to attract and retain resources	Director of TfL Engineering	Head of Technical Engineering	CS: People
<b>General Counsel</b>				
GC-01	Significant Legal Non-Compliance	Director of Legal	Director of Legal	All MTS themes: All MTS outcomes
GC-02	Insufficient legal resource to meet demand from the business	Director of Legal	Director of Legal	All MTS themes: All MTS outcomes
GC-03	Significant non-compliance with FOI Act/EIRs	Head of Information Governance and DPO	Information Access Manager	All MTS themes: All MTS outcomes
GC-04	Significant non-compliance with GDPR and other privacy legislation	Head of Information Governance and DPO	Head of Privacy and Data Protection	All MTS themes: All MTS outcomes
GC-05	Inadequate TfL Management System	Head of Information Governance and DPO	Head of TfL Management Systems	All MTS themes: All MTS outcomes
GC-06	Failure to deliver improvement to the quality of R&A outputs to support decision making	Director of Risk and Assurance	Head of Integrated Assurance	All MTS themes: All MTS outcomes
GC-07	Assurance activities fail to reflect and address business risks and concerns	Director of Risk and Assurance	Head of Integrated Assurance	All MTS themes: All MTS outcomes
<b>Human Resources</b>				
HR-01	Inability to attract the right resources	Chief People Officer	Director of Diversity, Inclusion & Talent	CS: People
HR-02	Inability to retain the right resources	Chief People Officer	Director of Diversity, Inclusion & Talent	CS: People
HR-03	Low or declining employee engagement	Chief People Officer	Head of Strategic Planning & Governance	CS: People
HR-04	Pay becomes neither fair nor equal	Chief People Officer	Director of Compensations & Benefits	CS: People
HR-05	Employee Relations climate deteriorates	Chief People Officer	Director of Business Partnering & ER	CS: People
HR-06	Failure to deliver Organisational Change	Chief People Officer	Head of Strategic Planning & Governance	CS: People
HR-07	TfL Pension Fund funding	Chief People Officer	Director of Compensations &	CS: People



Level 1 Professional Services Strategic Risks				
#	Risk	Owner	Manager(s)	Mayor's Transport Strategy / Corporate Strategy
			Benefits	
HR-08	Delivering a seamless Hire to Retire process	Chief People Officer & Transformation Director	Head of Strategic Planning & Governance	CS: People
<b>Technology and Data</b>				
T&D-02	T&D is unable to attract the right resources	Director of Strategy & Chief Technology Officer	Head of Strategy	CS: People
T&D-03	TfL loses role in providing digital services to customers	Director of Strategy & Chief Technology Officer	Head of Digital	MTS: A good public transport experience
T&D-06	Loss, misuse, or breach of GDPR for data owned by Tech & Data	Director of Strategy & Chief Technology Officer	Chief Data Officer	All MTS themes: All MTS outcomes
T&D-09	Under or over spend on budget	Director of Strategy & Chief Technology Officer	Head of Technology - Programmes	CS: Finance
T&D-10	Political pressure to change ticketing policy	Director of Strategy & Chief Technology Officer	Head of Technology & Data - Payments	MTS: A good public transport experience
T&D-14	SAP system out of support	Director of Strategy & Chief Technology Officer	Head of ERP Transformation	CS: Finance
T&D-19	Extreme weather and climate change effects	Director of Strategy & Chief Technology Officer	Head of Technology & Data - Surface Transport	CS: Finance
T&D-21	Over-reliance on current ticketing supplier	Director of Strategy & Chief Technology Officer	Head of Technology & Data - Payments	CS: Finance
T&D-22	Theft or fraud in the revenue collection process	Director of Strategy & Chief Technology Officer	Head of Technology & Data - Payments	CS: Finance
T&D-23	Risk of ticketing systems failure	Director of Strategy & Chief Technology Officer	Head of Technology & Data - Payments	CS: Finance
T&D-31	TfL is not ready for the switchover from PSTN	Director of Strategy & Chief Technology Officer	Head of Transformation Portfolio – Networks	CS: Finance
T&D-32	Software is non-compliant with licencing agreements	Director of Strategy & Chief Technology Officer	Head of Technology Services Operations	CS: Finance

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Enterprise Risk Management Framework



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### Appendix 3

#### Enterprise Risk Review Schedule

#	Enterprise Risk	Risk Owner	Committee / Panel	Date
ERI1	Major health, safety or environmental incident or crisis	Lilli Matson	SSHRP	30 June 2021
ER2	Protecting the wellbeing of our people	Tricia Wright	SSHRP	30 June 2021
ER3	Major Service disruption	Andy Lord	CSOPP	7 Dec 2021
ER4	Major security incident	Gareth Powell	AAC	15 Sep 2021
ER5	Supply chain disruption	Simon Kilonback	FC	23 June 2021
ER6	Loss of stakeholder trust	Vernon Everitt	CSOPP	17 March 2022
ER7	Financial sustainability	Simon Kilonback	FC	Constantly reviewed as part of ongoing funding discussions
ER8	Delivery of key projects and programmes	Stuart Harvey	PIC	21 July 2021
ER9	Changes in customer demand	Vernon Everitt	FC	24 Nov 2021
ERI0	Inability to support new ways of working	Vernon Everitt	SSHRP	14 Sep 2021
ERI1	Disparity leading to unequal or unfair outcomes	Tricia Wright	CSOPP	7 Oct 2021
ERI2	Asset condition unable to support TfL outcomes	Andy Lord	CSOPP	14 July 2021
ERI3	Governance and controls suitability	Howard Carter	AAC	16 March 2022
ERI4	Opening of the Elizabeth Line	Andy Lord	ELC	30 Sep 2021

### APPENDIX 3

Safety, Sustainability and Human Resources Panel (SSHHP)		
Meeting Date	Risk #	Enterprise Risk
30 June 2021	ERI	Major health, safety or environmental incident or crisis
	ER2	Protecting the wellbeing of our people
14 September 2021	ERI0	Inability to support new ways of working
2 December 2021		
24 February 2022		

Customer Service and Operational Performance Panel (CSOPP)		
Meeting Date	Risk #	Enterprise Risk
14 July 2021	ERI2	Asset condition unable to support TfL outcomes
7 October 2021	ERI1	Disparity leading to unequal or unfair outcomes
7 December 2021	ER3	Major Service disruption
17 March 2022	ER6	Loss of stakeholder trust

Finance Committee (FC)		
Meeting Date	Risk #	Enterprise Risk
23 June 2021	ER5	Supply chain disruption
6 October 2021		
24 November 2021	ER9	Changes in customer demand
9 March 2022		

Audit & Assurance Committee (AAC)		
Meeting Date	Risk #	Enterprise Risk
7 June 2021		
15 September 2021	ER4	Major security incident
1 December 2021		
16 March 2022	ERI3	Governance and controls suitability

Programmes and Investment Committee (PIC)		
Meeting Date	Risk #	Enterprise Risk
19 May 2021		
21 July 2021	ER8	Delivery of key projects and programmes
13 October 2021		
15 December 2021		
2 March 2022		

Elizabeth Line Committee		
Meeting Date	Risk #	Enterprise Risk
20 May 2021		
15 July 2021		
30 September 2021	ERI4	Opening of the Elizabeth Line
25 November 2021		
26 January 2022		
23 March 2022		

## Transport for London Audit and Assurance Committee

### Internal audit reports issued in Q3 2020/21

### Appendix 4

#### Grouped by Enterprise Risk

- Sixteen reports were issued during the quarter

Enterprise risk	Directorate	Audit title	Summary of Findings	Conclusion	P1	P2	P3
Cyber and Protective Security	Technology & Data	The strategic approach to cloud computing governance	<ul style="list-style-type: none"> <li>• Cloud-related risks discussed in service review meetings are not being actively transferred to and managed in the Technology Service Operations (TSO) risk register.</li> <li>• Risks relating to TfL’s SAP ERP system migration to the cloud could crystallise once the system goes live as flow through of risks is lacking between risks discussed in service review meetings and other risk documentation produced by the current managed service provider.</li> </ul>	Requires Improvement	2	4	1
		End User Computing (EUC) hardware stock management	<ul style="list-style-type: none"> <li>• An EUC asset management governance framework is not formalised and the processes and procedures that currently exist are focused on data controls and not the management of physical assets.</li> <li>• A number of EUC Asset Management policies and procedures are outdated and do not reflect the process currently being followed.</li> <li>• Control weaknesses exist regarding the logical security of EUC assets – desktops, laptops and tablets - as BitLocker device encryption is currently not configured in line with best practice.</li> <li>• Control gaps were noted regarding the assignment of asset tags which serves to identify the EUC assets for tracking, inventory and accountability purposes, as the current IT Service Management (ITSM) tool, Remedy, is misconfigured and not appropriately used.</li> </ul>	Requires Improvement	4	1	0
Disparity leading to unequal or unfair outcomes	HR	Adequacy of Business Rules Governing Performance Awards	<ul style="list-style-type: none"> <li>• Our review established that TfL’s Senior Manager Reward Framework – Payband 4 &amp; 5 Business Rules have been adequately designed</li> <li>• Two minor recommendations were made, and agreed, that will help in strengthening the control environment</li> </ul>	Memo	0	0	0

## Transport for London Audit and Assurance Committee

Enterprise risk	Directorate	Audit title	Summary of Findings	Conclusion	P1	P2	P3
Governance and control suitability	HR	Furlough Process	<p>The medium priority findings were:</p> <ul style="list-style-type: none"> <li>- HR should work with T&amp;D to assess if data on network access by staff can be used reliably to determine if there has been significant non-compliance to furlough rules.</li> <li>- Based on a review of the reliability of a sample of network access data to determine non-compliance with furlough rules, HR should work with Internal Audit to decide if a larger monitoring exercise should be undertaken.</li> </ul>	Requires Improvement	0	2	2
Governance and control suitability	Surface Transport	Payments to Local Authorities using the Borough Portal	<p>The medium priority findings were :</p> <ul style="list-style-type: none"> <li>- Lack of Borough compliance with published guidance in respect of reporting.</li> <li>- The claims approval process should include evidence that payment is linked to LIP scheme progress.</li> <li>- A LIP scheme tracker system should be introduced to monitor progress on LIP schemes and associated costs.</li> <li>- Guidance should be introduced for LIP Sponsors to ensure consistent ways of working and standards.</li> <li>- Introduce a protocol around IT changes so the business is informed in advance of change implementation.</li> <li>- Refresh portal guides to reflect the new look portal system.</li> <li>- A suite of periodic financial reports should be issued to LIP Sponsors</li> <li>- Dashboard style reports should be introduced to provide senior management with an overview of scheme progress and to aid strategic decision making.</li> <li>- Improve communications with Boroughs on LIPS schemes</li> </ul>	Requires Improvement	0	9	0



## Transport for London Audit and Assurance Committee

Enterprise risk	Directorate	Audit title	Summary of Findings	Conclusion	P1	P2	P3
Financial sustainability	Finance	LU Expense Claims during Covid-19	<p>The medium priority issues identified are as follows:</p> <ul style="list-style-type: none"> <li>• Lack of a strategic approach across LU functional areas in communicating mileage claim controls to senior managers</li> <li>• Controls and checks introduced in Network Operations for reimbursing mileage claims were not adequately enforced by senior management</li> <li>• Absence of clear guidance and insufficient vigilance to spending controls by approving managers for the Covid-19 expenses category</li> </ul>	Requires Improvement	0	3	0
	LT Museum	LTM Fraud Controls	<p>The high priority issue relates to permissions granted to some users of SAP and Futura, the two computerised systems used for procurement, financial management and stock control. These breach segregation of duties controls and allow some users to perform transactions not relevant to their roles.</p>	Requires Improvement	1	8	1
	Customers, Communication & Technology	Use of Whole Life Costings in Procurements (T&D)	<ul style="list-style-type: none"> <li>• There is no standard Whole Life Costing Model currently in place which covers the full lifecycle of a procured or prospective IT service from tender to decommissioning.</li> <li>• It was noted that there is a lack of formalised project documentation, charter and approval for its development; in particular, timelines and resources have not been formally determined, assigned and signed off by senior management.</li> <li>• We noted there is not a standardised model across the projects assessed in the audit, with all four projects assessed using different cost models.</li> <li>• We could not see evidence of a consistency of approach in relation to documentation and consideration of risks related to costing at the project level.</li> </ul>	Requires Improvement	4	2	0

## Transport for London Audit and Assurance Committee

Enterprise risk	Directorate	Audit title	Summary of Findings	Conclusion	P1	P2	P3
Financial sustainability	Surface Transport	LIPS Scheme for Hillingdon Borough	We carried out this audit in response to concerns raised by a member of the public. A key finding was that the controls around annual reviews of the schemes need strengthening.	Memo	0	0	0
Opening of the Elizabeth Line	Crossrail	Crossrail Complaints Commissioner Accounts 18/19	<ul style="list-style-type: none"> <li>• Accounts of the Crossrail Complaints Commissioner, in all material aspects, accurately reflect the receipts and payments during the financial period ended 31 March 2019</li> <li>• In addition, in all material aspects, the accounts comply with the Accounts Directions issued on behalf of the Crossrail High Level Forum</li> <li>• This review and report were delayed due to the Covid 19 pandemic</li> </ul>	Memo	0	0	0
	Crossrail	Crossrail Complaints Commissioner Accounts 19/20	<ul style="list-style-type: none"> <li>• Accounts of the Crossrail Complaints Commissioner, in all material aspects, accurately reflect the receipts and payments during the financial period ended 31 March 2020</li> <li>• In addition, in all material aspects, the accounts comply with the Accounts Directions issued on behalf of the Crossrail High Level Forum</li> </ul>	Memo	0	0	0

## Transport for London Audit and Assurance Committee

Enterprise risk	Directorate	Audit title	Summary of Findings	Conclusion	P1	P2	P3
Protecting the wellbeing of out employees	Commercial Development	Post Covid 19 return to work strategy	<p>Issues identified include the following (corrective action has already been taken in the majority of cases):</p> <ul style="list-style-type: none"> <li>• Minutes of strategic and tactical meetings were not being formally documented or reviewed at the beginning of the next Recovery and Reoccupation meeting. Furthermore, decisions taken and action agreed were also not being recorded or tracked.</li> <li>• The Activity Plan tracker had some action due dates missing and in many cases the completion status was not filled out.</li> <li>• The Reoccupation Communications Plan did not include how the effectiveness of desired outcomes and changes in behaviour would be measured, or the data for this evaluation and its method for collection.</li> <li>• The Recovery and Reoccupation risk register had not been adequately completed, with risks connected to eight outcomes and their supporting activities not having been identified.</li> </ul>	Memo	0	0	0
Opening of the Elizabeth Line	Crossrail	Adequacy of the Supply Chain Assurance Framework	<ul style="list-style-type: none"> <li>• Terms of reference and RACI matrices for the Vis Board meetings have not been defined</li> <li>• Forecast due dates for actions were not being updated and they were not being discussed in order of severity.</li> </ul>	Requires Improvement	2	2	0
		Consents Compliance Governance	<p>The high priority issues were :</p> <ul style="list-style-type: none"> <li>- Consents registers were not up to date</li> <li>- Serious Incident Event Review (SIER) reports were not completed in a timely manner</li> </ul>	Requires Improvement	2	0	1
		Culture Change	<ul style="list-style-type: none"> <li>• Crossrail (CRL) is operating without an agreed framework for assessing, managing and monitoring organisational culture.</li> <li>• Values statements should be expanded to provide guidance around expected behaviours and best practice at the corporate, directorate and project levels.</li> </ul>	Requires Improvement	0	2	2

## Transport for London Audit and Assurance Committee

Enterprise risk	Directorate	Audit title	Summary of Findings	Conclusion	P1	P2	P3
Major health safety or environmental incident or crisis	LU	Adequacy of the HSE Management System	<p>Issues identified include the following:</p> <ul style="list-style-type: none"> <li>• There is an absence of a direct link to the SHE and TfL management systems from the Platform homepage.</li> <li>• Guidance for lone working could only be located for London Underground.</li> <li>• Lack of assurance and management system reviews, which is not in line with ISO standards.</li> </ul>	Memo	0	0	0

## Transport for London Audit and Assurance Committee

### Work in progress at the end of Q3 2020/21

### Appendix 5

Grouped by Enterprise Risk

- 22 audits were in progress at the end of Q3

Enterprise risk	Directorate	Audit title	Objective	Current Status
Financial sustainability	Finance	Budget Planning and Forecasting (ST)	To review the adequacy and effectiveness of the ST budget planning and forecasting processes	Reporting
	Finance	Embedding of the Business Planning & Consolidation tool	Provide assurance on the planned implementation and embedding of the Business Planning & Consolidation tool.	In Planning
	Finance	Procurement during Covid 19	Provide assurance on the adequacy and effectiveness of controls for procurements conducted during Covid-19 pandemic.	In Progress
	HR	Pension Contributions - TfL Pension Fund (Inc AVCs)	To provide assurance on the adequacy and effectiveness of controls to administer pension contributions to the TfL Pension Fund (including Additional Voluntary Contributions)	Follow-up
		Pension Contributions – TfL- TfL Savings for Retirement Plan.	To provide assurance on the adequacy and effectiveness of controls to administer the TfL Savings for Retirement Plan.	Follow-up
	Surface Network Management	Governance of the Lane Rental Scheme	To provide assurance that the income from the Lane Rental Scheme is managed in accordance with DfT regulations	In Progress
LU	LU Modernisation Programme Phase 1	To provide assurance that the LU modernisation programme is effectively delivering the expected cost saves.	Reporting	

## Transport for London Audit and Assurance Committee

Enterprise risk	Directorate	Audit title	Objective	Current Status
Governance and control suitability	Customers, Communication & Technology	Compliance with GDPR and associated risks.	Provide assurance on the adequacy and effectiveness of TfL's information security controls to comply with GDPR.	In Planning
	General Counsel	TfL Governance and Decision Making	To provide assurance that the revised TfL Governance and decision-making arrangements have been adopted and embedded across the business.	In Progress
	Bus Operations	Bus Service Delivery Model	To review the effectiveness of the Bus operating model	In Progress
	General Counsel	TfL Management System	Provide assurance on the adequacy and effectiveness of controls in place for the TfL Management System	In Progress
Cyber and protective security	Customers, Communication & Technology	Remote Working Arrangements	To provide assurance over the adequacy and effectiveness of remote working arrangements for non-operational staff during COVID-19 and lessons learned.	Reporting
	Technology & Data	Privileged Access to Critical Enterprise Systems	Provide assurance on the adequacy and effectiveness of controls governing privileged access to critical enterprise systems including the vetting processes.	In Planning
Opening of the Elizabeth Line		Alternative Delivery Model Strategy	To provide assurance that the alternative delivery model strategy is adequate	In Planning
		CRL HSE framework	To provide assurance over the adequacy and effectiveness of the HSE framework	In Planning
		Transfer of CRL programme to TfL	To provide assurance on the effectiveness of controls around the transfer of the Crossrail programme to TfL	In Planning
		Management of Staff costs	To provide assurance that the Crossrail organisation is managing indirect costs in line with Programme requirements	In Progress
		Governance and Organisational Effectiveness	To provide assurance over the adequacy and effectiveness of arrangements designed to ensure timely project delivery	Reporting
		Risk Management	To provide assurance over adequacy and effectiveness of risk management in Crossrail.	In Progress

## Transport for London Audit and Assurance Committee

Enterprise risk	Directorate	Audit title	Objective	Current Status
	LU	Integration of Crossrail assets	To provide assurance that the controls over the integration of Crossrail assets into TfL are adequate and effective	In Planning
Protecting the wellbeing of our employees	Surface Transport	Work-Related Violence and Aggression Strategy - Training	To assess the adequacy of the plans and processes in place for conflict management training and support.	Reporting
		Work-Related Violence and Aggression Strategy – Reporting	To assess the adequacy of the systems and processes in place for reporting incidents of violence and aggression in the work place.	In Progress

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## Transport for London Audit and Assurance Committee

### Work planned to start in Q4 2020/21

### Appendix 6

Grouped by Directorate

- There are 14 audits planned to start during the quarter 4

Enterprise risk	Directorate	Audit title	Objective	Planned Period
Opening of the Elizabeth Line	Crossrail	Management of AFC	To provide assurance over the effectiveness of controls for the management of Anticipated Final Cost (AFC)	P12
		Management of Indirect Costs	To provide assurance that the Crossrail organisation is managing indirect costs in line with Programme requirements	P11
		Readiness for Trial Running	To provide assurance over the operational readiness of the operators to commence Trial Running	P12
		Demobilisation of Tier 1 contractors	To provide assurance that the controls around Tier 1 contractor demobilisation are adequate and effective.	P12
	London Underground	Management of Works deferred to LU	To provide assurance that current identified residual scope is managed effectively	P12
Inability to support new ways of working	Communication & Technology	Digital accessibility TfL	Provide assurance on the adequacy and effectiveness of TfL's compliance with digital accessibility regulations (WCAG 2.1).	P11
Cyber and protective security		IT Disaster Recovery and Operational Resilience	Provide assurance over TfL's ability to withstand and recover from disruptive IT events.	P12
		Enterprise IT Security Layer	Provide assurance on the governance, accountability, adequacy and effectiveness of TfL's enterprise IT security layers.	P12
Financial sustainability	Finance	Procurement and Supply Chain Transformation	Provide assurance around the transformation of Procurement & Supply Chain.	P11

## Transport for London Audit and Assurance Committee

Enterprise risk	Directorate	Audit title	Objective	Planned Period
		Tenant billing and rent collection processes using Right Finance Solutions (RFS)	Provide assurance over the adequacy and effectiveness of the tenant billing and rent collection processes.	P12
	Surface Transport	Additional Dedicated Home to School and College Transport Funding	Provide assurance that conditions attached to the Additional Dedicated Home to School and College Section 31 Grant S31/5137 have been complied with.	P10
	TfL Pension Fund	Transitioning to the new Additional Voluntary Contributions provider	Provide assurance on the adequacy of controls to transition to the new AVC provider	P12
	City Planning	Clean mobile energy (seventh review)	Certify costs in respect of EU funding.	P12
Major health safety or environmental incident or crisis	Surface Transport	Fatigue Risk Management	To provide assurance over the effectiveness of controls to manage fatigue risk.	P11

## Transport for London Audit and Assurance Committee

### Changes to the 2020/21 audit plan



### Appendix 7


- There have been four changes to the plan since the last meeting of the Committee.



Ref	Audit title	Status	Audit Comments
20 114	Pension Contributions – TfL Savings for Retirement Plan	New	This audit was originally part of another planned audit, but has been separated out to facilitate reporting to two separate committees with different remits
20 007	Governance of the Lane Rental Scheme		Management request to ensure lane rental monies are being spent in line with government regulation
20 112	TfL Management System		This audit was reinstated from the March plan following discussions with the business
20 001	Work-Related Violence and Aggression Strategy-Training		This audit was originally part of a larger audit covering both training and reporting of Work-Related Violence and Aggression, but has been separated out to facilitate reporting two different topics

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Control Environment – Trend Indicators

Audit indicators – rolling average									
	Q1 19/20	Q2 19/20	Q3 19/20	Q4 19/20	Q1 20/21	Q2 20/21	Q3 20/21	Q4 20/21	Trend
Poorly Controlled	8.7%	11.8%	10.0%	6.3%	5.3%	0.0%	0.0%		
Requires Improvement or Poorly Controlled	34.8%	37.3%	38.0%	45.8%	50.0%	58.6%	59.0%		

Technology									
	Q1 19/20	Q2 19/20	Q3 19/20	Q4 19/20	Q1 20/21	Q2 20/21	Q3 20/21	Q4 20/21	Trend
Internal system availability	99.85%	99.95%	99.95%	99.95%	99.99%	99.96%	99.99%		

Information Governance									
	Q1 19/20	Q2 19/20	Q3 19/20	Q4 19/20	Q1 20/21	Q2 20/21	Q3 20/21	Q4 20/21	Trend
Number FOI requests	3055	3147	3163	3169	2687	2551	2315		
On time FOI responses	96.7%	97.1%	98.8%	99.4%	99.4%	99.7%	99.8%		

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## Audit and Assurance Committee



Date: 17 March 2021

Item: Independent Investment Programme Advisory Group  
Quarterly Report

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### This paper will be considered in public

#### 1 Summary

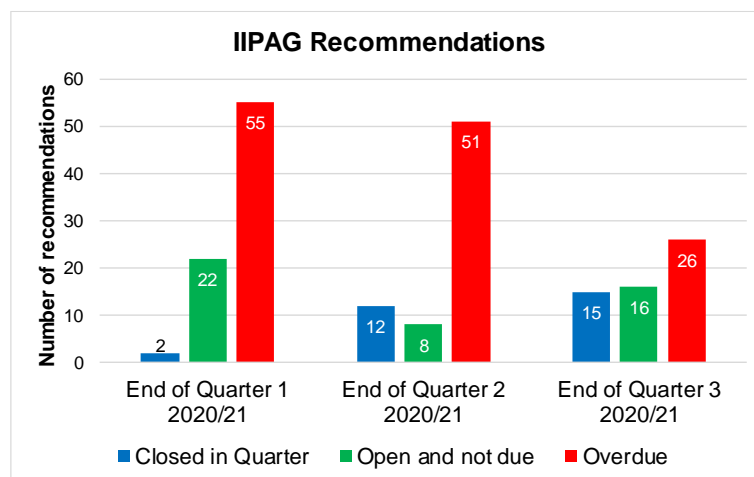
- 1.1. This paper presents the Independent Investment Programme Advisory Group (IIPAG) Quarterly Report for February 2021. It describes the work undertaken since the last report presented to the Committee in December 2020.
- 1.2. A paper is included on Part 2 of the agenda which contains exempt supplementary information. The information is exempt 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 Independent Investment Programme Advisory Group's Quarterly Report, the management response set out below and the exempt supplementary information on Part 2 of the agenda.**

#### 3 IIPAG Quarterly Report

- 3.1 Under its Terms of Reference, IIPAG is required to produce quarterly reports of its advice on strategic and systemic issues, logs of progress on actions and recommendations and the effectiveness of the first and second lines of project and programme assurance. IIPAG's Quarterly Report for February 2021 is included as Appendix 1 to this paper. This is an updated version of the IIPAG report that was presented to the Programmes and Investment Committee on 3 March 2021 and includes the outcome of IIPAG's review of the Procurement and Supply Chain (P&SC) Improvement Programme, which was not ready in time to be presented to the Programmes and Investment Committee.
- 3.2 Figure 1 sets out the status of the IIPAG recommendations at the end of each of the last three quarters.



**Figure 1: Status of IIPAG Recommendations**

- 3.3 There were no new unagreed or critical IIPAG recommendations made during the quarter, and none of the recommendations overdue at the end of Quarter 3 relate to critical issues.

## 4 Management Response to IIPAG Quarterly Report

- 4.1 In its report, IIPAG includes a new strategic recommendation. This recommends that project teams, in their submissions to the Programmes and Investment Committee, report how scope, schedule, cost and outcomes have compared with what was forecast and approved at the previous annual submission and how any changes affect the expected time and cost to complete the programme.
- 4.2 We are already planning to make changes to papers submitted to the Programmes and Investment Committee to ensure that they provide useful information to Committee Members including a clear focus on demonstrating value for money. As part of these changes we will take on board the recommendation made by IIPAG for improving the information provided within the papers.
- 4.3 IIPAG also includes in its Quarterly Report the output from its review of the P&SC Improvement Programme. We welcome the updated review conducted by IIPAG in February 2021 as it has highlighted the significant progress made in a short space of time.
- 4.4 The workshops initiated in January and February 2021 involving personnel across TfL have also been completed comprising 53 workshops in total. We also continue progress on the early wins, covering;
- implementing a TfL wide benefits methodology;
  - a supplier contracts repository including e-signature;
  - payment terms harmonisation in association with the Finance teams (with a £55m positive cashflow impact);
  - improved reporting suite;
  - implementing core key performance indicators across the P&SC function in readiness for the new fiscal year; and
  - a new category taxonomy to drive transparency and leverage spend across TfL.



4.5 In response to the concerns raised by IIPAG on systems funding and the comment that this seems low for the scale of the systems work required, we will review further within the team and with Technology and Data, but certainly note the concern. We are also aware of the significant cultural and behavioural change required across TfL in implementing this system change, the scale of which TfL has not experienced in recent times. The level of this challenge should not be underestimated as well as the need for it to be adequately financed.

**List of appendices to this report:**

Appendix 1 - Independent Investment Programme Advisory Group (IIPAG) – Quarterly Report February 2021 (version 2.0)

A paper containing exempt supplemental information is included on Part 2 of the agenda.

**List of Background Papers:**

None

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## Independent Investment Programme Advisory Group – Quarterly Report February 2021 (version 2.0)

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This paper will be considered in public

### 1. Introduction

1.1. This quarterly report to the Committee describes IIPAG's activities in the period December 2020 to February 2021. We make one new strategic recommendation about the reporting of a programme's performance with regard to scope, schedule, cost and outcomes over the past year compared with what was forecast.

### 2. IIPAG activity

2.1. We have engaged in a number of programme reviews ahead of the March meeting of the Programmes and Investment Committee, and a few targeted reviews for executive governance:

#### 2.2. Sub-Programmes

- LU Fleet and Access
- Surface Assets
- LU Renewals
- Technology and Data
- Surface Technology

#### 2.3. Targeted Reviews

- iBus
- Elephant and Castle Station

2.4. We have also continued to engage with the Four Lines Modernisation project.

2.5. The covering paper to this appendix reports management progress in implementing IIPAG's recommendations for sub-programme and project reviews

2.6. In several recent reviews we have made suggestions to project teams about the content of their submissions to the Programmes and Investment Committee. In particular, where programmes are seeking annual programme and project authority, it is our view that the team should present the Committee with a clear picture of how they have performed since the previous annual programme submission compared with what they said they would do. Teams already report what has been delivered over the past year, but in addition **we recommend that project teams should report how scope, schedule, cost and outcomes have compared with what was forecast and approved at the previous annual submission. They should also indicate how this performance affects the expected time and cost to complete the programme.**

### **3. IIPAG and Crossrail**

- 3.1. Now that Crossrail has transferred to TfL, IIPAG's scope has been expanded to cover 3<sup>rd</sup> line assurance for Crossrail. We have established an IIPAG CRL Sub-Group, and Terms of Reference have been agreed by the Elizabeth Line Committee. Two new appointments to the Sub-Group, including the Chair, have been made subject to finalising contractual arrangements. The Sub-Group is now developing its programme of work, which will seek to complement other assurance activities for Crossrail/Elizabeth Line. In the meantime a review of Crossrail's first and second lines of defence is underway, and we are making some targeted enquiries in relation to preparedness for Trial Running.

### **4. Cross-cutting work**

- 4.1. We have undertaken a review of the TfL Programme Management Office (PMO). We have had an initial discussion at the Investment Group meeting, and TfL management is currently developing its plans for completing the PMO change programme in the light of that. We expect to report on the outcome of our work to the May meeting of the Programmes and Investment Committee.
- 4.2. We have finalised our review of the Procurement and Supply Chain Improvement Programme (previously referred to as 'Commercial Transformation'). A copy of our report is attached at Appendix 1, excluding private material which is provided in Part 2 of the agenda.
- 4.3. We have initiated the annual Benchmarking review which will be relatively light touch this year. As noted above we have also begun an assessment of the adequacy of the first and second lines of defence on the Crossrail project.
- 4.4. We are finalising the scope of a review which will look at the form of contract chosen, tender outcomes and issues with contractors as part of contract management post award, with the aim of starting fieldwork in the next month.

### **5. Work Programme for 2021/22**

- 5.1. We will be presenting our work programme for 2021/22 to the June meeting of the Committee, when the funding position and investment programme should be clearer. We would welcome suggestions from both the Audit and Assurance Committee and the Programmes and Investment Committee on areas for our cross-cutting work.

### **6. IIPAG Stakeholder Survey**

- 6.1. In late Autumn 2020, IIPAG surveyed its stakeholders in TfL about its work. (This was off the back of a larger stakeholder survey by TfL Project Assurance.) The stakeholders included members of both the Programmes and Investment Committee and the Audit and Assurance Committee, relevant TfL executives and the sponsors and delivery leads of the programmes and sub-programmes which IIPAG has reviewed. The survey group was not large, but the results suggested that stakeholders value the reports IIPAG provides and are generally positive about IIPAG members. The results from the main questions are shown in Appendix 2. A number of more detailed and helpful comments were also provided.

**List of appendices to this report:**

Annex 1: Cross Cutting Theme: Review of Procurement and Supply Chain Improvement Programme

Annex 2: IIPAG Stakeholder Survey Results 2020/21

**List of background papers:**

None

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**INDEPENDENT INVESTMENT PROGRAMME ADVISORY GROUP (IIPAG)**

**Cross Cutting Theme: Review of Procurement & Supply Chain Improvement Programme**

**Review date: 1) October 2020 2) Updated February 2021**

**This paper will be considered in public**

**PURPOSE OF REPORT**

This report updates the IIPAG report dated November 2020 (v06) on the status of the Procurement and Supply Chain (P&SC) Improvement Programme (PSCIP). It is based upon a series of interviews with the Chief Procurement Officer (CPO) and selected members of his Senior Leadership Team (SLT) dating back to October 2019.

**SUMMARY**

The top 3 issues in November 2020 were:

- 1) Appropriate capital delivery experience is required to complement the existing transformation experience, in the SLT and the PSCIP team;
- 2) The “Voice of the Customer” in the design of change should be increased;
- 3) The supply chain should be engaged in the development of the improvement programme.

**These issues were shared with P&SC and all have since been addressed, as summarised in this report.**

In November 2020, IIPAG made seven detailed **recommendations** across a number of areas. This February 2021 update reports progress in most areas: three recommendations have been closed, 2 recommendations are being held pending the results of the IA review (see below), and two remain open.

It is to be noted that Internal Audit (IA) kicked off a review of PSCIP in January 2021 for which the Terms of Reference include governance design, benefits management, management of contracted outputs and financing and resourcing of PSCIP elements. Many of IIPAG’s recommendations are covered by this work and IA is aware of IIPAG’s earlier work.

P&SC is in Year 1 of a three-year plan, which addresses processes, systems and people change in every aspect of procurement, encompassing Market Intelligence, Source to Contract, Post Contract and Supplier Management (the latter being frequently referred to throughout TfL as commercial management and contracts management). A contract for a specialist Support Partner was awarded to PWC Retearn in late November 2020. They mobilised in December and January and progress should accelerate from February onwards.

The biggest challenges to the successful delivery of the PSCIP are complex and inter-dependent: 1) the scale of the Programme will require full engagement across TfL to maintain momentum and cohesion; 2) funding for the investment in systems and technology will be critical and value for money must be clearly explained; 3) investment in people capability and skill development is imperative. Business as Usual must continue to deliver whilst the PSCIP is designed, delivered and rolled-out over three years.

*Note: throughout this report, the term “Customer” refers to key TfL users of P&SC services, such as MPD, Surface and R&E delivery organisations. “Stakeholders” is a broader term, which includes customers but also P&SC partners, such as Finance, Engineering, PMO and HR. We note that Finance and HR are already centrally involved in the Improvement Programme.*

## **IIPAG RECOMMENDATIONS AND PROGRESS REPORTED BY P&SC FEB 2021**

IIPAG made seven recommendations in November 2020 against which progress has been made by P&SC.

**Recommendation no. 1:** Governance. Establish governance with the objective of assuring that design deliverables are fit for purpose and affordable as each element is proposed for implementation.

**This topic is now included in the 2021 Internal Audit Review. IIPAG recommendation no. 1 will be held open until the IA conclusions are published.**

**Recommendation no. 2:** Contracts Management and Commercial Management Capability. Improve communications specifically addressing commercial and contracts management to reassure staff and customers. Provide greater visibility in the SLT by assigning or raising the profile of a capital delivery sponsor on the SLT to champion commercial and contracts management and act as a focal point for stakeholder engagement.

**The inclusion of a Capital Workstream in the PSCIP led by a capital experienced manager and a Communications Plan that includes all capital areas in TfL closes out this recommendation no. 2.**

**Recommendation no. 3:** Contracts Management and Commercial Management Capability. Perform a risk assessment of both the PSCIP Team and the Support Partner to assure that there is a balanced skill set encompassing transformation, procurement and capital delivery expertise.

**The inclusion of a Capital Workstream in the PSCIP led by a capital experienced manager closes out this recommendation no. 3.**

**Recommendation no.4:** The “Voice of the Customer” needs to be more present in the design of the Improvement Programme, especially with regard to capital delivery. Verify that all that the MDs of LU, Surface & MPD and their responsible delivery representatives are consulted to ensure all key stakeholders and users have been identified, mapped and consulted with regard to issue definition and proposed solutions. The Communication Plan should be amended accordingly.

**The confirmation that the Communications Plan has been updated to include all capital areas of TfL and the Increased engagement as described in February is sufficient to close IIPAG recommendation no. 4 out.**

**Recommendation no. 5:** Supply Chain Engagement. Engage the supply chain in a selective and systematic way to test supplier-facing elements of the TfL improvement plans and to help define areas for improvement and promote potentially innovative solutions. Create a feedback loop on key changes.

**There is now a plan in place. Recommendation no. 5 will remain in place until the plan is implemented.**

**Recommendation no. 6:** Project Management of the Contract. Use project management techniques to manage delivery of the Improvement Programme to the agreed schedule, cost and quality. As a minimum, establish a programme of key milestones and dependencies and a change management procedure and report progress and costs accordingly.

**The 2021 Internal Audit review will look at how the PSCIP is being managed. IIPAG recommendation no. 6 will be held open until the IA conclusions are published.**

**Recommendation no. 7:** Systems & Technology. Agree with T&D a plan and organisational working methods for both design and implementation of the new P2P and other systems.

**IIPAG recommendation no. 7 is closed based on the action taken to formalise the working agreement, development of the RACI and assigned personnel in both the PSCIP and T&D. IIPAG proposes to review the progress of this PSCIP workstream in a future review.**

## **BACKGROUND**

The P&SC Improvement Programme is building upon early Commercial Transformation work performed as early as 2018. At the time, the emphasis was on cost savings through headcount reduction. It was soon understood that a complete transformation of the P&SC offering was needed to replace processes and systems that were outmoded and inefficient in many ways. Jonathan Patrick was appointed in mid-2019 to lead the P&SC Transformation (later renamed P&SC Improvement Programme) and become Chief Procurement Officer (CPO). The P&SC Improvement Programme is now a 3-year process-led change programme; new systems will be designed to support the processes and improve value-add to the organisation. Capability is the third essential ingredient for a successful P&SC: competences will be mapped around the new processes and systems and related training and development programmes will be designed. There is enormous opportunity for significantly increased value-add and improved efficiencies both in cost and performance. P&SC is responsible for managing an annual



spend of £3.5bn: in 2019/20, this broke down to £1.1bn in London Underground, £850m in Surface Transport, £825m Indirects\* and £700m in the Major Projects Directorate (Source: P&SC reports). Grassroot transformation of Procurement in other large corporations has added significant value to service excellence and the bottom line. In TfL, financial investment in P&SC systems and capability, even in the aftermath of Covid-19, is a necessity. The investment requirement will gain clarity as PSCIP design is completed.

*\* "Indirect procurement" is the sourcing of all goods and services commonly bought for consumption by internal stakeholders to maintain operations rather than the external customer. "Indirects" covers items purchased for T&D (all IT, licenses, hardware, software), Utilities (e.g. Energy purchasing), Office (Printers, Consumables, Office Equipment) and HR related services.*

## **PROGRESS 2018 - 2020**

At the beginning, progress was slower than expected: firstly because early work on headcount transformation by Deloitte in 2018 was suspended when it was realised that the transformation had to address processes and systems, and, secondly, because the programme was paused for 5 months in early 2020 when 50% of P&C staff were furloughed and the rest were re-assigned to support the COVID-19 response. The actual impact on the programme was 8 months due to the need to re-issue the Invitation to Tender for the Support Partner contract. Despite the COVID-19 impact, progress was still made in a number of areas, summarised below.

The first year of PSCIP was dedicated to scope of change definition, recruitment of a re-focused SLT, improvement of a number of key basic processes and the running of a competitive tender for a specialist Support Partner. Focus has also been on establishing and implementing a thorough change communication strategy, designing a matrix organisation, improving governance and work planning.

When the study phase of the 3-year programme was initiated in July 2019, P&SC leadership concluded that a number of procurement, commercial management and contracts management basics were either lacking or not effective. Much of the effort from July to December 2019 was to establish those basics to improve the every-day activities of P&SC, pending improvement.

The following short summary includes some of the headline improvements either completed or ongoing (much of this was reported to ExCo in September 2020):

### Processes:

- Improved the drive for value for money by: updating the Procurement Policy to put more emphasis on competition, issuing the Non-Competitive Transactions Guidelines, improving the quality of the Contracts Register, enabling it to be used more effectively in advance workload planning and thereby reduce sole source procurements.
- Early improvements to governance, such as new governance at sub £5m by introducing the Commercial Approval Panel (CAP) and added managerial focus at £5m+ at the Commercial Approvals Meeting (CAM).
- Creation of version 1 of the P&SC Services Catalogue
- Creation of a Benefits Methodology (in review and due complete end February)
- Establishment of a P&SC Risk Register for Business as Usual (developed by P&SC)

- Running a competitive tender for the PSCIP Support Partner.

#### Systems:

- Presentations were made to ExCo on the Case for Change and the need for a major investment in technology and systems.
- Commenced discussion of technology design parameters with T&D.
- Mapped at a high level the P2P and Source to Contract processes, which will require detailed design by the Support Partner

#### People

- Completed formation of a new P&SC SLT.
- Created a PSCIP Team of which 7 are full-time.
- In November 2020, the P&SC organisation was formally centralised with reporting lines revised from Finance to CPO. This should facilitate consistency and efficiency across P&SC.
- Established a Communications Strategy.
- Implemented training for the changes made to date to Business as Usual processes.
- Performed conceptual thinking on a capability matrix, which will mature as the Organisational Model develops.
- Trades Union engagement is ongoing; any formal proposals will be subject to collective consultation with TU colleagues.

## **PROGRESS DECEMBER 2020 – JANUARY 2021**

### **Appointment of a Support Partner**

Due to the enormity of the PSCIP and the specialist procurement knowledge required, a competitive tender was held to appoint a Support Partner. PWC Retearn was appointed at the end of November 2020 and mobilised in December and January. The work scope is divided into 2 Lots: Lot 1 – to deliver the Operational Model, a suite of processes, reporting, systems, governance, integration with PMO, i.e. Processes and System (Processes and Systems); Lot 2 - to design and deliver the People element, i.e. Organisational Model, capability mapping, training and development.

Each Lot has 2 phases: Design and Delivery. The design phase is planned for completion by May 2021 and the overall schedule is 24 months. As of February 2021, 8 workstreams had been established.

### **Main Activities**

January was dominated by the mobilisation of PWC Retearn and the planning of work. In the third week of January, a plan to deliver process-based workshops was initiated, and 53 were delivered by the end of February. The participants were TfL P&SC delivery personnel and non-P&SC delivery staff from all aspects of the business. The January workshop goal was to map the As-Is work processes. We were told that workshops in February will develop and map future improved processes, which will form the basis of the revised Operational Model.

The Solutions Blueprint, which will define the change from As-Is to future state, is in development and is due to be issued for review by the end of March 2021. It will include the proposed new data and systems architecture. It will be a living document.

## ISSUES CONSIDERED THROUGHOUT THE REVIEW

### Governance

Governance design is well advanced. Among other elements, a Programme Steering Group has been set up, chaired by the CPO and with 8 ExCo members as participants meeting bi-monthly or as required. P&SC has finalised a programme governance structure for design phase progress reporting. Given the size and breadth of the PSCIP and the large number of stakeholders, IIPAG considers it would be helpful to understand the road map of how decisions will be taken to approve design and commence delivery. IIPAG wishes to see that a process exists to assure that the final design represents the best solutions; that it is supported by key stakeholders, will be coordinated with the rest of the organisation and be affordable. Transition to the delivery phase will, necessarily, require TfL investment decisions, which should be subject to appropriate assurance.

In November, IIPAG **recommended (no.1)** that suitable governance be established with the objective of assuring that design deliverables are fit for purpose and affordable as each element is proposed for implementation. **This topic is now included in the 2021 IA Review and so the IIPAG recommendation no. 1 will be held open until the IA conclusions are published.**

### Commercial Management and Contracts Management

Effective risk management by commercial and contracts management is essential in a large investment programme, which naturally carries significant cost and schedule risk. From the time of IIPAG's first involvement in this review, some stakeholders expressed concern that capital delivery via contracts management and commercial management did not have the same profile or visibility in the PSCIP as the procurement of goods and services. Questions had also been raised regarding the level of capital delivery understanding and capability in the new SLT and PSCIP Team (which undoubtedly have strong procurement and transformation credentials). IIPAG encouraged P&SC to address the different nature of contracts and commercial management more fully. In the February update, IIPAG were informed of the various ways that the perceived imbalance between procurement and contracts and commercial management has been addressed. One of the key actions has been to include a Capital Workstream in the plan led by a PWC Retearn person who has capital experience. It was confirmed that the activities of this workstream are included in active Communications Plan.

In November 2020, IIPAG **recommended (no. 2)** that reassurance be provided to commercial and contracts management staff and key delivery customers via the Communications Plan and that the profile of capital delivery in the SLT be raised. **In February, the reported inclusion of a Capital Workstream led by a capital experienced manager and a Communications Plan that includes all capital areas in TfL closes IIPAG recommendation no. 2 out.**

IIPAG also **recommended (no.3)** in November that a risk assessment of both the PSCIP Team and the Support Partner be performed to assure that there is a balanced skill set encompassing transformation, procurement and capital delivery expertise. **Again, the inclusion of a Capital Workstream led by a capital experienced manager closes this IIPAG recommendation no. 3 out.**

## **Processes**

### **Stakeholder Engagement and The Voice of the Customer**

During the interviews up to November 2020, it was found that some key users of P&SC services had not been consulted regarding the PSCIP plan or issue identification and proposed solutions. The concept of PSCIP was supported across the board but design concept buy-in from all key stakeholders was absent.

In the February update, indications were given that engagement has improved but this is yet to be tested by IIPAG. Regular updates are being provided at senior management meetings and one-to-one briefings with directors. PSCIP has established an engagement tracker. IIPAG proposes to sample engagement effectiveness in the next review.

In November 2020, IIPAG **recommended (no. 4)** that the “Voice of the Customer” be more present in the design of the Improvement Programme, especially with regard to capital delivery and that all the MDs of LU, Surface & MPD and their responsible delivery representatives be consulted to ensure all key stakeholders and users have been identified, mapped and consulted. The Communication Plan should be amended accordingly.

**The confirmation that the Communications Plan has been updated to include all capital areas of TfL and the Increased engagement as described in February is sufficient to close IIPAG recommendation no. 4 out. This would address the second of the top 3 issues raised in November. IIPAG proposes a follow up in the next review.**

### **Supply Chain Engagement**

TfL’s supply chain represents a rich source of operational data, based not only on its direct TfL experience but also on its knowledge of other organisations and the market. As of November, there had been no engagement with suppliers. IIPAG was told in February that there is now a plan to work with selected suppliers in February/ March to access their experience of working with TfL.

In November, IIPAG **recommended (no. 5)** that the supply chain be engaged to access supplier experience and to test supplier-facing elements of the TfL improvement plan. In February, P&SC advised that a plan is now in place.

**IIPAG recommendation no. 5 will remain open until the plan is implemented but we consider that the third of the top 3 issues is being addressed.**

### **Management of the PWC Retearn Contract**

The PWC Retearn scope of works has a large number of deliverables, which are complex and affect many stakeholders. Execution will need to be tightly managed

through the establishment of appropriate project management controls, which should include cost and schedule baselines, change control and risk management. PMO will be able to support P&SC in setting up appropriate processes and Project Assurance will be able to assure effectiveness.

In November 2020, IIPAG **recommended (no. 6)** that appropriate and effective project management has been introduced and implemented to manage delivery of PSCIP to the agreed schedule, cost and quality.

**Internal Audit plans to review how the contract is being managed in their 2021 review. IIPAG recommendation no. 6 is therefore held open until the IA conclusions are published.**

## **Systems & Technology**

Investment in new P&SC systems and technology is essential and overdue. The existing SAP P2P system is more than 20 years old, is no longer supported and the hosting contract expires mid-2021. Additionally, new support P&SC systems are required, such as a contracts database, integrated supplier spend analytics, supplier & contract management tools and effective supplier relationship management. ExCo and FCOG have approved PSCIP funding however the technology element seems low for the scale of the systems work required and IIPAG proposes to that the status of this topic be reviewed during the next review, once design is further advanced.

In November, IIPAG was interested in understanding how the PSCIP team and T&D were planning to work together on this project and found that the working method and plan had not yet been formalised. As of February, PWC Retearn is providing the necessary technical resources to support this workstream, PSCIP has a System Lead embedded in T&D and T&D has assigned a project manager. An agreement of how the team will work together has been formalised and a RACI is being developed.

The team is making progress having finalised the As-Is review and are developing the future state systems and architecture. After T&D confirmation in December 2019 that their ERP strategy was to follow a SAP systems landscape, a licensing agreement was signed in December with Ariba for one important element to manage data architecture. Also, a statement of work is in development for SAP services, which is due to go to FCOG in March. IIPAG considers it would be helpful to review the project management processes around this project in a future review.

In November, IPAG **recommended (no. 7)** that P&SC agree with T&D a plan and organisational working methods for both design and implementation.

**Recommendation no. 7 is closed out based on the action taken to formalise the working agreement, development of the RACI and assigned personnel in both the PSCIP and T&D. IIPAG proposes to review the progress of this PSCIP workstream in a future review.**

## **BUSINESS AS USUAL**

During the many project and programme assurance reviews in 2020, we saw a consistent issue around the apparent shortage of commercial and contracts managers

both in terms of number and capability. Both IIPAG and Project Assurance continue to hear the same story in the 2021 reviews done to date e.g. Elephant & Castle, LU Fleet & Access, DLR, London Overground.

Given the impact of other major transformations in TfL and the departure of experienced resources, the concern for P&SC capital delivery is raised in this report as a channel for communicating our degree of concern. Since November, a number of headcount requests have reportedly been approved for some MPD projects however, this issue will continue to be monitored by IIPAG via their recommendation tracker for projects and strategic issues.

Additionally, the definition of roles and responsibilities for commercial managers on individual projects has been raised as an issue by some project teams. Notwithstanding the statement in the People section above, IIPAG will continue to highlight and monitor this as an area requiring action in the regular review arena.

Appendix A – List of Interviews.

***Joanne White - IIPAG***

## APPENDIX A – LIST OF INTERVIEWS

### NOVEMBER 2020

Name	Title	Role in Improvement Programme	Date of Interview
Jonathan Patrick	CPO	Leadership	10 Oct 2019 10 March 2020 24 April 2020 22 Oct 2020
Pritesh Shah	Head of Improvement Programme	Delivery, reporting to CPO	19 Oct 2020
Manisha Gangopadhyay	HR Senior Business Partner	Delivery of People related outcomes, reporting to Head of Improvement Programme	5 Nov 2020
Stuart Harvey	Director of Major Projects	Voice of the customer	6 Nov 2020
Nick Fairholme	Director of Project & Programme Delivery	Voice of the customer	20 Oct 2020
David Jones	Deputy CPO		
Simone Buckley	Change & Communications Lead	Delivery of communications strategy	27 Oct 2020

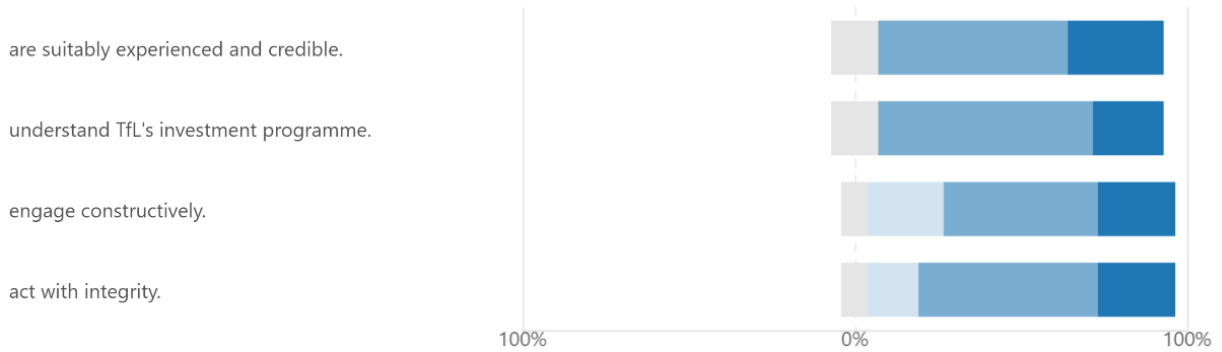
### FEBRUARY 2021

Jonathan Patrick	CPO		1 Feb 2021
Pritesh Shah	Head of Improvement Programme		1 Feb 2021
Manisha Gangopadhyay	HR Senior Business Partner		1 Feb 2021

## IIPAG Stakeholder Survey Results 2020/21

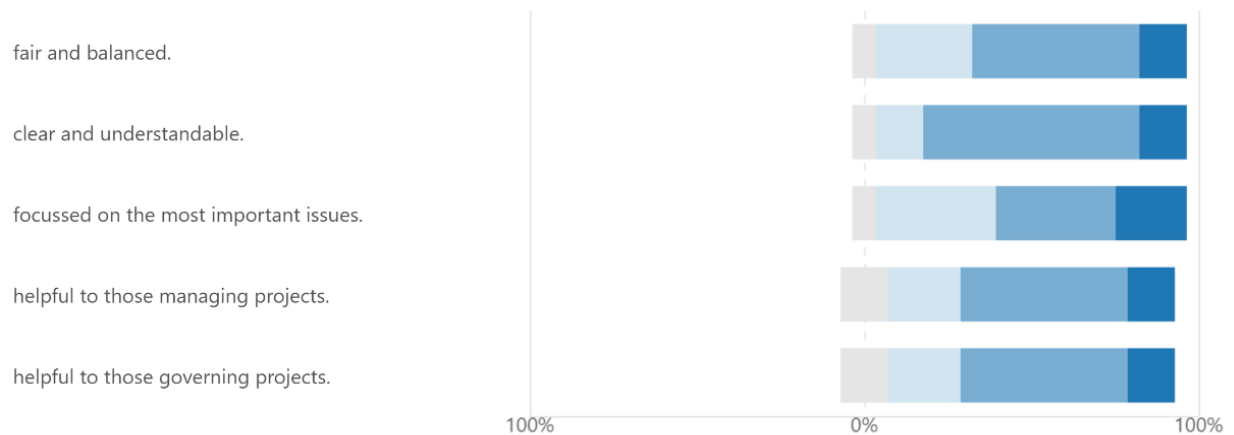
Please indicate to what extent you agree with the following statements. I find that IIPAG members...

■ Strongly disagree  
 ■ Disagree  
 ■ Somewhat disagree  
 ■ Neither agree or disagree  
 ■ Somewhat agree  
 ■ Agree  
 ■ Strongly agree



Please indicate which of these statements you agree with. IIPAG reports are...

■ Strongly disagree  
 ■ Disagree  
 ■ Somewhat disagree  
 ■ Neither disagree or agree  
 ■ Somewhat agree  
 ■ Agree  
 ■ Strongly agree





**Date:** 17 March 2021

**Item:** Integrated Assurance Plan 2021/22

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

## **1 Summary**

- 1.1 The purpose of this paper is to present the 2021/22 Integrated Assurance Plan (IAP) to the Committee for approval.

## **2 Recommendation**

- 2.1 **The Committee is asked to approve the Plan.**

## **3 Background**

- 3.1 Within our Risk and Assurance directorate, there are four principal functions involved in the delivery of assurance: Internal Audit, Integrated Assurance, Project Assurance, and Enterprise Risk Management (ERM). The ERM function ensures there is a sound basis for the assurance activities carried out by the other functions. Each of the assurance functions within the directorate has its own detailed programme of work that collectively provides for assurance across TfL.
- 3.2 The attached IAP sets out the Internal Audit (third line of defence) work we plan to carry out during 2021/22 and highlights areas where there will be second line of defence audit or review activity carried out by other assurance teams, both within Risk and Assurance and elsewhere in TfL.
- 3.3 The ongoing work of our ERM team continues to strengthen internal risk management processes. As the understanding of risk and control matures within the business, it may impact on the work we deliver during the year. Where appropriate, we will update our IAP to take account of any changes to TfL's Enterprise Risks.

## **4 Development of the Plan**

- 4.1 Development of the IAP is an iterative process. The starting point for development of our IAP is a review of the TfL Enterprise Risks and the key controls that have been identified over those risks. In addition, we focus our work on significant areas of business change and areas where we have found significant issues in the past.

- 4.2 Although, we have consulted with senior management to get their views on where assurance work would add value, due to the continued effects of the coronavirus pandemic on TfL we expect more change to the plan over the course of the forthcoming year than normal. We shared the draft plan for comment with London Underground and Surface Transport Directors and the Finance Leadership teams. However, the final decision on what is included rests with Internal Audit.
- 4.3 We have shared the plan with the Independent Investment Programme Advisory Group (IIPAG) and identified a number of areas where we will work collaboratively to deliver our work. This will help inform their work-bank and cross cutting issues. IIPAG's work-bank will be considered by the Committee in June 2021.
- 4.4 The IAP incorporates audit activity for the London Transport Museum (LTM) and the TfL Pension Fund, each of which has its own Audit Committee. We will present relevant sections of the IAP to those committees for review and approval as follows:
- (a) the LTM Risk and Audit Committee on 31 March 2021; and
  - (b) the TfL Pension Fund Audit Committee on 10 March 2021.
- 4.5 Additionally, we share the IAP with the external auditors, EY, and discuss, where appropriate, any areas where they wish to place reliance on our work.

## **5 Delivery of the Plan**

- 5.1 In developing the plan, we have taken into account the level of resource available within the Internal Audit team. As usual, the volume of possible audits identified during the planning process exceeds our capacity to deliver them and we have prioritised the audit effort in liaison with senior management. There are, therefore, a number of worthwhile audits that have not been included in this plan, but which may be 'promoted' into the plan in the event of other audits being postponed or cancelled due to changing business circumstances.
- 5.2 The plan is regularly reviewed, and updated to reflect changing business priorities, management requests for audit and consultancy work and resourcing levels within the team. We have informally identified audits within the plan that could be cancelled in the event that there were reductions in the resources available to the team. Any decision to cancel or postpone audits will be agreed with management and reported to the Committee.
- 5.3 Internal Audit, with input from other assurance providers, provides a quarterly report to the Committee and an annual report at the end of the year. The reports summarise the work completed against the IAP. Internal Audit use this information, together with outputs from other assurance obtained or observed during the year, to provide an overall opinion on the effectiveness of TfL's internal controls.

## 6 Other Audit and Review Activity

- 6.1 The IAP highlights areas where second line of defence, audit and review activity, is being provided by other teams, in particular, the Integrated Assurance and Project Assurance teams within Risk and Assurance. This work is not listed in detail in the IAP, but each of the teams agrees a detailed plan of work with relevant business areas.
- 6.2 Integrated Assurance carries out a programme of work focused primarily on safety, health and environment (SHE) assurance, engineering quality assurance and supply chain assurance at the second line of defence. Other assurance activities include oversight and reporting of TfL's compliance to the Payment Card Industry Data Security Standard to ensure adequate protection of payment card data.
- 6.3 The Project Assurance team carries out assurance reviews of projects and programmes across TfL's Investment Programme, with individual projects selected for review following a risk-based assessment. IIPAG (third line) review projects with an Estimated Final Cost over £50m or those under that threshold that they consider are risky, novel or have dependencies with larger programmes. Reports from Project Assurance reviews are considered alongside the authority request, depending on the size, complexity and risk of the project, at various investment meetings in all areas of TfL, the Commercial Approvals Meeting or by the officers under delegated authority. Project Assurance also undertake continuous assurance of projects in order to feed into reviews and to assess risk profile of projects/programmes by considering cost, scope, programme and risk factors.
- 6.4 Project Assurance also conducts reviews of the 22 sub-programmes to inform their annual request for Authority at the Programmes and Investment Committee.
- 6.5 Whilst not primarily an assurance provider, the Counter-Fraud and Corruption team often identifies control issues in the course of its investigations and reports these to management together with recommended corrective actions. Internal Audit works closely with the Counter-Fraud and Corruption team as a useful source of intelligence for areas requiring audit attention.
- 6.6 Risk and Assurance is continuing to develop relationships with teams delivering assurance at the second line of defence in other parts of TfL to ensure that provision of assurance is as integrated and efficient as possible. These include: the Bus Contract Compliance team conducting audits of TfL's bus operators against the contractual requirements; Programme Management Office Quality Assurance who assess project compliance with Pathway tools; Work Related Road Risk team who audit TfL suppliers against the Freight Operators Recognition Scheme; the Safety, Health and Environment Assurance and Improvement team providing assurance of SHE management system implementation; and the Major Projects Construction Compliance team.

## 7 Overview of the Plan

- 7.1 The IAP includes details of the assurance work to be carried out by Internal Audit and notes areas where audit and review work will be carried out by the Integrated Assurance and Project Assurance teams and other TfL teams providing assurance at the second line. These functions have worked together to ensure that assurance work is undertaken by the team most suited to deliver it, avoiding overlap and duplication.
- 7.2 Internal Audit delivers its work according to defined processes and procedures, set out in its audit manual, in line with relevant statutory requirements and professional standards.
- 7.3 In putting together this plan we have had regard to TfL's priorities as it strives to deliver the Mayor's Transport Strategy (MTS) following the effects of the coronavirus pandemic. These five priorities, recently announced by the Commissioner, are:
- (a) Financial Sustainability – TfL continues to work hard to reduce costs across all areas of activity and to enhance its revenue streams. Financial sustainability will be a key area of focus for our plan both through specific targeted audits in commercial development and as an important consideration in other relevant audits. We will also be working closely with our Counter-Fraud and Corruption team to highlight the most significant areas of fraud risk and ensure effective controls are in place.
  - (b) Transformative Projects – The delivery of the Elizabeth Line will be a significant area of management focus over the year ahead. Effective and efficient project and programme delivery is a key factor for TfL's delivery of its Business Plan and the MTS. Internal Audit plans to carry out some cross-cutting, thematic reviews, as well as specific audits on the Elizabeth Line. Assurance of project delivery will primarily be delivered through the work of the Project Assurance team and IIPAG, who will now also provide assurance on the Elizabeth Line.
  - (c) Pandemic Recovery – We have made provision in our plan to accept management requests in this area as we did around the coronavirus pandemic. Safety will continue to be a major focus for Internal Audit, and, in particular, the Integrated Assurance team, as we move forward and passenger numbers recover.
  - (d) Clear vision – Protecting the well-being of its employees and ensuring a more diverse and inclusive organisation is important to TfL. We have a number of audits to provide assurance that TfL is achieving these aims.
  - (e) Green future – TfL continues to focus on cleaner air and streets as well as reducing its carbon footprint. We will be providing assurance around TfL's strategy for achieving this.
- 7.4 The IAP is structured around TfL's current Enterprise Risks, and we have planned work against most of those risks. There are three risks for which no work is planned in the 2020/21 audit plan. These are:

- (a) ER6: Loss of Stakeholder Trust;
- (b) ER9: Changes in Customer Demand; and
- (c) ER11: Disparity leading to unequal outcomes.

7.5 There are a number of key areas of focus for this year's IAP, which are summarised in the following paragraphs. The audits within the IAP have been mapped against these themes where applicable:

**Safety of operations and people– (ER1: Major Safety, Health or Environmental incident or crisis, ER4: Major security incident, ER2: Protecting the wellbeing of our employees)**

- 7.6 Ensuring safety of our operations, customers and people has always been a key area of focus within TfL. The SHE Directorate is updating its Management System. We carried out a desktop exercise to review this in 2020/21. As this was at a very early stage of development, we have included an audit on the Management System's effectiveness in the 2021/22 plan. We will also audit TfL's carbon reduction strategy including climate adaption to ensure the the resilience of our core services, a lessons learned review to assess our readiness for future pandemics and Construction Design and Management Regulations in Commercial Development
- 7.7 TfL has also been working to strengthen controls over security of its premises, data and staff. We will provide assurance over the ongoing delivery of the TfL Protective Security Programme, and plan to conduct audits around asset and data security.
- 7.8 TfL has placed emphasis on the wellbeing of its employees and we will be conducting audits on whistleblowing, core line manager training to support staff wellbeing, movers and leavers and the headcount controls process.
- 7.9 At the second line the Integrated Assurance team will deliver a programme of audits agreed with the operating business, focused on compliance with management system requirements. This will supplement assurance provided by the Compliance, Policing, Operations and Security, SHE and Engineering teams.
- 7.10 Integrated Assurance will also deliver a portfolio of compliance and consultancy engagements at the second line relating to the Payment Card Industry Data Security Standard.

**Revenue and financial control and governance – (ER7: Financial Sustainability, ER13: Governance and Controls Suitability, ER5: Supply Chain Disruption)**

- 7.11 The bulk of our plan relates to these three risks. Protection of its revenue streams and delivery of new revenue streams are critical to TfL achieving its Business Plan. Ensuring effective governance over commercial activities is critical to TfL achieving value for money from suppliers, whilst demonstrating appropriate controls to ensure open, fair, transparent and ethical procurement processes.

- 7.12 We will continue to focus on controls over commercial activities and the supply chain. This will include continued assurance of the ongoing transformation of Procurement and Supply Chain. We will also review controls over some key elements of business ethics, including conflicts of interest and gifts and hospitality, with a particular focus on how they are managed in relation to commercial activities.
- 7.13 A number of audits in the plan will focus on TfL's financial sustainability, for example our work planned in the Commercial Development area, but we have also included audits on general financial controls including controls over expenditure/ costs. This will include audits of bank reconciliations, the controls for the validation and processing of financial data, use of consultants and pensioner payroll. As in previous years we will provide assurance over the outturns on TfL's scorecard indicators that are used to assess TfL's overall performance over the year.

#### **Inability to support new ways of working – (ER10)**

- 7.14 We will carry out audits in this area covering the effectiveness of the Estate Management Strategy, Transformation process, SAP Business Planning Consolidation tool, and a number of Technology & Data audits.

#### **Assets and service delivery- (ER3: Major Service Disruption, ER12: Asset Condition)**

- 7.15 We will carry out an audit in this area covering the effectiveness of the Engineering Resourcing Model, resilience of our assets in the wider context of climate change and the Asset Improvement Plan.
- 7.16 However, the majority of assurance of this risk is delivered at the second line of defence. The Integrated Assurance team will carry out a programme of audits, agreed with the operating businesses, include reviewing the effectiveness of controls over specific assets, or systems managed or maintained by TfL or by its suppliers. The Engineering Compliance Assurance Team and the Bus Contract Compliance team also provide assurance in this area.

#### **Project delivery – (ER8: Delivery of key projects and programmes)**

- 7.17 Effective and efficient project delivery is a key factor for TfL's delivery of its Business Plan and the MTS.
- 7.18 As noted in 6.3 above, the Project Assurance team carries out a programme of second line assurance reviews of major projects and of the 22 TfL sub-programmes. The work completed by Project Assurance is supplemented by reviews carried out by the IIPAG who, following a risk-based approach, act as a third line of defence assurance provider for TfL's Investment Programme. Further information on the work of IIPAG can be found in paragraphs 9.7 to 9.9 below.
- 7.19 Internal Audit will carry out a thematic review of the benefits realisation process and project cost escalation.

## **Crossrail – (ER14: Delivery of the Elizabeth line)**

- 7.20 Successfully moving from Trial Running to Passenger Revenue Service by early 2022 is a critical objective for both Crossrail and TfL.
- 7.21 The IAP includes a programme of audits within Crossrail which is covered in a separate paper.
- 7.22 In planning and delivering our work we will liaise closely with Crossrail's own teams providing second line assurance (including stage gate reviews, targeted assurance reviews and periodic assurance reviews) with the aim of ensuring that assurance is delivered as efficiently and effectively as possible.
- 7.23 IIPAG are also providing third line programme assurance and will continue to do so in 2021/22.

## **8 Medium Term Planning**

- 8.1 Despite the risk-based nature of our planning there are some core business activities (eg governance, core financial controls, Human Resources), where it is appropriate to provide assurance on a regular basis, and there is a cyclical element to our planning.
- 8.2 For a number of years we have presented, as part of our Integrated Assurance Plan, a schedule setting out our audits in these core business areas. This is attached as Appendix 2, and shows the audits done in 2019/20 and 2020/21, the audits incorporated in this 2021/22 plan, and indicative audits for 2022/23.

## **9 Resources**

- 9.1 The total budgeted headcount of the Risk and Assurance directorate (comprising Internal Audit, Integrated Assurance, Project Assurance, Enterprise Risk, Counter-Fraud and Corruption and Business Operations teams) is 67.
- 9.2 The Internal Audit team incorporates a range of skill sets including qualified auditors/accountants, experienced project and contract managers, health, safety, quality and technology specialists.
- 9.3 Internal Audit's budgeted headcount is 22 but there are currently several vacancies.
- 9.4 We have been making use of co-sourcing arrangements with external providers to deliver audits in the Technology and Information Security (TIS) area. However, we have recently initiated a recruitment campaign to recruit two TIS auditors so as to reduce reliance on co-sourcing.

### *Second line assurance teams*

- 9.5 The Integrated Assurance team (see paragraph 6.2) has a budgeted headcount of 13 staff, although there are currently two vacancies.

9.6 The Project Assurance team (see paragraph 6.3) also has a budgeted headcount of 13. Its resources are supplemented by the use of External Experts (approximately eight FTE).

*IIPAG resources and plan*

9.7 IIPAG's budget for 2021/22 is the same as in 2020/21, at £395,000. In 2020/21 the budget was underspent by £30,000.

9.8 IIPAG's work in 2021/22 will provide third line assurance and strategic advice in the following areas:

- (a) sub-programme reviews;
- (b) project assurance reviews for individual projects over £50m, either at key gate stages or as an annual check;
- (c) ongoing scrutiny of the most significant major projects, such as Four Lines Modernisation;
- (d) one-off reviews of strategic and systemic issues, including benchmarking.

9.9 As in 2020/21, IIPAG will take a risk-based approach to targeting effort on sub-programme and project reviews. IIPAG is currently reviewing the risk assessment of the sub-programmes and projects with Project Assurance. IIPAG is also reviewing the areas for cross-cutting work in 2021/2022. They expect that in many cases these will be a continuation, review or expansion of cross-cutting work undertaken in 2020/21. They are having discussions with TfL leadership and Internal Audit to help shape this programme. They welcome suggestions from the Committee.

**List of appendices to this report:**

Appendix 1 – Integrated Assurance Plan 2021/22

Appendix 2 – Integrated Assurance Plan 2021/22– Cyclical audit areas

**List of Background Papers:**

None

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## Transport for London Audit and Assurance Committee

### Rolling Integrated Audit Plan (2021/22):

There are 54 internal audits planned for delivery in 2021/22, of which 14 are planned to start in Q1:

### Appendix I

Enterprise Risk No.	Enterprise Risk	Audit Title	Objective	Planned Quarter	Directorate/ Sponsor	Business Unit	Est. Budget (Days)
ERI	Major Safety, Health or Environmental incident or crisis	Integrated Assurance will deliver a portfolio of engagements at the second line relating to safety assurance in addition to the SHE and Engineering assurance teams				Various	
		Bus Electrification Strategy	To provide assurance over the effective implementation of the strategy	Q3	Surface Transport	Bus Operations	30
		Construction Design and Management (CDM) Regulations	To provide assurance that the Commercial Development arrangements for CDM duties are adequate and effective	Q1	Finance	Commercial Development	30
		Carbon Reduction Strategy (including climate adaptation)	Provide assurance over the adequacy and effectiveness of the governance processes for reducing carbon in TfL	Q3	SHE	Corporate Environment	30
		Strategic Review of the SHE management system	Provide assurance over the adequacy and effectiveness of the updated SHE management system	Q4		SHE	35
		Pandemic Recovery	Review lessons learned from coronavirus pandemic to inform readiness for future pandemics	Q2		SHE	35
ER2	Protecting the wellbeing of our employees	Movers and Leavers	Provide assurance on the adequacy and effectiveness of the movers and leavers process.	Q4	Customers, Communication & Technology	Business Services	35
ER2	Protecting the	Call it Out	Provide assurance on the	Q1	Human	Human	30

## Transport for London Audit and Assurance Committee

Enterprise Risk No.	Enterprise Risk	Audit Title	Objective	Planned Quarter	Directorate/ Sponsor	Business Unit	Est. Budget (Days)	
	wellbeing of our employees	campaign	adequacy of the revised Whistleblowing process.		Resources	Resources		
		Core Line Manager Training (staff wellbeing)	Provide assurance on the adequacy and effectiveness on- line manager training to support wellbeing of staff	Q1			35	
		Headcount Controls Process	Provide assurance on the adequacy and effectiveness of the headcount controls process.	Q2			35	
ER3	Major Service Disruption	Engineering Resource Model	To provide assurance that controls over the engineering resourcing strategy are adequate and effective	Q1	London Underground	Engineering Delivery	35	
		Climate Adaption	To provide assurance that controls over asset resilience to climate change are adequate	Q4	Pan TfL	Pan TfL	35	
ER4	Major Security Incident	Integrated Assurance will deliver a portfolio of compliance and consultancy engagements at the second line relating to the Payment Card Industry, Data Security Standard					Various	
		Cubic entity - review of systems	Assess the adequacy and effectiveness of access controls, availability and performance of systems.	Q2	Customers, Communication & Technology	T&D	40	
		Security of BYOD	Provide assurance on the effectiveness of the strategy to ensure security of TfL data during use of BYOD.	Q3			30	
		Software License Management	Assess the adequacy and effectiveness of controls in place to manage risks associated with software licensing across TfL.	Q3			35	

## Transport for London Audit and Assurance Committee

Enterprise Risk No.	Enterprise Risk	Audit Title	Objective	Planned Quarter	Directorate/ Sponsor	Business Unit	Est. Budget (Days)
ER4	Major Security Incident	Data Leakage Prevention	Assess the adequacy and effectiveness of data leakage prevention controls in relation to personal, sensitive and confidential data.	Q4	Customers, Communication & Technology	T&D	40
		Implementation of the security programme	Provide assurance over the effectiveness of the implementation of the security programme	Q4	Surface Transport	Compliance Policing Operations Security (CPOS)	30
		Data Disclosure Unit for Body Worn Cameras	To provide assurance over the controls around body worn cameras	Q2			30
ER5	Supply chain disruption	Payments to contractors	Provide assurance on the adequacy and effectiveness of payments to contractors on capital and maintenance contracts.	Q2	Customers, Communication & Technology	Business Services	40
		London Highways Alliance Contract (LOHAC) Strategy	To provide assurance over the controls around LOHAC Strategy (including demobilisation and re-let)	Q4	Surface Transport	Procurement and Supply Chain	30
ER7	Financial sustainability	Bank reconciliations	Provide assurance on the adequacy and effectiveness of the bank reconciliations process	Q1	Finance	Finance	35
		Projects and Fixed Assets	Provide assurance on the adequacy and effectiveness of accounting controls for projects and fixed assets	Q2	Customers, Communication & Technology	Business Services	35
		Record to Account	Provide assurance on the adequacy and effectiveness of controls that validate and process financial data	Q2			40
ER7	Financial sustainability	TfL Scorecard	Provide assurance that 2020/21 year-end results on	Q1	Finance	Finance	35

## Transport for London Audit and Assurance Committee

Enterprise Risk No.	Enterprise Risk	Audit Title	Objective	Planned Quarter	Directorate/ Sponsor	Business Unit	Est. Budget (Days)
			the TfL Scorecard are being accurately reported.				
		Use of Consultants	Provide assurance on the adequacy and effectiveness of controls in place for the use of Consultants	Q3		Procurement and Supply Chain	40
		Pensioner Payroll	Provide assurance on the adequacy and effectiveness of controls for Pensioner Payroll	Q2	Human Resources	Pensions	35
		ACE-funded projects: The Cultural Recovery Fund Part 1	Certify costs in respect of funding for The Cultural Recovery Fund (Part 1).	Q1			30
		ACE-funded projects: The Cultural Recovery Fund Part 2	Certify costs in respect of funding for The Cultural Recovery Fund (Part 2).	Q1	LTM	LTM	25
		LTM Security of Valuable Collections	Provide assurance on the adequacy and effectiveness of controls in place to ensure the security of valuable collections.	Q3			30
		Clean Mobile Energy (7th review)	Certify costs in respect of EU funding.	Q2	Customers, Communication & Technology	City Planning	30
		LU Modernisation Programme (Phase 2)	To provide assurance that the LU modernisation programme is effectively delivering the expected benefits	Q2	London Underground	Finance	35
		Commercial Development's asset management strategy to maximise	Provide assurance over the adequacy and effectiveness of Commercial Development's asset management strategy	Q1	Finance	Commercial Development	40

## Transport for London Audit and Assurance Committee

Enterprise Risk No.	Enterprise Risk	Audit Title	Objective	Planned Quarter	Directorate/ Sponsor	Business Unit	Est. Budget (Days)	
		secondary revenue income						
		Commercial Development Financial Sustainability Plan	To provide assurance that the controls over the Financial Sustainability plan in Commercial Development are adequate and effective	Q2			40	
ER8	Delivery of TfL key investment programmes and projects	Project Assurance and Integrated Assurance will deliver a portfolio of assurance reviews at the second line of defence, in addition to work undertaken by SHE and PMO teams.						
		IIPAG will deliver a portfolio of assurance reviews at the third line of defence						
		Benefits Realisation	To provide assurance that controls in place to deliver programme benefits are adequate and effective	Q4	Major Projects Directorate	TfL Project Management Office	35	
		Project Cost Escalation	To review the effectiveness of cost controls in projects and programmes	Q3	Surface Transport	Finance	35	
ER10	Inability to support new ways of working	The Estate Management Strategy	Provide assurance on the adequacy and effectiveness of the Estate Management Strategy	Q2	Finance	Commercial Development	35	
		Transformation	Provide assurance on the adequacy and effectiveness of Transformation processes	Q2	Customers, Communication & Technology	Transformation	40	
		Software Development of the Contactless Payments System	Assess the adequacy and effectiveness of controls for developing and implementing changes to the Contactless Payments System.	Q1		T&D	30	
ER10	Inability to support new ways of	Cubic entity - review of procurement	Provide assurance the procurement of Cubic is being delivered effectively	Q1	Customers, Communication & Technology	T&D	30	

## Transport for London Audit and Assurance Committee

Enterprise Risk No.	Enterprise Risk	Audit Title	Objective	Planned Quarter	Directorate/ Sponsor	Business Unit	Est. Budget (Days)
	working		and efficiently.				
		SAP Business Planning Consolidation Tool (BPC)	Assess the adequacy of the development and implementation of the current enhancement to BPC	Q2	Finance	Finance	40
		IT Disaster Recovery and Operational Resilience	Provide assurance over TfL's ability to withstand and recover from disruptive IT events	Q4	Customers, Communication & Technology	T&D	40
ERI2	Asset condition unable to support TfL outcomes	Integrated Assurance will deliver a portfolio of assurance reviews at the second line of defence, in addition to work by the Engineering Maintenance Assurance team				Various	
		Asset Management Improvement Plan	To review the adequacy and effectiveness of the Asset Management Improvement Plan	Q3	LU	Engineering	40
ERI3	Governance and Controls Suitability	Risk Management in TfL	Provide assurance on the adequacy and effectiveness of Risk Management in TfL	Q4	General Counsel	Risk & Assurance	35
		Business Ethics	Provide assurance on the adequacy and effectiveness of controls supporting business ethics across TfL	Q3		Business Services	30
		Recruitment	Provide assurance on the adequacy and effectiveness of controls within recruitment	Q3	Customers, Communication & Technology		40
ERI3	Governance and Controls Suitability	Procurement & Supply Chain (P&SC) Improvement Plan (PIP)	To provide assurance the P&SC transformation is being delivered effectively and efficiently.	Q1	Finance	Procurement and Supply Chain	35
		Integration of Woolwich Ferry	To provide assurance on the adequacy and effectiveness of controls on the Woolwich Ferry integration	Q2	Surface Transport	Sponsored Services	35

## Transport for London Audit and Assurance Committee

Enterprise Risk No.	Enterprise Risk	Audit Title	Objective	Planned Quarter	Directorate/ Sponsor	Business Unit	Est. Budget (Days)
ERI4	Opening of the Elizabeth Line	Management of Crossrail Residual Works	To provide assurance over the effectiveness of the residual Works Programme	Q3	London Underground	London Underground	35
		Crossrail Complaints Commissioner Accounts	Provide assurance on the accuracy of the Crossrail Complaints Commissioners Accounts for 2020/21	Q3	Crossrail	Crossrail	25
		Management of CRL direct contracts	To provide assurance that the controls around the management of CRL Direct Contracts are adequate and effective	Q2			40
		Employer's Completion Process	To provide assurance that the controls around the Employer's Completion Process are effective	Q1			35
		Transition of CRL people	To provide assurance that the controls around the transition of CRL team are adequate and effective	Q4			40
		Information Management and Transfer	To review the effectiveness of controls around information transfer from CRL to TfL (including MTR)	Q2			35
		Organisational Effectiveness	To provide assurance that the CRL organisation governance is adequate and effective	Q4			40
		Network and Information Systems (NIS) regulations	To provide assurance on the adequacy of controls around adherence to the NIS regulations	Q3			45

## Transport for London Audit and Assurance Committee



## Integrated Assurance Plan 2021/22 – Cyclical audit areas

Appendix 2

	2019/20 Actual	2020/21	2021/22 (plan)	2022/23 (Indicative)
<b>Financial</b>				
Procure to Pay Accounts Payable	Whole life Costings in Procurements (T&D)		Payments to Contractors	Single Sourcing
			Consultants	Accounts Payable
Payroll	Payroll	Counter fraud audit investigations	Projects and Fixed Assets	Payroll
Fixed Assets			Counter fraud audit investigations	Counter fraud audit investigations
Cash			Bank Reconciliations	Order to Cash
Revenue				Accounts Receivable
Insurance		Counter fraud audit investigations		Insurance
General Accounting	Delegated Project Authority		Record to Account	LTM Key Financial Controls
			Treasury Management	
'Hygiene' Audits		Expenses		
<b>Human Resources</b>				
HR Processes	Nominee Passes		Movers and Leavers	Talent Management
			Recruitment	
			Business Ethics	
<b>Other</b>				
Risk Management			Risk Management in TfL	
Legal/ statutory compliance	Networks and Information Systems (NIS)	Digital Accessibility Regulations	Grant certifications	GDPR
	Grant certifications	GDPR	Crossrail Complaints Commissioner Accounts	Grant certifications
	Crossrail Complaints Commissioner Accounts	Grant certifications		Crossrail Complaints Commissioner Accounts
		Crossrail Complaints Commissioner Accounts		
Internal Governance	TfL Scorecard	TfL Scorecard	TfL Scorecard	TfL Scorecard

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## Audit and Assurance Committee



**Date:** 17 March 2021

**Item:** Elizabeth Line Audit and Assurance Quarter 3 Report  
2020/21

---

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

## **1 Summary**

1.1 This paper provides an overview of the third line audit assurance activity in relation to the Elizabeth line during Quarter 3 of 2020/21 (Q3). The purpose of this report is to inform the Committee of the work completed by the Internal Audit team during Q3, the work in progress and planned to start.

## **2 Recommendation**

2.1 **The Committee is asked to note the paper,**

## **3 Background**

3.1 Assurance over the Elizabeth line is delivered in accordance with the three lines of defence model as follows:

- (a) First line of defence – control and monitoring arrangements carried out by the functions responsible for managing the risks/controls;
- (b) Second line of defence – typically audit and inspection regimes carried out by teams separate from those responsible for managing the risks/controls, but reporting through the Crossrail management hierarchy; and
- (c) Third line of defence – fully independent audit and review activities. Typically, activities will have a strategic focus, with reporting to the Elizabeth Line Committee and this Committee as appropriate.

3.2 Third line assurance over the Elizabeth line is provided by TfL's Internal Audit team. The Independent Investment Programme Advisory Group (IIPAG) will provide third line assurance over the project delivery. A summary of the work of these teams during Q3 is set out below.

3.3 The Projects and Programme Assurance team (Crossrail Assurance) provides second line assurance over project delivery. The Crossrail sponsors receive assurance on delivery of the Crossrail project from Jacobs UK Ltd in its role as Project Representative (P-Rep).

## **4 Third Line Assurance – Internal Audit**

- 4.1 The Crossrail Internal Audit Plan for 2020/21 was approved by the Crossrail Audit and Assurance Committee in March 2020 and formed part of the TfL Integrated Assurance Plan approved by this Committee. Some minor changes to the Crossrail Internal Audit Plan were reported to both Committees in September 2020.
- 4.2 We meet periodically with Crossrail Assurance, the P-Rep and the Crossrail Risk team to share assurance information and ensure that assurance activity is co-ordinated and duplication of effort is avoided.

### **Audit Delivery**

- 4.3 During Q3 we issued two memorandums (memos) and three audit reports, all of which were concluded as requires improvement. The two memos related to the Crossrail Complaints Commissioner Accounts for 2018/19 (delayed due to furlough of the auditee) and 2019/20, which are annual audits. The three reports were for audits carried forward from the 2019/20 plan and delayed due to furlough.
- 4.4 Details of the audit reports issued during Q3 are included in Appendix 1. Work in progress at the end of Q3 is set out in Appendix 2. Audits planned to start during Quarter 4 (Q4) are set out in Appendix 3.

### **Management Actions**

- 4.5 Currently there are six actions overdue but no actions overdue by more than 60 days.

### **Changes to the Plan**

- 4.6 We regularly review and update the plan throughout the year, in liaison with management, to reflect changing business priorities. There were no changes to the plan in Q3.

## **5 Third Line Programme Assurance - IIPAG**

- 5.1 IIPAG will carry out third line programme assurance activity on the Crossrail project. IIPAG's Terms of Reference have been updated to reflect that change. A sub-group to oversee the Crossrail assurance activities and work has been set up.
- 5.2 An IIPAG review of the effectiveness of first and second line assurance in Crossrail has also begun.
- 5.3 IIPAG recently attended the deep dive briefing held for Members of the Committee. They have also had discussions on operational readiness with TfL. They are working with the Crossrail Assurance team to understand the status of assurance on the Delivery Control Schedule. IIPAG will be looking at preparedness for Trial Running and the safety assurance associated with it.

IIPAG are also awaiting the outcome from the P-Rep's review of risk allowances so they can review that output.

5.5 A full quarterly work plan of IIPAG activities will be presented in future.

**List of Appendices:**

Appendix 1 – Reports issued in Q3  
Appendix 2 – Work in progress at the end of Q3  
Appendix 3 – Work due to start in Q4

**List of Background Papers:**

None

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# Transport for London Audit and Assurance Committee

## Internal audit reports issued in Q3

- There were five reports issued

## Appendix 1

Enterprise risk	Directorate	Audit title	Summary of Findings	Conclusion	H	M	L
FC3- Crossrail may not be able to demonstrate sufficient commercial and/or financial control.	Crossrail	Consents Compliance Governance	<ul style="list-style-type: none"> <li>Consents registers were not up to date</li> <li>Serious Incident Event Review (SIER) reports were not completed in a timely manner</li> </ul>	Requires Improvement	2	0	1
		Crossrail Complaints Commissioner Accounts 18/19	<ul style="list-style-type: none"> <li>Accounts of the Crossrail Complaints Commissioner, in all material aspects, accurately reflect the receipts and payments during the financial period ended 31 March 2019</li> <li>In addition, in all material aspects, the accounts comply with the Accounts Directions issued on behalf of the Crossrail High Level Forum</li> <li>This review and report were delayed due to the Covid 19 pandemic</li> </ul>	Memo	0	0	0
		Crossrail Complaints Commissioner Accounts 19/20	<ul style="list-style-type: none"> <li>Accounts of the Crossrail Complaints Commissioner, in all material aspects, accurately reflect the receipts and payments during the financial period ended 31 March 2020</li> <li>In addition, in all material aspects, the accounts comply with the Accounts Directions issued on behalf of the Crossrail High Level Forum</li> </ul>	Memo	0	0	0

## Transport for London Audit and Assurance Committee

Enterprise risk	Directorate	Audit title	Summary of Findings	Conclusion	H	M	L
OC3-Crossrail fails to retain key competence and leadership to complete the programme.	Crossrail	Culture Change	<ul style="list-style-type: none"> <li>• Crossrail is operating without an agreed framework for assessing, managing and monitoring organisational culture.</li> <li>• Values statements should be expanded to provide guidance around expected behaviours and best practice at the corporate, directorate and project levels.</li> </ul>	Requires Improvement	2	2	0
FC3 -Crossrail may not be able to demonstrate sufficient commercial and/or financial control		Adequacy of the Supply Chain Assurance Framework	<ul style="list-style-type: none"> <li>• Terms of reference and RACI matrices for the Vis Board meetings have not been defined</li> <li>• Forecast due dates for actions were not being updated and they were not being discussed in order of severity.</li> </ul>	Requires Improvement	2	2	0



**Work in progress at end of Q3**

**Appendix 2**

Grouped by Enterprise Risk

- Six audits were in progress at the end of Q3

Enterprise risk	Audit title	Objective	Current status
OC1 Crossrail and TfL may fail to deliver on the transition plan to complete the programme.	Governance and Organisational Effectiveness	To provide assurance over the adequacy and effectiveness of arrangements designed to ensure timely project delivery	Reporting
	Transfer of CRL programme to TfL	To provide assurance on the effectiveness of controls around the transfer of the Crossrail programme to TfL	In Planning
FC3-Crossrail may not be able to demonstrate sufficient commercial and/or financial control.	Risk Management	To provide assurance over adequacy and effectiveness of risk management in Crossrail.	In Progress
	Management of Staff costs	To provide assurance that the Contractual Appointments process is being approached and managed in a transparent and effective manner.	In Progress
HS4 Safety performance could be impacted by changing from the Crossrail programme rules to the IM operational rules.	CRL HSE framework	To provide assurance over the adequacy and effectiveness of the HSE framework	In Planning
SC4 -Volume of residual works may impact operation and safety of the railway (ADM)	Alternative Delivery Model Strategy	To provide assurance that the alternative delivery model strategy is adequate	In Planning

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## Transport for London Audit and Assurance Committee

### Appendix 3

#### Work planned to start in Q4 2020/21

Grouped by Directorate

- There are 4 audits planned to start during the quarter 4

Enterprise risk	Directorate	Audit title	Objective	Planned Period
Opening of the Elizabeth Line	Crossrail	Management of AFC	To provide assurance over the effectiveness of controls for the management of Anticipated Final Cost (AFC)	P12
		Management of Indirect Costs	To provide assurance that the Crossrail organisation is managing indirect costs in line with Programme requirements	P11
		Readiness for Trial Running	To provide assurance over the operational readiness of the operators to commence Trial Running	P12
		Demobilisation of Tier 1 contractors	To provide assurance that the controls around Tier 1 contractor demobilisation are adequate and effective.	P12

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## Audit and Assurance Committee



**Date:** 17 March 2021

**Item:** Elizabeth Line Programme Assurance Quarter 3 Report 2020/21

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**This paper will be considered in public**

### **1 Summary**

- 1.1 This paper provides an overview of programme assurance activity in relation to the Elizabeth line during Quarter 3 of 2020/21. A separate paper which provides an overview of the third line audit assurance activity in relation to the Elizabeth line appears elsewhere on the agenda for this meeting.

### **2 Recommendation**

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

### **3 Background**

The Elizabeth line Three Lines of Defence (3LoD) Integrated Assurance Framework (IAF) was approved by the Crossrail Limited (CRL) Audit and Assurance Committee, a committee of the then CRL Board in June 2019.

- 3.1 In October 2020, the 3LoD IAF was updated in response to the CRL transition to TfL, reflecting the new reporting lines and governance structure.
- 3.2 This paper describes progress with changes to the 3LoD IAF and key assurance activities over the last quarter since the transition to TfL governance. Unlike the reports to periodic governance forums which focus on current issues and concerns, this paper provides an overview of assurance activity, observed trends and a forward look of planned activity.

### **4 Changes to 3LoD IAF**

- 4.1 Following the CRL transition to TfL governance in October 2020, there have been a number of changes to the CRL 3LoD IAF as illustrated by the diagram in Appendix 1.
- 4.2 The previous reporting lines of the IAF to the CRL Board and CRL Audit and Assurance Committee have been replaced by new reporting lines to the periodic Elizabeth Line Delivery Group, the Elizabeth Line Committee and now, through this paper, to this Committee.
- 4.3 Line of Defence 3 (LoD3) has been augmented by the creation of a new Independent Investment Programme Advisory Group (IIPAG) CRL Sub-Group,

which is covered separately in the general IIPAG paper elsewhere on the agenda for this meeting.

- 4.4 Two members of the previous CRL Board and three members of the previous CRL Advisory Panel have been retained to provide expert advice to the Commissioner and CRL CEO, respectively. These Expert Advisors prioritise and align their activities in coordination with the 3LoD IAF assurance functions.
- 4.5 The Crossrail Programme Assurance Group continues to serve as the coordinating forum for assurance activities and is now attended by the new, above mentioned LoD3 IIPAG CRL Sub-Group and the Expert Advisors in addition to the 3LoD IAF assurance functions and the Project Representative.
- 4.6 In addition to the changes to the formal 3LoD IAF structure, CRL has also established a new CEO Assurance forum where LoD2 and Expert Advisors hold focused reviews with the CRL CEO and members of the CRL Executive in order to identify emerging concerns and consider intervention responses.

## **5 Assurance Trends and Developments in the last Quarter**

### **Project Progress Performance**

- 5.1 Overall progress towards completion and commencement of Passenger Service is on-track to be achieved in line with the previously published dates although the schedule and cost for completing Crossrail remain under significant pressure.
- 5.2 The last quarter has seen the project take significant steps forward with a number of key activities including, for example; the commencement of System Integration Dynamic Testing, the completion of a second Routeway Blockade and commencement of station systems integration testing.
- 5.3 Commencement of Trial Running has quite rightly been the project's top priority throughout the last quarter. This has been hindered by slower than anticipated progress with essential safety assurance documentation and key information required for future maintenance and operation which has led to certain lower priority activities being deferred.
- 5.4 The stations completion programme is under some pressure, exacerbated by the deferred Trial Running activities which will place readiness to commence Trial Operations under pressure.

### **Real-Time/Continuous Assurance**

- 5.5 With the elevated pace and agility of the Crossrail project the last quarter has seen a greater focus on real-time assurance with (particularly LoD2) concentrating more on participation in project activities and giving active feedback, and a reduction in emphasis on set-piece, remitted reviews and formal reports.
- 5.6 This has seen a reduction in the number of Target Assurance Reviews (TARs) in the last quarter from an average of five per quarter to two per quarter. In the same period, the closeout of Periodic Assurance Review (PAR) actions has improved from 36 to 19 items outstanding.

## **Adequacy of Controls**

- 5.7 The last quarter has seen an improvement in the Adequacy of Controls assessment across the 11 main functional areas.
- 5.8 This assessment score had previously seen a variable / mixed performance over the previous year as the CRL Functions had, in some cases, struggled to achieve the desired level of process compliance across project and contract delivery.
- 5.9 One area of particular concern is the Schedule (Programme Controls) function which continues to score Amber/Red due to continued inconsistent schedule performance.

## **6 Infrastructure Projects Authority Critical Friend Review**

- 6.1 The Infrastructure and Projects Authority (IPA) is the Government's centre of expertise for infrastructure and major projects reporting to the Cabinet Office and HM Treasury. The IPA conducts regular independent reviews of selected major UK projects.
- 6.2 In November 2020, the IPA conducted a follow-up Critical Friend Review of Crossrail and made seven recommendations.
- 6.3 Of the seven recommendations, five relate to the effectiveness works delivery of the Crossrail project and are currently being addressed as part of the Crossrail's delivery programme.
- 6.4 Two recommendations relate to the breadth of Crossrail's 3LoD assurance framework following the transition to TfL governance and are currently under review by TfL. Progress with these actions will be reported at the next meeting of the Committee.

## **7 Integrated Audit and Assurance Plan**

- 7.1 The 3LoD IAF maintains an integrated plan of assurance activity coordinated through the Crossrail Programme Assurance Group forum.

### **List of Appendices:**

Appendix 1 – Diagram Illustrating 3LoD IAF as at Period 11

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

None

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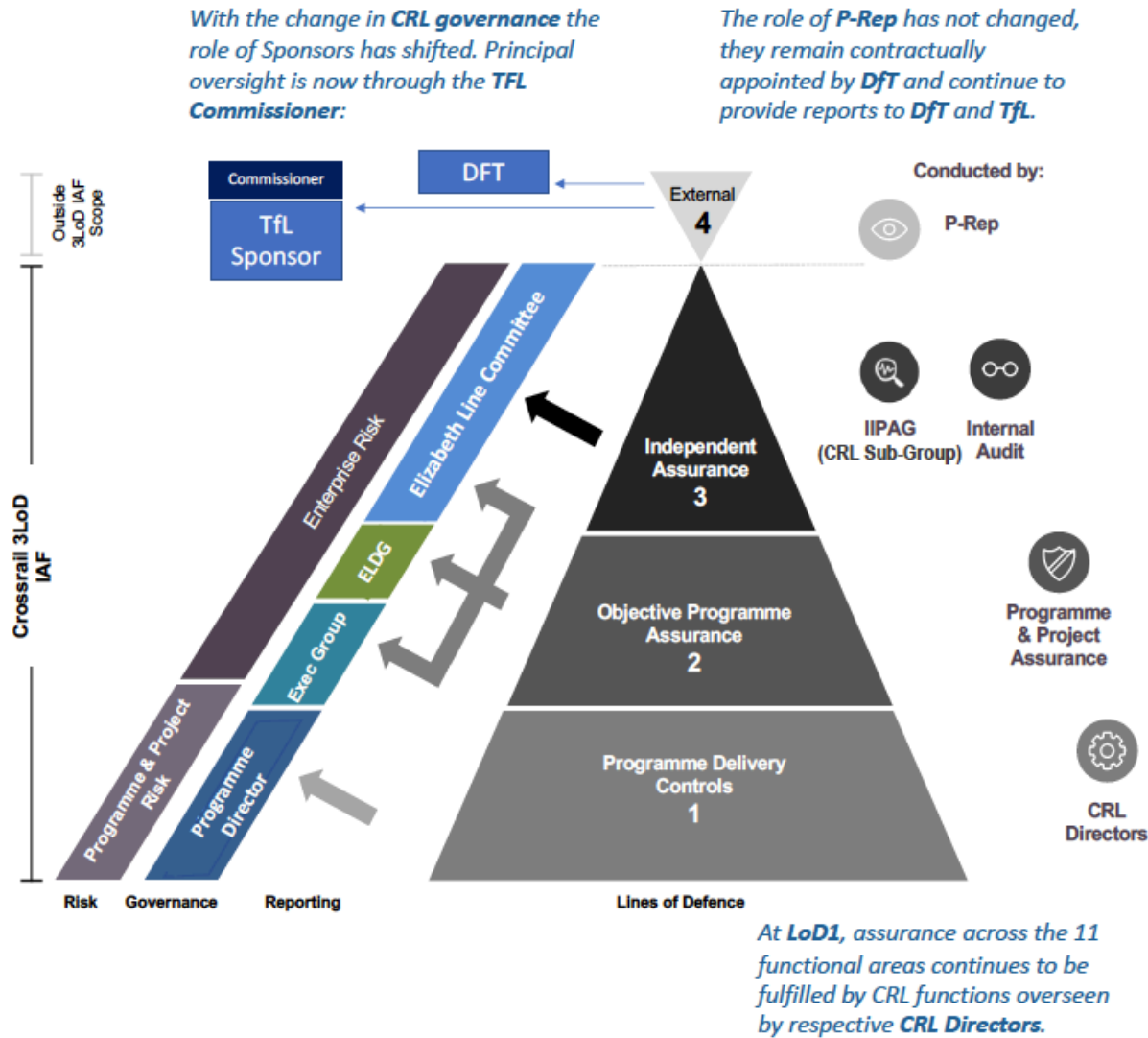
Appendix 1 – Diagram Illustrating 3LoD IAF as at Period 11

# Integrated Assurance Framework (IAF)

Update on the IAF post-Transition to TFL Governance as-at 15-Feb:

1. LoD1 and LoD2:
  - Position unchanged
2. LoD3
  - ELC endorsed IIPAG to undertake LoD3 Assurance
  - New CRL IIPAG Panel reporting to IIPAG
  - New Chair appointed to CRL IIPAG Sub-Group
3. Specialist Advice and Assurance
  - Two advisors expert advisors supporting CEO and Commissioner
  - Three members of the previous Advisory Panel providing expert support to CEO

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**Date:** 17 March 2021

**Item:** Elizabeth Line Internal Audit Plan 2021/22

---

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

## **1 Summary**

- 1.1 The purpose of this paper is to present the 2021/22 Elizabeth Line Internal Audit Plan (IAP) to the Committee for approval.

## **2 Recommendation**

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

## **3 Background**

- 3.1 Within Crossrail, there are a number of functions involved in the delivery of assurance operating across the three lines of defence model.
- 3.2 Internal Audit, operating at the third line of defence, will work with other Crossrail assurance providers to deliver audit and assurance work in a collaborative manner.
- 3.3 The IAP in Appendix 1 sets out the Internal Audit (third line of defence) work we plan to carry out during 2021/22.

## **4 Development of the Plan**

- 4.1 The starting point for development of our IAP is a review of the Crossrail Enterprise Risks identified by Crossrail during 2020 and the key controls over those risks. The plan is structured around the Enterprise Risks.
- 4.2 We have consulted with senior management to get their views on where assurance work would add the most value and shared the draft plan for comment. However, the final decision on what is included rests with Internal Audit.
- 4.3 In developing the plan, we have also had regard to the assurance being provided by other assurance teams within Crossrail and the Independent Investment Programme Advisory Group to ensure that the work is carried out by the most appropriate team and that duplication of effort is avoided.
- 4.4 Internal Audit delivers its work according to defined processes and procedures, set out in its audit manual, in line with relevant statutory requirements and professional standards.
- 4.5 We will provide a quarterly update report to each meeting of the Committee on progress with delivery of the plan. We will also regularly review and update the

plan throughout the year, in liaison with management, to reflect changing business priorities. Any changes to the plan will be presented to the Committee for approval.

## **5 Resources**

- 5.1 The plan will be delivered through a mix of our in-house auditors and auditors from our co-sourced audit partner. We are currently in discussions with Crossrail management regarding funding of this work.

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

Appendix 1 – Elizabeth Line Internal Audit Plan 2021/22

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

None

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## Transport for London Audit and Assurance Committee

### Rolling Elizabeth Line Audit Plan (2021/22):

### Appendix 1

There are 8 internal audits planned for delivery in 2021/22, of which 2 are planned to start in Q1:

Enterprise Risk No.	Enterprise Risk	Audit Title	Objective	Planned Quarter	Directorate/ Sponsor	Business Unit	Est. Budget (Days)
FC3	Crossrail may not be able to demonstrate sufficient commercial and/or financial control.	Crossrail Complaints Commissioner Accounts	Provide assurance on the accuracy of the Crossrail Complaints Commissioners Accounts for 2020/21	Q3	Crossrail	Crossrail	25
		Management of CRL direct contracts	To provide assurance that the controls around the management of CRL Direct Contracts are adequate and effective	Q2			40
		Employer's Completion Process	To provide assurance that the controls around the Employer's Completion Process are effective	Q1			35
OC3	Crossrail fails to retain key competence and leadership to complete the programme	Transition of CRL people	To provide assurance that the controls around the transition of CRL team are adequate and effective	Q1			40

## Transport for London Audit and Assurance Committee

<b>OC1</b>	Crossrail and TfL may fail to deliver on the transition plan to complete the programme	Transition of CRL assets	To provide assurance that the controls around the transition of CRL assets are adequate and effective	Q3			40
		Information Management and Transfer	To review the effectiveness of controls around information management and transfer from CRL to TfL	Q2	Crossrail	Crossrail	35
		Organisational Effectiveness	To provide assurance that the CRL organisation governance is adequate and effective	Q2			40
		Network and Information Systems (NIS) regulations	To provide assurance on the adequacy of controls around adherence to the NIS regulations	Q3			45

## Audit and Assurance Committee



**Date:** 17 March 2021

**Item:** Finance Control Environment Trend Indicators

---

**This paper will be considered in public**

### **1 Summary**

1.1 To report to the Committee on the Financial Control Environment Trend Indicators.

### **2 Recommendation**

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

### **3 Background**

3.1 This paper reports on the Quarter 3 Financial Control Indicators, that informs the Committee as to the control environment across Finance, Business Services and Procurement.

3.2 As agreed with the Committee at its last meeting, this quarter includes the procurement metrics for the first time.

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

Appendix 1 - Financial Indicators Dashboard

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

None

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# TfL Audit & Assurance Committee Performance Metrics Quarter 3, 2020/21

17 March 2021

Appendix I



# TfL Group: audit committee performance metrics to end Quarter 3, 2020/21

## Key metrics Audit Committee

Key control metrics relating to Forecasting Accuracy, Processing Payments and Procurement  
Quarter 3, 2020/21

Q3 variances driven by:

Total operating income: underlying income – after adjusting for £100m revenue contingency – is in line with target.

Underlying passenger income (excluding contingency) was £8m better than target, driven by upsides in buses, Rail and Oyster write off income. Road User Charging income (including income from the Congestion Charge and ULEZ schemes) was £10m lower than target, following the national lockdown in November.

Operating costs: £28m lower than target, driven by lower core costs – partly from lower bad debt as a result of lower Congestion Charge and ULEZ volumes – and lower investment costs.

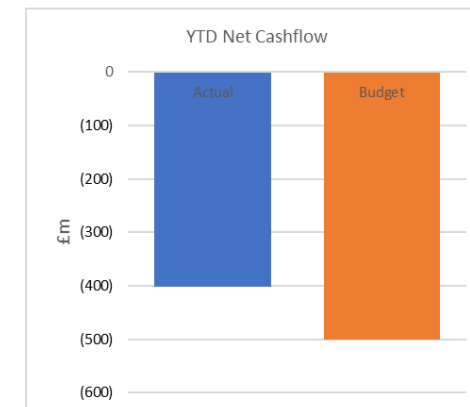
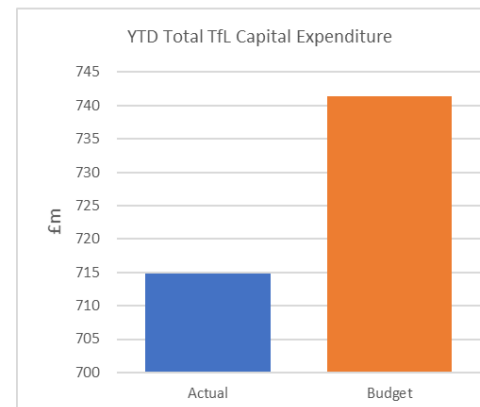
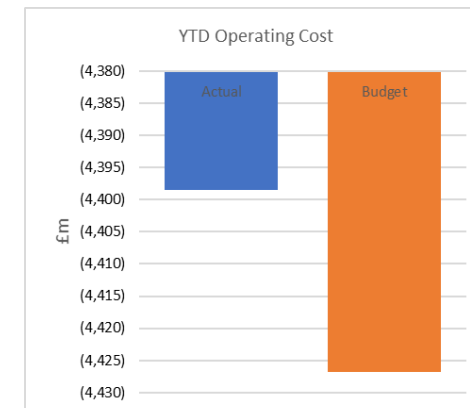
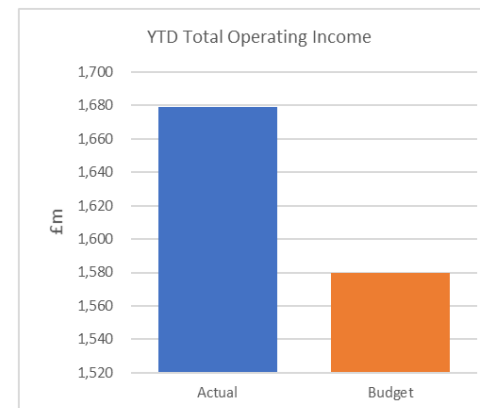
Total capital expenditure: £27m lower than target, driven by slower ramp up in capital renewals and lower property investment spend.

### Quarterly Forecasting Accuracy

£m	Q4 19/20	Q1 20/21	Q2 20/21	Q3 20/21
<b>Total Operating Income</b>	<b>1,649</b>	<b>332</b>	<b>649</b>	<b>697</b>
Variance to reported Budget *	(193)	151	101	100
<b>Operating Cost</b>	<b>(2,093)</b>	<b>(1,436)</b>	<b>(1,451)</b>	<b>(1,512)</b>
Variance to reported Budget	(8)	(30)	58	28
<b>Total TfL Capital Expenditure **</b>	<b>596</b>	<b>180</b>	<b>245</b>	<b>289</b>
Variance to reported Budget	76	(20)	18	27
<b>Net Cashflow</b>	<b>140</b>	<b>(559)</b>	<b>70</b>	<b>87</b>
Variance to reported Budget	(4)	(99)	125	98

### YTD Forecasting Accuracy - P9

£m	YTD
<b>Total Operating Income</b>	
Actual	1,679
Budget	1,580
<b>Operating Cost</b>	
Actual	(4,398)
Budget	(4,427)
<b>Total TfL Capital Expenditure</b>	
Actual	715
Budget	741
<b>Net Cashflow</b>	
Actual	(402)
Budget	(500)



\* 2019/20: reporting is against the original Budget in Q1 & Q2 and Revised Budget in Q3 & Q4 .

2020/21: reporting is against the Emergency Budget for P1-3; P4 onwards is against the Revised Budget

\*\* Total TfL Capital Expenditure excludes amounts relating to Crossrail

# Key metrics

## Audit Committee

### TfL Group: audit committee performance metrics to end Quarter 3, 2020/21

Key control metrics relating to Forecasting Accuracy, Processing Payments and Procurement  
Quarter 3, 2020/21

Open items on the bank reconciliation have reduced between Q2 and Q3 both in terms of value and volume driven by a joint exercise between the Finance and Business Services to actively clear out > 30 days.

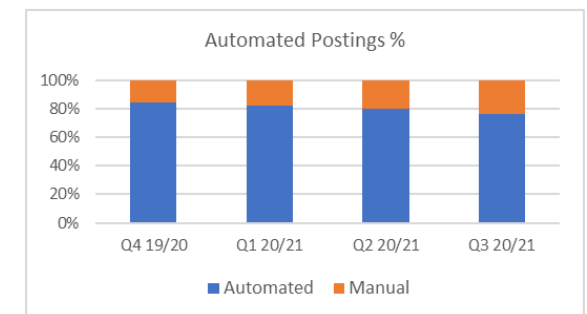
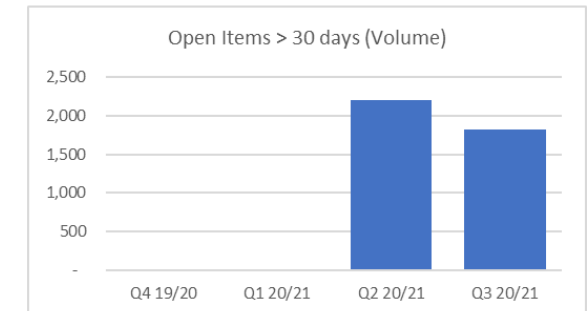
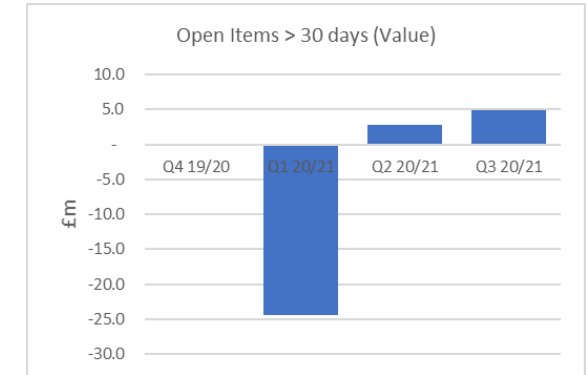
Automated postings decreased 4% compared to Q2 20/21 as a result of higher volumes of customer receipts vs. Q2 – customer receipts are manually allocated to customer accounts hence the % decline.

A review of manual postings has been undertaken and a new set of auto posting rules installed at the end of Q3 resulting in larger proportions of postings being carried out automatically, the benefits of which we expect to realise in Q4.

Finance/BSF will continue to review manual postings to seek further automation opportunities.

#### Quarterly Figures

£m	Q4 19/20	Q1 20/21	Q2 20/21	Q3 20/21
Open Items < 30 days (£m Value)	n.q.	(145.0)	(137.7)	(18.6)
Open Items > 30 days (£m Value)	n.q.	(24.4)	2.8	4.9
Open Items < 30 days (Volume)	n.q.	n.q.	1,072	935
Open Items > 30 days (Volume)	n.q.	n.q.	2,205	1,819
<b>Automated Postings %</b>				
Automated	15,695	7,121	6,650	6,710
Manual	2,941	1,559	1,709	2,075
Automated	84%	82%	80%	76%
Manual	16%	18%	20%	24%



# Key metrics Audit Committee

Key control metrics relating to Forecasting Accuracy, Processing Payments and Procurement

Quarter 3, 2020/21  
Description

## Non Competitive Transaction by Value and Volume:

Designed to measure the number and value of non-competitive transactions (NCT). It is important to track the number of sourcing activities undertaken in a non-compliant manner.

## Benefit Delivery:

Measures value enabled by P&SC in relation to cost reduction and added benefit delivered.

## Spend Under Contract:

Measures spend managed by P&SC that can be directly attributed to a contract to ensure 3rd party spend is being spent compliantly in line with agreed arrangements.

## Retrospective PO by Value and Volume:

Measures on time compliance to process, ensuring best value is achieved from every transaction.

## TfL Group: audit committee performance metrics to end Quarter 3, 2020/21

### Quarterly Figures

<i>£m</i>	Q4 19/20	Q1 20/21	Q2 20/21	Q3 20/21
Non Competitive Transactions by Value	n.q.	n.q.	25.1	20.1
Non Competitive Transactions by Volume	n.q.	n.q.	14	20
Benefit Delivery	n.q.	n.q.	n.q.	n.q.
<i>On Contract Spend %</i>	n.q.	n.q.	n.q.	51%
<i>Retrospective PO % by Value</i>	n.q.	n.q.	n.q.	4%
<i>Retrospective PO % by Volume</i>	n.q.	n.q.	n.q.	11%



## Audit and Assurance Committee

**Date:** 17 March 2021

**Item:** Finance and Business Services - End to End Processes

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

#### **1 Summary**

- 1.1 This paper provides an update to the Committee on the impact of the implementation of end-to-end processes organisations across TfL's Finance and Business Services teams.

#### **2 Recommendation**

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

#### **3 Background**

- 3.1 In March 2020, TfL launched its new Business Service Function (BSF), as well as a new Finance Controls and Systems team under Group Finance. The BSF was an amalgamation of several teams who performed transactional activities including the Finance Shared Service Centre, HR services and Master Data Management. These teams are a key part of TfL's strategy to create efficiency, ensure controls are operating effectively and looking for process efficiencies.
- 3.2 The Finance Controls and Systems team ensure that our end-to-end finance processes (E2E):
- (a) are efficient, well documented and well understood by the teams that follow them;
  - (b) contain robust controls which operate effectively;
  - (c) are supported by appropriate systems and technology; and
  - (d) are periodically reviewed and improved.
- 3.3 The Business Services Function scope includes:
- (a) providing critical HR and finance transactional services;
  - (b) looking after data and reporting that enable us to run our business and plan for the future; and
  - (c) our centralised team providing an integrated hub of knowledge via helpdesk, which cover finance as well as HR queries.

## **4 Global Process Owners**

4.1 Global Process Owners are responsible for overseeing the E2E processes across TfL, irrespective of which department is involved in the activity. This includes working with key stakeholders to:

- (a) drive standardisation and continuous improvement of process design;
- (b) champion compliance with existing policy and procedure and address non-compliance;
- (c) own the strategy for their E2E process improvement; and
- (d) ensure the process design includes robust controls.

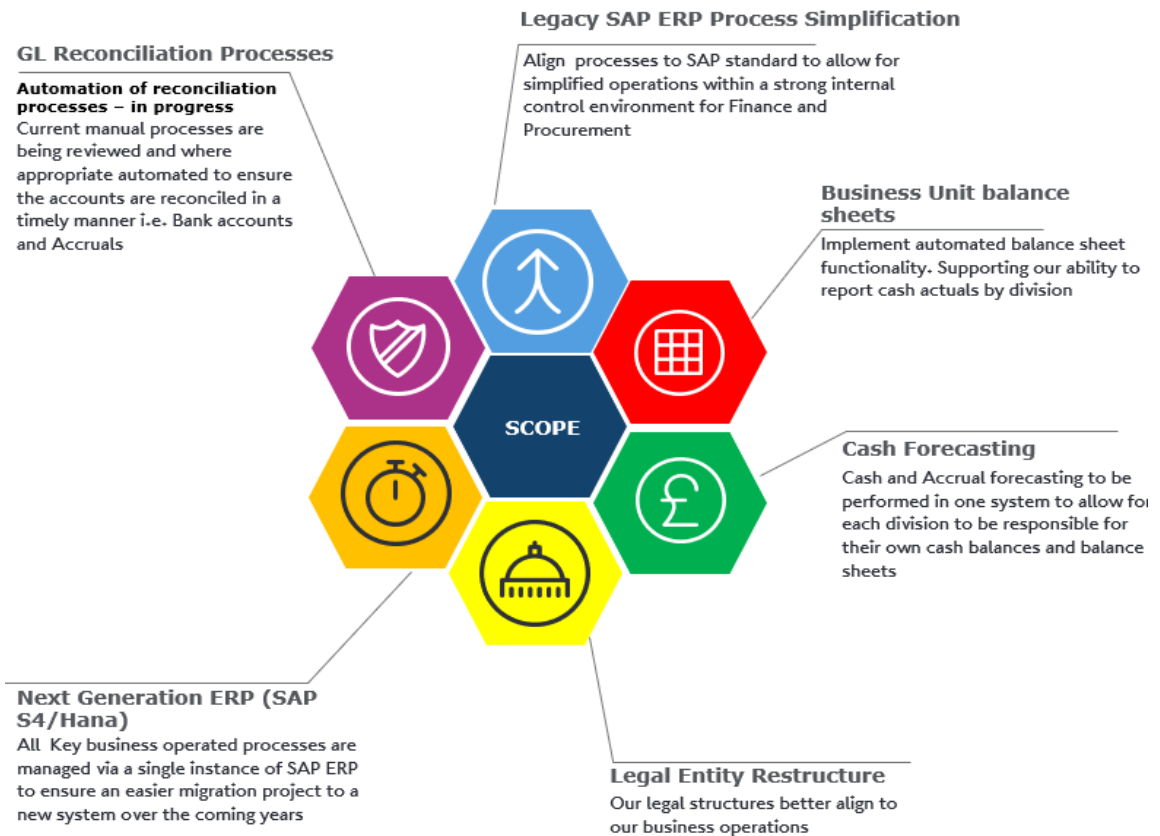
## **5 Process Improvements**

5.1 We have been running a Chief Finance Officer improvement programme across our Finance and BSF. The purpose of the programme is to deliver efficient and effective improvement of financial processes, systems, data and controls at TfL to allow for:

- (a) complete, accurate and valid account balances;
- (b) automated production of a balance sheet by business unit;
- (c) system driven cash actuals and ability to reconcile movement to closing balance in the balance sheet;
- (d) review the corporate company structure to best align with our operating units; and
- (e) optimisation of legacy Enterprise Resource Planning (ERP) system and preparation for next generation ERP.

5.2 These process and system improvements are made up of several key streams of work as illustrated below:-

## Key Streams



5.3 Examples of improvements to the general ledger reconciliation processes include a bank reconciliation transformation. The key output to this is better cash balance management. We have been improving the utilisation of our current investment in technology through standardisation and simplification of process and data. This allows us to:

- (a) utilise our assets for longer as well as at the same time prepare for future technology investments;
- (b) improve the efficiency and effectiveness of processes through use of standard SAP software functionality;
- (c) replace manual excel spreadsheet reconciliations with fully automated reconciliations in SAP; and
- (d) this in turn provides real time views and assurance to senior stakeholders.

5.4 We have been improving forecasting and cash management through effective purchase order commitment management. A key component of ensuring accurate forecasting and cash management data is the focus on accurate purchase order data and status of purchase orders. We have started created a suite of reports that allow the business and finance to review purchase order approvals, status and forecast delivery dates. This:

- (a) provides the ability for all stakeholders to have access to real time and insightful purchase order status information;
- (b) provides clear information to understand drivers of costs for actuals and forecast information; and
- (c) illustrates the importance of raising purchase orders correctly and continued monitoring and review.

5.5 The Master Data Management team is a single team within the BSF that is responsible for the maintenance of all master data within our ERP systems. This team has been fundamental in processing the changes that clean up our data and help drive the standardisation of our processes and the automation that the technology provides.

5.6 Business Services also support HR transactional activities for all their processes from hiring to retirement of staff. Key process improvements include:

- (a) a new process for right to work documents (agreed with Home Office);
- (b) remote interviewing, a digital training suite and interactive induction sessions in response to home working arising from the coronavirus pandemic; and
- (c) we have also recently introduced software for anonymous recruitment which has been created to remove bias from the recruitment longlisting and shortlisting stage by presenting decision makers only with information that is relevant to determining job.

## **6 Next Steps**

6.1 The last 12 months have been a challenging environment to drive and deliver change, with the dual impacts of the coronavirus pandemic and remote working. The combined Chief Finance Officer teams along with our Business Services teams have worked closely and collaboratively to move forward as quickly as possible with our improvement agenda. Many initiatives have been developed and a number have been delivered, for example bank reconciliation automation, but there is still much work to do. We will continue to deliver in line with the workstreams set out earlier and report back to the Committee periodically over the next year.

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

None

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

None

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## Audit and Assurance Committee



**Date:** 17 March 2021

**Item:** Procurement Update

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### This paper will be considered in public

#### 1 Summary

- 1.1 The primary purpose of this paper is to provide an update on the key actions being taken by TfL's Procurement and Supply Chain team (P&SC) to address the results of internal and external audits leading to the qualification of TfL's accounts in respect of value for money, since the previous update to the Committee on 11 September 2020.
- 1.2 A paper is included on Part 2 of the agenda which contains exempt supplementary information. The information is exempt by virtue of paragraph 3 of Schedule 12 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 information on Part 2 of the agenda**

#### 3 Actions in Relation to Non-Competitive Transactions

- 3.1 Competitive tendering is required for all procurements in order to comply with TfL Standing Orders, TfL's Procurement and Contracting Policy and UK procurement law (the Procurement Regulations). In exceptional circumstances, the award of a contract directly to a supplier without competition may be considered. These types of purchases are classed as "Single Source" events and are sometimes referred to as "Direct Awards". There are circumstances when sourcing without running a competitive process, is permitted by law, but the justification for this, and the demonstration of value for money are still paramount. For this reason, all sourcing events that take place without a competitive process are classed as Non-Competitive Transactions (NCTs) and are subject to the measures set out in this paper.
- 3.2 The need to address internal and external audit findings in relation to NCTs has been highlighted by the Chief Procurement Officer (CPO) as one of the P&SC team's highest operational priorities.

- 3.3 In their 2019/20 review, the external auditors identified concerns in respect of the correct classification of transactions as NCTs. Moreover, concern was raised that because of the number and value of NCTs, the external auditors felt unable to provide assurance that TfL was achieving value for money.
- 3.4 The focus of activity since the last report to the Committee has therefore been on challenging NCTs to ensure that NCTs are only entered into when appropriate, and that all NCTs clearly set out what has been done to ensure that value for money is being achieved wherever possible.

## **4 Improvements to Procurement and Supply Chain Governance**

- 4.1 P&SC has updated the terms of reference for its existing governance forums and has introduced, and is in the process of introducing, new forums to ensure that all NCTs are subject to appropriate and proportionate senior management scrutiny.
- 4.2 The pan-TfL Commercial Approvals Meeting (CAM) governs contracts of more than £5m and, until recently, reviewed NCTs over £500k. CAM is chaired by the Head of Procurement, Strategy and Performance and attended by the CPO, Deputy CPO and Heads of Procurement. Since September 2020, CAM has reviewed all NCTs over £100k, significantly increasing the range of NCTs that are subject to senior management scrutiny. Moreover, members of CAM have been actively and constructively challenging the value for money of NCTs presented.
- 4.3 To support addressing these issues, governance documentation has been reviewed and updated. For example, the Single Source Request document requires the type of NCT to be stated and the reason for it to be explained. Moreover, P&SC staff are required to evidence the steps taken to ensure value for money has been delivered for TfL in the document.
- 4.4 Since September 2020, a Commercial Approval Panel (CAP) has been established within each P&SC team (Surface, London Underground, Indirect Service and Major Projects Directorate) for procurements of between £1m and £5m. CAP is chaired by the Head(s) of Procurement for that area and attended by their senior management team. CAP complements the CAM process reviewing NCTs between £20k and £100k. This provides additional senior management scrutiny of these lower-value NCTs and has had the effect of cascading the challenge on the need for, and value for money delivered by, each NCT presented.
- 4.5 From March 2021, a third tier of commercial scrutiny is being introduced across P&SC. This will be known as the Senior Procurement Review. This will codify and provide a consistent approach to local approval processes and will review all papers being submitted to CAP and CAM.
- 4.6 When it is necessary to scrutinise NCTs in this way there is, arguably, risk of driving a culture of opaqueness, that the leadership team makes particular effort to avoid. All P&SC governance forums are encouraged to foster open

constructive discussion about NCTs and how to mitigate their commercial risks, rather than them being hidden. There are some encouraging signs that this approach is beginning to pay off.

- 4.7 This increased commercial scrutiny of NCTs has been widely promoted within P&SC and has focused P&SC on ensuring value for money, establishing more robust governance, as well as, increasing opportunities to improve P&SC planning and future mitigation of NCTs, details of which are set out below.
- 4.8 A revised Procurement and Contracting Policy (the Policy) and a revised Procurement and Contracting Procedure (the Procedure) have been developed in conjunction with a broad group of key stakeholders. The Policy is in the final phase of its approval process with the expectation of approval by March/April 2021; subsequent to that approval both documents will be made available on the TfL's Management System. Together they place considerable emphasis on the importance of competition in the context of TfL's responsibility to demonstrate fair, proper and best value use of public funds throughout the procurement and contracting process. Both apply to any person undertaking or authorising commercial activity across the business, including staff outside of P&SC, and whether employees or contracted staff.
- 4.9 Specifically, the revised procedure responds to internal audit findings including single source actions; lack of paperwork to evidence correct governance; incidents of suppliers working without a contract; and other potential breaches of governance.
- 4.10 Underpinning the Policy and the Procedure are a set of practitioner rules (the Rules), which are mainly directed at those in P&SC teams but also extend to staff undertaking contract management or sponsors developing plans involving procurement actions. These are currently under review with the working group (members as above) and will be launched as part of the Procurement and Supply Chain Improvement Programme (PSCIP).
- 4.11 The Rules go into a greater level of detail than the Procedure and serve as a valuable reference for practitioners. They embody best practice and address the full scope of issues likely to be encountered by those undertaking commercial activity.
- 4.12 To support the communication, understanding and assimilation of the Policy, Procedure and Rules the optional Procurement Module of TfL's training for all managers, "Managing Essentials" has also been updated and reinforces the message that competition is to be encouraged wherever possible. P&SC team members requesting new delegated procurement authority, or that as a result of a role change must complete the course. Mandatory training will be launched as part of the Policy and Procedure roll-out.
- 4.13 All P&SC staff will be required to complete both the Managing Essentials Procurement module and the Practitioner modules as will all new joiners, including temporary staff and contractors. The 300 most Senior Managers

across TfL will be required to complete the Managing Essentials Procurement module. These modules are available to all staff.

## **5 Establishing, Recording and Tracking of NCT Data**

- 5.1 In order to better understand the nature/type of NCTs, currently in place and the pipeline of transactions that may lead to NCTs in the future, further enhancements to the P&SC Contract Register were introduced in September 2020. New fields have been created to enable P&SC team members to classify NCTs by providing a “reason code” which indicates why an NCT has been, or is planned to be, entered into. This more granular classification of NCTs allows a more targeted approach to reducing the number of those NCTs which are not appropriate, to mitigate the risks inherent in NCTs and to demonstrate how value for money has been assessed and delivered.
- 5.2 The new data classifies the category of NCTs into four types: Under Threshold Single Source, Over Threshold Single Source, Derogations and Variations.
- 5.3 Of these four classifications, three are permissible in law:
  - (a) Under Threshold Single Sources where the Procurement Regulations do not apply;
  - (b) Derogations, where the Procurement Regulations permit the award of a contract without competition; and
  - (c) Variations, where an instruction to a supplier to modify an existing and competed contract is of a type permitted under the Procurement Regulations.

However, all four are given appropriate scrutiny and challenge through the P&SC governance forums.

- 5.4 High level initial analysis on the contracts awarded in the current financial year was presented at TfL’s Investment Group in November 2020 and at the Chief Finance Officer Senior Managers forum. The purpose of the presentations was to educate further the senior management teams on the potential impact of NCTs and the need to plan effectively such that NCTs do not become the only available sourcing option. These sessions have raised awareness and led to further engagement and discussion across the business, around continuous improvement, best practice and the value for money proposition for NCTs.
- 5.5 The P&SC Governance and Best Practice team is managing a process to ensure that mitigation plans are put in place for Over Threshold NCTs that have been classified as a “Business Led Commitment”. They have spoken to all commercial contract owners and draft plans are now in place for 27 out of the 35 so recorded. These draft mitigation plans vary in duration and may have dependency of business and/or asset strategies being defined or agreed. For example, a large proportion of Single Source requests in London

Underground result from engineering/safety if not contractual warranty obligations, to buy spare parts from Original Equipment Manufacturers (OEMs) during at least part of the lifecycle. In some cases this position will be mitigated by the replacement of sub-systems or components (subject to appropriate risk analysis) and in other cases work is on-going with TfL Engineering to establish if reverse-engineering of parts is a practical and cost-effective way of moving away from a restricted source of supply.

- 5.6 Even where parts have historically only been sourced from OEMs, substantial progress has been made over the last year in delivering value for money. Examples of this include the work done to aggregate demand across similar requirements to drive scale economies, where these exist, and also when outside of OEM warranties, to compete procurements for the same sub-systems/components between the OEMs and the sub-system/component manufacturers that supplied the OEMs. We are also seeing early signs of suppliers being challenged for cost breakdowns using Quotation Analysis Forms during these negotiations and the use of “should-cost” modelling with which to challenge suppliers.

**List of appendices to this report:**

Supplementary information on Part 2 of the agenda

**List of Background Papers:**

Procurement and Contracting Policy  
Procurement and Contracting Procedure

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## Audit and Assurance Committee

**Date:** 17 March 2021

**Item:** Critical Accounting Policies



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### This paper will be considered in public

#### 1 Summary

- 1.1 To update the Committee on the Group's critical accounting policies to be applied in deriving the form and content of TfL's Statement of Accounts for the year ending 31 March 2021.
- 1.2 This update reflects any changes to the CIPFA/Local Authority (Scotland) Accounts Advisory Committee (LASAAC) Code of Practice on Local Authority Accounting (the Code) and any other changes to International Financial Reporting Standards (IFRSs) which may have an impact on TfL's Statement of Accounts for the year ending 31 March 2021.

#### 2 Recommendation

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

#### 3 Background

- 3.1 TfL's Statement of Accounts is prepared in accordance with the provisions of the Local Audit and Accountability Act 2014 and the Accounts and Audit Regulations 2015 (the Regulations). The form and content followed in preparing the Statements are as prescribed in the Regulations and by the Code. The accounting policies followed are also substantially as prescribed by the Code.
- 3.2 The Code is updated annually by the CIPFA/LASAAC Joint Committee, a standing committee of the CIPFA and LASAAC, and is based on European Union Adopted IFRS, with adaptations and interpretations considered necessary for the local government context. The 2020/21 Code has been prepared on the basis of accounting standards and interpretations in effect for accounting periods commencing on or after 1 April 2020.
- 3.3 This paper deals with changes to the critical accounting policies as they relate to the Accounts for the year ending 31 March 2021.

#### 4 Developments in the 2020/21 Code

- 4.1 The 2020/21 Code introduces a small number of amendments relating to changes in some of the accounting requirements, which are as follows. These amendments are not expected to have a material impact on the TfL Accounts for the year ending 31 March 2021.

## **Amendments to IAS 1 and IAS 8 Definition of material**

- 4.2 The amendments provide a new definition of material that states, information is material if omitting, misstating or obscuring it could reasonably be expected to influence decisions that the primary users of general purpose financial statements make on the basis of those financial statements. The amendments clarify that materiality will depend on the nature or magnitude of information, either individually or in combination with other information, in the context of the financial statements.

## **Implementation of Amendments to IAS 19 – Plan Amendment, Curtailment or Settlement in Post-Employment Benefits**

- 4.3 The amendments clarify the assumptions to be used in calculating the current service cost and interest in relation to defined benefit pension schemes after a plan amendment, curtailment or settlement.

## **Amendments to IAS 28 Investment in Associates and Joint Ventures.**

- 4.4 The amendments clarify that an entity should apply IFRS 9 'Financial Instruments' to long-term interests in an associate or joint venture that form part of the net investment in the associate or joint venture but to which the equity method is not applied.

## **Annual Improvements to IFRS Standards 2015–2017 Cycle, containing the following amendments to IFRSs:**

### **IFRS 3 Business Combinations and IFRS 11 Joint Arrangements**

- 4.5 The amendments to IFRS 3 clarify that when an entity obtains control of a business that is a joint operation, it remeasures previously held interests in that business. The amendments to IFRS 11 clarify that when an entity obtains joint control of a business that is a joint operation, the entity does not remeasure previously held interests in that business.

### **IAS 12 Income Taxes**

- 4.6 The amendments provide clarification as to where the income tax consequences of dividends should be recognised in the Comprehensive Income and Expenditure Statement.

### **IAS 23 Borrowing Costs**

- 4.7 The amendments clarify that if any specific borrowing remains outstanding after the related asset is ready for its intended use or sale, that borrowing becomes part of the funds that an entity borrows generally when calculating the capitalisation rate on general borrowings.
- 4.8 CIPFA/LASAAC has agreed to defer the adoption of IFRS 16 to the 2022/23 Code, meaning that, for local authorities generally, IFRS 16 needs to be adopted from 1 April 2022.
- 4.9 The TfL Group, however, with the agreement from CIPFA/LASAAC, early-adopted IFRS 16 from 1 April 2019, to be consistent with the adoption date under the IFRS standards that is relevant for all its subsidiary entities. TfL also adopted the Code interpretation of IFRS 16 in relation to the accounting requirements for leases at



peppercorn or nominal lease payments, or for nil consideration which stipulates that the principles in the Code for the treatment of donated assets be followed.

- 4.10 For 2020/21 The Group has also adopted Amendments to IFRS 16 Covid-19 Related Rent Concessions. These amendments provide practical relief to lessees from applying IFRS 16 guidance on lease modification accounting for rental concessions arising as a direct consequence of the coronavirus pandemic.

## **5 Streamlined Energy and Carbon Emission Reporting**

- 5.1 The Companies (Directors' Report) and Limited Liability Partnerships (Energy and Carbon Report) Regulations 2018 imposed new obligations for what must be included in the Directors' Report for quoted and large unquoted companies as well as imposing an obligation on large LLPs to prepare a new kind of report ('the Energy and Carbon Report').
- 5.2 TfL's reporting team is reviewing best reporting practices and reporting requirements for TfL. Much of the Group's reporting on carbon emissions and the wider climate change agenda is addressed through the publication of a separate Safety, Health and Environment Annual Report. However, to align with best practice requirements in this area, the TfL Accounts for the year ending 31 March 2021 will include the following disclosures:
- (a) electricity, gas and fuel consumption for TfL Group and its subsidiaries;
  - (b) greenhouse gas emissions using published emissions factors;
  - (c) intensity ratios;
  - (d) energy efficiency actions taken; and
  - (e) disclosure of methodology use in calculations.

## **6 Future Changes to International Financial Reporting Standards**

- 6.1 Other standards and interpretations mandatory for years commencing on or after 1 January 2021, include the following.
- (a) Interest Rate Benchmark Reform – Phase 2 – Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16. The phase 2 amendment addresses the financial reporting implications for when an existing interest rate benchmark (e.g. London Inter-Bank Offered Rate) is replaced with an alternative.
- 6.2 The project team in treasury is working on the reform and is monitoring the timing of an expected Financial Conduct Authority announcement regarding fixing the spread upon extinction of LIBOR. The Interest Rate Benchmark Reform is expected to have some (but limited) impact on the TfL Accounts for the year ending 31 March 2022.
- 6.3 Other standards and interpretations mandatory for years commencing on or after 1 January 2022, include the following, which amendments are expected to have limited impact on the TfL Accounts for the year ending 31 March 2023:

- (a) amendments to IAS 16 – Property, Plant and Equipment: Proceeds before Intended Use;
- (b) reference to the Conceptual Framework – Amendments to IFRS 3;
- (c) amendments from the 2018-2020 annual improvements cycle; and
- (d) amendments to IAS 37 in relation to onerous contracts.

6.4 Other standards and interpretations mandatory for years commencing on or after 1 January 2023, include the following, which are expected to have limited impact on the TfL Accounts for the year ending 31 March 2024:

**IFRS 17 Insurance Contracts**

- 6.5 This standard will replace IFRS 4 and provides an accounting model for insurance contracts that is more useful and consistent for insurers than the existing IFRS 4 standard.
- 6.6 The standard is not expected to have an impact on the TfL consolidated Group accounts.

**Amendments to IAS 1 on classification of current versus non-current liabilities**

- 6.7 These amendments clarify that the classification of liabilities as current or non-current should be based on rights that are in existence at the end of the reporting period

**List of appendices to this report:**

None

**List of Background Papers:**

None

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## Audit and Assurance Committee



Date: 17 March 2021

Item: Engineering Standards Improvement Programme

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### This paper will be considered in public

## 1 Summary

- 1.1 On 11 September 2020, the Committee considered the Independent Investment Programme Advisory Group (IIPAG) quarterly report, including the findings of the IIPAG Cross-Cutting Reports: Main Findings and Recommendations on TfL Standards. Members subsequently requested an update on the Engineering Standards Improvement Programme.
- 1.2 This paper provides an update on the progress of the Engineering Standards Improvement Programme including details of its work with the London Underground (LU) modernisation programme and the Transport Infrastructure Efficiency Strategy (TIES).

## 2 Recommendation

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

## 3 Background

- 3.1 TfL has over 1,000 standards, of which around 300 are Safety Standards. In previous years, funding constraints have impacted standards review and consequently many engineering standards are past their planned review date. A prioritisation process has been developed to deal with this backlog. Standards are an efficient way of aligning the behaviour of the extended enterprise with statutory and business requirements in a safe manner. However, over time standards become outdated and their original intent may no longer be valid or understood, e.g. due to technological advances. Challenging standards is always of value, however, in order to do so, it is necessary to understand the original purpose and intent and determine whether this remains valid.
- 3.2 There have been many initiatives in the last 20 years to rationalise standards with varying degrees of success and completion. The Engineering Standards Improvement Programme was set up in 2019 to identify the standards that drive inefficiency or avoidable cost. The objective of the programme is to move to a business led and systematic approach to standards with buy in and support from the business and supply chain to maximise value for money.
- 3.3 The programme recognised that issues with standards can arise due to their content but also their interpretation and implementation when they are used in the business. Issues arise in many types of documents from safety standards through

to maintenance work instructions and the technical specifications implemented in projects.

- 3.4 The Engineering Standards Improvement Programme has worked in close co-operation with the LU modernisation programme in the last year to identify the standards that are driving cost in the LU business either through content or interpretation and to address these issues.
- 3.5 The programme has also worked with the TIES team to share best practice with other infrastructure owners such as Highways England (HE) and Network Rail and to develop opportunities for standards convergence.
- 3.6 During 2020, resourcing on the standards programme has been limited as a result of the coronavirus pandemic. Resources have been focussed on applying standards more effectively to achieve short-term savings due to the financial position of TfL.

## **4 Current Status of the Engineering Standards Improvement Programme**

### **Collaboration with LU Modernisation Programme**

- 4.1 The Engineering Standards Improvement Programme closely collaborates with the LU modernisation programme. Defined financial targets have been set for this work and the financial impact of the changes is being monitored through business budgets. The results of this work should be of great value to the wider business in demonstrating what can be achieved and the best areas to target for savings.
- 4.2 An ambitious target of £10.8m of savings to be delivered in the financial year 2021/22 and £11.2m for 2022/23 was identified for this programme and the financial impact of the changes monitored through the business budgets.
- 4.3 We have identified 116 initial ideas for standards improvements. These opportunities were then analysed to determine their technical difficulty, business difficulty, time to implement and financial impact. Some initiatives provided cost avoidance opportunities and some cost savings opportunities. Work was then prioritised to deliver savings to the operating budget in 2021-2023.
- 4.4 The close financial control of the programme quickly identified that monetising benefit was not straightforward. Issues arose due to the following:
  - (a) as the scope of the Standards Improvement Programme includes Standards, Technical Specifications and engineering derived requirements, the majority of the savings manifest themselves through procurement activities and which is not necessarily due to changes in standards;
  - (b) benefits from standards improvements had already been identified and budgeted as part of another improvement programme, for example Original Equipment Manufacturers to Alternative Equipment Manufacturers;
  - (c) the benefit was in productivity and therefore could not be realised until other work was re-organised and appropriate consultation and reorganisation had taken place;

- (d) savings could only be realised if the work programmes went ahead, the coronavirus pandemic and associated change in financial position meant that some of the programmes intending to benefit from standards changes were cancelled; and
  - (e) savings tended to be bundled with other changes in scope so that the cost saving from standard change was not separately identifiable.
- 4.5 The Engineering Standards Improvement Programme identified savings embedded in the LU 2021/22 budget is currently £2.8m; the total potential identified saving is £4.8m. The main contributors to these savings are:
- (a) supply of parts/materials via alternative manufacturers;
  - (b) engineering requirements for procurement of materials/services; and
  - (c) modified business practices, enabled through application of existing standards.
- 4.6 TfL has put forward a case study to the Department for Transport for inclusion in its report on the TIES initiative which showcases the work of the Engineering Standards Improvement Programme on the Standard S1372 for Staff Accommodation. The revised standard enables improved employee welfare facilities whilst reducing the land requirements for new build facilities, such as the station re-development at Elephant & Castle and this is included at Appendix 1.

### **Digitisation of Standards**

- 4.7 HE has developed a system for the digitisation of its standards which has delivered benefits including reductions in standard production time, volume and concessions. The result has been standards that can be quickly and easily searched and which facilitate opportunities for design innovation and efficiency.
- 4.8 HE has shared its experience with TfL and Network Rail and through their participation in the TIES programme. Network Rail is now completing a trial with the HE system and TfL considering funding for a trial using the HE system for the development of updated standards for uninterruptable power supplies and road safety audits.

### **Standardisation**

- 4.9 The pan-TfL scope of TfL Engineering means that it is now positioned to leverage best practice across TfL and the programme has supported the development of the first pan-TfL Engineering standard for hazardous materials. Implementation of this is linked to work led by the Safety, Health and Environment (SHE) team to create a pan-TfL SHE management system and this will open the door to the greater application of pan-TfL standards in compliance with our safety certificates.
- 4.10 The Engineering Standards Improvement Programme also has workstreams looking at standardisation from a design perspective. The opportunity is for greater standardisation and/or modular design for configurations that we use regularly. This would enable economies of scale to be gained if linked to category management and inefficiency to be reduced. Station retail, staff welfare and

property management are currently seen as best pilot areas to develop principles of “Reference Designs” e.g. retail kiosk and welfare designs.

- 4.11 TfL is also participating in the TIES “Living Lab” initiatives focussed on achieving benefits of standardisation/economies of scale and applying continuous improvement to construction. The programme aims to establish common data structures, analytics and metrics to establish best practice whilst establishing collaborative behaviours and addressing blockers. TfL is leading three of the demonstrator projects for equipment rooms, cable route management systems and cooling panels. It is intended to use the Reference Design approach to share permissible solutions with other TIES partners. TfL is also collaborating with Network Rail and HE on the demonstrator project for footbridge standardisation.
- 4.12 TfL has recently implemented a number of improvements to the management of early lifecycle stages in our Pathway project management framework including the implementation of a new Outcome Definition tool, an Options Development Report to replace the existing Feasibility Report, a new Scope Baseline product and a revamped Project/Programme Requirements Specification template which together result in a hierarchy of requirements linked to the development of the solution. This approach will facilitate the identification of standards challenges at an early stage and inform priorities for our standards development.

### **Next Steps**

- 4.13 Responsibility for Engineering Standards transferred to the Director of Engineering and Asset Strategy in January 2021 and TfL Engineering appointed a Chief Technical Officer to lead technical change in engineering. This has strengthened the senior support available to the Engineering Standards Improvement Programme in line with IIPAG’s recommendations. The programme also has the full support of the Managing Director LU and TfL Engineering.
- 4.14 Once the digital pilot with HE demonstrates the transferability of the approach, there is an opportunity to evolve our Engineering Standards and processes as they are digitised. This would enable the more intensive and focussed programme of standards review and change, with clear principles to guide the work that was recommended by IIPAG.
- 4.15 While the digital pilot is proceeding, TfL Engineering will prioritise review of the standards which are overdue a review on the basis of the following criteria:
- (a) straightforward “house-keeping” changes (e.g. cross-references);
  - (b) updates which are essential for safety and/or legislative compliance; and
  - (c) updates which have a clear business benefit.
- 4.16 The challenge for the next few months is to work out to what extent and how fast this can be done and the benefit it will deliver to the business, including our capital efficiency programme, noting that the portfolio of projects which proceeds (and hence the achievable benefit) is dependent on the funding settlement currently being negotiated.

**List of appendices to this report:**

Appendix 1 – Extracts of IIPAG Report included in 11 September 2020 Audit and Assurance Committee Meeting

Appendix 2 – Case Study – Staff Accommodation

**List of Background Papers:**

Independent Investment Programme Advisory Group, Review of TfL Standards, 9 August 2020

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## **Appendix 1:**

### **Extract of IIPAG Report included in 11 September 2020 Audit and Assurance Committee Meeting**

#### **TfL Standards**

- 2.1. TfL standards are generally used in conjunction with national and international standards and perform a vital role in protecting the business from potentially expensive mistakes in specification, design and construction. There is however recognition within the business that the way they are implemented varies significantly across different parts of TfL and that there are opportunities to improve their impact in terms of value for money.
- 2.2. Last year the TfL Standards Improvement Programme was set up as part of the wider objective to drive efficiencies. The principal aim of the Programme is to create continuous improvement in standards development in order to reduce costs. Our recommendations have been made in the context of the work of the Programme.
- 2.3. This review identifies a number of opportunities to improve standards, grouped into Structural opportunities (the way standards are drafted, organised and maintained) and Cultural opportunities (the way the organisation uses its standards) and makes the case for change. Recognising that TfL's challenge with its standards is not unique, we have also included a relevant external case study from a large multinational, operating in a safety critical sector, with a multi-billion dollar annual capital budget.
- 2.4. Our recommendations are based on supporting and focussing the efforts of the Standards Improvement Programme over the current year, with a review of progress in around 12 months. We think that the work of the Programme should be supported by strong senior leadership and a high level of ambition. For greatest impact, efforts should be focussed initially in a limited area through an intensive programme of standards review and change along the lines of the case study included in the report. As a shorter term measure we also recommended that a robust standardised risk assessment should be developed as a priority, for use in concession applications.

#### **Extract of IIPAG recommendations, August 2020 Review of TfL Standards**

We applaud the 2019 decision by TfL to set up the Standards Improvement Programme, and we note the improvements already made as a result of the work it has undertaken and the changes to standards already carried out. We make the following suggestions with the objective of bringing more focus and impact to the work of the Programme in 2020.

Our recommendations:

- Support the work of the Programme through strong senior leadership and a high level of ambition
- Prioritise effort to a limited area for maximum impact. This might be selected from an area of high spend in the next few years, or from a cross-cutting discipline with wide application (such as, for example, fire engineering)



- Undertake a more intensive and focussed programme of standards review and change within the selected area using clear principles to guide the work (along the lines of those used in the Oil and Gas case study described above) - This isn't referenced above.
- Prioritise the development of a robust standardised risk assessment process to be used in support of concession applications
- Address the cultural as well as the structural aspects of change
- Apply some light touch programme management to make sure that energy on this important subject is not consumed by more proximate challenges.

We propose that IIPAG should review the progress of the Standards Improvement Programme in around 12 months' time.

TfL's response:

- Resourcing on the standards programme has been limited as a result of the Covid pandemic – a resourced forward programme is being put forward for approval
- Resources have been focussed on applying standards more effectively to achieve short-term savings - a number of the programmes which would accrue benefits from significant work on standards have been put on hold subject to confirmation of forward funding.
- Work is being led by our Safety Health & Environment (SHE) team to create a pan-TfL SHE Management System – this will open the door during 2021 to the development of pan-TfL standards in compliance with our Safety Certificates. Currently, any pan-TfL standard with safety implications (and any subsequent updates) need to be approved by each mode's safety governance process separately.
- Updated Fire Safety standard has been issued for consultation, this will provide more flexibility on use of materials on new-build stations (e.g. Bakerloo line Extension)
- Assurance standard and QUENSH to be tackled during 2021 in collaboration with SHE in order to achieve a pan-TfL approach.
- Development of approaches for measuring the value delivered by our existing standards, in order to inform prioritisation of future standards improvement

## Appendix 2: Case Study

The following case study is planned for inclusion in DfT's 2021 TIES report:

London Underground identified that the station staff accommodation standard was overly prescriptive and resulted in over-sizing of the "back of house" areas of new and extended stations. In addition there were no equivalent standards for maintenance and train staff accommodation; the existing provision was inconsistent. The standard and associated guidance had also not been updated to reflect equality and inclusion legislation or changes in operational strategy (e.g. the closure of ticket offices).

A complete rewrite of the standard was undertaken using a "Tiger Team" approach, which brought all relevant stakeholders together in order to generate clear, unambiguous, outcome-focussed requirements covering the vast majority of operational and maintenance staff accommodation on London Underground. The key outcomes are as follows:

1. Application of the new standard will tailor accommodation provision more closely to working patterns and methodology, rationalising accommodation requirements for different operational functions and achieving consistency across different job roles, whilst ensuring that all new and modernised accommodation is to a good standard.
2. The new standard has also addressed equality and inclusion requirements. Accessibility for non-customer areas, for applicable staff roles, is now a clarified high-level requirement. New accommodation must include at least one gender-neutral toilet. Locker rooms will be unisex but will have private changing spaces, which supports dignity at work.
3. The new standard also facilitates the re-purposing of former ticket office spaces for other uses such as staff welfare or station retail.
4. These changes will collectively reduce the volume of construction on new and extended stations, resulting in carbon reductions as well as financial savings.

The first project to take advantage of the new standard will be the station capacity upgrade at Elephant & Castle.

## Audit and Assurance Committee

Date: 17 March 2021

Item: **Personal Data Disclosure to Police and Other Statutory Law Enforcement Agencies (2020)**

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### This paper will be considered in public

#### 1 Summary

- 1.1 This paper provides an update to the Committee on the disclosure of TfL held personal data to the police and other Statutory Law Enforcement Agencies (SLEAs) for the prevention and detection of crime in London.

#### 2 Recommendation

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

#### 3 Background

- 3.1 TfL holds a range of information about its customers and employees which is of significant value to our partners in the police and in other law enforcement agencies in the prevention and detection of crime and in safeguarding the most vulnerable in our society. In disclosing personal details to the police and other statutory law enforcement bodies<sup>1</sup> without the subject's consent, TfL must be mindful of its duties under data protection legislation. We exercise the exemption under Schedule 2 Part 1 and Schedule 2 Part 2 of the Data Protection Act 2018 for the purposes of crime prevention and detection.<sup>2</sup> We consider all requests on a case by case basis and release personal data where it is lawful to do so and is consistent with its powers.
- 3.2 This paper provides the Committee with a summary picture of the data disclosed in 2020. In previous annual reports we have compared trends and patterns with previous years. As 2020 is unique we are presenting last year's data as a snapshot instead.

#### 4 Operational Update

- 4.1 TfL's Directorate of Compliance, Policing Operations and Security (CPOS) manages the day to day operation of data disclosure, and deal with the bulk of requests for personal data made by the police and other SLEAs. To resource adequately the growing demand for TfL's data without increasing costs to TfL we established a pioneering partnership unit in 2018, with officers from the British Transport Police (BTP) and the Metropolitan Police Service (MPS) attached to TfL, working under the direction of a TfL manager and subject to regular auditing. In addition, the MPS Roads and Transport Policing Command (RTPC) resource a dedicated unit to liaise with bus operators and assist in the identification and retrieval of bus CCTV for the

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<sup>1</sup> Includes national security and other agencies with a statutory role in crime prevention and detection. Non-police bodies include agencies such as the Driver and Vehicle Standards Agency (DVSA), local authorities, HM Revenue and Customs, and the National Crime Agency.

<sup>2</sup> TfL's policy on the disclosure of personal data to the police and other law enforcement agencies can be found at <http://content.tfl.gov.uk/aac-20150309-part-1-item13-policy-on-disclosure-of-personal-data.pdf>.

purpose of crime investigation. Our bus operators provide significant support to the police to investigate crimes that occur both on, and off the bus network.

- 4.2 A few other business areas who manage personal data, disclose directly to the police under the guidance of CPOS and General Counsel. This is to avoid the unnecessary transfer of personal data within TfL. These business areas disclose data in accordance with the TfL policy and are subject to regular auditing to ensure compliance.
- (a) Requests for access to CCTV held by London Underground Limited (LU). These requests are currently processed directly by LU where the BTP acts as the data processor;
  - (b) Requests for information on taxi and private hire licensees, held by TfL's Licensing, Regulation and Charging Directorate for the investigation of sexual offences and other alleged or suspected criminal activity involving a licensee as a suspect or witness; and
  - (c) Requests for CCTV for bus stations and London River Services.
- 4.3 In April 2019, CPOS and the MPS implemented a 24/7, 365 day call out service to support urgent requests. This arrangement, funded by the MPS, means that the police can obtain electronic ticketing data and related information for incidents that are deemed of national importance, there is a tangible and significant threat to life, or a threat the transport system.

## **5 Overview of Data Requests and Disclosures**

- 5.1 The total number of police data requests made to us for TfL data in 2020 was 12,342, a 35 per cent decrease on 2019. There are several reasons why data requests remained high despite the reductions in passenger journeys. Crime on TfL's public transport networks only fell by 38 per cent in 2020 compared with 2019 (15,690 fewer offences). Passenger journeys were down by 46 per cent overall (down 63 per cent on LU). Overall crime in London was only 14 per cent down compared to the previous year and violence against the person offences in 2020 were at a similar level to the previous year, despite coronavirus pandemic restrictions. The police can request TfL data to support the investigation of range of different crimes or safeguarding incidents across the Capital. We continued to support the MPS' efforts to locate highly vulnerable people. We dealt with 481 requests relating to high risk missing persons, only 25 per cent lower than the previous year. Our police partners maintained their focus on investigation of transport crimes while also using the opportunity of lower levels of crime and calls for service during lockdown to clear up a number of outstanding investigations and pursue cold cases.
- 5.2 The table below shows the police data requests for personal data held by TfL (ticketing data CCTV or Body Worn Video (BWV)) by crime or incident type and by requesting agency. Categories with fewer than 100 requests are not shown. Requests for taxi and private hire licensee details are reported separately below.

Table 1. Police data requests for personal data held by TfL

<b>Crime / incident type</b>	<b>Number of requests receive by TfL (CPOS and LU)</b>
Criminal damage	184
Fraud	192
High risk missing person	481
Murder/fatality	275
National security	106
Other	491
Robbery	1,160
Sexual offences	1,517
Theft	3,046
Violence against the person offences (including public order but excluding murder)	3,680

- 5.3 The table below provides a breakdown by the requesting agency for TfL personal data (TfL (ticketing data, CCTV or BWV). Requests for taxi and private hire licensee details are reported separately below.

Table 2. Breakdown of requesting agency for TfL personal data

<b>SLEA</b>	<b>No of requests</b>
MPS	5,736
BTP	6,101
Other police forces	276
National Security	105
Non-police bodies that have a statutory role in crime prevention and detection	102
City of London Police	22

- 5.4 In 2020, as part of our pan-TfL strategy to eradicate work-related violence and aggression, we introduced BWV for our directly employed staff in line with operational requirements. The first phase of the rollout will be completed by the end of March 2021 and will see over 4,500 cameras available to all enforcement staff and to bus and LU station staff. This will replace the small number of cameras that were being used by LU Revenue Control Inspectors. Strict controls are in place to manage the use of cameras and access to the footage, ensuring we are compliant with data protection legislation. To date, there have been 10 requests from the police for BWV footage relating to work-related violence and aggression incidents. We will report on BWV requests in future reports.
- 5.5 In addition to the requests to TfL for personal data, the MPS made 5,079 requests directly to our bus and rail operators for CCTV. This included 310 requests for CCTV relating to murder investigations, 1,797 for violence against the person offences (including public order), 1,060 for road traffic collisions and 554 for robbery. The requests were to support investigations of both transport and non-transport related crimes and incidents

## 6 Taxi and Private Hire Requests

- 6.1 There were 326 data requests for information on taxi and private hire drivers and vehicles in 2020. This was a 40 per cent increase from 2019. The majority of requests were received from the MPS (89 per cent).
- 6.2 All private hire operators have a condition on their licences to report all alleged or suspected criminal conduct to the police in an appropriate and timely way to ensure that the incident is investigated. Operators may receive notification of a potential crime as a complaint from a passenger using their services, a driver or another member of the public. Any suspicious activity identified through their own assurance systems is also reported to TfL and to the police for investigation. Operators can report these issues to the police more easily now through an online reporting tool. The breakdown of requests by type of licensee is shown in table 3 below.

Table 3: Breakdown of requests by type of licensee:

Type of Driver	No of Requests	2020 (%)
Private Hire	261	80%
Taxi	36	11%
Dual Licence	0	0%
Operator	1	0.5%
Other	28	8.5%

## 7 Conclusion

- 7.1 TfL data released to the police and other SLEAs for the investigation, prevention and detection of crime on the TfL network and across London continues to prove to be a vital crime prevention tool. TfL continues to make a significant contribution to safety and security in London with TfL's data and support leading to the identification, apprehension and prosecution of offenders.

### List of appendices to this report:

None

### List of Background Papers:

None

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## Audit and Assurance Committee



**Date:** 17 March 2021

**Item:** Enterprise Risk Update – Governance and Controls Suitability (ER13)

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

#### **1 Summary**

- 1.1 This paper provides an overview of the Level 0 Enterprise Risk 13 – “Governance and controls suitability” (ER13).
- 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 supplemental information on Part 2 of the agenda.**

#### **3 Risk Assessment**

- 3.1 ER13 assesses whether Transport for London’s (TfL) governance and controls are fit for purpose and if they provide adequate support to meet the changing demands on TfL and expectations of our stakeholders.
- 3.2 The key causes that relate to risk exposure for ER13 are: not being aware of or following appropriate processes; failure to seek appropriate approvals for decisions; not keeping up to date with changes that affect our governance arrangements (eg changes in legislation); and failure to comply with and update strategic controls.
- 3.3 The key consequences could be reputational damage, transactions and projects operating without appropriate approval or oversight and possible financial loss from third parties.
- 3.4 The probability of the risk occurring is considered very low and the overall design and operation of the control measures is assessed to be adequately controlled. The probability and impact of the risk and the control measures to address it are regularly reviewed and are always reassessed following any significant issues arising relating to governance or any actions arising from a related audit report.

## 4 Controls and Measures

- 4.1 Twenty-two controls have been identified – 13 preventative and nine corrective. All nine corrective controls have been assessed as effective for both design and operation.
- 4.2 Of the 13 preventative controls, seven were assessed as effective for both design and operation:
- (a) Governance Framework;
  - (b) delivery of the Integrated Assurance Plan, monitoring of the completion of actions and reporting to the TfL Board’s Committees and Panels;
  - (c) Terms of Reference and oversight of the TfL Board, Committees and Panels are kept under regular review and changes made when necessary;
  - (d) Greater London Authority and London Assembly oversight;
  - (e) transparency and strategic policy and publications framework;
  - (f) annual Board effectiveness reviews with an independent review every three years; and
  - (g) communication of election guidance.
- 4.3 The remaining six preventative controls were all assessed as effective for design but partially effective for their operation:
- (a) Standing Orders;
  - (b) TfL’s Management System (TfL policies, controls and processes);
  - (c) privacy and data protection compliance programme;
  - (d) cybersecurity programme;
  - (e) Governance Statement for the Annual Report (includes the Governance Improvement Plan); and
  - (f) TfL's Enterprise Risk Management Framework.
- 4.4 The below table provides a summary of various actions taken to further reduce TfL’s risk exposure.

Key Issue	Action
Effectiveness of decision-making	<b>Ongoing:</b> TfL’s Standing Orders are kept under regular review and changes made when necessary to ensure the effectiveness of decision-making so that decisions are as robust as possible to legal challenge. A Board review of the effectiveness of its decision-making is conducted each year and the



Key Issue	Action
	<p>outcome of the 2020 review was discussed at the 9 December 2020 Board meeting. Delegated decision-making and organisational governance is regularly reviewed in the light of experience, organisational requirements, changed circumstances and changes in legal requirements or professional standards and guidance.</p>
TfL's Management System	<p><b>Ongoing:</b> We continue to engage with business areas across TfL to ensure that relevant content currently outside the Management System, for example policies that apply to all staff, is included in the Management System. Trams, Surface (Assets), Technology &amp; Data and Finance are currently creating and/or migrating new content.</p> <p><b>Completed:</b> To improve accessibility and visibility of the Management System, content held on previous systems was migrated and became part of the new intranet when it launched in July 2020.</p>
Privacy and data protection	<p><b>Ongoing:</b> Verification, input and refresh of mapping of personal data continues and plans have been implemented for regular data refresh.</p> <p><b>Ongoing:</b> Regular assurance is sought from key suppliers that they are complying with their data protection obligations.</p> <p><b>Completed:</b> A process was created for owners of non-Technology &amp; Data systems who process personal data to self-assess risks at system level. The self-assessment will automatically report results to our Information Governance team and enables pre-population of fields in our data mapping template.</p> <p><b>In progress:</b> Our Data Protection Impact Assessment template is being reviewed and updated. We are also considering purpose specific templates for CCTV, introducing new systems or international transfers.</p> <p><b>In progress:</b> The Information Commissioner's Office Age Appropriate Design Code came into force on 2 September 2020 with a 12-month transition period. We have identified and logged issues relating to the code and internal guidance is being</p>

Key Issue	Action
	<p>developed. Changes are also being made to our Data Protection Impact Assessment template.</p> <p><b>Proposed:</b> A table top exercise to test personal data breach and incident management processes will form part of the planned resilience activity that will be delivered under the Cyber Security Strategy.</p>
Coordinated approach to Digital Accessibility across TfL	<p><b>In progress:</b> A co-ordinated set of measures were implemented to achieve compliance with the Digital Accessibility Regulations, which took full effect on 23 September 2020. Most are completed but some are still in progress.</p>
Annual Governance Statement (including the Governance Improvement Plan)	<p><b>Completed:</b> A review of compliance with the TfL Code of Governance in 2019/20 was presented to the Committee at the 8 June 2020 meeting. The Committee approved the Annual Governance Statement, for inclusion in TfL's 2019/20 Annual Report and Accounts, and noted the progress against the 2019/20 Governance Improvement Plan.</p> <p>The Governance Improvement Plan 2020/21 was then approved by the Committee at the 11 September 2020 meeting. This was drafted later than the Annual Governance Statement so as to better respond to the impact of the coronavirus pandemic on TfL.</p>
TfL's Enterprise Risk Management Framework	<p><b>Ongoing:</b> TfL's Enterprise Risk management processes are well established and are regularly reviewed to ensure they are fully effective. We are on track to meet our commitment to the TfL Board to have all 14 Enterprise Risks reviewed by the relevant Committee or Panel by 2020/21 year end.</p>

- 4.5 Some of the above key issues are included in the 2020/21 Governance Improvement Plan, approved by the Committee at its meeting on 11 September 2020.

## 5 Internal Audit Reviews

- 5.1 To date for 2020/21, Internal Audit has conducted four reviews of matters that fall within the scope of ER13. One was concluded as Adequately Controlled (CPC Contract Management Review) and two as Requires Improvement (Payments to Local Authorities using the Borough Portal; and Furlough Process).
- 5.2 The remaining review covered the Brydon Report and its relevance and application to Internal Audit at TfL. The Report, published in December 2019

following the UK Government's commissioned independent review into the quality and effectiveness of audit, is currently only an advisory report and none of its recommendations have been adopted into law. We do not consider there to be any implications to the work of our Internal Audit team as the Report is primarily focused on the external audit process, with only brief mention of internal audit, and is only applicable to designated 'Public Interest Entities', so would not apply to TfL. Should the Government adopt recommendations from the Report in the future, we will assess whether TfL may wish to voluntarily adopt any of these as part of our regular benchmarking of TfL against the UK Corporate Governance Code.

**List of appendices to this report:**

A paper containing exempt supplemental information is included on Part 2 of the agenda.

**List of Background Papers:**

None.

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## Audit and Assurance Committee



**Date:** 17 March 2021

**Item:** Register of Gifts and Hospitality for Members and Senior Staff

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

### **1 Summary**

- 1.1 This paper sets out details of the gifts and hospitality declared by the Board and senior staff. Details of those accepted by Members and the most senior staff are routinely published on our website. In line with the GLA Group Framework Agreement, we submit a regular report to the Committee on the gifts and hospitality accepted by Board Members and senior staff. For these reports, we have extended the staff coverage to anyone on the top level organisation chart published on <https://tfl.gov.uk/corporate/about-tfl/how-we-work/corporate-governance/chief-officers>.
- 1.2 This report covers a three-month reporting period, from 1 November 2020 to 31 January 2021. The restrictions on travel and social distancing, to manage the coronavirus pandemic, resulted in relatively few offers during this period. This also affects the benchmarking data as the continuing situation does not relate to the previous baselines for the same quarter in the previous year.
- 1.3 During the three months covered by this report, no declarations were made by Members. A total of five declarations were made by senior staff, of which three were declined and two, though accepted, fall outside the scope of the policy.

### **2 Recommendation**

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

### **3 Background**

- 3.1 TfL's policy on gifts and hospitality applies to TfL Board Members, all staff who work for TfL and staff contracted to work for TfL including on advisory groups or through a third party. It covers both gifts and hospitality offered directly or offered through a spouse or partner.
- 3.2 The policy was last reviewed and updated in November 2017. It starts from the premise that any gifts or hospitality offered should usually be declined. No offer should be accepted where there is a possibility, or a perception, of being influenced by it. The guidance provides advice on the few circumstances where acceptance might be appropriate but, as a guiding principle, Members and staff are advised to err on the side of caution. Acceptance of any offer requires line manager approval and an explanation as to why acceptance is appropriate.

- 3.3 The policy will be reviewed shortly to ensure it is consistent with recent changes in the GLA's policy, which included an increase in the threshold for declaration, which has been raised from £25 to £50.
- 3.4 Currently, Board Members and staff are required to register with the General Counsel any gift or hospitality received in connection with their official duties that has a value of £25 or over, and also the source of the gift or hospitality. For staff, declarations are made at the end of every month. As the acceptance of any offers of gifts or hospitality by Members is uncommon, they are asked to confirm any declarations at the end of every quarter. Offers accepted by Members and the most senior staff are then reviewed and published on [tfl.gov.uk](https://tfl.gov.uk) on a quarterly basis.
- 3.5 Gifts and hospitality declarations from Members, the Commissioner and Managing Directors, the General Counsel and the Chief Finance Officer have been published on [tfl.gov.uk](https://tfl.gov.uk) since 2012.

## **4 Reporting Period and Issues for Consideration**

- 4.1 Appendices 1 sets out gifts and hospitality declared and accepted by senior staff over the three-month period from 1 November 2020 to 31 January 2021. There were no declarations by Members during this period.
- 4.2 A total of five declarations of offers were made by senior staff. The three offers within our policy were all declined. The two declarations that were accepted, fall outside of the policy: one was a speaking engagement at a virtual Highways England meeting and the other was participation at a virtual conference.
- 4.3 Table 1A shows the figures provided in previous reports since May 2019 and then breaks these down to a monthly average for each period reported, to enable some trend analysis. For comparison, Table 1B shows the figures for the corresponding three reporting periods i.e. November 2020 – January 2021, the current reporting period. An accurate comparison is difficult due to the impact of measures to control the coronavirus pandemic.
- 4.4 The offers received and accepted have been reviewed to ensure they comply with the policy and guidance. Where there are concerns that the policy or guidance is not being followed, these are raised with the member of staff and their line manager.

**Table 1A: Figures reported to previous meetings and monthly averages**

	<b>01/05/19- 31/07/19</b>	<b>01/08/19- 31/10/19</b>	<b>01/11/19- 31/01/20</b>
<b>Period reported to Committee</b>	3 months	3 months	3 months
Total offers	145	163	174
Total declined	110	112	132
Total accepted	35	51	42
<b>Monthly average</b>			
Total offers	48.3	54.3	58
Total declined	37	37.3	44
Total accepted	12	17	14

**Table 1B: Figures reported to this meeting**

	<b>01/05/20- 31/07/20</b>	<b>01/08/20- 31/10/20</b>	<b>01/11/20- 31/01/21</b>
<b>Period reported to Committee</b>	3 months	3 months	3 months
Total offers	10	16	3 (5*)
Total declined	10	6	3
Total accepted	0	10	0 (2*)
<b>Monthly average</b>			
Total offers	3.3	5.3	1
Total declined	3.3	2	1
Total accepted	0	3.3	0

\*Two events were recorded and accepted, but neither fall within our policy.

**List of appendices to this report:**

None

**List of Background Papers:**

Corporate Gifts and Hospitality Register

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## Audit and Assurance Committee



**Date:** 17 March 2021

**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 planner 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 planner 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 quarterly reports. For this Committee these include quarterly risk and assurance reports; Crossrail updates; and IIPAG quarterly updates;
  - (b) regular items (annual, half-year or quarterly) which are for review and approval or noting: examples include the legal compliance report, integrated assurance plan, and TfL annual report and accounts;
  - (c) matters reserved for annual approval or review: examples include those already mentioned above as well as annual audit fee; 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.
- 3.2 The Committee is required to meet in private, on an annual basis, with the Director of Risk and Assurance, External Auditors and Chief Finance Officer. These discussions are scheduled after the following Committee dates:

17 March 2021	Chief Finance Officer
7 June 2021	External Auditors
15 September 2021	
1 December 2021	Director of Risk and Assurance
16 March 2022	Chief Finance Officer

## **4 Current Plan**

- 4.1 The current plan is attached as 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 - Audit and Assurance Committee Forward Plan

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

None

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## Audit and Assurance Committee Forward Planner 2021/22

## Appendix 1

**Membership:** Anne McMeel (Chair), Dr Lynn Sloman (Vice Chair), Kay Carberry CBE, Dr Mee Ling Ng OBE and Dr Nelson Ogunshakin OBE

<b>7 June 2021</b>		
Risk and Assurance Quarterly Report	D. Risk and Assurance	Quarterly
Risk and Assurance Annual Report	D. Risk and Assurance	Annual
Crossrail Audit and Assurance Update	D. Risk and Assurance	Quarterly
Finance Control Environment Trend Indicators	Chief Finance Officer	Quarterly
EY Report on Non-Audit Fees	Chief Finance Officer	Six Monthly
Annual Audit Fee	Chief Finance Officer	Annual
TfL Statement of Accounts	Chief Finance Officer	Annual
TfL Annual Report	MD CCT	Annual
Review of Governance and the Annual Governance Statement	General Counsel	Annual
EY Report to Those Charged with Governance	EY	Annual
EY Letter on Independence and Objectivity	EY	Annual
Legal Compliance Report	General Counsel	Six Monthly
IIPAG Quarterly Report	Head of Project Assurance	Quarterly

<b>15 September 2021</b>		
Risk and Assurance Quarterly Report	D. Risk and Assurance	Quarterly
Crossrail Audit and Assurance Update	D. Risk and Assurance	Quarterly
Finance Control Environment Trend Indicators	Chief Finance Officer	Quarterly
IIPAG Quarterly Report	Head of Project Assurance	Quarterly
TfL Statement of Accounts – Changes Made Prior to Finalisation	Chief Finance Officer	Annual
Effectiveness Review of the External Auditors	Chief Finance Officer	Annual
Annual Audit Letter	EY	Annual
Freedom of Information Update	General Counsel	Annual

## Audit and Assurance Committee Forward Planner 2020/21

1 December 2021		
Risk and Assurance Quarterly Report	D. Risk and Assurance	Quarterly
Crossrail Audit and Assurance Update	D. Risk and Assurance	Quarterly
External Audit Plan	D. Risk and Assurance	Annual
EY Report on Non-Audit Fees	EY	Six Monthly
IIPAG Quarterly Report	Head of Project Assurance	Quarterly
Annual Tax Compliance Update	Chief Finance Officer	Annual
Finance Control Environment Trend Indicators	Chief Finance Officer	Quarterly
Legal Compliance Report	General Counsel	Six Monthly
Enterprise Risk: ER4 - Cyber and Protective Security	Director Compliance and On- Street	Annual