### **Audit and Assurance Committee**



**Date:** 11 October 2016

Item: Internal Audit Quarter 1 Report 2016/17

# This paper will be considered in public

## 1 Summary

1.1 The purpose of this report is to inform the Committee of the audit work completed in Quarter 1 of 2016/17, the work in progress at the end of the quarter, and the work planned for Quarter 2 of 2016/17.

### 2 Recommendation

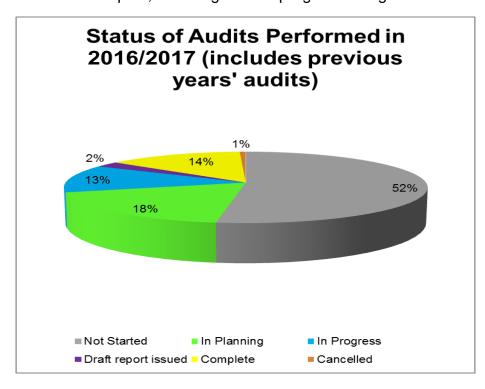
2.1 The Committee is asked to note the report.

# 3 Background

3.1 The Director of Internal Audit is required to provide an annual report in support of his opinion on the internal control framework. Quarterly reports are presented to the Committee in anticipation of the annual report.

#### 4 Work Done

4.1 The chart below shows progress at the quarter end towards delivery of the 2016/17 audit plan, including work in progress brought forward from 2015/16.



- 4.2 There were 15 Final Audit Reports issued during the quarter, including three interim reports that were concluded as 'Well Controlled' and went straight to final. In all cases, appropriate management action had been taken to address the issues raised in the original Interim Audit Report and the report was closed. A summary of the report findings (except one in relation to the TfL Pension Fund) is included in Appendix 3 attached.
- 4.3 The table below shows the number of Interim Audit Reports and other outputs, including advisory/ consultancy reports and memorandums, issued during the quarter and in the full year, together with comparative figures for 2015/16.

	Interim Audit Reports  WC – well controlled AC – adequately controlled RI – requires improvement PC – poorly controlled					Aud	HSE and Technical Audit Reports			Other Outputs (Advisory Reports/ Memos)		
	wc	AC	RI	РС	Total	wc	AC	RI	РС	Total		Total
This Quarter	3	6	8	1	18	3	21	12	1	37*	7	62
Q1 2015/16	2	4	8	0	14	1	7	10	1	19	10	43

<sup>\*</sup> The HSE&T report numbers include, for the first time, reports issued by the Crossrail audit team who transferred into TfL Internal Audit in March 2016. The numbers are not, therefore, directly comparable with the prior year.

- 4.4 Details of the findings from the interim audit reports issued during the quarter can be found in Appendix 4. In all cases, management actions have been agreed to address the issues raised and are being taken forward. One of the interim audit reports issued during the quarter was concluded as 'poorly controlled'. The report on Software Licensing of IBM Products identified a number of issues regarding the management of software assets. IM Service Management is taking forward actions to address the issues raised.
- 4.5 A summary of the other outputs issued during the quarter, including memorandums and advisory reports can be found in Appendix 5. The more significant of these include the following:
  - (a) At the request of management we carried out a lessons learned review of Commercial Development's (CD's) recent retail project at Embankment station. We noted that since this project, CD has taken steps to establish a more robust project management regime. However we made some recommendations to further strengthen controls.
  - (b) We carried out a review, using the lean six sigma methodology, of TfL's process for commissioning consultants, with the aim of identifying opportunities to improve the efficiency of the process and deliver better value for money. We made a number of recommendations, which management is taking forward.

- 4.6 Summaries of the HSE and Technical (HSE&T) Audit reports issued during Quarter 1 are set out in Appendix 6. One of the HSE&T audit reports issued during the quarter was concluded as 'poorly controlled'. This was the audit of Aluminothermic Welding at Maintenance Infrastructure Services, which carries out maintenance of track and associated infrastructure. The report noted issues with the recording and performance of welding activity, and with the management of equipment.
- 4.7 Work in progress at the end of Quarter 1 is shown in Appendix 1 and work due to start in Quarter 2 of 2016/17 is shown in Appendix 2.

### Changes to the audit plan

- 4.8 As discussed more fully in paragraphs 6.1 and 6.2 below, Internal Audit is currently six members of staff below its budgeted headcount for the year, and will not be filling these vacancies due to TfL's current headcount controls. To compensate for this, we have carried out a review of the 2016/17 audit plan and identified a number of lower priority audits that will be cancelled or postponed to 2017/18. As usual, there have been some other changes due to changes in business priorities. The full list of audits can be found in Appendix 7.
- 4.9 We have also added some audits to the plan, as a result of management requests or changes to business activity. The list of jobs added to the plan can be found in Appendix 8.

### 5 Other Assurance Providers

5.1 In reaching his overall opinion on the effectiveness of internal control in TfL, the Director of Internal Audit takes account of work carried out by other assurance providers as well as work carried out directly by Internal Audit. The following paragraphs provide a brief summary of work carried out by other assurance providers during Quarter 1.

### Project assurance

- 5.2 The TfL Project Assurance team carries out Integrated Assurance Reviews (IARs) of projects. Projects are selected for review following a risk-based assessment, in order to enable the optimum assurance intervention to be planned. The risk factors that inform the assurance include; novel engineering, team experience, repeatable work, complexity and consents. In this way, reviews of relatively low risk, repeated work such as highways maintenance, will not be assured to the same depth as a project with novel engineering for the same cost.
- 5.3 All projects with an Estimated Final Cost (EFC) over £50m are reviewed under the same IAR process but with additional input from the Independent Investment Programme Advisory Group (IIPAG). The assurance reports are considered alongside the project's Authority request at the operating business boards with both the operating Managing Director and the Chief Finance Officer in attendance.
- 5.4 In Quarter 1 2016/17, 19 IARs were conducted, with IIPAG providing oversight and guidance on 10 reviews, mostly of projects with an EFC of over £50m. Issues arising from the reviews are presented to the operating boards with agreed actions, owners and timescales.

5.5 Some of the more significant reviews during Quarter 1 were: a Contract Award review of the Bakerloo Line 72 Tube Stock Life Extension; a Pre-Tender review of the Surface Intelligent Transport System; an Initiation review of the Central Line Improvement Programme; and a Contract Award review of the DLR Royal Docks Custom House Station Capacity project.

#### **Crossrail Contractor Commercial Reviews**

5.6 In addition to the work carried out by Internal Audit, Crossrail has a contractor commercial review team. This team carries out commercial assurance reviews of the performance of contractors, covering Cost; Contract Management; Risk Management; Commercial Value; Supply Chain and Procurement; and Anticipated Final Cost Management and Controls. There are no significant areas of concern arising from this work.

#### **Embedded assurance**

- 5.7 In addition to HSE and Technical audits carried out by Internal Audit, a number are carried out during the year by staff 'embedded' in parts of Surface Transport and Rail and Underground. This was incorporated in the Integrated Assurance Plan for 2016/17 approved by the Audit and Assurance Committee in March, and work done during Quarter 1 is summarised below.
- 5.8 Surface Transport 19 audits were completed in Quarter 1. The purpose of these was to ensure the existence and adequacy of the control procedures and management systems used by bus operators in accordance with Buses Directorate contractual requirements as well as Road space management. There were no significant issues identified.
- 5.9 London Underground Five audits were completed in Quarter 1, as follows:
  - (a) An audit of Design Change Control Tottenham Court Road. There were no significant issues identified.
  - (b) An audit of an Occupational Health supplier to assess its capability to deliver to LU standards.
  - (c) Audits of management of quality standards and processes at three contractors: Cintec UK, JNG Construction & Engineering, and Brownings.

### 6 Resources

- 6.1 We began the year with three vacancies: an Audit Manager IM and Security; an Audit Manager Commercial; and an Internal Auditor Commercial. Two more auditors, in the Business Processes and Commercial sections left during Quarter 1. A further auditor, in the IM and Security section has left since the end of the Quarter.
- 6.2 Consequently, the department is currently six heads below its budgeted headcount. In light of the headcount controls that TfL has introduced we will not be filling those vacancies. As noted in para 4.8, we have carried out a review of our audit plan and cancelled and postponed a number of lower priority audits to compensate for this.

# 7 Integrated Assurance / Networking

- 7.1 The Assurance Delivery Group (ADG), chaired by General Counsel, which provides oversight of assurance across TfL, continues to meet on a quarterly basis. A particular area of focus is on working with the business to develop assurance maps linked to TfL's strategic risks. These maps will show the levels of assurance that are in place through which TfL ensures that its risks are being effectively managed. They are an important tool to help identify any gaps in internal control, as well as areas of potential over control.
- 7.2 The Director of Internal Audit and the General Counsel met recently with members of the Independent Investment Programme Advisory Group (IIPAG) to discuss areas where Internal Audit could support IIPAG in its work. This meeting highlighted a number of areas where IIPAG believed there would be value in review by Internal Audit. These will be explored further in the coming months.
- 7.3 We continue to meet regularly with the Head of the TfL Programme Management Office and the Head of Project Assurance to discuss upcoming work and ensure that any potential areas of overlap are properly managed.
- 7.4 The Crossrail Integrated Assurance Group (CIAG), which comprises representatives of assurance providers from a range of Crossrail stakeholders, has continued to meet regularly. The CIAG is a useful forum for the sharing of assurance activity, which helps minimise the risk of duplication of effort between assurance providers.

### 8 Customer Feedback

8.1 At the end of every audit, we send out a customer feedback form to the principal auditee(s) requesting their views on the audit process and the report. The form is questionnaire-based so it can be completed easily and quickly. A summary of the responses to the questionnaire, together with comparative figures for the previous quarter, is included as Appendix 9.

### List of appendices to this report:

Appendix 1 – Work in Progress at the end of Quarter 1 2016/17

Appendix 2 – Work Planned for Quarter 2 2016/17

Appendix 3 – Final Reports Issued in Quarter 1 2016/17

Appendix 4 – Interim Reports Issued in Quarter 1 2016/17

Appendix 5 – Consultancy Reports and Memoranda Issued in Quarter 1 2016/17

Appendix 6 – HSE and Technical Reports Issued in Quarter 1 2016/17

Appendix 7 – Audits Cancelled and Postponed 2016/17

Appendix 8 – Audits Added 2016/17

Appendix 9 – Customer Feedback Form – Summary of Responses for Quarter 1

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

Audit reports.

Contact Officer: Clive Walker, Director of Internal Audit

Number: 020 3054 1879

Email: <u>Clivewalker@tfl.gov.uk</u>

#### **TfL Internal Audit** Work in Progress at end of Period 3 2016/17

# **Risk Audit Title**

#### Objective

Pan-TfL

TfL fails to deliver key investment programmes or elements of key programmes

Supplier Relationship Management To assess the adequacy of TfL's arrangements for

ensuring that relationships with key suppliers provide

TfL fails to prepare for or deal with a catastrophic event

TfL Management of Stress To assess the effectiveness of management

arrangements for minimising the incidence and effect of

stress at work in line with best practice.

People Risk (Inc Pensions, IR)

Employee Relations - Timing and conduct of TU consultations

To review the controls in place to ensure TU consultations are timed and conducted in a manner to limit service disruptions, loss of revenue and damage to reputation in TfL following similar work on LU in the

Major/ catastrophic Incident

**Business Continuity** 

To review the adequacy and effectiveness of the controls operating over the revised business continuity

### London Underground and TfL Rail

TfL fails to deliver key investment programmes or elements of key programmes

Fraud Risk in projects and contracts within the Station Works Improvement

Programme (SWIP)

Review the adequacy and effectiveness of controls in place to manage Fraud risk in projects and contracts within SWIP and assess against a Fraud risk maturity

Procurement of Facilities Management To ensure that the procurement processes employed for

Category

the Facilities Management Category are in accordance with approved procedures and EU directives and are open, fair and transparent.

Project use of Pathway and Maintenance Teams' Readiness to deliver support for new Signalling

LU Track Clearances

To provide assurance that products such as approval and registration of new equipment, provision of training, provision of tools and spares etc. are delivered in a timely and effective manner. Provide assurance that controls are in place over

LU Project Specific Works Information Documents

designs to ensure that track clearances are maintained. To provide assurance over the preparation, checking and approval of Works Information documents prior to sending to contractors.

Review of Northern Line Extension project

To review elements of TfL's management of the Northern Line Extension project.

TfL fails to maintain elements of the asset base resulting in asset failure or operational decline Management of Current Rail Indicator Devices (CRIDs) and Permanent **CRIDS** 

To provide assurance that these pieces of equipment are maintained and managed adequately.

LU Operations - Piccadilly Line Fleet Life Extension project

To provide assurance that suitable quality processes

LU Operations - Management of Off Track Drainage Systems

refurbishment and vehicle floor upgrade meet To review the extent to which COO (AP) is complying with the relevant engineering standards for the management of the Off-Track Drainage.

and competencies are in place to ensure bogie

Maintenance of Air Handling Units for Critical Rooms

Provide assurance that air handling units for Communication Equpment Rooms and Signal

Equipment Rooms are subject to adequate maintenance to prevent failure and impacts on the operational railway.

TfL fails to meet operational or safety targets Wabtech (Brecknell Willis) Supplier

To provide assurance over the performance of this supplier.

TfL fails to prepare for or deal with a catastrophic event

Consultancy - Signal Design Management

Audit

To evaluate recent enhancements in design management controls and ensure that best practices are adopted within LU.

LU Management and prevention of nuisance noise and vibration

To provide assurance that suitable risk controls are in place to prevent / minimise noise and vibration during works and that appropriate systems exist to manage

public complaints.

LU Operations Signals SSL South

**HSE Management** 

To provide assurance that legislation is being complied with and HSE Management System requirements are understood and implemented.

ation To rev

Role of Principal Contractor in relation to Construction Design and Management (CDM) in Lifts and

Escalator (L&E) Projects

To review compliance with Principal Contractor and Principal Designer duties in CPD as defined by the CDM

Regulations 2015.

#### **Surface Transport**

TfL fails to deliver key investment programmes or elements of key programmes

Project closure in ST To provide assurance on the management of Project

Handover from Projects & Programmes to Operations and Project Closure in Surface Transport. These stages are represented by Gate 5 and Gate 6 in the TfL

Pathway Gate Process.

Project transition in ST To provide assurance on the management of Project

Transition from Sponsor team to Delivery team in

Surface Transport.

Use of Pathway in ST To review the extent to which Pathway is embedded in

Surface Transport, and to assess its use by projects,

ahead of the planned Pathway Refresh.

Gate & Design Reviews in ST

To provide assurance that Surface Transport gate and

design reviews are conducted in accordance with Pathway and that they are effective in contributing to

project assurance.

Procurement of the Major Projects

Framework

To ensure that the procurement process employed for the Major Projects Framework is managed effectively, in

accordance with approved procedures and EU directives, is open, fair and transparent, and has appropriate management controls and governance.

TfL fails to prepare for or deal with a catastrophic event

LO Safety Verification Process

To provide assurance the change control process in LO provides adequate safety verification when changes with

safety impacts / implications are authorised.

Finance and Governance

**TPH Regulatory Function** 

Following a management request the audit will review the governance and regulatory functions in Taxi and Private Hire and Enforcement and On Street Operations

#### **Finance**

TfL fails to deliver key investment programmes or elements of key programmes

**External Expert Conflict of Interest** 

To review robustness of processes used by supplier to protect against conflict of interest when providing sole consultancy to Crossrail 2 and potential other project work for TfL.

#### **Commercial Development**

TfL does not develop or manage secondary income streams effectively

Mobilisation of Advertising Partnership To provide assurance over the mobilisation of the new

advertising contract, and the exiting of the current

arrangements.

Maintaining a long term, strategic balanced plan

**Exterion Connectivity Services** 

Phoenix Payments Process To provide assurance over key controls over the

processing of compulsory purchase and other property compensation payments recorded in the Phoenix Management request to carry out a lessons learnt review following issues identified with this contract. To review and assess the systems and processes in

Bus Shelter Advertising Concession To re

place for determining TfL's Minimum Guaranteed Income and Authority Revenue Share as detailed in the

contract with JCDecaux.

Finance and Governance

Contract

Financial Controls in Commercial

Development

To review the financial processes and controls operating

within Commercial Development.

#### **Customers, Communication and Technology**

TfL suffers a significant IT failure or attack

Active Directory To provide assurance on the adequacy of the Active

> Directory implementation within TfL and the effectiveness of the management security design, including the operating effectiveness of the security

To provide advice and guidance on development of key Contact Centre Service Framework

controls within the contact centre environment

TfL fails to deliver key investment programmes or elements of key programmes

Quality and Timeliness of IM Project

Delivery

Provide assurance on the processes that have been implemented to ensure the quality and timeliness of outputs delivered as part of IM projects and effective managed transition into support services in BAU.

TfL does not keep up with technology / market changes resulting in loss of franchise

Procurement of Access and WAN

contract

To provide assurance that the procurement relating to the Access and WAN contract is being managed effectively and carried out in accordance with approved procedures. The audit will also consider the steps taken to ensure the resulting contract is fit for purpose.

HR

People Risk (Inc Pensions, IR)

Performance and Development

To review the new performance and development process including introduction/roll out; procedures and guidance; training; roles and responsibilities; monitoring; linkages to other staff monitoring, and success factors. To provide assurance on the adequacy and

Make a Difference Instant Awards

effectiveness of the controls over the ordering, security, issuing, recording and monitoring of MAD Instant

**General Counsel** 

Finance and Governance

Gifts and Hospitality

To review the effectiveness of the controls in place to manage the recording, authorisation and monitoring of gifts and hospitality.

Crossrail

Crossrail

Chief Engineer's Communications

To assess the effectiveness of Chief Engineer's Communications.

**Engineering Safety Management** 

(ESM)

To assess the effectiveness of the management of the Engineering Safety Management (ESM) process including Common Safety Method management.

Management of Technical Assurance

To assess the effectiveness of the management of Technical Assurance. To assess the effectiveness of the rolling stock

To review controls over Sectional Completion

approvals process managed by RfL.

documentation.

Rolling stock approvals process by

Rail for London (RfL)

Sectional Completion documentation at C360 Mile End / Eleanor Street

at C360 Mile End / Eleanor Street

Shafts

Management of construction interfaces To review management of construction interfaces.

Framework Design Consultants (FDCs) for C512 Whitechapel Management of Design & Design Change at C828 Ilford Depot Programme Management at C828

**Ilford Depot** 

Project Glide-path monitoring

Transition of the Data Centre

Control of Materials at C422

Tottenham Court Road

Engineering Safety Management and Technical Assurance

Reviews of the application of the Crossrail Engineering Safety Management and Technical Assurance

processes at a selection of contracts

To review quality management in relation to design / drawing by FDCs.

To review the management of design and design change at Ilford Depot.

To review the management of the Ilford Yard delivery schedule.

To assess the effectiveness of Project Glide-path monitoring in managing outturn costs for each project. To assess the effectiveness of arrangements for

transition of the Data Centre. To review the control of materials. Work Planned - P4 to P6 2016/17

#### **Risk Audit Title Objective**

Pan-TfL

TfL fails to deliver key investment programmes or elements of key programmes

Management of 2nd and 3rd tier

contractors

To assess the extent to which TfL's first tier contractors manage their contractors in compliance with TfL's contract conditions.

Use of refreshed Commercial Toolkit

To provide assurance that the TfL Commercial Toolkit is

being appropriately considered and used.

TfL suffers a significant IT failure or attack

Data Privacy & Protection - CCTV

To provide assurance over the controls over the use of CCTV and the associated data.

London Underground and TfL Rail

TfL fails to deliver key investment programmes or elements of key programmes

LU Project Requirements

To provide assurance that Project Requirements are adequately identified and are suitable and sufficient.

Disruption to Quality of Service

LU Power Compressor Contract

To provide assurance that the contract and supplier processes are working effectively to maximise value from the asset.

TfL fails to maintain elements of the asset base resulting in asset failure or operational decline

LU Operations JNP Signal

Maintenance

To provide assurance over specific elements of signal maintenance controls, covering calibrated tools and equipment, surveillance activities and management of wire degradation.

LU REW - Overhaul of Signal Equipment and Management of the Signalling Equipment Emergency Stores

To review implementation of previous audit findings in respect of the overhaul of signalling equipment to confirm these have been fully implemented and continue to operate. Also to provide assurance that Signalling Emergency Stores are being managed to support the business objectives in response to incident and maintenance rectification.

LU Operations - Repeat Asset Failure

Avoidance

To provide assurance that asset failures are investigated and root causes identified, addressed and escalated to avoid repeat failures.

LU Operations Management of Rail Grinding Programme

To provide assurance that the rail grinding programme is appropriately managed to ensure track assets are in a safe and serviceable condition.

LU BCV Track Maintenance

To provide assurance over specific elements of track maintenance controls, covering Ellipse data management, manual metal arc welding, PM4 inspections and preparations for Night Tube (where applicable).

database

LU Power Defects Management

LU Operations - Fleet Removal of LITE To ensure robust processes are put in place and business as usual can continue.

Completion of Station Electrical

**Testing** 

LU Track Manual Metal Arc Welding

To provide assurance that Power defects are process managed to avoid impacts on the operational railway. To ascertain the levels of completion of station statutory electrical testing and reasons for any non-completion To provide assurance that Manual Metal Arc Welding is

undertaken to LU standards.

TfL fails to meet operational or safety targets

**DK Rewinds Supplier Assurance** 

To provide assurance over the performance of this supplier.

TfL fails to prepare for or deal with a catastrophic event

LU Operations Stonebridge Park

To provide assurance that legislation is being complied Rolling Stock Depot HSE Management with and HSE Management System requirements are

understood and implemented.

LU Competence Requirements for Undertaking civil engineering safety

critical work

LU Operations Northern Line HSE Management

LU Operations Transplant HSE Management

LU Operations Fit for the Future Stations - transfer of station HSE

LU Operations Fleet Competence Management

LU CPD Working at Height

LU Environment Audit of the Paddington Bakerloo Line Tunnel Project

LU Station Security reviews

To review LU's compliance with Cat 1 standards in respect of competence requirements for undertaking civil engineering safety critical work.

To provide assurance that legislation is being complied with and HSE Management System requirements are understood and implemented.

To provide assurance that legislation is being complied with and HSE Management System requirements are understood and implemented.

To provide assurance that all HSE activities on stations have been effectively handed over and all key HSE activities are being completed.

Assess implementation of Competence Management System in Fleet Asset area.

To review compliance with Working at Height

Regulations 2005.

To provide assurance that the project is adequately implementing the environmental requirements of Pathway and the LU Management System and the Crossrail EMR and 14000.

Thematic review of the protective security controls in place at high risk stations to assess whether controls are operating effectively

### **Surface Transport**

TfL fails to deliver key investment programmes or elements of key programmes

Management of single sourcing in

London Rail

To ensure that the procurement process used for single sourcing in London Rail is managed effectively, including the frequency and legitimacy of single sourcing, and the robustness of the approval process.

TfL does not respond to increasing financial challenges

Benefits arising from lean six sigma reviews

A review of the outcome of recent business process improvement reviews within Surface Transport to assess whether anticipated benefits have been achieved.

TfL fails to prepare for or deal with a catastrophic event

ST Health and Safety competence management

To provide assurance that H&S competence standards have been identified, documented, monitored and maintained.

Trams Management of Operations H&S risk

To provide assurance that First Group (TOL) have appropriate arrangements in place to manage operational risk and the relevant competence based risk

**DLR Asbestos Management** 

To provide assurance that an appropriate system is in place to manage the risk of asbestos exposure and that a register is maintained to enable works to be suitably controlled.

TfL fails to meet operational or safety targets

Operation of the new DLR franchise

A review of the operation of the new contract, with particular focus on: safety management, outsourcing of maintenance, transfer of obligations.

#### **Finance**

**Financial Controls Group Treasury** 

To review the financial processes and controls operating in Treasury with focus on hedging and investments

### **Commercial Development**

Maintaining a long term, strategic balanced plan

Management of Fraud Risk in Commercial Development

A review of a sample of Commercial Development's activities, to assess the extent to which fraud risk is being effectively managed.

#### **Planning**

TfL fails to deliver key investment programmes or elements of key programmes

Commercial Management within

Planning

A general audit of commercial management processes within Planning to provide assurance over compliance with TfL policies and good practice.

#### **Customers, Communication and Technology**

TfL fails to prepare for or deal with a catastrophic event

Strategic Datacentre Controls Review To assess the design and effectiveness of the controls.

TfL suffers a significant IT failure or attack

Patch Management - DMZ

To evaluate the effectiveness of controls in place to consistently secure against known vulnerabilities in operating system and application software with the DMZ.

Maintaining a long term, strategic balanced plan

Refunds

To review controls over issue of refunds to customers.

Crossrail

Asset Handover Strategy and Implementation

Gates process in Systemwide

To assess the effectiveness of Asset Handover Strategy and implementation management within Crossrail. To assess the effectiveness of the Gates process for

design management in Systemwide.

Rolling stock assurance process

To assess the effectiveness of the rolling stock assurance process managed by Bombardier. To review handover processes for this project

Handover Process Management at

C405 Paddington

Inspection and test plan management Verification Acceptance Process at

C350 Pudding Mill Lane

**Quality Management and Certification** at C510 Whitechapel

Quality Management at C631Platform **Edge Doors** 

Contractors Management of their own Supply Chains, eg. PES Brackets at

C631 PES

Quality Management Contractors at

C650 HV Power Systems

Management of Design and Design Change at C660 Communication and Control Systems

Accounts Payable

Transition of the Tunneling and **Underground Construction Academy** (TUCA)

**London Transport Museum** 

LTM New Income Generation

IT Governance

To review the effectiveness of inspections and test plans To review the Verification Acceptance Process.

To review quality management and certification.

To review the management of quality by the systemwide contractors, including quality auditing.

To review the effectiveness of contractor supply chain management and control in relation to, eg, PES brackets.

A review of the management of quality by the systemwide contractors.

A review of management of design and design change.

To review the effectiveness of controls over the

Accounts Payable process

To provide assurance that TUCA is being transitioned effectively to TfL and that commitments made to funders are being met.

To provide assurance over the process and planning around the generation of new income streams. This will include the pop up shops and the Hidden London To provide assurance over LTM's IT governance arrangements.

Conclusions	Number
PC= Poorly Controlled	0
RI= Requires Improvement	0
ANC = Audit Not Closed	0
AC= Adequately Controlled	0
WC/ACL = Well Controlled and Audit Closed	3
AC/ACL = Adequately Controlled and Audit Closed	0
ACL = Audit Closed	11

Reference	Responsible Director	Report Title	Interim Report Issued	Original Objective	Summary of Findings	Final Report Issued
London Under	ground and TfL Ra	il				
•	•	pital investment portfolio and cont ver Capital Investment Programme	•			
IA 14 612	Commercial Director, LU	London Underground Estimate Review and Validation Process	19/06/2015 RI	To provide assurance that the estimate review and validation process within London Underground is carried out effectively.	Our Interim Internal Audit Report dated 19 June 2015 entitled LU estimate review and validation process identified one Priority 1 issue.  The process and template documents in Pathway define how the governance of the estimating process should operate. We found that the Pathway process is not followed in all areas, and that documents, in particular the Estimate Strategy and the Estimate Review and Verification Checklist, are used infrequently. However, we also recognised that the bespoke processes that are actually used in some areas do, nevertheless, appear to provide comprehensive estimates.  We have carried out a follow up review, and concluded that all five agreed actions arising from the finding have been satisfactorily addressed.  This audit is now closed.	18/04/2016 ACL

Reference	Responsible Director	Report Title	Interim Report Issued	Original Objective	Summary of Findings	Final Report Issued
	lisk: Financial and G	overnance Controls ding				
IA 15 112F	Asset Operational Support Director	Uniforms for Operational Staff	09/10/2015 RI	To review the effectiveness of controls over uniforms.	<ul> <li>Our Interim Internal Audit Report dated 9 October 2015 entitled Uniforms for Operational Staff identified two Priority 1 issues, six Priority 2 issues and three Priority 3 issues resulting in 22 agreed management actions. The Priority 1 issues were:</li> <li>Given the planned increase in stock levels in the short term, the business continuity plan needs to be updated and fire risk needs to be adequately addressed. Some aspects of warehouse security need to be improved</li> <li>Stock issues based on manual requisitions are a known risk and procedures need to be improved to make sure that they are documented and authorised</li> <li>We have conducted a follow up review of the agreed management actions and can confirm that they have all been satisfactorily addressed. Accordingly this audit is now closed.</li> </ul>	21/04/2016 ACL
IA 14 407F	Chief Operating Officer, LU	Security of LU Tenants	01/10/2014 RI	To provide assurance that the London Underground Construction Access System (LUCAS) process for LU station tenants complies with the requirements contained in the London Underground Security Programme (LUSP) and that the process operates in an effective and efficient manner.	<ul> <li>Our Interim Internal Audit Report dated   October 2014 entitled "Security of LU Tenants" identified the following priority   issues:</li> <li>The outcome of the initial implementation of the LUCAS ID cards for tenants had been poor, with very low levels of compliance</li> <li>The new process had not been properly documented in the management system</li> <li>We carried out an initial follow up review and published an Audit Not Closed report on 8 September 2015 where three actions remained unaddressed. The outstanding actions all related to guidance documentation for the implementation of the new access control system, Sentinel. The Sentinel system has been introduced as a replacement for LUCAS.</li> <li>We have completed our second follow up review and confirmed that all of the nine agreed management actions have been satisfactorily addressed. The audit is now closed.</li> </ul>	14/06/2016 ACL

Reference	Responsible Director	Report Title	Interim Report Issued	Original Objective	Summary of Findings	Final Report Issued
Surface Transp	port					
•	Risk: Major Incident isk: Major Incident					
IA 14 114F	Director of Service Operations	Victoria Coach Station Healthcheck	28/08/2015 AC	To provide assurance on the adequacy and effectiveness of internal controls in place within Victoria Coach Station (VCS), focusing on key activities.	Our Interim Internal Audit Report dated 28 August 2015 entitled VCS Healthcheck identified two Priority 2 issues and one Priority 3 issue resulting in seven management actions.  We have now carried out a follow up review of the agreed management actions and can confirm that all seven have been satisfactorily addressed.  Therefore this audit is now closed.	12/04/2016 ACL
TfL Strategic R ST Strategic Ri IA 15 415F	Chief Operating	Access Control Arrangements in		To assess the	Our Interim Internal Audit Report dated 22 September 2015 entitled	
	Officer, ST	the Surface Transport and Traffic Operations Centre	05/10/2015 RI	effectiveness of the physical access security arrangements that are in operation within the Surface Transport and Traffic Operations Centre (STTOC) at Palestra and 200 Buckingham Palace Road (BPR).	Access Control Arrangements in the Surface Transport and Traffic Operations Centre identified one Priority I issue. The Priority I issue highlighted that a review of physical access rights to Palestra (second floor) and the recovery control room at 200 BPR had not taken place. Further, there was no documentation outlining the requirement to review the access rights of personnel on a regular basis appropriate to risk.  We have now completed our follow up review and can confirm that all of the agreed management actions have been satisfactorily addressed. The audit is now closed.	18/04/2016 ACL

Reference	Responsible Director	Report Title	Interim Report Issued	Original Objective	Summary of Findings	Final Report Issued
Finance						
TfL Strategic F	Risk: Disruption to	quality of service				
IA 15 604F	Director of Commercial	Collaborative Procurement Team (CPT)	15/12/2015 AC	To provide assurance on the work of the CPT to support the development of a collaborative procurement function across the GLA,	Our Interim Internal Audit Report dated 15 December 2015 entitled Collaborative Procurement Team identified one Priority I issue.  A GLA Group Collaborative Procurement Board (CPB) had commenced meeting informally since the CPT went live. It includes representation from the GLA and the Functional Bodies and acts as a joint committee for the approval of the overarching strategy and approach to collaborative procurement. The CPB role is also to coordinate and oversee the CPT work, and to use delegated powers of approval in decision making on contract awards following procurement processes undertaken by the CPT. However, the procurement authority had not yet been fully delegated to the CPB.  At the time of our audit two key governance documents had been drafted but were still subject to approval:  • the Working Arrangement Document, which contains the CPB terms of reference, decision making and meeting procedures, and related terms and conditions, and  • the Joint Arrangements Agreement detailing practical arrangements and terms of the collaborative arrangement between TfL and other FBs.  We have carried out a follow up review, and concluded that the single agreed action arising from the issue has been satisfactorily addressed.  This audit is therefore now closed.	18/04/2016 ACL
TfL Strategic F	Chief Finance Officer	TfL Scorecards	30/01/2015 RI	To review the process and controls over scorecards and indicators and provided assurance on their accuracy and integrity.	Our Interim Internal Audit Report dated 30 January 2015 entitled TfL Scorecards identified one Priority 1 issue, one Priority 2 issue and one Priority 3 issue resulting in six agreed management actions. The Priority 1 issue related to inadequate processes for verifying scorecard source data.  We have now conducted a follow up review and can confirm that all actions have been satisfactorily addressed. Accordingly this audit is now closed.	31/05/2016 ACL

Reference	Responsible Director	Report Title	Interim Report Issued	Original Objective	Summary of Findings	Final Report Issued
Customers, Co	ommunication and	Technology	.	.l		
TfL Strategic F	Risk: Technology Ri	sk				
IA 14416F	Chief Information Officer	Information Security Controls Framework	30/09/2015 Memo	To provide assurance on the effectiveness of the processes that have been used to implement the Information Security Controls Framework (ISCF) in alignment with best practices and TfL business and legal requirements.	Our internal audit memorandum dated 30 September 2015 entitled Information Security Controls Framework (ISCF) identified three issues as follows:  • Ineffective training and awareness of the ISCF to ensure it was understood by relevant members of staff  • Failure to align the ISCF with the TfL Information Security Policy to provide a holistic view  • Lack of a defined process or plan to improve the ISCF  We have carried out a follow up review and have confirmed that all of the actions to address these issues have been satisfactorily completed and the audit is, therefore, closed.	29/04/2016 ACL
TfL Strategic F	Risk: Disruption to	quality of service				
IA 15 427F	Chief Information Officer	IM Incident and Service Request Management	17/12/2015 RI	To provide assurance that IM service management processes have been designed to provide adequate coordination of available resources and are operating effectively to achieve efficient incident and service resolution.	Our Interim Internal Audit Report dated 17 December 2015 entitled IM Incident and Service Request Management identified two Priority 1 issues as follows:  • Management of problem resolution was not fully effective • IM could not assess the impact of the changes before they were implemented because the configuration management system (CMS) data was inaccurate  In addition, we identified one Priority 2 and one Priority 3 issue. We confirm that management have implemented all the actions agreed in respect of these findings. This audit is therefore closed.	05/05/2016 ACL

Reference	Responsible Director	Report Title	Interim Report Issued	Original Objective	Summary of Findings	Final Report Issued
Commercial D	evelopment					
TfL Strategic R	Risk: Maintaining a	long term strategic, balanced plan				
IA 15 629F	Director of Commercial Development	Commercial Advertising Partnering Agreement Procurement	20/04/2016 WC/ACL	To provide assurance that the decision making process in place for governing the procurement of the pan-TfL advertising services contract was managed effectively, in accordance with approved procedures and had appropriate management controls and governance.	See Interim Audit Report Summary in Appendix 4.	20/04/2016 WC/ACL
TfL Strategic R	Risk: Financial and (	Governance Controls				
IA 15 124F	Director of Commercial Development	Completeness of the Property Asset Register	17/09/2015 RI	To provide assurance over the completeness of the Property Asset Register (PAR).	Our Interim Internal Audit Report dated 17 September 2015 entitled Completeness of the Property Asset Register identified three Priority I issues and one Priority 2 issue resulting in fifteen management actions. The Priority I actions were:  • The cost and benefit of a full alignment of the PAR with the Finance Asset Register (FAR) needed to be assessed as there was no straightforward way to confirm that all property assets recorded in the PAR were also recorded in the FAR and vice versa.  • PAR records had not been consistently created and updated which precludes a reliable automated matching to Land Registry (LR) title records and site plans.  • The property acquisitions process needed to be improved by reinforcing the control process with those responsible for buying and selling, as well as seeking further supporting information.  We have now carried out a follow up review of the agreed management actions and can confirm that all but two have been satisfactorily implemented.  The remaining two are partially addressed and relate to aligning the PAR with the FAR and the process of obtaining fixed asset additions and disposals information from the FSC on a quarterly basis. Appropriate plans have been put in place to address these actions.	31/05/2016 ACL

Reference	Responsible Director	Report Title	Interim Report Issued	Original Objective	Summary of Findings	Final Report Issued
					Therefore this audit is now closed. However, the remaining actions will be followed up as they become due.	
Planning				•		
TfL Strategic F	Risk: Maintaining a l	ong term strategic, balanced plan				
IA 15 634F	Head of Strategic Analysis	Strategic Transport Modelling in TfL	27/10/2015 AC	To provide assurance over the use of strategic transport planning models and forecasts within TfL.	Our Interim Internal Audit Report dated 27 October 2015, entitled Strategic Transport Modelling in TfL, identified one Priority 2 issue regarding documentation of the modelling process and one Priority 3 issue relating to opportunities for income generation.  Management have implemented all the actions agreed in respect of these	08/06/2016 ACL
					findings and this audit is now closed.	
Crossrail						
IA 15 514F	Project Director, Crossrail	Schedule Management	12/04/2016 WC/ACL	To provide assurance that procedures are in place to deliver accurate handover schedules, and that the relevant stakeholders are engaged and informed.	See Interim Audit Report Summary in Appendix 4.	12/04/2016 WC/ACL
IA 15 526	Director of IT, CRL	Transition of Crossrail eB Document Management System to a Cloud Based Service Offered by Bentley Systems	31/05/2016 WC	To provide assurance on the effectiveness of the processes that have been implemented to transition the eB solution from the internal Crossrail datacentre to the Bentley Systems' cloud based service, including those related to ensuring the confidentiality, integrity and availability of the data in a cloud environment.	See Interim Audit Report Summary in Appendix 4.	31/05/2016 WC/ACL

Conclusions	Number
PC= Poorly Controlled	I
RI= Requires Improvement	8
AC= Adequately Controlled	6
WC/ACL = Well Controlled and Audit Closed	3
AC/ACL = Adequately Controlled and Audit Closed	0

Reference	Responsible Director	Report Title	Report / Memo Issued	Original Objective	Follow-up Audit	Summary of Findings
London Underg	ground and TfL Rai	L				
		ital investment portfolio and contre er Capital Investment Programme /	•			
IA 15 601	Head of TfL PMO	Management of Change Control in projects across TfL	23/05/2016 AC	To review the adequacy and effectiveness of controls in place to manage Change Control in projects across TfL.	16/01/2017	Individually, change control was managed adequately in all the projects we looked at, although the process was more robust in some areas than others. We have identified two Priority 2 and one Priority 3 issues.  The first Priority 2 issue is that use of the Pathway templates is inconsistent across TfL. In part this is because some projects started before the introduction of Pathway but it is also due to the fact that some Project Managers see Pathway as being too onerous.  The second Priority 2 issue relates to the inconsistent use of approved systems across TfL. Some projects use Livelink for document control and Asite for contract management, some use Sharepoint and some rely upon the shared directory and internal controls for managing documents.

Status Key
PC Poorly controlled

Poorly controlled RI Requires improvement

AC Adequately controlled

Reference	Responsible Director	Report Title	Report / Memo Issued	Original Objective	Follow-up Audit	Summary of Findings
Surface Trans	port	<u>I</u>				
TfL Strategic F	Risk: Technology					
IA 15 410	Chief Operating Officer, Surface Transport	Delivery of Technology Projects in Surface Transport	06/04/2016 AC	To provide assurance that the programme and project controls for relevant projects and programmes are designed and operating effectively to address the risk inherent in each area.	31/05/2016	In performing our tests, we selected a sample of three out of twenty projects delivered by the Technology and Systems team. The following are examples of key controls operating effectively:  • The Portfolio Office manages resources centrally and this enables regular and consistent assessments of the resource requirements in relation to project management  • There are clear roles and responsibilities in relation to internal resource management and this allows the different teams within the PPD to work together towards a common objective  We did not identify any priority I and 2 issues. We identified four priority 3 issues where there is potential for process improvement. These relate to project documentation; engagement of IM when planning project resource; use of the performance dashboard for management reporting; and use of the Pathway Product Management tool.
TfL Strategic F	Risk: Delivery of cap	oital investment portfolio	1			
IA 15 626	Director of Buses, ST	Purchase and Supply of New Routemaster from Wrightbus Limited	23/05/2016 AC	To ensure that the management of the contract and variations to the contact is cost effective and efficient.	30/09/2017	The contract is being managed in a satisfactory manner by a small competent team. The payment and handover processes are well established and are being followed.  We did not identify any Priority I issues, but did identify two Priority 2 and one priority 3 issue. The Priority 2 issues were:  • There was no formal benefits management and realisation plan developed to ensure that planned benefits are realised  • A suitable cost baseline has not been established for value management purposes, nor are the results from cost reduction actions adequately documented for the future.

 $^{\rm 1}\,{\rm S\,ee}$  Appendix 2 for definition of issue ratings.

Status Key
PC Poorly controlled Requires improvement

Reference	Responsible Director	Report Title	Report / Memo Issued	Original Objective	Follow-up Audit	Summary of Findings
TfL Strategic F	Risk: Disruption to	Quality of Service	1			
IA 15 401	Director of Road Space Management	Incident Management – Surface Transport	21/06/2016 AC	To provide assurance that the over-arching incident management framework in Surface Transport has been adequately designed, implemented and is operating effectively.	30/09/2016	<ul> <li>We identified the following examples of good practice:</li> <li>Clear organisational strategy within Surface Transport for incident management</li> <li>Well-documented incident management process documentation aligned with relevant legislation and standards has been implemented and is managed centrally via the SharePoint portal</li> <li>Effective plans have been implemented to co-ordinate and communicate the incident management activities and decisions for the key stakeholders</li> <li>Well-established and appropriate structures and forums (ie command structures, Gold Support Group meeting) are in place that facilitate incident management-related activities and communications amongst internal and external stakeholders</li> <li>Relevant initial command structure training to Surface Transport staff has been effectively implemented</li> <li>The audit did not identify any Priority I or Priority 2 issues, but identified four Priority 3 issues relating to effective records management, training management and records, incident analysis and exercising processes.</li> </ul>
Finance						
TfL Strategic F	Risk: Financial and (	Governance Controls				
IA 15 130	Chief Finance Officer	Business Expenses and Purchasing Cards	27/04/2016 RI	To review the controls in place over BE and P-cards.	31/01/2017	In March 2016, the Financial Services Centre implemented SAP Self Service and employees will be required to scan in receipts to support their BE claims. Line managers will approve claims with visibility of receipts thereby improving efficiency and accountability.  We identified the following areas of good practice:  • AP proactively queries and rejects expense claims that do not comply with the Business Expenses Policy (BEP), for example claims that include alcohol, or claims for glasses where the optician has not confirmed a Display Screen Equipment need  • Financial Operations and Performance (FOP) reports outstanding HSBC Pcard amounts to the finance relationship managers in the business areas to ensure that they are approved and allocated to the income statement

Status Key
PC Poorly controlled

Poorly controlled RI Requires improvement

AC Adequately controlled

Reference	Responsible Director	Report Title	Report / Memo Issued	Original Objective	Follow-up Audit	Summary of Findings
						<ul> <li>on a timely basis</li> <li>Oracle is set up with a cost centre for each P-card holder in the income statement which increases the visibility of each employee's spend and whether his claims are up to date</li> <li>Six Priority I issues, together with three Priority 2 and one Priority 3 issues, were identified.</li> <li>The Priority I issues are: <ul> <li>The BEP requires some additions and changes to strengthen it and ensure that it is fully enforceable and meets its objectives</li> <li>An awareness initiative, especially for approvers, is needed to reinforce the BEP and reduce the number of non-compliant claims</li> <li>The approvals matrix needs to be simplified to ensure that it is workable in an automated system</li> <li>The remaining three issues relate to the need to strengthen and automate the FSC validation process, particularly in relation to category and VAT reference errors.</li> </ul> </li> </ul>
IA 15 154	Chief Finance Officer	Unsupported Invoices	06/05/2016 RI	To review the key controls over the processing of unsupported SAP invoices by the Financial Services Centre (FSC), and the related authorisations by cost centres.	31/10/2016	<ul> <li>The audit identified four Priority I issues together with one Priority 2 issue.</li> <li>The Priority I issues are as follows:</li> <li>Unsupported invoices and requests for payment are both inherently risky and should only be used as an exception. However, they are sometimes used by business areas when other more controlled procurement / payment routes should be used;</li> <li>Unsupported invoices submitted by vendors are automatically paid when they are below the authorisation thresholds of £7,000 or £700 (dependent on the TfL company). There is no review by TfL staff at the ordering, receipt of goods or payment stages. A number of other issues around authorisation were also identified;</li> <li>Sample testing found one instance of VAT not being recorded in SAP, and thus not reclaimed, and two instances of valid VAT invoices not being obtained, necessary to support reclaiming VAT;</li> <li>Hospitality from a supplier had not been declared in one business entertainment situation.</li> <li>Two issues were already being addressed by Accounts Payable (AP) before the audit started:</li> <li>Unsupported invoice work instructions for AP staff and request for payment guidance for cost centres are both out of date. The Continuous Improvement Team, FSC, is in the process of updating them.</li> </ul>

Status Key
PC Poorly controlled

Poorly controlled RI Requires improvement

AC Adequately controlled

Reference	Responsible Director	Report Title	Report / Memo Issued	Original Objective	Follow-up Audit	Summary of Findings
						The Vendor Authorisation Exemption list recording vendors which can be paid via unsupported invoices is incomplete. One vendor in our sample of 10 unsupported invoices was not included. AP is presently reviewing the list to ensure it is up-to-date and complete.
IA 15 132	Chief Finance Officer	VAT	09/05/2016 RI	To provide assurance over VAT accounting controls.	31/12/2016	A key control for ensuring that VAT is accounted for correctly on Commercial Development (CD) transactions is a targeted review by the Indirect Tax Manager of significant inflows and outflows on property sales, disposals and projects, and business development activity from inception. This is problematic because CD uses diverse data collection systems such as the Property Asset Register and Commercial Development Investment Committee (CDIC) papers that are not integrated with each other or SAP; responsibilities are not always well-defined; and its activities span all TfL companies.  VAT rules on property transactions are complex, but one important concept for TfL is the Option to Tax (OTT). The grant of any rights over land or property is generally VAT exempt. However TfL and TTL can opt to tax commercial land and property. The exercise of an OTT changes a VAT exempt supply into a VAT standard rated supply. This allows TTL as landlord (rental properties) or vendor (development properties) to reclaim VAT against associated property expenditure such as purchases, refurbishment, maintenance or legal costs. However, it also needs to charge VAT on rentals and property sales.  An OTT cannot be exercised retrospectively and a report by Deloitte on CD's VAT processes identified that TfL was not always opting to tax on a timely basis. It is possible to opt to tax all properties held in a given part of the country. The Deloitte Report recommended substantially reducing the risk of unrecoverable VAT by formalising a strategy on a universal OTT in Central London. In April 2015, CD decided to opt to tax in Zones I and 2 based on an estimated cost saving of £500k. Since then it has been assessing the impact of charging VAT to vulnerable tenants and the need to compensate them. The OTT is expected to be submitted to HMRC by September 2016.  We identified the following examples of good practice:  • FSC FA has a standard approach to preparing VAT returns and their supporting schedules, and has documented detailed work instructio

Status Key
PC Poorly controlled Requires improvement

AC Adequately controlled

Reference	Responsible Director	Report Title	Report / Memo Issued	Original Objective	Follow-up Audit	Summary of Findings
						CD. He maintains an open and collaborative relationship with HMRC
						One Priority 1 issue, together with five Priority 2 and one Priority 3 issues was identified.
						The Priority I issue relates to the process to address recommendations, findings and key risks identified in the Deloitte Report. The recommendation and findings remain partially addressed. Commercial Development Finance (CDF) has not assigned overall responsibility for the report and there is no formal action plan that includes responsibilities and timeframes.
fL Strategic Ri	sk: Maintaining a	long term strategic, balanced Plan				
IA 15 106	Chief Finance Officer/Director of Finance, LU	Cash Management – Fit for the Future - Stations	05/05/2016 RI	To review the effectiveness of controls over cash management following the installation of the new Cash Handling Devices (CHDs) at stations.	31/10/2016	A pilot scheme to validate the concept of using CHDs began on four station in early 2014. This was initially intended to be a three month trial, but was subsequently extended to last 18 months. Following acceptance testing an some modifications to the design, a contract was placed with Scancoin to supply and install CHDs.  Since the project is still in progress it is too early to fully assess whether all the expected benefits have been achieved, particularly on the fares to cash reconciliation.  At stations where CHDs have been installed the following improvements habeen made:  Reduction in staff time to remove and count cash  Reduction in time managing safes and cash bags  Staff accountability for cash collections is minimised as G4S collect cash direct from CHDs.  The FSC has observed a reduction in the volume of transactions being recorded on ESAF where there are CHDs in place, so reducing time to balan the cash reconciliations. The level of discrepancies and cash losses has also reduced. In Period 9 the amount of loss was £17k, whereas previously losse were about £30k a period.  The fares to cash reconciliations are carried out on excel spreadsheets using data extracted from Cubic. Work is in progress to automate and improve

Reference	Responsible Director	Report Title	Report / Memo Issued	Original Objective	Follow-up Audit	Summary of Findings
						<ul> <li>The three Priority I issues are:</li> <li>Fares to cash reconciliations are not being completed on a timely basis for stations with CHDs.</li> <li>A record is not being retained of issues identified on cash reconciliations</li> <li>The cash reconciliation process is complex but has not been documented.</li> </ul>
General Couns	sel		1			
_	1	iovernance Controls	1	I		T
IA 15 143	Head of Information Governance	Freedom of Information	27/04/2016 RI	To review the adequacy and effectiveness of internal controls in place for TfL's and Crossrail's compliance with the FoIA.	31/08/2016	<ul> <li>The following areas of good practice were noted:</li> <li>Every week emails are sent by the Information Access Team to key contacts in Crossrail 2 and Surface Transport, including Enforcement and On Street, Buses and Service Operations, detailing all open Fol cases relating to their area. The key contacts found these reports to be very useful.</li> <li>Where a higher than average number of requests has been received on a specific topic, or where high profile issues emerge, the Information Access management team work proactively in conjunction with the business to publish this information on the external website, in line with the Transparency Strategy.</li> <li>Until 31 March 2016, all Fol requests were recorded on an Excel spreadsheet. A Fol case management system to replace the spreadsheet has been created. The system is based on SharePoint 2013, with the company K2 having developed a workflow application for it under the guidance of an IM Project Manager. This new system went live on 1 April 2016. The intention is to publish all requests received and responses sent, to improve transparency and with the expectation that this may reduce the number of requests received.</li> <li>We identified one Priority 1 issue, four Priority 2 issues and three Priority 3 issues.</li> <li>The Priority 1 issue relates to the need to review the definition of a sensitive request and the process used to answer these. Due to growing pressure in processing a rapidly increasing number of such requests the statutory deadline for these requests is often missed.</li> </ul>

Status Key
PC Poorly controlled

Poorly controlled RI Requires improvement

document our findings up to the end of the bid evaluation and proposal

As stated in our previous memorandum, it is often the case with

bid evaluation and award recommendation phase.

clarification phase. This report covers our findings up to the end of the BAFO

Reference	Responsible Director	Report Title	Report / Memo Issued	Original Objective	Follow-up Audit	Summary of Findings
IA 15 144	Director of Legal	Legal Compliance Reporting		To review the procedures and key controls for producing the biannual Legal Compliance Reports for the TfL Audit and Assurance Committee.		The compliance questionnaire asked appropriate questions to cover the intended scope of the legal compliance reports, there were clear responsibilities for issuing and completing questionnaires, and clear responsibilities for drafting and reviewing reports. We reviewed in detail the most recent report, published in the December 2015 report, and it had been issued to Audit and Assurance Committee members within the required timescale. A large majority of the report accurately reflected the returned questionnaires and other sources of information.
	11/05/2016 AC		30/06/2016	This audit found no Priority 1 issues but identified two Priority 2 issues.		
						The Priority 2 issues are:
					A small number of minor inaccuracies were identified in the December 2015 report indicating checking procedures could be strengthened, and one directorate's questionnaire had not been signed by the managing director to confirm it was accurate	
					There is a lack of clarity over whether to include London Transport Museum (LTM) in the reporting process. This results in inconsistent treatment of LTM in different sections of the reports	
Commercial D	Pevelopment					
ΓfL Strategic F	Risk: Maintaining a	ong term strategic, balanced plan				
IA 15 627	Director of Commercial Development	Procurement of the Property Partnerships		To ensure that the procurement of the framework of property development partners was		Our memorandum dated 9 March 2016 contained several recommendations regarding organisation, governance and preparations for the first minicompetitions.
			08/06/2016 RI	managed effectively, in accordance with approved procedures and EU directives, and had appropriate management controls and governance.	31/10/2016	Several of these recommendations have been addressed; however we have identified two Priority I issues. These relate to a need for greater clarity and structure regarding strategies and decision-making for selecting and prioritising sites to be offered under the Framework, and concerns that current resources may not be sufficient to support the proposed programme.
IA 15 629F	Director of Commercial	Commercial Advertising Partnering Agreement Procurement		To provide assurance that the decision making process		We previously issued memoranda on 24 September 2015, to document our findings up to the end of the PQQ phase, and on 22 December 2015 to

Status Key
PC Poorly controlled

Poorly controlled RI Requires improvement

Development

AC Adequately controlled

20/04/2016

WC/ACL

WC/ACL Well controlled & Audit Closed

20/04/2016

WC/ACL

in place for governing the

advertising services

contract, was managed effectively, in accordance

procurement of the pan-TfL

Reference	Responsible Director	Report Title	Report / Memo Issued	Original Objective	Follow-up Audit	Summary of Findings
				with approved procedures and had appropriate management controls and governance.		procurements where an incumbent supplier is effective and efficient, that the tender evaluation result will show a clear differentiation between any two bids on the technical element due to the inherent advantage that an incumbent supplier has in terms of knowledge and experience of having worked with the contracting authority previously. The commercial element of the tender is less likely to give an incumbent a similar advantage and it is this which often helps new suppliers to win the contract. The dialogue meetings with the two bidders were designed to ensure that each bidder was afforded the opportunity to discuss technical, legal and commercial aspects of their own bids in order to better understand the requirement so that they were able to submit a suitable BAFO.  However, in this instance, despite some improvements in the bid from the non-incumbent supplier, the differential in both elements (technical and commercial) between the two bids resulted in a relatively easy decision for the evaluation team to propose that the contract be awarded to the incumbent supplier.  In our previous memorandum we raised a concern around the lack of a formal Project Governance Board comprising representatives of senior stakeholders from across TfL. Although a governance board has not been set up for the project, a contractual requirement for the implementation of the contract is the formation of a Partnering Board to provide governance and oversight. The Partnering Board will require three representatives each from TfL and the successful bidder. We have been informed that the TfL representatives are likely to include the Director of Strategy LU & COO London Rail and the Chief Finance Officer for TfL but these details are yet to be finalised.  Preparations for contract mobilisation are still being developed but will involve a number of working groups, each responsible for a specific workstream. A draft project plan has been created but is not yet complete.
	ommunication and					
ITL Strategic R	isk: Disruption to o	quality of service				
IA 15 424	Chief Information Officer	Management of Non-Permanent Labour within IM	03/05/2016 RI	To provide assurance on the effectiveness of the controls that IM had implemented to optimise	31/10/2016	<ul> <li>We have identified the following good practises:</li> <li>The majority of NPL within IM are engaged through the TfL preferred recruitment agency at rates defined by HR through benchmarking. HR defines the minimum, maximum and mid-point rate. All positions offered</li> </ul>

Reference	Responsible Director	Report Title	Report / Memo Issued	Original Objective	Follow-up Audit	Summary of Findings
				the use of NPL capabilities and ensure effective knowledge management.		<ul> <li>above mid-point require the approval of the IM Resource Planning team and those offered above the maximum point require IM senior leadership approval</li> <li>Engagement of NPL staff within IM is subject to approval by the IM Resource Planning team following an assessment of alternative options</li> <li>At the time of our audit fieldwork it was acknowledged that there was a high number of NPL within IM. This number has subsequently reduced significantly. The IM Resource Planning team, together with other IM teams, is working to improve the effectiveness of the demand planning and management processes throughout TfL.</li> <li>This audit identified the following two Priority I issues:</li> <li>Workforce planning: IM did not have a process in place to identify and document a workforce strategy and plan.</li> <li>Consultancy services: IM management did not have overall visibility of the consultancy services being delivered to IM.</li> </ul>
IA 15 403	Chief Information Officer	Software Licensing for IBM Products	09/05/2016 PC	To provide assurance over the effectiveness of the processes that have been implemented to manage, control and protect TfL's software assets, together with the related information, for IBM products.	30/10/2016	<ul> <li>We identified four Priority I issues as follows:</li> <li>A TfL wide strategy is needed to effectively manage the software asset management lifecycle, simplify operational processes and minimise associated risks. A tender for the procurement of a managed service for software asset management was issued in February 2016 to address this requirement. In addition, control processes, including documentation, should be updated and monitored regularly.</li> <li>The IBM license management processes, which are designed to ensure compliance with contractual terms, are not fully effective.</li> <li>Software acquisition and implementation is not managed centrally and there are multiple ways for personnel to purchase software outside of the control of CICT.</li> <li>There is no consolidated inventory of all IBM software.</li> </ul> One Priority 2 issue was also identified.
ondon Trans	port Museum					
IA 15 146	Museum Director	LTM Grant Funding	13/05/2016 RI	To review the effectiveness of controls over the process of grant funding and reporting back to funders.	31/01/2017	The use of grants has enabled LTM to deliver a number of significant projects, such as the Battle Bus, and improvements to the online collections and the Connections Gallery. The Development team has cultivated good relationships with the various fund providers who have continued supporting LTM projects.

Reference	Responsible Director	Report Title	Report / Memo Issued	Original Objective	Follow-up Audit	Summary of Findings
						We identified one Priority 1 issue, together with the three Priority 2 issues and one Priority 3 issue.  The Priority 1 issue relates to weaknesses in management reporting of grant usage and monitoring of project costs.
Crossrail						
IA 15 514F	Project Director, Crossrail	Schedule Management	12/04/2016 WC/ACL	To provide assurance that procedures are in place to deliver accurate handover schedules, and that the relevant stakeholders are engaged and informed.	12/04/2016 WC/ACL	The planning team was organised logically with clear understanding of roles and responsibilities. Interfacing staff were located at the same office where possible, and there were good lines of communication between Sector and Project planners. Governance was ensured through regular update and review meetings with the Head of Planning, Sector Directors and the Programme Director.  The scheduling procedure was managed well through project planners adhering to guidance documentation such as the 'Planning Handbook', and keeping organised records such as 'schedule tracking registers'. Planners showed full awareness of the timescales and deadlines that need to be met in the production of their schedules.  The Planning Systems Database Administrator (PSDA) monitored the quality of level 1 and level 2 schedules by sending a 'Summary Schedule Checks' report every period to all planners. This report highlighted schedules with quality issues for rectification. The PSDA also ensured that project planners were aware of any interface issues in their schedules, by issuing an 'Interface busts' report every period.  The accuracy of the detail in the Master Operational Handover Schedule (MOHS) period presentation was ensured by the Central Planning team through linking the presentation to the data extracted from Primavera, thereby mitigating against human error. The Central Planning Analyst sends a data validation email to planners before finalising the MOHS presentation. This confirms the information extracted was correct.  Change control was managed by the project teams through the use of templates. Any significant changes were signed by appropriate Sector Directors, the Head of Planning and the Programme Director. The Central Planning team also manage a register of changes.

Status Key
PC Poorly controlled Requires improvement

AC Adequately controlled

Reference	Responsible Director	Report Title	Report / Memo Issued	Original Objective	Follow-up Audit	Summary of Findings
IA 15 505	Programme Director, Crossrail	Management of Docklands Light Railway Limited (DLRL) Cost for		To review the effectiveness of the processes and controls in place at Crossrail		their combined experience in schedule management.  This audit did not identify any Priority 1 and Priority 2 issues. The audit identified one Priority 3 issue.  The Crossrail Interface team consists of the Rail Interface Manager (a consultant) and a Cost Engineer (who will no longer be in the role end of March 2016). The DLPL Interface team is led by the Head of Engineering.
		Custom House and Pudding Mill Lane	13/05/2016 AC	and DLRL for cost reimbursed in relation to Custom House and Pudding Mill Lane station activities.	31/07/2016	March 2016). The DLRL Interface team is led by the Head of Engineering DLRL but largely consists of external consultants.  The appointment of in-house staff in place of these consultants would not be value for money at this point in the contract. However, Crossrail may wish to consider a cost benefit analysis in other areas where consultants are employed.  The Works Agreement between DLRL and Crossrail provides the terms and conditions under which DLRL will support Crossrail in the delivery of the Crossrail project. Some clauses are not being complied with by DLRL and the Crossrail Interface team. This has been agreed by the teams on the basis that it would require significant resource on both sides, which would increase costs for little benefit. Internal Audit is comfortable that these limited areas of non-compliance do not give rise to any significant risk to the project.  The DLRL consultants are required to submit invoices and timesheets to DLRL every period. These are sent to the Crossrail Interface team. Timesheets for periods 6, 7 and 8 were reviewed for contractors employed by KAD in relation to work on Custom House and Pudding Mill Lane. All the timesheets were signed by the employee, KAD representative and Crossrail Representative. The remaining consultants' timesheets show the hours worked on Crossrail and other projects. The breakdown of hours for individual Crossrail contracts is not required.  The audit identified one Priority 2 in relation to the checks being undertaken by the Crossrail Interface team and three Priority 3 issues.
IA 15 526	Director of IT, CRL	Transition of Crossrail eB Document Management System to a Cloud Based Service Offered by Bentley Systems	31/05/2016 WC	To provide assurance on the effectiveness of the processes that have been implemented to transition the eB solution from the internal Crossrail datacentre	31/05/2016 WC	Crossrail management set out the decision to move the existing eB solution from the internal environment to a cloud based service in a business case supported by an effective cost-benefit analysis. The business case was reviewed and approved by the Finance Director under the overall Crossrail IT Business Plan 2015/16.

Status Key
PC Poorly controlled Requires improvement

AC Adequately controlled

Reference	Responsible Director	Report Title	Report / Memo Issued	Original Objective	Follow-up Audit	Summary of Findings
				to the Bentley Systems' cloud based service, including those related to ensuring the confidentiality, integrity and availability of the data in a cloud environment.		The migration was planned jointly with Bentley Systems and an impact assessment was conducted prior to the migration to understand and mitigate the risks to the smooth transitioning of data to the new cloud service. The migration approach was effectively discharged with both pre-production environment and development environments transitioned firstly to understand any potential issues prior to the effective transition of the live production environment. Roles and responsibilities were clearly defined and effectively communicated within the migration plans.  Prior to contract signature, Crossrail undertook due diligence on the security of the cloud solution offered by Bentley Systems to facilitate effective risk management in relation to the criticality of the data.  Crossrail has ensured that the contract for Bentley MANAGE services aligns to its information security requirements. An information security framework is in place within the contractual agreements that provide for operational processes to manage Crossrail user access and interactions with Bentley Systems. This security framework includes robust processes for identity.
						Systems. This security framework includes robust processes for identity access management, provisioning and de-provisioning of users, password management and security incidents management.
						Governance structures have been put in place to manage the contract and monitor the service capability via monthly service management meetings with Crossrail. Roles and responsibilities have been clarified within the contract to enable a single point of contact, communication and escalation for any issues. Defined key performance targets have been specified and formalised within the contract in relation to the service provision. This includes targets for the availability and utilisation of servers, network, databases and application. The support model sets out effectively the processes used to provide incident management, capacity management and system auditing capabilities.
						The eB document management system data was migrated successfully during the course of the audit into the new Bentley MANAGE service on the last weekend in March 2016.
						The audit did not identify any issues.

Reference	Responsible Director	Report Title	Date Issued/ Report Type	Objective	Summary of Findings
London Unde	rground and TfL Rail				
TfL Strategic I	Risk: Technology				
R&U Strategic	Risk: N/A				
IA 15 409  Surface Trans  TfL Strategic I	-	Security Assessments of LU Supervisory Control and Data Acquisition (SCADA) systems  Sovernance Controls	17/06/2016 Memo	To assess the security of key SCADA systems by applying the Centre for the Protection of National Infrastructure (CPNI) assessment tool.	We highlighted a number of overarching issues under the following headings:  • Risk Management  • Secure Architecture  • Response Capabilities  Detailed reports of findings in each of the operational areas reviewed have been shared with relevant management but not shared more widely due to their sensitivity.
_	isk: Insufficient Fund				
IA 15 783	Director of Commercial	Lean Six Sigma Review of the TfL Process for Commissioning Consultants	09/05/2016 Consultancy	The aim of this Lean Six Sigma (LSS) review was to identify opportunities for increasing efficiency by reducing waste within the processes for commissioning external consultants. It also aimed to identify the 'best-value' routes to the market place for engaging with consultants whilst identifying measures to reduce spend in this category.	<ul> <li>The key recommendations to increase consistency and efficiency, whilst reducing spend within the processes, are summarised as follows:</li> <li>TfL planning functions to provide a detailed overview of upcoming works for TfL client to produce resourcing strategies in a timely manner, to enable a detailed evaluation of alternative resourcing options where feasible.</li> <li>Reinforce to TfL clients the current guidelines as to the most appropriate type of resource needed in accordance to different business requirements and timescales, for example use of secondees, NPL Engineering temps, internal and external consultants. These guidelines could also be incorporated in the proposed consultancy request eform (see below).</li> <li>TfL clients to use a single TfL-wide e-template (with 'built-in' guidance and 'Do's &amp; Don'ts') for requesting external consultants to increase consistency within the request process and to provide further details of business requirements.</li> <li>The e-template for requesting consultants would also provide TfL clients with guidelines for approaching the Commercial Services Professional Team (or the individu Business Commercial Units (regardless of the proposed 'route to the market') according to business consultancy requirements. This will streamline the process by reducing touch points and approvals required relevant to the different approaches.</li> <li>Visibility (within the e-template) by the Consultancy Category Manager and the Strateg and Performance Commercial teams for all consultancy spend (regardless of which</li> </ul>

Reference	Responsible Director	Report Title	Date Issued/ Report Type	Objective	Summary of Findings
Finance					
TfL Strategic F	Risk: Delivery of capi	tal investment portfoli	0		
IA 12 632	Director of Commercial	Procurement of the Professional Services Frameworks	10/05/2016 Memo	To ensure that the procurement process employed for the Professional Services Frameworks is managed effectively, in accordance with approved procedures, EU directives and is open, fair and transparent.	Since the issue of our previous memorandum, the Programme Team have finalised the short list of successful bidders to be awarded a place on Framework 4 and presented this to the Programme Governance Board on 31 March 2016. In general, the evaluation process was adequately managed, and in particular, the consensus process seems to have helped evaluators clarify thoughts for scoring bids. However, there are a number of lessons that would be useful to take note of in relation to availability of evaluators, resourcing, knowledge transfer, and application of the scoring mechanism.  Subject to management taking note of the above, we are satisfied that the risks and controls relating to procurement of the PSF are being managed appropriately at this stage. We will continue with this real-time audit with the review of the award phase for the final framework, and implementation planning for each of the five frameworks. An Internal Audit Report will be issued after the decision to award that framework has been finalised.
TfL Strategic F	Risk: Financial and G	overnance Controls			
IA 15 129	Chief Finance Officer	Consultancy work on leases in operational contracts	18/05/2016 Memo	To review the processes and controls operating over leases in operational contracts.	Internal Audit recognises the need for improving existing procedures, which do not appear to be adequate for identifying leases, hence increasing the risk of non-compliance with the relevant accounting standards, and possible breach of the TfL borrowing limit. Internal Audit has reviewed and provided input to the proposal to use the Procurement Strategy process, and agrees that this should improve the management of this risk. It is important that the checklist is designed and introduced promptly so the new procedure can become operational as soon as possible.  An audit of this area will be included in the 2017/18 Integrated Assurance Plan, which will review the operation of the new system, as well as the preparations for the implementation of the new standard in 2019.

Reference	Responsible Director	Report Title	Date Issued/ Report Type	Objective	Summary of Findings
Commercial D	Development				
TfL Strategic I	Risk: Maintaining a lo	ng term strategic, balanc	ed plan		
IA 15 631	Director of Commercial Development	Embankment Retail Project Lessons Learned Review	13/05/2016 Memo	To identify lessons learned from the project management of the Commercial Development Embankment Project including stakeholder management, monitoring of budgets and milestones, and clarity of roles and responsibilities.	The Embankment Retail project delivered new retail units with increased floor space, improved design that benefits the station ambience and achieved rental income at double the previous level of revenue generated.  However, the project cost more than twice the business case estimate and there will not be a positive return on investment within CD's 10-year business plan. There were also substantial delays in delivering the completed units.  A number of factors contributed to this, including fundamental weaknesses in the original business case, inexperience with TfL's ways of working and legacy asset conditions, and a lack of overall project ownership.  In 2013/14 CD had not established project and programme management processes, and therefore did not implement adequate controls over scope, change, risk or cost and progress monitoring. The engagement of AD and SSP was intended to instil good project governance; however, the absence of defined roles and responsibilities hindered this being established.  A number of these factors were exacerbated by the initial desire to complete the retail units in time for the relaunch of Embankment, following the station stabilisation and escalator works. This affected decisions regarding the delivery mechanism and reduced project planning and feasibility assessment.  CD have taken steps to establish a project governance regime, increase understanding of Pathway, and embed accountability through the creation of the Property Development and Commercial Asset Management directorates. CD are also working with the dedicated S&SD sponsor teams to implement project controls. However, there remain some lessons to be
					learned and improvements to be made in developing a robust project control environment.
IA 16 503	External Affairs Director, Crossrail	Internal Audit Review of the Accounts of the Crossrail Complaints Commissioner	16/06/2016 Memo	To review the Crossrail Complaints Commissioner Accounts.	We conducted a review of the Crossrail Complaints Commissioner accounts for the period ending 31 March 2016. We were able to confirm that the accounts accurately reflect the receipts and payments made during the financial period in all material respects, and that the accounts complied with the Accounts Direction issued on behalf of the Crossrail High Level Forum.
IA 15 513	Programme Director, Crossrail	Internal Audit Review of Operational Interface Management	22/04/2016 Memo	To review the operational interface management by the Infrastructure Managers, in relation to technical assurance at the boundaries, and specifically interface management at the operational level.	The review concluded that there is an effective governance process in place to ensure that Crossrail is adequately managing the development of arrangements necessary to secure operable and maintainable interfaces with Network Rail and LUL as Infrastructure Managers, immediately neighbouring the Crossrail Central Section.  However, the process is still relatively new, and we recommended further audit work in four to six months' time to monitor the progress of workshops against the Final Design Overview delivery dates.

Conclusions	Number
PC= Poorly Controlled	1
RI= Requires Improvement	12
AC= Adequately Controlled	21
WC/ACL = Well Controlled and Audit Closed	3
AC/ACL = Adequately Controlled and Audit Closed	0

RI Requires improvement

Status Key
PC Poorly controlled

Reference	Responsible Director	Report Title	Report / Memo Issued	Original Objective	Follow-up Audit	Summary of Findings			
Pan TfL	an TfL								
	TfL Strategic Risk: Major Catastrophic Incident LU Strategic Risk: Inadequate Operational Performance/ Catastrophic Event								
IA 15 706	Director of Safety	Construction (Design and Management) (CDM) Regulations 2015 compliance in TfL	19/04/2016 RI	To measure compliance against the new CDM Regulations 2015. The audit focussed on the procedures and documentation in place to deliver compliance and the effectiveness of the implementation pan TfL.	N/A	Docklands Light Railway (DLR) was audited on compliance with CDM 2015 by an external company and it was agreed that any relevant findings will be referenced in this report.  Areas of Effective Control:  • The CDM Working Group developed a comprehensive TfL Communication and Consultation Plan to manage the revision of CDM 2015.  • Change Assurance Plans were approved by the Directors' Risk, Assurance & Change Control Team (DRACCT) and Surface Board  • Communication of CDM changes to Pathway users.  • Introduction of RBI tool across TfL.  • Availability of Construction Phase Plans in Pathway users projects.  Priority 1 Issues:  • Identification and communication of those maintenance activities that would not fall under CDM 2015 has not been effective.  • Pathway is not used by all (LU AP and TfL Facilities), especially those managing short duration, small scale works delivery by discreet teams. There is not a single, consistent approach to managing this type of work to ensure compliance with CDM 2015.  • Examples of critical project documentation having not been updated were found.			

WC/ACL | Well controlled & Audit Closed

AC Adequately controlled

Transport fo	or London Audit an	d Assurance Committee – HSE&	Appendix 6				
Reference	Responsible Director	Report Title	Report / Memo Issued	Original Objective	Follow-up Audit	Summary of Findings	
						<ul> <li>Priority 2 and 3 issues:</li> <li>The first CDM 2015 change update was published in Pathway on 24 April 2015. The Working Group acknowledge that communication took more time than expected and that could be a lesson learnt for future projects.</li> <li>AP JNP Process and Procedures have not been updated to reflect changes in CDM 2015.</li> <li>Principles of CDM 2015 are detailed in the HSE handbook. A number of project managers stated that it would be useful to have a specific handbook on CDM compliance.</li> </ul>	
London Underground and TfL Rail							
	Risk: Disruption to	o quality of service Operational Performance					
IA 15 727A	Chief Operating Officer, LU	Aluminothermic Welding – Maintenance Infrastructure Services		To assess the implementation and effectiveness of the		Priority 1 Issues:  Records and inspections of welds were not always occurring as required leading to risk of sub-standard welds and impact on safety.	

	Chief Operating Officer, LU	Aluminothermic Welding – Maintenance Infrastructure Services	21/04/2016 PC	To assess the implementation and effectiveness of the processes for track aluminothermic welding.	N/A	<ul> <li>Priority 1 Issues:</li> <li>Records and inspections of welds were not always occurring as required leading to risk of sub-standard welds and impact on safety of track. Examples included lack of a warning system to ensure the 28 day inspection limit was not exceeded and 60 thermic welds incorrectly recorded including 20 that missed final inspection.</li> <li>Management of aluminothermic welding equipment and oxyacetylene equipment was poor and deficient in several respects (eg storage, defective equipment, hazardous chemical signage, documentation) when compared to industry practice, impacting on the safety of users.</li> <li>Management of storage and calibration of other equipment is poor impacting on assurance that equipment is fit for use.</li> <li>Priority 2 issues:</li> <li>Specification T0432 requires that the Rail Manager undertakes 'audits' of contractors and LU's own welding organisation but does not define who this is, or what is meant by audit.</li> <li>Management tools to ensure staff assigned work hold up to date licences were deficient.</li> <li>Several key spreadsheets had corrupted functionality undermining their reliability. Anomalies included multiple items being listed as one item, missing assets and non-functioning warning systems for expiry dates.</li> </ul>
	Chief Operating Officer, LU	Management of Rolling Stock Fracture Maps	08/04/2016 AC	To provide assurance that Fracture Maps are used strategically for monitoring	N/A	Areas of Effective Control:     Fracture databases (Bakerloo Line Fracture Map Lite and Maximo)     were found to be used for recording and managing fractures and

strategically for monitoring

fracture defects on trains,

were found to be used for recording and managing fractures and cracks on the 1972 Tube Stock (72TS Bakerloo Line) and the 1973

Status Key
PC Poorly controlled RI Requires improvement AC Adequately controlled WC/ACL | Well controlled & Audit Closed

AC

Reference	Responsible Director	Report Title	Report / Memo Issued	Original Objective	Follow-up Audit	Summary of Findings
				and are recorded in the asset management databases.		<ul> <li>Tube Stock (73TS Piccadilly Line).</li> <li>The work instructions used for managing and carrying out crack detection work on the 72TS (1972 Tube Crack Locations Map - R0217) and on the 73TS (1973 Tube Stock Crack Manual &amp; Detached Parts Management) were found to be current and up-to-date.</li> <li>The staff involved with the testing and crack detection on the 72TS and the 73TS, were found to be adequately trained and certificated to undertake assigned tasks.</li> <li>Priority 2 Issues: <ul> <li>The findings of the Programme Lift work on Unit 3559; Car number: 4559 and the inspection of the Auto-Coupler on Unit 3247; Car number: 3347, on the 72TS were not recorded in the inspection and Ellipse databases. The units have since been re-inspected and the work recorded.</li> </ul> </li> <li>Priority 3 issues: <ul> <li>The 1972 Tube Stock: Crack Locations Map: Inspection on Exam (R0299) work instruction duplicates the requirements in the 1972 Tube Stock Crack Locations Map (R0217) work instruction and should be withdrawn.</li> <li>There was no evidence to indicate that the Sector Bar Assembly inspection result was included in the '73TS Underframe NDT inspection report' for Units 206, 406 and 606. A separate form is required for recording this inspection work.</li> </ul> </li> </ul>
IA 15 790	Chief Operating Officer, LU	Management of Traction Voltage Recorders (TVRs) and Traction Earth Fault Detectors (TEDs)	21/04/2016 AC	To determine that appropriate process for management of TVRs and TEDs are in place	N/A	<ul> <li>Areas of Effective Control:</li> <li>Roles and Responsibilities are identified and recorded and competence, including safety critical licensing is managed and monitored to ensure staff meet licensing requirements.</li> <li>The Active Maintenance regime ensures that planned maintenance is completed to programme.</li> <li>Site visits of maintenance work confirmed risk controls and the permit system are communicated, implemented and when required are supervised by a competent and licenced Site Person in Charge.</li> <li>Proactive and Reactive monitoring are carried out and actions are allocated and tracked.</li> <li>Effective record retention process is in place.</li> <li>Priority 1 issue</li> <li>At AP JNP, three yearly 'track earth cable test' and 'fault injection test' as detailed in W1041 and W1042 were not completed.</li> <li>Priority 2 and 3 issues:</li> <li>The LU Cat 1 Standard (1-117) needs to be reviewed for clarification regarding Fault detection tolerance limits so that there is clarity on when a variation from the 2:1 ratio would be considered a fault.</li> </ul>

Reference	Responsible Director	Report Title	Report / Memo Issued	Original Objective	Follow-up Audit	Summary of Findings
						<ul> <li>Other minor updates required to the standard were identified.</li> <li>At AP JNP, it was found that Procedure for Live Work does not include Pre Work Risk Assessment for Live Working. Work is underway to produce this.</li> <li>At AP Power the relevant work instruction needs reviewing to include the calibration process. Also, there was no 'Specific' Risk assessment for Live Working.</li> <li>At BCV/SSL, it was found that the Work Instructions were overdue for review (December 2015).</li> <li>At BCV/SSL, three yearly 'track earth cable test' and 'fault injection test' as detailed in W1041 and W1042 was completed on incorrect forms.</li> </ul>
IA 15 727B	Chief Operating Officer, LU	Aluminothermic Welding – AP JNP	29/04/2016 AC	To assess the implementation and effectiveness of the processes for track aluminothermic welding.	N/A	<ul> <li>Good Practice:</li> <li>A portfolio of evidence demonstrating competency was submitted for welders. This was held on a master database. Only welders recorded on the database are authorised to work on JNP assets. It will be a requirement for all welders to be part of the Welder Fabricator Certification Scheme (WFCS) from 01/06/16. This will provide external monitoring and assurance of contracted welders achieving ISO 3834 quality standard.</li> <li>Areas of Effective Control:</li> <li>Responsibility for equipment, consumables and their storage are covered by contractual arrangements. This was monitored by way of site surveillance activity.</li> <li>A definitive list of identification stamp numbers of every welder working on JNP sites was held.</li> <li>Weld inspections are being undertaken at the required frequencies</li> <li>Priority 1 Issues</li> <li>Abrasive grinding wheels held in stock were for brick work and not rail metal grinding. Use of the wrong discs could lead to fragmentation and possible injury. This indicates a failure to manage stores correctly.</li> <li>Priority 2 issues:</li> <li>No formal process in place to record the risk assessment and method statement briefing conducted with weld inspectors.</li> <li>There are no defined calibration requirements for master gauges for LU.</li> </ul>
IA 15 727C	Chief Operating Officer, LU	Aluminothermic Welding - Track Partnership / Track Delivery Unit	29/04/2016 AC	To assess the implementation and effectiveness of the processes for track aluminothermic welding.	N/A	<ul> <li>Areas of Effective Control:</li> <li>TP holds a database of welders' identification stamp numbers and receives a daily updated list from suppliers. This is then sent to each welding team each night for confirmation.</li> <li>TP had conducted audits of all its suppliers.</li> </ul>

Reference	Responsible Director	Report Title	Report / Memo Issued	Original Objective	Follow-up Audit	Summary of Findings
						TP receives information from suppliers about welders that have bee stood down due to poor performance. They are also removed from suppliers' skills matrices.
						<ul> <li>Priority 2 issues:</li> <li>A flag system to alert when the 28 day limit for post welding inspection is approaching is not operated by TP. On occasion the 2 day limit has been breached with the weld being clamped and a revisit programmed.</li> <li>There is no direct channel for TP to share information with MIS about welders that have been stood down due to poor performance.</li> </ul>
IA 15 791	Chief Operating Officer, LU	Management of Live Line Detectors		To determine that appropriate process for management of Live Line Detectors (LLDs) is in place.		<ul> <li>Areas of Effective Control:</li> <li>Roles and Responsibilities are identified and recorded and competence, including safety critical licensing is managed and monitored to ensure staff meet licensing requirements.</li> <li>The Active Maintenance regime ensures that planned maintenance is completed to programme.</li> <li>Proactive and Reactive monitoring are carried out and actions are allocated and tracked.</li> <li>Effective record retention process is in place.</li> </ul>
			29/04/2016 AC		N/A	<ul> <li>Priority 1 issue:</li> <li>During a site visit at Hounslow substation, it was demonstrated that Generic task risk assessments were in place but it was evidenced that prior to commencement of testing and discharging, the Rectific Surge Circuit Capacitors precautions as detailed in Work instruction (OMD/PLT/WI/178) which should be undertaken as part of the LV rules were not adhered to.</li> </ul>
						<ul> <li>Priority 2 and 3 issues:</li> <li>During the site visit at Hounslow substation, it was evidenced that contrary to process detailed in Work Instructions (OMD/PLT/WI/118 cleaning of LLD was performed using a cloth that was moistened with fluid from an unlabelled bottle.</li> <li>At Tufnell Park, It was found that following Desk Top Future Upgrades due to non-compatibility of the asset database (software issues), not all the records on LLDs were retrievable.</li> <li>It was found that two of the LLDs Work Instructions were overdue for review.</li> </ul>
IA 15 731	Capital Programmes Director, LU	JNP Track Maintenance	10/05/2016 AC	To assess compliance with LU Track Category 1 standards to give confidence that specific technical requirements are controlled to mitigate service disruption	N/A	<ul> <li>Good Practice:</li> <li>The annual risk assessment of inspection intervals is assisted by a decision support tool providing guidance for Track Managers and Zonal Maintenance Managers (ZMM).</li> </ul> Areas of Effective Control:

Reference	Responsible Director	Report Title	Report / Memo Issued	Original Objective	Follow-up Audit	Summary of Findings
				and safety risks.		<ul> <li>Temporary Approved Non-Compliance (TANC) training and licensing.</li> <li>TANC Accountable Managers' responsibilities were understood.</li> <li>The numbers of TANCs at the time of audit were three on the Northern line, one on the Piccadilly line and six on the Jubilee line. The process for approving these TANCs was followed and a process exists to seek approval from the Maintenance Assurance Engineer beyond 28 days.</li> <li>Annual risk assessment for PM1 and PM4 inspections were completed by all lines.</li> <li>Processes exist to ensure that mitigations were implemented in the event of missed inspection.</li> <li>Priority 3 issues:</li> <li>Updating of colour coding of dates on the spreadsheet monitoring the expiry of licenses and certification is performed manually. An automated 'traffic light' system would be more efficient.</li> <li>'Reviewed by' and 'Approved by' signature boxes on several Annual Risk Assessment documents seen at Edgware Track Office had not been completed.</li> <li>Track Patrolling Risk Assessment document does not indicate whether either or both the ZMM or the Track Maintenance Manager's signatures are required.</li> </ul>
IA 15 704	Commercial Director, LU	Viking Precision Engineers (VPE) Ltd (Supplier Assurance)	08/06/2016 WC	To assess VPE Limited's overall capabilities for providing safety critical and non-safety critical parts (57 in total) to LU's Trains Division	N/A	Areas of Effective Control:  VPE is a supplier of safety critical manufactured components for the aerospace, oil & gas and rail industries. The supplier has invested steadily in state of the art Japanese machinery, tooling and upgrading the skills & competencies of its staff.  Review of the following arrangements and sampling records (via the Quality Manual based on ISO 9001:2008) were found to be satisfactory:  • Competency of machine operators.  • Review of TfL product requirements.  • Management of suppliers and inspections.  • Manufacturing processes and calibration.  • Management of non-conforming product and concessions.  Priority 3 issues (potential for process improvements):  • The Route Cards (manufacturing details) do not specify which gauges are to be used within the Operations Description.  • VPE's Non-Conforming Product procedure does not refer to the process and related form used for managing concessions.

TfL Strategic Risk: Major Catastrophic Incident

Status Key
PC Poorly controlled

RI Requires improvement

AC Adequately controlled

WC/ACL | Well controlled & Audit Closed

Status Key
PC Poorly controlled

Reference	Responsible Director	Report Title	Report / Memo Issued	Original Objective	Follow-up Audit	Summary of Findings
LU Strategio	: Risk: Inadequate	Operational Performance/ Cata	strophic Event			
IA 15 747	Director of Safety	Management of High Risk Waste	22/04/2016 RI	To provide assurance that high risk waste produced from operational activities is managed effectively and in accordance with applicable TfL HS&E Management System requirements and environmental legislation.	N/A	<ul> <li>Good Practice: <ul> <li>Effective application of the waste hierarchy was observed across the sites visited.</li> <li>Trade Effluent Consent monitoring was shown to be particularly well managed at Stratford Market Depot.</li> <li>A number of Roadshows to raise awareness and educate staff in relation to waste management are planned to be delivered by Distribution Services (DSM) in 2016.</li> <li>DSM are externally accredited by BSi against the requirements of ISO 9001(Quality Management System), ISO 14001 (Environmental Management System) and OHSAS 18001 (Health and Safety Management System).</li> </ul> </li> <li>Areas of Effective Control: <ul> <li>Quarterly monitoring to ensure compliance to specified Trade Effluent Consent limits was shown to be effectively implemented across all applicable sites.</li> <li>Ongoing audits conducted by DSM were shown to monitor performance and evaluate legal compliance of waste subcontractors.</li> <li>Waste subcontractors sampled were shown to hold valid licences and to be authorised waste carriers on the Environment Agency's Public Register.</li> <li>Good record keeping in relation to waste documentation for the classification, collection and removal of all waste streams.</li> </ul> </li> <li>Priority 1 Issues: <ul> <li>Not all locations visited were shown to have a formal monitoring regime in place. Where a programme of PGIs was implemented, it could not always be demonstrated that they were effective in identifying and correcting environmental issues. An inconsistent approach to the forms used was also observed.</li> <li>Up to date site drainage plans were not available for all locations sampled. Not all drains had been demarcated to distinguish between foul and surface water with some colour-coding shown to have worn away due to dirt or weathering.</li> <li>Findings identified during this audit relate to the sample of Depots visited. Common deficiencies identified in relation to the management of high risk waste are likely to be indicative of systemic waste managem</li></ul></li></ul>

WC/ACL | Well controlled & Audit Closed

AC Adequately controlled

Reference	Responsible Director	Report Title	Report / Memo Issued	Original Objective	Follow-up Audit	Summary of Findings
IA 15 757	Capital Programmes Director	Points and Crossing Inspection and Maintenance	13/05/2016 RI	To provide assurance that Points and Crossings (P&C) were subject to regular agreed inspection and maintenance that meets the requirements of the controlling specifications. Some aspects of which have been updated, following the outcome of the Grayrigg inquiry by the Track and Signals maintenance functions.	N/A	<ul> <li>Good practice</li> <li>SSL South were utilising the revised crossing management process aimed at managing crossings via regular maintenance grinding and not via weld repairs (unless in the case of an emergency).</li> <li>Areas of Effective Control</li> <li>P&amp;C inspection and maintenance activities in both Track and Signals were being undertaken at the required frequencies.</li> <li>There was a competency based licensing process in place for PM4 Track Inspectors and it was being followed.</li> <li>Briefings had been undertaken with track staff following the Grayrigg incident and the subsequent LU review.</li> <li>Priority 1 Issues:</li> <li>There were a number of inconsistencies between the Track (S1159) and Signals (S2536) standards (and therefore associated documents) with regards switch openings. Following the completion of the audit field work, it was identified that a written notice to S1159 had been prepared and was subject to review prior to authorisation and issue.</li> <li>Examples were found of Ellipse not being updated in a timely manner where Projects installed (or removed) P&amp;C assets. This means that installed assets were potentially not subject to inspection and maintenance. An Internal Audit completed in May 2015 (14 701) found this was a widespread issue across all assets and some actions are outstanding.</li> <li>There was no documented requirement for Track and Signals maintenance areas to share between them instances of broken or defective stretcher bars. This affects the ability to identify trends and underlying conditions. One example was identified during the audit.</li> </ul>
IA 16 796	Chief Operating Officer, <b>LU</b>	Upminster Rolling Stock Depot Health and Safety Management	26/05/2016 RI	To provide assurance that health and safety legislation is being complied with through the local implementation of the TfL HSE management system and risk controls.	N/A	<ul> <li>Safety isolation training is provided for any employee that will be working on or near live electricity. Different colour tags are issued to identify who is working in the area.</li> <li>Areas of Effective Control: <ul> <li>All workplace risk assessments and COSHH assessments were recorded in relevant databases.</li> <li>Statutory inspections of lifting equipment are being carried out to the required frequencies and Lifting plans have been completed and briefed to depot staff.</li> <li>Competence, including safety critical licensing, is managed and monitored to ensure staff meet licensing requirements.</li> <li>Robust processes are in place for the management of contractors.</li> <li>Incident trends are monitored and individual incidents investigated in line with procedures.</li> </ul> </li> </ul>

					Priority 1 Issues:
					<ul> <li>Manual Handling and Hand Arm Vibration risk assessments were not evidenced.</li> <li>Proactive monitoring (Safety Tours, System Checks and Inspections) is not being completed at Upminster depot. Two PGIs had been completed but there is no annual plan.</li> <li>Priority 2 and 3 issues:</li> <li>A number of workplace risk assessments could not be seen by the depot staff as their status was 'under review' and they had not been reviewed and published.</li> <li>The safety improvement plan is not populated or maintained at Upminster Depot.</li> <li>Although not the responsibility of the depot, there has been a lack of trainers to complete the electrical training scheme.</li> <li>No weekly fire tests or fire evacuations are being completed at present.</li> <li>The first aid room did not have a COSHH sheets available, the first aid box had out of date stock in and there is no first aid risk assessment available.</li> </ul>
Director of Safety	LU HSE Incident Action Tracking	13/06/2016 RI	To review the systems used to manage key HSE actions to closure, report on progress and to verify the effectiveness of the escalation process and governance arrangements.	N/A	Since the implementation of interim action tracking systems in August 2014, all current actions sampled since this date were seen to be effectively tracked and managed to closure.  Priority 1 issues:  There is no documented process for managing actions arising from Formal Investigations, the Rail Accident Investigation Branch, the Office of Road and Rail and the Directors' Risk, Assurance and Change Control Team; with particular regard to the tracking, reporting, escalation and closure of actions.  The new HSE action tracking system due to be launched in 2016 will require documented procedures and a governance regime to ensure they are suitably tracked, managed, reported and escalated.  Priority 2 issues:  All Formal Investigation Report records and supporting documentation are required to be held as a permanent record by the TfL Corporate Archives. From the sample taken for this audit there was no evidence of the retention of records and supporting documentation.
	LU Operations Working at Height	14/06/2016 RI	To provide assurance regarding LU Operations compliance with the Work at Height (WAH) Regulations	N/A	<ul> <li>Areas of Effective Control:</li> <li>The WAH procedure, R0290, covers all the clauses required by legislation and describes the arrangements for ensuring compliance.</li> <li>All Risk Assessments (RAs) for WAH have been completed by a</li> </ul>

Status Key
PC Poorly controlled

Reference	Responsible Director	Report Title	Report / Memo Issued	Original Objective	Follow-up Audit	Summary of Findings
				2005.		competent assessor.  Statutory Inspections of Equipment are being completed on a timely basis.  Priority 1 Issues:  42 per cent of SSL Signals South operatives have not received WAH training.  Hainault Depot Mobile Equipment Working Platform (MEWP) Pre-Use Checks have not been recorded consistently.  Priority 2 and 3 issues:  Communications of WAH procedure, R0290 and other relevant information have not been cascaded effectively to relevant employees.  SDM Safety Operating Procedure - Working at Height does not clearly prioritise the hierarchy of WAH control measures.  The Stratford Market Depot (SMD) MEWP Statutory inspections have not been uploaded into Maximo.  Ealing Common Depot obsolete working platforms have not been labelled 'Do Not Use' whilst waiting to be removed.  Ealing Common Depot WAH training records were not readily available at the depot.  SSL Signals South has a number of reviewed Workplace Risk Assessments that need to be published.
IA 15 751	Director of Safety	LU Operations Lifting Operations	05/04/2016 AC	To provide assurance over LU Operations compliance with the Lifting Operations and Lifting Equipment Regulations (LOLER).	N/A	<ul> <li>Good Practice:</li> <li>When raising a work order on Maximo, an employee cannot be assigned to the task if their competency training had lapsed. This erases any human error that can occur.</li> <li>Areas of Effective Control:</li> <li>The LU Reference document; R2688 covers all the relevant clauses required from Lifting Operations and Lifting Equipment Regulations</li> <li>Competency matrices are managed well within the areas sampled with no licences expiring without a reason.</li> <li>Programmes produced for lifting activities are produced by competent people.</li> <li>Although inspections of lifting equipment vary across different areas, they were evidenced to be managed well for both internal and external inspections.</li> <li>Lifting plans were generally produced well and communicated to relevant staff.</li> <li>Priority 2 and 3 issues:</li> <li>The communication of R2688 final issue was not effective with the procedure not being stored with other HSE information on the 'Working at TfL' section of the intranet.</li> </ul>

WC/ACL | Well controlled & Audit Closed

AC Adequately controlled

IA 15 795 Capital Programmes Director, LU  Stations Platform Working Arrangements  To provide assurance that risks from the change to station platform working have been managed and the expected benefits have been realised.  The audit found that the safety and operational impact of the change has been managed. Improvements can be made to embed process changes and collaboration to realise the commercial benefits from the change.  Areas of Effective Control  The risks associated with change have been updated and clearly identified and controlled through mitigations.  Standards and Rule Books have been updated and clearly identify what people need to do differently as a result of the change.  A review of the documentation associated with a recent example of traffic platform work showed the process was followed.  Priority 2 issues:  Improvements can be made to ensure early involvement of the Stations Access Planning Team in proposed works to maximise the potential for platform working in traffic hours. With the exception of the Integrated Stations Programme, Station Access Plans are required.	Reference	Responsible Director	Report Title	Report / Memo Issued	Original Objective	Follow-up Audit	Summary of Findings
Programmes Director, LU  Arrangements  irisks from the change to station platform working have been managed and the expected benefits have been realised.  Areas of Effective Control  The risks associated with change have been updated and controlled through mitigations.  Standards and Rule Books have been updated and clearly identified and controlled through mitigations.  Standards and Rule Books have been updated and clearly identified and controlled through mitigations.  Areas of Effective Control  The risks associated with change have been effectively identified and controlled through mitigations.  Standards and Rule Books have been updated and clearly identified and controlled through mitigations.  Areas of Effective Control  The risks associated with change have been effectively identified and controlled through mitigations.  Standards and Rule Books have been updated and clearly identified and controlled through mitigations.  Standards and Rule Books have been updated and clearly identified and controlled through mitigations.  Standards and Rule Books have been updated and clearly identified and controlled through mitigations.  Standards and Rule Books have been updated and clearly identified and controlled through mitigations.  Standards and Rule Books have been updated and clearly identified and controlled through mitigations.  Standards and Rule Books have been updated and clearly identified and controlled through mitigations.  Take Improvements can be made to ensure early involvement of the Stations of traffic platform work in the changes was followed.  Priority 2 issues:  Improvements can be made to ensure early involvement of the Stations and Effective Control  The integrated Stations Programme, Station Access Plans (F0478) are not being station and approved by Area Managers rather than the Access Team.  The ability to demonstrate that the benefits from the change have been realised was found to be affected by there being no plan or measures for monitoning delivery of the benefits and usefulness of d							<ul> <li>There is no log for defective assets to assess the progress of the repair or disposal.</li> <li>A requirement of the Reference document is for Lifting Supervisors to monitor as well as undertake a sufficient number of lifting operations to ensure correct working practices are followed and remedy deficiencies. Awareness of this was weak and it could not be evidenced that monitoring was being undertaken.</li> <li>An up to date version of a dashboard used to monitor the completion of lifting plans across LU could not be provided. Ruislip Depot had not completed the lifting plans for the lifting shop, but was 85% complete.</li> <li>No formal list of produced lifting plans is managed or maintained</li> </ul>
Status Key  PC Poorly controlled RI Requires improvement AC Adequately controlled WC/ACL Well controlled & Audit Closed	Status Key	Programmes Director, LU	Arrangements	AC	risks from the change to station platform working have been managed and the expected benefits have been realised.		<ul> <li>has been managed. Improvements can be made to embed process changes and collaboration to realise the commercial benefits from the change.</li> <li>Areas of Effective Control</li> <li>The risks associated with change have been effectively identified and controlled through mitigations.</li> <li>Standards and Rule Books have been updated and clearly identify what people need to do differently as a result of the change.</li> <li>A review of the documentation associated with a recent example of traffic platform work showed the process was followed.</li> <li>Priority 2 issues:</li> <li>Improvements can be made to ensure early involvement of the Stations Access Planning Team in proposed works to maximise the potential for platform working in traffic hours. With the exception of the Integrated Stations Programme, Station Access Plans (F0478) are not being submitted to the Access Team as required. Operational Assurance Notifications (OANs) are often not submitted within 28 days of the planned works.</li> <li>Changes to the use of the OAN have not been fully embedded resulting in their over use. For example they are sometimes still requested or submitted for works with no significant impact on the station and approved by Area Managers rather than the Access Team.</li> <li>The ability to demonstrate that the benefits from the change have been realised was found to be affected by there being no plan or measures for monitoring delivery of the benefits and usefulness of data capture.</li> <li>Improvements are possible to the involvement of the Stations</li> </ul>

Reference	Responsible Director	Report Title	Report / Memo Issued	Original Objective	Follow-up Audit	Summary of Findings
IA 15 768	Director of Commercial, LU	1972 Tube Stock Structural Repair Project		To provide assurance in relation to TfL strategic risk		to improve their links with Commercial Teams.  Priority 3 issues:  The old format of the station access plan is still in use by the projects. The newly designed access plan has not been effectively communicated to all projects. The details of the new format do not reflect some of the changes and will benefit from amendment.  Areas of Effective Control:  Changes to 72TS structural repair, were carried out and managed in
			10/05/2016 AC	5: Disruption to the Quality of Service.	N/A	<ul> <li>accordance with the requirements in the Change to Rolling Stock Standard (S2451).</li> <li>First Article Inspections were carried out for the key components to meet the requirements in the Standard (S2180).</li> <li>The Work Instructions for the production process are subject to appropriate document control, meeting the requirements of the Standards (S1180 and S2180).</li> <li>Non-Destructive Testing (NDT) was found to be carried out on key components with documented results, and repairs undertaken where necessary.</li> <li>The staff involved with the structural repair were found to be adequately trained and certificated to undertake the structural repair work.</li> <li>Build quality and inspection of the structural repair work were found to be managed in accordance with the requirements in the Standard (S2180).</li> <li>Non-conformances were well managed in accordance with the requirements in Work Instruction (W12028) and the Standard (A2180).</li> <li>Certificates of repair, functional testing, pre/post testing, handover and technical conformance were issued and managed, meeting the requirements of the Assurance Standard (S1358) and Passenger Rolling Stock Standard (S2180).</li> <li>Priority 2 Issues:</li> <li>There was no documented procedure on how red line drawing should be managed to avoid the unintentional use of unapproved drawings</li> <li>There is an up to 8 months delay in updating the Bill of Material (BOM) with the changes made to drawings; this could lead to the purchase of incorrect material.</li> <li>The working range of the Torque Wrench (B/62073), was not marked on the Wrench, it could therefore be calibrated to the wrong torque setting.</li> </ul>

<u>S</u>	tatus K	<u>ey</u>						
	PC	Poorly controlled	RI	Requires improvement	AC	Adequately controlled	WC/ACL	Well controlled & Audit Closed

Status Key
PC Poorly controlled

Reference	Responsible Director	Report Title	Report / Memo Issued	Original Objective	Follow-up Audit	Summary of Findings
_	_	capital investment portfolio an	_			
IA 15 713	Capital Programmes Director, LU	LU Management of Temporary Works	12/05/2016 RI	To examine the management of temporary works associated with LU projects, to assess their effectiveness and degree of compliance with TfL management system requirements and to identify any improvement opportunities.	N/A	Suitable processes for temporary works are in place for the projects audited, and the requirements of these processes have been followed, except as identified in the issues below.  Areas of Effective Control  • Where temporary works registers have been kept up to date, and with suitable information additional to that shown in the current template, they have proven to be an effective aid to temporary works management.  Priority 1 Issues  • LU and FLO procedures require the use of Inspection and Test Plans (ITPs) or, for simple schemes, a combined ITP / Permit system. Several different approaches relating to ITPs and permit systems have been used, which in some cases has reduced the level of assurance provided.  • LU persons appointed as TWCs and TWSs have not been formally assessed in terms of their competence to perform these roles and to identify any development needs that may be required. The LU Temporary Works Coordinator (TWC) / Temporary Works Supervisor (TWS) competency register is incomplete and has not been formally issued.  Priority 2 Issues  • A number of improvement opportunities relating to the procedural instruction (\$1062, PR0655 and templates) have been identified.  • Some noncompliance's to LU requirements have been identified, including the following: some TWCs and TWSs have not attended industry accredited training; some projects do not use temporary works design briefs; some projects have incomplete temporary works registers; and some projects have not used the latest versions of forms or templates.  • A noncompliance relating to the use of design check categories for the Northern Line Extension NLE Project (FLO) has been identified.  • The LU Procedure does not describe the process to be used for proposed design changes or reference any relevant procedures (eg PR0653-A1).

WC/ACL | Well controlled & Audit Closed

AC Adequately controlled

Reference	Responsible Director	Report Title	Report / Memo Issued	Original Objective	Follow-up Audit	Summary of Findings
IA 16 706	Capital Programmes Director, LU	Disposal and Acquisition of LU Land and Property	27/05/2016 RI	To provide assurance of the adequacy of arrangements regarding the disposal and acquisition of land, property and rights including the interface with third parties.	N/A	<ul> <li>Areas of Effective Control for both the 21 Moorfields and Knightsbridge Projects:</li> <li>The process to determine if land / property are to be disposed of or acquired, and if this to be through lease or freehold, is being managed.</li> <li>Arrangements for the vacation of land / property by LU are in place.</li> <li>Alterations to LU assets are being managed.</li> <li>The 21 Moorfields Project was being well managed and evidenced effective control in all other areas sampled, including:</li> <li>Consultation with Infrastructure Protection had taken place.</li> <li>Rights are being determined and monitored.</li> <li>Arrangements for the temporary access to LU land / property by third parties are in place.</li> <li>The requirements for permanent works occupied by LU are being managed.</li> <li>Priority 1 issues:</li> <li>It could not be evidenced how it is ensured the requirements of S1022 – Land and Property and S1023 – Infrastructure Protection are consistently applied and monitored across Projects.</li> <li>Priority 2 issues for the Knightsbridge Project: It could not be evidenced that:</li> <li>Consultation with Infrastructure Protection had taken place.</li> <li>Rights are being determined and monitored.</li> <li>Forms of indemnity for access to, or licences to work on, LU land / property had been completed.</li> <li>The requirements for permanent works occupied by LU are being managed.</li> </ul>
IA 15 710	Capital Programmes Director, LU	Engineering Design Change Control, London Underground Capital Programmes Directorate	17/05/2016 AC	To provide assurance that LU CPD projects have suitable arrangements in place that comply with the principles of the Engineering Design Change Control Procedure (PR0653-A1 May 2015) during construction or fitting phases.	N/A	Areas of Effective Control: All the projects sampled during this audit were found to have defined and controlled processes for managing engineering changes during construction. These arrangements were seen to include both LU and contractors during reviews, approvals/rejections, acceptances and updates to documentation. Sampling from the design change list registers also demonstrated general compliance with these processes.  The majority of projects sampled addressed the key principle of PR0653 which requires that LU Project Managers (PMs) are involved and accept / reject engineering changes during the construction phases to ensure that all potential technical, safety, commercial and maintenance implications are fully considered. Under this procedure, the PM is also responsible for ensuring that the relevant documents (e.g. drawings) are updated and distributed to the relevant stakeholders.  Priority 2 Issues:

Reference	Responsible Director	Report Title	Report / Memo Issued	Original Objective	Follow-up Audit	Summary of Findings
						<ul> <li>Arrangements within three out of seven projects were not fully aligned to the principles of PR0653 (in terms of PM input) and therefore current TfL Pathway requirements for minimising risks associated with design changes.</li> <li>One of the projects sampled was not following the arrangements defined within its Design Management Plan (DMP); it could not be assured that all requirements of PR0653 would be met.</li> </ul>
Surface Tran	nsport					
TfL Strategic	Risk: Failure to M	leet Operational or Safety Targe	ts			
IA 15 738	Director of Trams	Tram Infrastructure Safety Management	18/04/2016 AC	To provide assurance that closed actions from Audit 14 779 Trams Infrastructure HSE Safety Management have been embedded into business as usual activities and to review whether actions in Issue Track due to be delivered by 31st October 2016 have a deliverable plan.	N/A	<ul> <li>Areas of Effective Control:</li> <li>Sampled risk assessments were found suitable and sufficient.</li> <li>Risk assessors have received bespoke training.</li> <li>A review to identify topic specific assessment was completed.</li> <li>Planned General Inspections are completed to programme.</li> <li>A programme of Working Instructions has been developed and is being progressed.</li> <li>Safety communication, Toolbox and Safety Hour, has improved.</li> <li>Priority 1 Issues:</li> <li>The completion and recording of Senior Managers' Tours requires improvement.</li> <li>Priority 2 and 3 issues:</li> <li>Workplace Risk Assessment Procedure does not reference the hierarchy of controls to ensure that all preventative measures (controls) are assigned in order of priority.</li> <li>The development of CMs has commenced and phase 1 is due by mid-April. It is recommended that to maintain momentum and ensure delivery of phase 1 to 3 by October 2016 updates are provided on completion of each phase.</li> </ul>
Crossrail						
IA 15 214	Central Section Delivery Director, Crossrail	Self-Certification at C422 Tottenham Court Road	13/05/2016 RI	To review the arrangements for the management of self-certification and related aspects of quality management at C422 and provide assurance that controls and procedures were effective.	N/A	<ul> <li>No Corrective Action Reports (CARs) were raised, however nine Observations were identified. The key observations related to:</li> <li>Documents and registers not having been regularly reviewed and updated as required;</li> <li>Ongoing issues with Inspection &amp; Test Plan (ITP) Management and Non-Conformance Report (NCR) management;</li> <li>Two Certification Packages not having been submitted by their due date because the final designs had not been approved. Construction had been completed using the CRL 'By Exception' process.</li> </ul>

Reference	Responsible Director	Report Title	Report / Memo Issued	Original Objective	Follow-up Audit	Summary of Findings
IA 15 431	Technical Director, Crossrail	Implementation of the By Exception Construction Prior to Gate Acceptance (BEC) Procedure	11/04/2016 RI	To review the use of the BEC Procedure and provide an analysis of strengths, weaknesses, opportunities and threats.	N/A	On the basis of the contracts sampled and the evidence reviewed, this summary report concluded that controls implemented in the BEC Procedure require improvement.
IA 15 417	Central Section Delivery Director, Crossrail	Gate and Design Change Management	15/04/2016 RI	To review the management of gates and design change within Delivery and provide assurance that controls and procedures were effective.	N/A	This summary report identified the strengths, weaknesses, opportunities, and threats from these audits and, on the basis of the areas sampled and the evidence reviewed, it was concluded that there was scope for improvement in the management of Gate Condition closure and Risk Management.
IA 15 420	Technical Director, Crossrail	Whole Life Cost	15/04/2015 RI	To sample the arrangements for the management of Whole Life Cost (WLC) within Delivery and provide assurance that controls and procedures were effective.	N/A	This summary report identified the strengths, weaknesses, opportunities, and threats from these audits. On the basis of the areas sampled and the evidence reviewed it was concluded that there was scope for improvement in the management of the documents listed in DOORS and available in eB which support WLC evaluations.
IA 15 430	Central Section Delivery Director, Crossrail	Configuration Management	09/06/2016 AC	To review the arrangements for the management of the Register and Issue Record (RIR) with respect to Configuration Management across Design; providing assurance that controls and procedures were effective.	N/A	One CAR was raised relating to the inability to demonstrate that a RIR was issued and communicated by the Chief Engineer's Group (CEG) to C510 Whitechapel.
IA 15 269	Central Section Delivery Director, Crossrail	Gate and Design Change Management at C422 Tottenham Court Road	15/04/2016 AC	To review the arrangements for the management of design at C422.	N/A	<ul> <li>No CARs were raised, however five Observations were identified including:</li> <li>No supporting documents being listed on the Dynamic Object Orientated Requirements System (DOORS) for the Employers design (C134) and two of the listed ten documents for the Design &amp; Build (C422) not being on eB; and;</li> <li>A variance of gate condition numbering, descriptions, and status between the Gate Review reports, Assurance Gate Condition tracker, and Gate Conditions listed on the Critical Issues list.</li> </ul>
IA 15 268	Central Section Delivery Director, Crossrail	Gate and Design Change Management at C412 Bond St	15/04/2016 AC	To review the arrangements for the management of design at C412.	N/A	<ul> <li>No CARs were raised, however seven Observations were identified including:</li> <li>No supporting documents being listed on the Dynamic Object Orientated Requirements System (DOORS) for the Employers design (C132);</li> <li>A variance of Gate condition status between the Assurance Gate Condition tracker and the Gate Conditions listed on the Critical Issues list; and;</li> <li>Evidence of Gate risks and risks on Active Risk Manager (ARM) having mitigations and responses in place which did not reduce the</li> </ul>

Reference	Responsible Director	Report Title	Report / Memo Issued	Original Objective	Follow-up Audit	Summary of Findings
						risk exposure.
IA 15 270	Central Section Delivery Director, Crossrail	Gate and Design Change CARs Management at C435 Farringdon	15/04/2016 AC	To review the arrangements for the management of design at C435.	N/A	<ul> <li>No CARs were raised, however four Observations were identified including:</li> <li>Two of the supporting documents listed on the Dynamic Object Orientated Requirements System (DOORS) for the Employers design (C136) not being on eB;</li> <li>A variance of Gate condition status between the Assurance Gate Condition tracker and the Gate Conditions listed on the Critical Issues list.</li> </ul>
IA 15 414	Technical Director, Crossrail	Crossrail Management System (CMS)	22/04/2016 AC	To review the arrangements for the management of technical assurance requirements on the Crossrail Management System (CMS).	N/A	One CAR was raised relating to the Engineering Safety Management System Safety Plan not having been effectively maintained since it was updated in 2012.
IA 15 510	Technical Director, Crossrail	Signalling Software Development Design Process Assurance at C620	22/04/2016 WC	To review the signalling system design assurance and monitoring regimes in order to provide Crossrail with assurance that the contractor has in place robust processes for the development of assurance data as the project progresses.	N/A	This audit did not raise any issues and there were no actions for the contractor to address.
IA 15 515	Programme Director, Crossrail	Physical Site Security	12/05/2016 AC	To assess the effectiveness of physical security arrangements in operation across Crossrail sites.	N/A	The audit identified no Priority 1 or 2 issues but did identify three Priority 3 issues relating to effective storage and back up of security advice and decisions provided by the Technical Security Advisor, potential impacts to the Security Manager role as a result of a loss of post, and managing the risk of unauthorised access across shared perimeter lines.
IA 16 336	Central Section Delivery Director, Crossrail	Interface Management at C502 Liverpool Street Station	18/05/2016 AC	To review the management of interfaces by the contractor at C502 Liverpool Street Station and provide assurance that controls and procedures were effective.	N/A	<ul> <li>No CARs were raised, however six Observations were identified. The key findings related to:</li> <li>The Crossrail Assessment Body will not be completing its assessment of the C502 design with regards to engineering safety until after the 'Wrap Up' Gate / Presentation in August 2016.</li> <li>The Project Security Plan and Construction Phase Plan not having been reviewed every 3 months as is required and the Interface Management Plan, last reviewed in 2013, containing out of date data.</li> </ul>

Status K	<u>ey</u>							
PC	Poorly controlled	RI	Requires improvement	AC	Adequately controlled	WC/ACL	Well controlled & Audit Closed	

Reference	Responsible Director	Report Title	Report / Memo Issued	Original Objective	Follow-up Audit	Summary of Findings
IA 16 327	Central Section Delivery Director, Crossrail	Control of Materials at C412 Bond Street	24/05/2016 AC	To review the arrangements for the management of the Control of Materials.	N/A	<ul> <li>No CARs were raised, however three Observations were identified relating to:</li> <li>A potential trip hazard being identified on walkways;</li> <li>Two concrete block suppliers being used on this site. One supplier's CE declaration was for CAT I blocks (with a level of attestation of 2+) and the other was for CAT 2 (with a level of attestation of 4); and</li> <li>The contractor not including material substitution in their procedure although they were aware of the Material Compliance Records (MCR) resubmission requirement.</li> </ul>
IA 16 366	Central Section Delivery Director, Crossrail	Control of Materials at C422 Tottenham Court Road	24/05/2016 AC	To review the arrangements for the management of the Control of Materials.	N/A	<ul> <li>No CARs were raised, however four Observations were identified relating to:</li> <li>Rebar mats being stored on the ground in an area where there was potable water;</li> <li>A skip being identified which had a mixture of materials;</li> <li>A fluorescent light being attached to the scaffold guard rail which also acted as a handrail; and</li> <li>An electrical supply cable spanning a walk way being partially covered by an off cut piece of timber.</li> </ul>
IA 16 319	Central Section Delivery Director, Crossrail	Management of Construction Interfaces at C350 Pudding Mill Lane	25/05/2016 AC	To review the management of construction interfaces and provide assurance that controls and procedures were effective.	N/A	<ul> <li>No CARs were raised, however six Observations were identified including:</li> <li>The C152 ICD for Architectural and Structural (designs) not being identified in the Morgan Sindall Design Management Plan;</li> <li>The 'Temporary Handover of Portal Sections' not being documented in the Morgan Sindall Construction ICD; and</li> <li>No evidence being available to demonstrate that the latest revision of the Construction Interface Management Procedure had been formally communicated to Morgan Sindall.</li> </ul>
IA 16 340	Central Section Delivery Director, Crossrail	Work Breakdown Structure at C530 Woolwich	23/05/2016 WC	To review the arrangements for the management of Work Breakdown Structure at C530 Woolwich and provide assurance that controls and procedures were effective.	N/A	No CARs were raised, however one Observation was identified regarding the omission of a specific risk within the Active Risk Manager (ARM) relating to Work Breakdown Structure.

## TfL Internal Audit Internal Audit Plan 2016/17 Audits Cancelled and Postponed

Risk Pan-	ς Audit Title Τfι	Objective	Cancelled/ Postponed
	workforce and governance structures be Occupational Health (OH)	ecome unfit for purpose  To review provision of OH services across TfL including compliance with SLAs.	Postponed to Q1 2017/18
TfL f	fails to deliver key investment programn Commercial People project	nes or elements of key programmes  To review the People element of the Commercial Capability  Programme.	Postponed to Q1 2017/18
	Project resourcing	To review controls over the resourcing of projects across TfL	Postponed to Q1 2017/18
TfL f	fails to prepare for or deal with a catastr Security Incident Management Framework	ophic event  To provide assurance on the design and operating effectiveness of the Incident Management Lifecycle.	Postponed to Q1 2017/18
LU a	nd TfL Rail		
TfL \	workforce and governance structures be R&U Governance	ecome unfit for purpose  To provide assurance over the R&U Governance structure.	Cancelled
TfL	suffers a significant IT failure or attack Engineering Operational Assets: Application Control Review	To provide assurance that the application controls over engineering operational assets are working effectively as designed.	Postponed to Q1 2017/18
	Engineering Network Control: Neasdon Depot Signalling	To provide assurance that the network security processes and controls in respect of Neasdon Depot signalling are operating effectively as designed.	Postponed to Q1 2017/18
	Connect Network Security	To provide assurance over controls over Connect network security.	Postponed to Q1 2017/18
TfL f	fails to deliver key investment programn LU Investment Change Programme	nes or elements of key programmes To review delivery of the LU Investment Change Programme.	Cancelled
TfL f	fails to meet operational or safety target LU Operations - Inspections of LU Premises	s  To follow up on actions taken following the previous audit in this area to ensure they are embedded and working.	Postponed to Q1 2017/18
	LU and TfL Rail HSE Transformation Project	Consultancy work in relation to the HSE team transformation project. Scope to be determined.	Cancelled

## **Surface Transport**

IIL.		a a a a a a confit for a company	
	workforce and governance structures be Development of the ST organisation	To provide assurance that ST's organisational changes are being planned and executed efficiently and effectively, and likely to deliver the expected benefits.	Postponed to Q1 2017/18
TfL i	fails to deliver key investment programn Impact of Permitting requirements on project delivery	nes or elements of key programmes Review the arrangements for liaison between PPD and Permitting, with particular focus on efficiency of the process	Postponed to Q1 2017/18
	Impact of Lane Rental on project delivery	Review the efficiency of current lane rental arrangements, and skewing of project costs and BCR.	Postponed to Q1 2017/18
	London Highways Alliance Contarct (LoHAC) works pipeline	To review the organisation's ability to contract work through LoHAC at adequate levels to achieve anticipated economies of scale.	Cancelled
	DLR Design Assurance	To assess the design assurance processes for new assets to ensure they comply with Pathway and legal requirements and conform to best practice.	Postponed to Q1 2017/18
TfLi	fails to maintain elements of assetbase ST Bus Infrastructure Asset Management	resulting in asset failure or operationaldecline To provide assurance that bus infrastructure assets are being managed in accordance with ISO 55000 principles	Cancelled
Fina	nco		
	workforce and governance structures be	ocomo unfit for nurnoco	
	Building a Better Finance (BBF) Transition to business as usual	To provide assurance on the transition of BBF to business as usual to ensure objectives of BBF are appropriately managed.	Postponed to Q1 2017/18
	Building a Better Finance (BBF)	To provide assurance on the transition of BBF to business as usual to ensure objectives of BBF are appropriately	to Q1
TfL t	Building a Better Finance (BBF) Transition to business as usual Risk Management	To provide assurance on the transition of BBF to business as usual to ensure objectives of BBF are appropriately managed.  To provide assurance over the effectiveness of the revised	to Q1 2017/18 Postponed to Q1
	Building a Better Finance (BBF) Transition to business as usual Risk Management fails to maintain elements of assetbase	To provide assurance on the transition of BBF to business as usual to ensure objectives of BBF are appropriately managed.  To provide assurance over the effectiveness of the revised risk management processes.  resulting in asset failure or operational decline To provide assurance over the effectiveness of the process and controls over building facilities management.	to Q1 2017/18 Postponed to Q1 2017/18 Postponed to Q1
TfL :	Building a Better Finance (BBF) Transition to business as usual  Risk Management  fails to maintain elements of assetbase Facilities Management  does not respond to increasing financial Efficiencies  Insurance Brokers	To provide assurance on the transition of BBF to business as usual to ensure objectives of BBF are appropriately managed.  To provide assurance over the effectiveness of the revised risk management processes.  resulting in asset failure or operational decline To provide assurance over the effectiveness of the process and controls over building facilities management.  I challenges Assurance work in respect of TfL's ongoing savings and efficiencies programme in liaison with external consultants PwC. Scope of work to be agreed.  To provide assurance that effective controls are in place over payments to insurance brokers.	to Q1 2017/18 Postponed to Q1 2017/18 Postponed to Q1 2017/18
TfL :	Building a Better Finance (BBF) Transition to business as usual  Risk Management  fails to maintain elements of assetbase Facilities Management  does not respond to increasing financial Efficiencies  Insurance Brokers	To provide assurance on the transition of BBF to business as usual to ensure objectives of BBF are appropriately managed.  To provide assurance over the effectiveness of the revised risk management processes.  resulting in asset failure or operational decline To provide assurance over the effectiveness of the process and controls over building facilities management.  I challenges Assurance work in respect of TfL's ongoing savings and efficiencies programme in liaison with external consultants PwC. Scope of work to be agreed.  To provide assurance that effective controls are in place over payments to insurance brokers.	to Q1 2017/18  Postponed to Q1 2017/18  Postponed to Q1 2017/18  Cancelled  Postponed to Q1 2017/18
TfL :	Building a Better Finance (BBF) Transition to business as usual  Risk Management  fails to maintain elements of assetbase Facilities Management  does not respond to increasing financial Efficiencies  Insurance Brokers	To provide assurance on the transition of BBF to business as usual to ensure objectives of BBF are appropriately managed.  To provide assurance over the effectiveness of the revised risk management processes.  resulting in asset failure or operational decline To provide assurance over the effectiveness of the process and controls over building facilities management.  I challenges Assurance work in respect of TfL's ongoing savings and efficiencies programme in liaison with external consultants PwC. Scope of work to be agreed.  To provide assurance that effective controls are in place over payments to insurance brokers.	to Q1 2017/18  Postponed to Q1 2017/18  Postponed to Q1 2017/18  Cancelled  Postponed to Q1

^	mercial	D	I	
t .om	merciai	IJEVE	ionme	2MT

112	does not develop or manage secondary Project and Programme Management in Commercial Development	A general audit of project and programme management processes, following on from similar work in 2015/16.	Postpone to Q1 2017/18
	Festival Pier	A review of TfL's involvement in this project, to provide assurance that associated risks (particularly reputational) are properly managed.	Postpone to Q1 2017/18
	Homes for London programme	To review controls over TfL's input to the Homes for London programme, including the extension of the programme to provide more homes than currently planned.	Postpone to Q1 2017/18
Cust	omers, Communication and Technol	ody	
	suffers a significant IT failure or attack End User Computing - Mobile	To provide assurance over the process for assessing and managing risks associated with the Desktop Futures - Mobile project, and evaluate actions taken to mitigate these risks.	Cancelle
	Security Operations Centre (SOC) - Model Design	Evaluate the design of SOC model to assess whether it is designed appropriately to meet strategic objectives and industry best practice.	Postpone to Q1 2017/18
	IM Service Delivery: Major Incident Management	To provide assurance on the processess governing Service Delivery activities within TfL - scope to be determined.	Cancelle
<b>T</b> (1 (			
IILI	fails to deliver key investment programn Third Party Project Delivery Model	Assess process design and effectiveness to enable project delivery in most cost effective and efficient manner.	Cancelle
up.	Project Governance and Delivery	To evaluate the operating effectiveness of governance processess driving project and programme management decision making in relation to IT projects.	Cancelle
HR TfL v	workforce and governance structures be	ecome unfit for purpose	
	Grievance Policy & Procedures	To provide assurance on the adequacy and effectiveness of controls in place over the grievance policy and associated procedures.	Postpone to Q1 2017/18
	Staff Induction Process	To provide assurance on the adequacy and effectiveness of controls in place over the staff induction process.	Postpone to Q1 2017/18
Cros	srail		
33	Yellow Plant delivery process	To assess the effectiveness of the Yellow Plant delivery process.	Cancelle
	Project Delivery Plan	To assess the effectiveness of the Project Delivery Plan process.	Cancelle
	Scheduling process	To assess the effectiveness of the Programme scheduling process.	Cancelle
	Management of the Apprenticeship Programme	To assess the effectiveness of the Apprenticeship Programme.	Cancelle
		5	

Readiness to Energise

To provide assurance that the risk of catastrophic failure of the the electrification process is being managed effectively.

Crossrail 2

Lessons Learned by Crossrail 2 A review of the lessons learned by Crossrail 2 from

Crossrail.

Postponed to Q1 2017/18 TfL Internal Audit Internal Audit Plan 2016/17 Audits Added

Audit Title Objective

Pan-TfL

TfL workforce and governance structures become unfit for purpose

TfL Transformation Programme Audit work in relation to the Transformation Programme to

ensure that: a) the programme is carried out effectively, and b) appropriate ongoing assurance arrangements are put in place.

Scope to be decided.

LU and TfL Rail

TfL workforce and governance structures become unfit for purpose

Thorntask Lessons Learnt To review and follow up delivery of the actions in the Thorntask

Lessons Learnt Report

TfL fails to maintain elements of asset base resulting in asset failure or operational decline

LU Power Defects Management

To provide assurance that Power defects are process managed

to avoid impacts on the operational railway.

TfL fails to meet operational or safety targets

Supplier Audit: John Bradley and Son Ltd. To seek assurance that the Supplier 'John Bradley and Son' has

suitable quality management systems in place to assist in the LU

Train Stop overhaul project

**Surface Transport** 

TfL fails to deliver key investment programmes or elements of key programmes

Procurement of the Major Projects

Framework

To ensure that the procurement process employed for the Major Projects Framework is managed effectively, in accordance with approved procedures and EU directives, is open, fair and transparent, and has appropriate management controls and governance.

TfL fails to meet operational or safety targets

Health and Safety Assurance in Emirates

Air Line

To provide assurance that Emirates Air Line's operator, Mace Macro has suitable health and safety management systems in place that are consistent with TfL Standards, contractual requirements and applicable health and safety legislation.

**Finance** 

TfL fails to deliver key investment programmes or elements of key programmes

External Expert Conflicts of Interest To review robustness of processes used by the supplier to

protect against conflict of interest when providing sole consultancy to Crossrail 2 and potential other project work for

TfL.

**Commercial Development** 

TfL does not develop or manage secondary income streams effectively

Phoenix Payments Process To provide assurance over key controls for the processing of

compulsory purchase and other property compensation

payments recorded in the Phoenix system.

**Group Planning** 

TfL workforce and governance structures become unfit for purpose

Follow up to audit of Garden Bridge design

and development procurements

To review whether the recommendations from the original audit of the Garden Bridge procurements have been implemented and

controls are working effectively.

## INTERNAL AUDIT CUSTOMER FEEDBACK FORM SUMMARY OF RESPONSES FOR 2016/17 Quarter 1

We send a customer feedback form to our principal auditee at the conclusion of each audit. This table sets out the questions asked and the responses, including a selection of the freeform comments that we have received.

Customer Feedback Forms Sent: Q1 = 52 (Q4=47)

Customer Feedback Forms Returned: Q1 = 19 (Q4 = 20)

	No sco	re given	Very	poor	Po	oor	Satisf	actory	Go	od	Very	good	Average \$	Score
ASSIGNMENT ASSESSMENT CRITERIA				1 2			3		4		5	Q1	Q4	
PLANNING AND TIMING	Q1	Q4	Q1	Q4	Q1	Q4	Q1	Q4	Q1	Q4	Q1	Q4	4.2	4.4
The assignment timing was agreed with me and there was appropriate consideration of my other commitments as the work progressed	0	0	0	0	0	1	4	1	8	7	7	11	4.2	4.4
The assignment was completed and the report issued within appropriate timescales	0	0	0	1	1	0	2	1	7	6	9	12	4.3	4.4
COMMUNICATION	•		-		-		-		•		•		4.1	4.3
Communication prior to the assignment was appropriate, including the dates and objectives	0	0	0	0	2	0	1	3	9	6	7	11	4.1	4.4
Throughout the assignment I was informed of the work's progress and emerging findings	0	0	0	1	1	0	2	2	10	7	6	10	4.1	4.3
CONDUCT											4.3	4.4		
The Internal Audit team demonstrated a good understanding of the business area under review and associated risks, or took time to build knowledge and understanding as the work progressed	0	0	0	0	1	1	2	3	8	6	8	10	4.2	4.3
The Internal Audit team acted in a constructive, professional and positive manner	0	0	0	0	0	2	2	1	9	2	8	15	4.3	4.5
RELEVANT AND USEFUL ADVICE AND ASSURANCE													4.0	4.2
A fair summary of assignment findings was presented in the report	0	0	0	1	1	1	5	2	9	5	6	11	4.0	4.2
Assignment recommendations were constructive, practical and cost-effective	0	0	0	0	1	2	6	2	8	6	6	10	3.9	4.2
My concerns were adequately addressed and the review was beneficial to my area of responsibility and operations	0	0	0	0	1	2	6	1	6	6	9	11	4.0	4.3
Overall a	ıssessmeı	nt											4.1	4.3

## Other comments including suggested improvements and areas of good performance:

"There was limited update along the way however as there were no issues this is probably not unreasonable."

"It was useful to have our internal view that we were managing the process well confirmed!"

"Report was issued prior to final check of the final draft and it contained a number of errors or other points needing clarification."

"There was little understanding of the business area but the auditor did review the relevant agreements etc to build an understanding."

"Within timescales wasn't the issue however the content of the report did not reflect all of the work already [in progress]."

"The concerns raised with audit to ensure all audits connected to TfL wide initiatives should happen in a co-ordinated way. Given some of the observations declared dependencies on areas outside of IM or its direct control, there was no support from an audit perspective to join this up with wider audits around the other technical sectors where overlap occurs. There is also no view of how overlapping audit areas are being addressed."

"There was appropriate flexibility around availability of staff on our side and also around the go-live of the project being audited."

"Good updates on progress and regular chasing of any outstanding actions from my team."

"Some good challenges raised around the TfL requirements [in this area] and this demonstrated a good knowledge."