

**Date: 9 March 2015**

**Item: Integrated Assurance Plan 2015/16**

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

### **1 Summary**

- 1.1 The purpose of this paper is to present the 2015/16 Integrated Assurance Plan to the Audit and Assurance Committee.

### **2 Recommendation**

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

### **3 Background**

- 3.1 TfL has developed an Integrated Assurance Framework, describing the overall regime within TfL for the efficient provision of assurance over all of its activities.
- 3.2 The Framework recognises four principal functions involved in the delivery of assurance within TfL. These are Internal Audit, Project Assurance, Health, Safety and Environment (HSE) and Risk. The Risk function is not involved in carrying out assurance reviews, but ensures that there is a sound basis for the assurance activities carried out by the other functions.
- 3.3 The attached Integrated Assurance Plan sets out, in summary form, the planned assurance work to be carried out in 2015/16 by these assurance functions. Each of the functions has its own detailed programme of work that underpins the Plan.

### **4 Development of the Plan**

- 4.1 The Integrated Assurance Plan was developed from the strategic risk registers for Rail and Underground, Surface Transport and Specialist Services, and the consolidated pan-TfL strategic risk register.
- 4.2 Workshops were held for Rail and Underground, Surface Transport and Specialist Services involving directors and senior managers and representatives from assurance functions. The workshops were used to highlight areas where assurance work would be beneficial and to map the assurance requirements against TfL's strategic risks.
- 4.3 The workshops have been complemented by a number of lower level workshops and a series of one to one planning meetings with a range of directors and senior managers across the business.

- 4.4 A similar process has been followed in Crossrail to develop a plan for 2015/16. This incorporates the work of Internal Audit and the Crossrail Compliance assurance function, whose work is directed by the Senior Audit Manager, Crossrail. The planned assurance work is incorporated into the Integrated Assurance Plan. The Crossrail plan is scheduled to be approved by its Audit Committee on 16 March 2015.
- 4.5 The planning of the Integrated Assurance Reviews (IARs) led by the Programme Assurance team, together with the related work of the Independent Investment Programme Advisory Panel (IIPAG), has followed a different approach since this work is driven by the timing of the key gate stages of the major projects that are subject to review.
- 4.6 The Plan also incorporates planned work at the London Transport Museum (LTM). The LTM Audit Committee is scheduled to approve the Museum's Audit Plan at its meeting on 19 March 2015.
- 4.7 A programme of audit work in respect of the TfL Pension Fund is also carried out and reported to the Pension Fund Audit Committee.
- 4.8 The Plan has been presented to the Rail and Underground Board, the Surface Transport Board, and the Leadership Team.
- 4.9 We will also share the Plan with the external auditors for year ending 31 March 2016, Ernst & Young, and we will be confirming with them, in due course, any areas where they may wish to place reliance on our work.

## **5 Overview of Plan**

- 5.1 The Integrated Assurance Plan includes the assurance work to be carried out by Internal Audit, the Crossrail Compliance Audit function and Project Assurance, together with the work of a number of assurance teams embedded in areas of the business, including the Surface Transport HSE Team who carry out audits of suppliers and bus operators; London Overground (LO) HSE and Engineers, who audit LO key suppliers; the LU Access Team, who audit track protection suppliers; asset engineers who audit key suppliers and against maintenance quality standards, and the HSE Occupational Health team, who audit TfL medical assessment suppliers. These functions have worked together to ensure that assurance work is undertaken by the team most suited to deliver it, avoiding overlap and duplication.
- 5.2 Each of the assurance functions has its own processes and procedures for the delivery of its work, in line with relevant statutory requirements and professional standards, and aligned with the nature of the work it carries out. Nevertheless, where applicable the assurance teams will seek opportunities to better align their processes and methodologies so as to facilitate further joint working in the future. To assist with this, Internal Audit is establishing a 'Community of Auditors'.
- 5.3 The attached Plan is structured around TfL's seven top-level strategic risks. For each risk any planned assurance activity is grouped into themes.
- 5.4 The themes reflect the main elements of the risks, the mitigations and controls around those risks, and TfL's business objectives, activities and organisation.

For each theme a number of audits and reviews have been identified through which it is expected to provide assurance over that theme.

- 5.5 The themes are likely to remain unchanged throughout the year. However, the specific audits and reviews against each theme may change in response to evolving business priorities and plans. The thematic structure will provide a robust and stable basis on which to routinely report progress on assurance work completed and its outcomes.
- 5.6 The following paragraphs summarise the work planned against each of the strategic risks, and other key areas.

#### **TfL01: Maintaining a Long Term Strategic Balanced Plan**

- 5.7 The work of the Commercial Development Directorate to grow TfL's income from secondary revenue streams is fundamental to delivery of TfL's business plan, and this will continue to be a significant focus for internal audit work during the year. We will review elements of the overall Commercial Development governance arrangements, as well as a number of individual work streams in more detail, including advertising, property developments, and the sponsorship programme.
- 5.8 We will carry out further audit work around TfL's efficiencies programme, working in liaison with PwC who have been engaged under a three year contract to provide assurance over the programme's deliverability.
- 5.9 We will also review aspects of longer term transport planning, including the development of new transport models.
- 5.10 In addition, where applicable we will include value for money considerations in each of our audits, with the aim of identifying areas of opportunity for the business to reduce spend, or deliver activities more efficiently.

#### **TfL02: People Risk**

- 5.11 A key focus of the work against this risk will be TfL's arrangements for ensuring access to scarce staff resources. This will include an audit of the implementation and delivery of the Strategic Resourcing Strategy as well as specific work on resourcing of the Investment Programme. We will also carry out audits of demand planning and of TfL's recruitment processes.
- 5.12 A second area of focus will be on staff management, with audits of the new Performance and Development process, managing attendance, and controls over the processing and storage of HR documentation held across the business. We will review employee relations arrangements in TfL following work done in Rail and Underground in 2014/15.
- 5.13 We will also carry out an audit of organisational development within Surface Transport.

#### **TfL03: Delivery of Capital Investment Portfolio**

- 5.14 Ensuring the effective and efficient management of projects and contracts forms a significant element of the assurance plan, and this is an area where all of the assurance teams have a role to play.

- 5.15 The Project Assurance team, which has recently transferred from the Programme Management Officer to Finance, will lead a comprehensive programme of IARs, with input from the IIPAG, to provide assurance over project delivery. The IARs have historically been carried out by external consultancies, but over the past two years there has been increasing use of peer reviews, reducing the dependence on external resource. This trend is set to continue.
- 5.16 In addition to the extensive assurance provided by the Project Assurance Team and the IIPAG over delivery of components of the Investment Programme, Internal Audit will be carrying out some thematic audits of programme delivery overall. One key area of focus will be on Surface Transport's delivery of the Investment Programme in light of the significant increase in activity over the past year. This will include audits of some of the factors affecting programme delivery, including dependencies on internal suppliers and Specialist Services areas, and the impact of permitting requirements and lane rental.
- 5.17 As in previous years, we will audit a number of important procurements, typically on a real time basis, and some non-project related contracts. In addition, we will audit the LoHAC (London Highways Alliance Contract) works pipeline, and the management of fraud risk within contracts in Rail and Underground.
- 5.18 We will also provide assurance by reviewing the safety and technical assurance regimes that are in place within individual projects and programmes, including SUP, Access, and Power. We will also audit for compliance against management systems that control risk, including change control, 'Pathway' project management tools, and risk registers. In addition, the supplier audits referred to in 5.27 below will provide assurance over the quality of assets, goods and services delivered.

#### **TfL04: Technology Risk**

- 5.19 We will continue to work with the Chief Information Security Officer through a combination of real time and programmed audits to ensure that the required processes, procedures and controls to manage the risks associated with cyber security have been implemented and are working effectively.
- 5.20 Major IM programmes of work including reviews of the Run Better, End User Computing and Transforming IM (formerly IM Sourcing Strategy) Programmes will continue to be reviewed on a real time basis.
- 5.21 There will be a significant programme of audits providing assurance that TfL data is being held securely across all areas of the business including Oyster Contact Centre and Travel Information Centres, Cycle Hire, Congestion Charging and Taxi and Private Hire.
- 5.22 We will also provide assurance in respect of information security, including audits of SCADA systems, as well as continuing our work supporting the business in relation to Payment Card Industry Data Security Standards (PCI-DSS).

#### **TfL05: Disruption to Quality of Service**

- 5.23 We will be undertaking a number of audits across the business relating to the IT Change management and IT Service Request Management processes with a

particular emphasis on ensuring that the intended improvements in service quality are achieved.

- 5.24 We will be undertaking a major review of the incident management process across the company looking at planning and management, and response and recovery as the two main themes.
- 5.25 In addition to work on information/ cyber security referred to above, we will also carry out a programme of audits covering physical security and threats due to the actions of individuals.
- 5.26 Our plan addresses assurance over the effectiveness of systems governing the maintenance of specific operational assets and the management of the associated risks. The audits include the maintenance of operational vehicles and infrastructure, focussing on risks to reliability and incidents that may cause suspension of services.
- 5.27 Programmes of supplier audits will be carried out by both Internal Audit and the embedded auditors. These will be a mix of audits of procurement, contract management, and supplier conformance with management systems, with the aim of providing assurance that suppliers can be relied on to deliver goods and services of the required quality.
- 5.28 A specific audit will cover the life cycle of suppliers looking at the assurance that is sought and provided at all stages, and the impact on HSE and service reliability. The audit will address the supplier quality assurance regime implemented by TfL Commercial in 2014 and the effectiveness of its use by risk owners to identify risk based assurance and surveillance activity.

#### **TfL06: Targeting Continued Improvement**

- 5.29 We have no audits planned specifically against this risk, although several of the audits included under other risks will also provide assurance over this one.

#### **TfL 07: Major/ Catastrophic Incident**

- 5.30 Our plan focuses on the effectiveness of management systems that contribute towards the control of safety risks to both TfL customers and employees as well as risks to the reliability of TfL services. Key themes of the programme are inspection and maintenance activities, particularly for track, signals, rolling stock, civils and lifts and escalators in LU; design control of new assets; and compliance with the management system. This is informed by intelligence on where weaknesses are present; effectiveness of recent changes to systems; and the adequacy of quality systems in key or poor performing suppliers.
- 5.31 One key initiative this year is the introduction of a three-year rolling programme of compliance auditing against HSE regulation and the TfL management system, looking to provide assurance and seek good practice across all TfL teams. Other audits will focus on emergency preparedness and planning, and on providing assurance against specific hazards that have been identified by the management team, either due to forthcoming organisational change or as a result of incidents. Specific topic audits include: preparedness for the introduction of 'night tube'; electrical safety; working at height; compliance with the proposed Construction (Design and Management) Regulations 2015; assessing manual handling operations; management of HSE responsibilities across the 'Fit for Future – Stations' organisational change; management of

Occupational Health risks; and the implementation of Environmental and Sustainability objectives.

### **Financial and Governance Controls**

- 5.32 Following on from recent work on procurement authorities, the plan includes a more comprehensive review of Standing Orders including the various authorities contained therein. We will also be focusing on providing assurance over the effectiveness of some core corporate governance areas including Freedom of Information and Data Protection.
- 5.33 As always, the assurance plan includes a number of audits of core financial processes, which this year will include the general ledger, Group Treasury, and financial controls in Oracle. We will also be continuing our work on financial controls in projects, and we have included an audit of the completeness of TfL's property register that was requested by the Audit and Assurance Committee. In addition we will review progress with the Build a Better Finance (BBF) project, and provide input to the BBF team where appropriate.
- 5.34 We will also provide assurance over cash management in relation to the changes introduced through Fit for the Future – Stations. This will include examination of the controls over the introduction of the new ticket machines.
- 5.35 Finally, we always ensure that our plan includes coverage of some staff related spend and governance areas (often referred to as 'hygiene' audits), which, whilst not necessarily of high monetary value, have potential for reputational damage if not properly controlled. In 2015/16, this will include reviews of business expenses and purchasing cards, and of controls over the pool cars used by operational staff.
- 5.36 The audits will be supplemented by a number of targeted data analytical reviews aimed at detecting potential instances of fraud in high risk areas.

### **Crossrail**

- 5.37 The Crossrail Project will be completing many of the civils activities in the coming year and will transition to stations fit-out, systems works such as signals, and overseeing the delivery of rolling stock and depots. There is a related shift in the staff competencies required to deliver this phase of the Project. A number of Tier 1 contractors will also be completing their parts of the project and therefore going through contract close-out requirements.
- 5.38 The audit plan for 2015/16 reflects this new risk profile. We will audit the management of project costs and schedule, but will also focus on the contract close-out arrangements for those contractors leaving the Project over the coming twelve months.
- 5.39 From a technical perspective, the focus will move by the second quarter from civils engineering onto the system wide aspects of the Project. There will also be a number of audits in respect of various aspects of planning for the phased transition to an operational railway, for example reviewing the handover strategy.
- 5.40 As in previous years the plan will include a substantial programme of audits of controls over safety, environment, quality and occupational health at contractors, reflecting Crossrail's reliance on its supply chain for delivery of the

project.

## **6 Medium Term Planning**

- 6.1 As discussed above the Integrated Assurance Plan is risk based, and prepared annually by reference to the Strategic and Operational Risk Registers in order to ensure that assurance effort is properly directed. In line with CIPFA and IIA guidance, the plan that we present only covers activity for one year ahead.
- 6.2 In some business areas, assurance provision is driven by the activity of the business. For example:
- (a) Procurement audits – The internal audit plan will always incorporate a programme of audits of major procurements, often carried out on a real-time basis. The decision about which procurements to review in any year is based on the risk associated with the procurements having regard to monetary value, complexity and reputational risk;
  - (b) Investment Programme Reviews – The programme of IAR reviews carried out by the Project Assurance team is driven by the gate stages reached by each major project and programme; and
  - (c) Other project related assurance – There are also other areas of assurance that are driven by project related activities. This includes IM audit reviews of system developments; health, safety and technical audits linked to infrastructure projects, including audits of suppliers; and security audits of significant infrastructure developments.
- 6.3 There are, though, some areas where, despite the risk-based nature of our planning, there is a cyclical element to the work that we do. This particularly applies to assurance over routine business activities, that is not necessarily derived from the risk registers but where it is appropriate to ensure that assurance is provided on a regular basis. These include the following:
- (a) Core Financial Controls – We seek to ensure that we cover all significant financial control areas at least every three years. For the most significant areas, including Revenue, Procure to Pay and Payroll, a full audit of controls every three years will be supplemented by more targeted assurance work, so that there is always some assurance activity in these areas. For Procure to Pay and Payroll this will include annual performance of targeted SAP data interrogations of key controls aimed at proactive identification of any evidence of fraud or other irregularity;
  - (b) Human Resources – There are a number of core elements of HR control, which again we seek to ensure are covered over a three year cycle. These include HR activities such as recruitment, performance management, and learning and development;
  - (c) Governance – One key element of governance is risk management, which is intrinsic to the risk based planning of our work. We will, therefore, seek to carry out a regular programme of work on risk management processes. There are some other basic elements of corporate governance that we would seek to cover regularly on approximately a three year cycle; and

(d) Information Management – While some assurance activity in relation to information management is linked to business activity, such as delivery of major IM developments, there are some basic IM control areas that we need to ensure are covered on a regular basis. This is particularly relevant to controls over the security and resilience of TfL's systems and data, where we seek to carry out some assurance work every year and ensure that all key areas are covered over a three year cycle.

6.4 Appendix 2 sets out, for these cyclical areas of the plan, the audits done in 2014/15, the audits incorporated in this 2015/16 plan, and indicative audits for 2016/17 and 2017/18.

## **7 Resources**

7.1 Delivery of the Integrated Assurance Plan requires 11,254 person days across the assurance functions involved. This compares to 11,425 planned days in the 2014/15 plan. Further information on resources for each of the assurance functions is set out in the paragraphs 7.3 to 7.10.

7.2 An indication of how the time is allocated, by business area and risk, is shown in the following table. However, these allocations are likely to change over the course of the year, as plans are further refined, and in response to changes in business activity.



### Summary of allocation of assurance resources by strategic risk and business area

Risk	Pan TfL	R&U	Surface Transport	Specialist Services	CRL	LTM	Pension Fund	Total Days
TfL01: Maintaining a long term strategic, balanced plan	0	70	0	373	0	0	0	<b>443</b>
TfL02: People risk	113	0	25	245	0	0	47	<b>430</b>
TfL03: Delivery of capital investment portfolio	1,885	643	250	0	0	0	0	<b>2,778</b>
TfL04: Technology risk	50	65	250	305	0	0	0	<b>670</b>
TfL05: Disruption to Quality of Service	138	1,289	529	250	0	0	0	<b>2,206</b>
TfL06: Targeting continued improvement	0	0	0	0	0	0	0	<b>0</b>
TfL07: Major/ catastrophic incident	65	1,180	135	0	0	0	0	<b>1,380</b>
Financial and Governance Controls	65	160	103	533	0	0	0	<b>861</b>
Crossrail	0	0	0	0	2,356	0	0	<b>2,356</b>
Other	0	0	0	0	0	130	0	<b>130</b>
<b>Total Days</b>	<b>2,316</b>	<b>3,407</b>	<b>1,292</b>	<b>1,706</b>	<b>2,356</b>	<b>130</b>	<b>47</b>	<b>11,254</b>
<b>2014/15 Total Days</b>	<b>2,335</b>	<b>3,900</b>	<b>765</b>	<b>1,810</b>	<b>2,425</b>	<b>135</b>	<b>55</b>	<b>11,425</b>

## **Internal Audit**

- 7.3 Internal Audit's total budgeted headcount for 2015/16 is 58. The team incorporates a wide range of skill sets including qualified auditors/ accountants, experienced project and contract managers, IM auditors, security specialists and fraud investigators. Full induction programmes and ongoing training are provided to enable everyone to comply with the Audit Manual and understand the purpose of the Internal Audit function. Audit staff who do not have an audit background are required to take the Certificate of Internal Audit qualification set by the IIA in their first year.
- 7.4 The Internal Audit service will be delivered wholly or largely using in-house permanent employees. TfL participates in a GLA-wide contract for specialist internal audit services with Baker Tilly. This provides the facility to supplement in-house resource if required. However, no use was made of this contract in 2014/15 and it is not currently anticipated that the contract will be used in 2015/16.
- 7.5 The Internal Audit element of the 2015/16 plan requires 6,737 days (2014/15: 6,854 days). This small reduction in planned days reflects a decision to allow for the likelihood that there will be some level of staff vacancy during the year and, therefore, to not assume we will be fully resourced.

## **HSE and Technical**

- 7.6 In total, 2,767 days (2014/15: 2,820 days) of the plan relate to the various HSE and technical audit functions within the business. This excludes the HSE and technical team within Internal Audit, whose resources are included in the figures in para 7.5 above.
- 7.7 The largest element of this total relates to the compliance audit team within Crossrail, with a budgeted headcount of 11. This carries out a programme of HSE, Quality and Technical audits, both against the Crossrail Management System, and at contractors.
- 7.8 The total also includes an estimated 900 days (2014/15: 900 days) in respect of the work of the various auditors embedded within different areas of the business (see para 5.1).

## **Project Assurance**

- 7.9 The project assurance element of the plan requires 1,750 days (2014/15: 1750 days), representing the work of approximately eight heads within the Project Assurance team carrying out IAR reviews. This time will be supplemented by the work of external experts and internal peer reviewers engaged to provide technical support on IAR reviews, which is not included in the table above.
- 7.10 The table also does not include time spent on reviews by IIPAG members (approximately 450 days per annum).

## **8 Delivery of the Plan**

- 8.1 The Integrated Assurance Plan will be kept under review throughout the year. In view of the ongoing pace of change within TfL, it is likely that it will be revised over the course of the year to reflect changing business priorities, including

management requests for audit and consultancy work that we typically receive.

- 8.2 The Director of Internal Audit will, with input from other assurance providers, provide a quarterly report to the TfL Audit and Assurance Committee, and an annual report at the end of the year, summarising the work completed against the Integrated Assurance Plan. This information, together with outputs from other assurance obtained or observed during the year, will be used to provide an overall opinion on the effectiveness of internal controls across TfL.

**List of appendices to this report:**

Appendix 1: Integrated Assurance Plan 2015/16

Appendix 2: Integrated Assurance Plan 2015/16 – Cyclical audit areas

**List of Background Papers:**

None

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Theme	Theme Description	Proposed Audits/Reviews	Assurance Function(s)	Business Area(s)
<b>TFL01 : Maintaining a long term strategic, balanced plan</b>				
Ticket revenue	Assurance over processes for ensuring that primary income is maximised.	Cash controls - new ticket machines (Fit for the Future); Revenue inspection controls over contactless ticketing.	Internal Audit	Rail & Underground
Sources of secondary income	Assurance over the robustness of budgets for secondary income, and the mechanisms for maximising and securing it now and in the future.	Procurement of Property Development Framework; Project Skyline; Procurement of the new advertising contract; Operation of the Earl's Court joint venture; Project management within Commercial Development; Financial modelling of property development schemes; Sponsorship	Internal Audit	Finance
Delivery of savings and efficiencies	Assurance over all aspects of the delivery of savings and efficiencies programmes.	Delivery of Efficiencies.	Internal Audit	Finance
Demand forecasting and contingency planning	Assurance over sources of demand forecasting data, used in development of the business plan, assumptions made, contingencies, flexibility to respond to unexpected changes in demand.	<i>Nothing planned for this theme.</i>		
Long term planning	Assurance over long-term planning activities and the risk that they will adversely impact delivery of the business plan.	Transport model development	Internal Audit	Planning
<b>TFL02 : People Risk (inc. Pensions - Industrial Relations)</b>				
Availability of resources	Assurance over TfL's processes for securing resources in an efficient and cost effective manner.	Resourcing the Investment Programme	Internal Audit	Pan-TfL
People management	Assurance over the efficiency and effectiveness of TfL's management of resources.	HR Documentation pan-TfL HR Preferred Suppliers; Performance & Development; Recruitment Processes; Managing Attendance; Resourcing Strategy; Demand Planning	Internal Audit	Pan-TfL HR
Organisational change	Assurance over the development and implementation of organisational changes	Development of the ST organisation	Internal Audit	Surface Transport
Industrial Relations	Assurance over risks associated with industrial relations issues	Employee Relations - timing and conduct of TU consultations	Internal Audit	Pan-TfL
Management of the Pension Fund	Assurance over the management of the TfL Pension Fund.	Pensioner Payroll; Receipt of Pension Payment	Internal Audit	Pension Fund
<b>TFL03 : Delivery of capital investment portfolio</b>				
Capital programme management	Assurance over the governance of the programme, the project delivery environment, and thematic issues applicable to the portfolio overall.	Change control in projects; Project cost estimating and budget approval; Impacts on the IP of shortage of staff with key skills  Effective use of Design Reviews in LU; Project handover from CPD to COO (aka project close-out); Implementation of the improvement programme within LU CPD; Use of lessons learned to inform future rail franchise transfers  Use of Pathway in ST; Gate & design reviews in ST; Project closure in ST; Project handover in ST; Impact of Permitting requirements on project delivery; Impact of Lane Rental on project delivery; Dependencies of ST IP on internal suppliers; Dependencies of ST IP on Specialist Services (particularly Recruitment and IM)	Internal Audit	Pan-TfL  Rail & Underground  Surface Transport
Project assurance	Assurance over individual projects within the portfolio linked to approvals.	Series of TfL Integrated Assurance Reviews and related work by IIPAG	Project Assurance	Pan-TfL
Procurement and contract management	Assurance over the processes for procurement of new contracts and for the effective management of contracts awarded.	Fraud Risk in projects and contracts  LoHAC works pipeline; Supply Chain reliability; Wrightbus Limited. Supply of New Routemaster - Purchase and Supply	Internal Audit	Rail & Underground Surface Transport
Delivery of reliable and safe assets	Assurance that key assets are designed and delivered in accordance with requirements	DLR Design Assurance; LU ATC Contract Assurance Arrangements; LU Quality Inspection and Change Control of Power Assets; LU Design Change Control; LU Technical Assurance Requirements; LU Plant Approval Process for Construction Sites (non-rail borne); LU Inspection and Test Plans Civils Projects; LU Management of Temporary Works - Civils; LU Croxley Link Civil Engineering Design and Co-ordination ; LU 09 and S7/8 stock maintenance handover;  Various quality audits	Internal Audit  CPD audit	Rail & Underground  Rail & Underground

Theme	Theme Description	Proposed Audits/Reviews	Assurance Function(s)	Business Area(s)
<b>TFL04 : Technology Risk</b>				
Ticketing systems failure	Assurance over resilience of ticketing systems.	<i>Nothing planned for this theme.</i>		
IT Systems, Networks and Infrastructure	Assurance over the availability and effective use of internal systems and processes to ensure efficient and effective business operations.	Security assessments of Surface Transport SCADA systems; Implementation of delivery projects in Surface Transport; Security, availability and resilience of Surface Transport critical applications  End User Computing (EUC); Transforming IM (TIM); Run Better Programme (RBP)  Implementation of new Pension Administration System	Internal Audit	Surface Transport  Finance  Pension Fund
Data and Infrastructure Security	Assurance over threats to security of TfL's data	Cyber Security - Identification and Mitigation of Risks  Security of Power Assets; Review of London Underground Security Programme (LUSP)  Security of data (including personal data) within Barclays Cycle Hire; Review of Congestion Charging logical and physical security arrangements; Security of Taxi & Private Hire physical data (including personal data)  Active Directory; Information Security Controls Framework (ISCF)  Security reviews of Oyster Contact Centre; and Travel Information Centres (TICs) focusing on security of personal data	Internal Audit	Pan-TfL  Rail & Underground  Surface Transport  Finance  Customer Experience, Marketing & Communications
<b>TFL05 : Disruption to quality of service</b>				
Management of disruption	Assurance over processes for minimising the impacts of disrupted services.	Incident Management - Planning & Management; Incident Management - Response and Recovery  London Streets Traffic Coordination Centre (LSTCC) Access Control Arrangements	Internal Audit	Pan-TfL  Surface Transport
Reliability	Assurance over activities to improve service reliability.	Multi-Modular Integrated Command & Control System (MICCS); Bus Priority Programme	Internal Audit	Surface Transport
Internal systems and processes	Assurance over the availability and effective use of internal systems and processes to ensure efficient and effective business operations.	Software Licencing - Product Specific (eg Oracle, IBM)  EOS - TPH Compliance; Bus accessibility; Information Management Service Model (IMSM) for supporting and managing Surface Transport applications  Portfolio Management; Management of IM NPL; Quality and Timeliness of IM Project Delivery; IM Change Management; IM Service Requests Management  Review of the IT Change Control Process (including TfL Online)	Internal Audit	Pan-TfL  Surface Transport  Finance  Customer Experience, Marketing & Communications
Assurance of Suppliers	Assurance that TfL's suppliers can be relied upon to provide the quality of goods and services that are required.	Procurement shared services  Supplier assurance within LU; Readiness for transfer of West Anglia services; Procurement of the new London Overground concession operator; RfL - CTOC mobilisation planning and contract management.; DLR - Closeout of Serco contract; Operation of the new DLR franchise; Trams - Management of fleet maintenance activities; Trams - Hand back of critical assets from the Systems Upgrades Project; LU Management of Contractors; LU On track Plant  Contract management within IM; IM small contracts / framework call offs  Audits of suppliers pre and on contract (risk-based)  Audits of Bus Operators  Audits of TfL Medical Assessment Suppliers  Audits of London Overground key suppliers  Audits of Track Protection Suppliers	Internal Audit    Internal Audit, LU CPD, LU COO, ST HSE Team, ST Buses  Surface Transport HSE Team  HSE Occupational Health Team  London Overground HSE and Engineers  LU Access Team	Pan-TfL  Rail & Underground  Finance  Pan-TfL  Surface Transport  Pan-TfL  Rail & Underground  Rail & Underground

Theme	Theme Description	Proposed Audits/Reviews	Assurance Function(s)	Business Area(s)
Asset Maintenance	Assurance over the continued maintenance of assets	LO Adverse weather preparedness; LU Wheel Set Management; LU Calibration of RS depot tools; LU RS Fracture Maps; LU Signal Changeover; LU REW Overhaul of signal components; LU Change to signal Maintenance regime; LU Signalling Competence in accordance with Institute of Registered Signalling Engineers (IRSE) requirements; Network Rail Maintenance of signals on the Wimbledon Branch; LU Automated Track Monitoring System (ATMS); LU Track Workshops Quality Management; BCV Track Maintenance; SSL Track Maintenance; JNP Track Maintenance; LU COO Engineering Change Control; LU Repeat Asset Failure Avoidance; Assurance of LU Maintenance; LU Materials Management; LU Communication Equipment Room Management; Stations Plant Register Process  Bus Infrastructure Asset Management	Internal Audit	Rail & Underground  Surface Transport
<b>TFL06: Targeting Continued Improvement</b>				
<i>Nothing planned specifically for this risk but some of the work planned for other risks will also provide assurance over this one.</i>				
<b>TFL07: Major / Catastrophic incident</b>				
HSE & incident management	Assurance over TfL's approach to health, safety, environment and incident management.	Major Incident Emergency Plans  Trams Line Maintenance Teams management of HSE; Bakerloo Line HSE Management; District Line HSE Management; Jubilee Line HSE Management; Fleet Central HSE Management (Hainault and Ruislip); Fleet Metropolitan HSE Management (Neasden); Signalling Central HSE Management; Signalling SSL North HSE Management; Signalling Piccadilly HSE Management; LU AP L&E Direct Labour Organisation HSE Management; LU Emergency Response Unit HSE Management; LU Power Operations HSE Management; LU Management of Sustainability and Environment in CPD projects; LU COO Emergency Planning; Preparedness for Night Tube - verification of change control; LU Compliance with Revised CDM Regulations; LU Control of Manual Handling; LU Control of Working with Electricity; LU Control of Working at Height; LU Control of Mobile Plant; LU Drug and Alcohol Testing; LU Risk from Falling Objects; LU use of SPCs in performing protection activities; LU Management of Occupational Health Risks; LU HSE Incident action tracking; LU HSE Monitoring Regimes; Fit for future stations organisational change; LU Competence of Test Train Operators; LU Competence of Trainers; LU Availability of Competence Records;  LO Compliance with the revised CDM Regulations; Victoria Station Upgrade Handover of Assets; Signal audits (x2); DLR Safety Management  Cycling/Pedestrian/Motorcycling safety; London Bus Operations Ltd HSE Management; Victoria Coach Station HSE Management; ST Safety Organisation Arrangements; ST Contract Procurement - Safety Evaluation; ST control of environmental risk from projects  Audits of environmental compliance  DLR annual safety management audit  Safety Management System Compliance Audits	Internal Audit              LU Environment Team  DLR Externally Procured review  Surface Transport HSE Team	Pan-TfL  Rail & Underground             Surface Transport  Rail & Underground  Surface Transport
Insider Threat	Assurance over the security risk posed to TfL from people	Review of Security Policies	Internal Audit	Pan-TfL
Physical security	Assurance over the security risk posed to TfL's assets	Security of Stratford Market Depot	Internal Audit	Rail & Underground
<b>Financial and Governance Controls</b>				
Corporate Governance	Assurance over TfL's corporate governance.	DRAACT Process  Preparations for Mayoral Election  Standing Orders; Freedom of Information; Data Protection; Legal Compliance	Internal Audit	Rail & Underground  Customer Experience, Marketing & Communications  General Counsel

Theme	Theme Description	Proposed Audits/Reviews	Assurance Function(s)	Business Area(s)
Financial controls	Assurance over TfL's core financial controls to ensure that they are efficient and effective, and compliant with statutory requirements.	Controls over Project Spend; Outsourced finance systems  Fixed Asset registers - LU; Cash forecasting on major projects; Pool Cars; Uniforms  Taxi and Private Hire - Licensing; Taxi and Private Hire - Financial Controls healthcheck; Road Space Access  Payment Card Industry Data Security Standards (PCI DSS) Compliance; Insurance Claims against TfL; Completeness of Property Asset Register; Financial Controls in Commercial Development; Oracle financial controls and supporting systems; General Ledger; Group Treasury; Leases in Operational Contracts; Business Expenses and Purchasing Cards; Crossrail SAP Systems; Bailiffs; Build a Better Finance	Internal Audit	Pan-TfL  Rail & Underground  Surface Transport  Finance
<b>London Transport Museum</b>				
London Transport Museum		LTM IT Governance and Process Review; Security at LTM; Follow up work on previously agreed actions; Grant Funding; Youth Travel Ambassador Programme.	Internal Audit	LT Museum
<b>Crossrail</b>				
Finance and Fraud	Assurance over CRL's financial and anti-fraud controls to ensure that they are efficient and effective, and compliant with statutory requirements.	Management of the Estimated Cost of Completion; Fraud audits/awareness; Urban Realm funding and Implementation; Whole Life Costing; Crossrail Complaints Commissioner Accounts; DLR apportionment of costs	Internal Audit	Crossrail
Commercial Assurance	Assurance over the processes for procurement of new contracts and for the effective management of contracts awarded.	Commercial Settlement Management and Management of Disputes; Management of Contract close-out; Management of Crossrail Commercial Exposure and Contractor Earned Value; Agreements Management process	Internal Audit	Crossrail
Technical Assurance	Assurance over the operation of technical assurance processes.	Signalling system design process; Document control and management at RfL; Rolling Stock Assurance; Operational interface management by the Infrastructure Managers; RAM Plan performance management; Change Management of Contractor Designs and the Gates Process; Design integration and interface management for Network Rail (NR) and Rail for London (RfL); Materials Compliance; Engineering Safety Management; Testing and Commissioning Strategy; NEC Supervisor responsibilities and performance; Stations Asset Maintenance; Completion Certification; Handover Strategy	Internal Audit & Crossrail Audit	Crossrail
Programme Management	Assurance over the governance of the Crossrail programme, and the project delivery environment.	Schedule Management; Management of staged openings; Corporate reporting structure in relation to operational safety	Internal Audit & Crossrail Audit	Crossrail
IT and Security	Assurance over the business and security risk posed to CRL from people and systems.	Physical site security; Digital Railway application for Infrastructure Managers; the Configuration Management Database; Fujitsu reporting and trend analysis; and Fujitsu resourcing	Internal Audit	Crossrail
Safety and Environment	Assurance over day to day compliance with health, safety and environment standards, processes, procedures, etc.	Environmental Manual and Environmental Procedures; Management of CDM; Environmental Data Handling; and Environmental Management within Facility Management and IT	Internal Audit & Crossrail Audit	Crossrail
Quality Management	Assurance over the availability and effective use of internal management systems to ensure efficient and effective business operations.	Crossrail Management System and Document Control; Quality of information on eB / CARE; Legacy management	Internal Audit & Crossrail Audit	Crossrail
People	Assurance over the efficiency and effectiveness of CRL's management of resources.	Management of the Transition process; Recruitment processes and staff and knowledge retention; and Constructing Better Health	Internal Audit	Crossrail
Contractor Quality, Environmental, and Health and Safety, including Contractor management	Assurance over contractors' day to day compliance with health, safety and environment standards, processes, procedures, etc.	A programme of over 200 audits of Quality, Environmental, Occupational Health, and Safety process controls at contractors.	Crossrail Audit	Crossrail

## Integrated Assurance Plan 2015/16 – Cyclical audit areas

	2014/15 Actual	2015/16 Plan	2016/17 (Indicative)	2017/18 (Indicative)
<b>CORE FINANCIAL CONTROLS</b>				
<b>Procure to Pay/ Accounts Payable/ Receivable</b>	Accounts receivable	SAP data interrogations	Procure to pay/ Accounts payable  SAP data interrogations	Accounts receivable  SAP data interrogations
<b>Payroll</b>	Payroll controls (including starters)  SAP data interrogations	SAP data interrogations	SAP data interrogations	Payroll controls  SAP data interrogations
<b>Fixed Assets</b>		R&U fixed asset registers	Fixed asset controls	
<b>Cash</b>	Supplier bank accounts	Treasury controls  Cash forecasting	Supplier bank accounts	
<b>Revenue</b>	Operation of contactless payment	Oyster and contactless system – IT controls  Revenue inspection – controls over contactless ticketing	Ticket revenue systems (including contactless)- reconciliation controls  Revenue protection activities	Oyster and contactless system – IT controls



	2014/15 Actual	2015/16 Plan	2016/17 (Indicative)	2017/18 (Indicative)
<b>General Accounting/ Sundry</b>	Project accounting for a sample of major projects  Victoria Coach Station healthcheck  London River Services healthcheck  LBSL healthcheck  VAT	TPH financial controls  General ledger controls  Controls over project spend	Management accounting  Dial A Ride healthcheck  Bank reconciliations	VCS healthcheck  LRS healthcheck
<b>'Hygiene' Audits</b>	Movers/ leavers  Staff and Nominee travel cards  Declarations of interest	Business expenses and purchasing cards  Pool cars	Make a Difference Scheme  Mobile phones and portable devices  Gifts and hospitality	Movers/ leavers  Staff and Nominee travel cards  Declarations of interest
<b>GOVERNANCE</b>				
<b>Risk Management</b>	Risk management – Pan TfL including control self assurance  Risk management – Support Services		Risk management – Rail and Underground  Risk management – Surface Transport	Risk management – Pan TfL  Risk management – Support Services

	2014/15 Actual	2015/16 Plan	2016/17 (Indicative)	2017/18 (Indicative)
<b>Legal/ statutory compliance</b>		Freedom of Information  Data Protection  Legal compliance	Bribery Act  Transparency	Governance and administration of subsidiaries
<b>Internal Governance</b>	TfL Management System  Procurement authorities	Standing orders/ delegated authorities	Policy management	TfL Management System
<b>HUMAN RESOURCES</b>				
<b>Core HR Processes</b>	Graduate scheme  Equality and Inclusion	Resourcing strategy  Demand management  Recruitment process  Managing attendance  Performance management	Non-permanent labour  Staff induction	Equality and Inclusion  Learning and Development
<b>INFORMATION MANAGEMENT</b>				
<b>Information Security</b>	Cyber security  PCI DSS	Cyber security  PCI DSS	Cyber security  PCI DSS	Cyber security  PCI DSS

	<b>2014/15 Actual</b>	<b>2015/16 Plan</b>	<b>2016/17 (Indicative)</b>	<b>2017/18 (Indicative)</b>
	<p>Information Security Model Third Party Access to SAP Systems</p> <p>Data Centre Management (including Virtualisation)</p>	<p>User Access Controls – Active Directory Review of IM Security Policies and Procedures</p> <p>Information Security Model</p>	<p>Network Perimeter Security User Active Controls – Unix</p> <p>Security of Wireless Networks</p> <p>SAP User Access Controls</p>	<p>Security of Mobile Devices Information Security Model</p>
<b>General IM Processes and Controls</b>	<p>Framework for the provision of enterprise architecture services</p> <p>Business relationship management</p>	<p>Change management process</p> <p>Incident and problem management</p> <p>Management of IM suppliers</p> <p>Back-up and disaster recovery</p> <p>Software licensing</p>	<p>Review of System Development Life Cycle (SDLC)</p> <p>IM resilience</p> <p>Service delivery</p> <p>Customer Experience IM processes</p> <p>IM assets inventory management</p>	<p>Software licensing</p> <p>Business relationship management</p> <p>Change management process</p>