Audit and Assurance Committee

Date: 8 March 2016

Item: Integrated Assurance Plan 2016/17

This paper will be considered in public

1 Summary

1.1 The purpose of this paper is to present the 2016/17 Integrated Assurance Plan to the 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, 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 2016/17 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 2016/17. Historically, Crossrail has had its own audit team, albeit managed by the TfL Internal Audit Senior Audit Manager – Crossrail, carrying out audits of compliance with the Crossrail management system. However, on 1 March 2016 this team transferred to TfL. This means that all Crossrail audit activity is now carried out by TfL Internal Audit, other than some safety and environmental auditors who remain 'embedded' in Crossrail, but whose work is directed by the Senior Audit Manager – Crossrail. The Crossrail audit plan, which is incorporated into this Integrated Assurance Plan, was scheduled to be approved by its Audit Committee on 7 March 2016.

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 15 March 2016.

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 have also shared the Plan with the external auditors, 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 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; and asset engineers who audit key suppliers against maintenance quality standards. 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 has established a 'Community of Auditors' bringing together staff from across TfL who carry out audits as part of their jobs. During 2016/17 Internal Audit will work with this group to further integrate the delivery of assurance by promoting a common set of standards for the conduct of audits across TfL.

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 are likely to 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 Commercial Development Directorate is taking forward a significant programme of work to grow TfL's income from secondary revenue streams, which is critical to delivery of TfL's Business Plan. In recognition of this we have recently appointed a dedicated Audit Manager – Commercial Development, who will lead our audit effort in this area. The Commercial Development audit work will be a significant element of the plan and will review aspects of the general Commercial Development governance arrangements, as well as a number of individual work streams in more detail, including the sponsorship programme, advertising, and property developments. The latter will cover management of the overall programme of property developments, individual competitions for new JVs, and operation of the existing Earls Court JV.

5.8 We will carry out further audit work around TfL's efficiencies programme. The precise scope will be agreed with the business in order to ensure it supports and complements the work of PwC who have been engaged under a three year contract to provide assurance over the programme's deliverability.

5.9 We will also review elements of controls over ticketing revenue, including controls over completeness and accuracy, and over refunds, and concessionary travel arrangements.

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 Several of the audits against this risk focus on elements of personnel security. These include a review of TfL's security culture and an audit of employment based security screening. We will also review provision of Occupational Health services across TfL.

5.12 Other audits will cover recruitment of non-permanent labour (NPL) including use of personal service companies; grievance policy and associated procedures; movers and leavers processes; and staff induction.

TfL03: Delivery of Capital Investment Portfolio

5.13 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.

5.14 The Project Assurance team within Finance will lead a comprehensive programme of around 120 Integrated Assurance Reviews (IARs), with input from the Independent Investment Programme Advisory Group (IIPAG), to provide assurance over project delivery. The IARs have historically been carried out by external consultancies, but over the past few years there has been increasing use of peer reviews. More recently the Project Assurance Team has been increasing its capacity and capability, so that increasingly IARs will be delivered in-house with external experts providing support rather than leading the reviews.

5.15 TfL is undergoing further developments in its methodology for and assurance of projects. We will carry out a suite of audit and consultancy assignments in consultation with the TfL Programme Management office to complement these, to help ensure that they are optimally effective. Furthermore, the organisation is seeking to improve the process for learning lessons from both successes and issues experienced with projects, and we have a key role to play in encouraging that, both by reviewing lessons-learned processes, and where appropriate by taking an active role in lessons-learned reviews.

5.16 TfL is also seeking to improve its commercial management arrangements. We will work closely with both of the main commercial functions to provide assistance to and assurance over these initiatives. For example, we plan to audit delivery of the Systems and People work streams of the Commercial Capability Programme, and to review aspects of project cost estimating. However, the precise plan of audits in this area will depend upon the outcomes of the Business and Finance Review, and the Commercial Review.

5.17 In both of these areas, we will consider the extent to which TfL's organisational culture impacts upon the effectiveness of risk management and control.

5.18 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 carry out some more general work around TfL's procurement processes. This will include a review across a range of procurements to ensure there is proper maintenance of documentation in line with regulatory and TfL requirements; and a review of controls over the use of single sourcing.

5.19 We will also provide assurance by reviewing the safety and technical assurance regimes applicable to TfL projects and programmes, including capturing lessons learnt; documenting project work information; project requirements; and approval regimes for plant and track clearances. Specific audits will review design assurance for DLR, signal assurance within the '4 Lines Modernisation' programme, and projects that have additional power requirements.

TfL04: Technology Risk

5.20 Ensuring effective and efficient management of Technology and Information Security risks forms a significant element of the audit plan. In the last twelve months, organisational change has seen a greater alignment between the pan-

TfL Technology and Data operations than in previous years. The plan seeks to reflect these operational changes with a renewed focus on Technology, Cyber Security and Data risks.

5.21 We will continue to work with the Chief Information Security Officer, Information Governance and other relevant stakeholders to provide assurance that the required processes, procedures and controls to manage the risks associated with data security have been implemented and are working effectively. There will be a significant programme of audits providing assurance that TfL data is being managed securely throughout the information lifecycle. These audits will cover both data held directly by TfL and by third parties on TfL's behalf and will cover controls to prevent data loss, as well as ensuring that effective response plans are in place should a data security incident arise.

5.22 Time has been allocated in the plan for reviews of major IM programmes of work including End User Computing – mobile and Service Continuity under what was the 'Transforming IM' Programme.

5.23 We will also provide assurance in respect of other aspects of information security, including audits of SCADA and Connect 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

5.24 We will be undertaking a number of cyclical audits across the business relating to basic IT network controls with a particular emphasis on providing assurance that risks to the underlying network infrastructure are effectively managed.

5.25 We will be undertaking a major review of the pan-TfL security incident management process looking at planning and management, and response and recovery as the two main themes.

5.26 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.

5.27 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 fleet, track, signals, power and operational infrastructure, focussing on risks to reliability and incidents that may cause suspension of services. Our plan is developed in collaboration with local asset assurance engineers.

5.28 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.

5.29 Specific audits will address the management of assets to mitigate obsolescence risk, the use of trend analysis to prevent repeat asset failure and a suite of audits to provide assurance of engineering quality during the overhaul of key operational assets.

TfL06: Targeting Continued Improvement

5.30 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

5.31 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.

5.32 The three-year rolling programme of compliance audits against HSE regulation and the TfL management system continues into its second year, following positive feedback from its introduction last year. Other audits will focus on themes including: Occupational Health, specifically display screen equipment; stress reduction; the new Construction (Design and Management) Regulations 2015; and changes to track access arrangements for maintenance and project teams. Topic specific audits will include environmental risk management, working at height and assurance work to support the HSE Transformation Programme.

Financial and Governance Controls

5.33 Following recent work on Standing Orders we plan to review the application of the delegated authorities contained therein. We will also provide assurance of the controls over the collection and publication of data under the local governance transparency code.

5.34 We will audit the revised strategic risk management processes to provide assurance that they are operating effectively.

5.35 We will also audit the governance structures in place within Rail and Underground and within Enforcement and On-Street (EoS) following recent changes in those areas.

5.36 As always, the assurance plan includes a number of audits of core financial processes, which this year will include the controls over fixed assets and Group Treasury. We will also review financial and business controls in relation to Congestion Charging, Road User Charging and Dial a Ride. We will review progress with the Build a Better Finance (BBF) project, focusing on the transition to business as usual to provide assurance that the project's objectives are being delivered.

5.37 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 2016/17, this will include reviews of gifts and hospitality and of 'Make a Difference Instant' awards.

5.38 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

5.39 The Crossrail Project is continuing to transition to station 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, and the specialisms required of auditors to conduct the Audit Plan.

5.40 The audit plan for 2016/17 reflects the changing risk profile. We will continue to audit the management of project costs and schedule, but will have a stronger focus on technical aspects of the project over the coming twelve months.

5.41 The focus of the technical audits will be on the system wide aspects of the Project, including signalling, communications and track work. There will also be a number of audits related to the phased transition to an operational railway, including testing and commissioning, engineering safety management and the Regulator approvals process.

5.42 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 professional 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.

(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.

(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 and 2015/16, the audits incorporated in this 2016/17 plan, and indicative audits for 2017/18.

7 Resources

7.1 Delivery of the Integrated Assurance Plan requires 12,760 person days across the assurance functions involved. This compares to 11,254 planned days in the 2015/16 plan. The primary reason for this change is the increased Project Assurance resource that will be available in 2016/17, as set out in paragraph 7.9. 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	2015/16 Total Days
TfL01: Maintaining a long term strategic, balanced plan	0	0	25	485	0	0	0	510	443
TfL02: People risk	126	0	0	174	0	0	70	370	430
TfL03: Delivery of capital investment portfolio	4,205	456	0	25	0	0	0	4,686	2,778
TfL04: Technology risk	260	190	30	582	0	0	0	1,062	670
TfL05: Disruption to Quality of Service	62	1,469	395	139	0	0	0	2,065	2,206
TfL06: Targeting continued improvement	0	0	0	0	0	0	0	0	0
TfL07: Major/ catastrophic incident	146	1,138	180	80	0	0	0	1,544	1,380
Financial and Governance Controls	0	35	132	349	0	0	0	516	861
Crossrail	0	0	0	0	1,857	0	0	1,857	2,356
Other	0	0	0	0	0	150	0	150	150
Total Days	**4,799**	**3,288**	**762**	**1,834**	**1,857**	**150**	**70**	**12,760**	
2015/16 Total Days	*2,316*	*3,407*	*1,292*	*1,706*	*2,356*	*130*	*47*	*11,254*	

Internal Audit

7.3 Internal Audit's total budgeted headcount for 2016/17 is 64, including the six staff transferred from Crossrail in March 2016. 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 Institute of Internal Auditors 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 2015/16 and it is not currently anticipated that the contract will be used in 2016/17.

7.5 The Internal Audit element of the 2015/16 plan requires 7,742 days (2015/16: 6,737 days). The increase in the number of days is due to the transfer of staff from Crossrail.

HSE and Technical

7.6 In total, 1,550 days (2015/16: 2,767 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 This total includes 650 days in relation to Occupational Health, Safety and Environmental audits carried out by staff who have been retained in Crossrail, although their work continues to be overseen by Internal Audit's Senior Audit Manager – Crossrail.

7.8 The total also includes an estimated 900 days (2015/16: 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 3,500 days (2015/16: 1,750 days), representing the work of approximately 16 heads (2015/16: 8 heads) within the Project Assurance team carrying out IAR reviews. This increase results from a review of resource requirements following the transfer of Project Assurance into Finance during 2015. 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 (510 days budgeted for 2016/17 (2015/16: 450 days)).

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 2016/17
Appendix 2: Integrated Assurance Plan 2016/17 – Cyclical audit areas

List of Background Papers:

None

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IAP Theme	Audit Title	Audit Objective	Business Area
TfL01: Maintaining a long term, strategic balanced plan			
Delivery of savings and efficiencies	Efficiencies	Assurance work in respect of TfL's ongoing savings and efficiencies programme in liaison with external consultants PwC. Scope of work to be agreed	Finance
Sources of secondary income	Forecasting and financial reporting – data validation	To review the robustness of Commercial Development's forecasting and financial reporting arrangements, including data validation	Commercial Development
	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.	
	Management of the programme of JV property developments	To review management of the programme of property developments, including prioritisation of sites.	
	Operation of Advertising Partnerships	To provide assurance over the mobilisation of the new advertising contract, and the exiting of the current arrangements.	
	Operation of Earls Court JV	To provide assurance over management of the risks to TfL and the JV Board arising from the property development project.	
	Operation of JV framework	To provide assurance that the new property development framework is being used efficiently and effectively. Specific scope areas will include: > First mini competition call off from Property Partnerships (Parsons Green) in March. Value £50m > 3rd or 4th mini-competition from the Property Partnerships framework in October – Value £30- £70m.	
	Partnership/ Sponsorship Marketing	To review arrangements for identifying and exploiting partnership/ sponsorship marketing opportunities	
	Project and Programme Management in Commercial Development	A general audit of project and programme management processes, following on from similar work in 2015/16.	
	Property Management including vetting of tenants	To review controls over property management, including the vetting ot tenants	
	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.	
	Investments appraisal	To assess the efficiency and effectiveness of processes and tools used in the development of cost/benefit appraisals used in scheme selection and prioritisation.	
	Festival Pier (Apple Store) (commercial)	A review of TfL's involvement in this project, to provide assurance that associated risks (particularly reputational) are properly managed.	
	Exterion Connectivity Services Contract	Management request to carry out a lessons learnt review following issues identified with this contract	
	Procurement and management of commercial advisors by Commercial Development	To provide assurance that appropriate controls are in place for the appointment and management of advisers, to ensure that advice received is of a high quality and not compromised by conflicts of interest.	
	Bus Shelter Advertising concession	Management request to audit the systems and processes JCDecaux have in place and to validate the gross revenue share, to ascertain the figures are correct and provide an accurate reflection of the revenue derived.	Surface Transport
Ticket revenue	Concessionary Travel	To provide assurance that effective controls are operating over the approvals and maintenance of concessionary travel arrangements.	Customer Experience, Marketing & Communications
	Refunds	To review controls over issue of refunds to customers	
	Ticketing revenue	A review of controls over the completeness and accuracy of ticket revenue - precise scope TBC	
TfL02: People Risk (Inc Pensions, IR)			
Availability of resources	Agency Temporary Workers	To provide assurance on the adequacy and effectiveness of controls in place over the recruitment and management of NPL, including use of personal service companies.	HR
People management	Personnel Security - Role based security screening	To evaluate the employment based security screening processes to provide assurance of effective design and operation	Pan-TfL
	Security Culture across TfL	To assess how deeply the security culture is embedded within TfL and what processes are in place to proactively understand, manage and develop a security culture	
	Make a Difference Instant Awards	To provide assurance over the adequacy and effectiveness of the controls over the ordering, security, issuing, recording and monitoring of Instant Awards.	
	Occupational Health (OH)	To review provision of OH services across TfL including compliance with SLAs.	
	Grievance Policy & Procedures	To provide assurance on the adequacy and effectiveness of controls in place over the grievance policy and associated procedures.	HR
	Movers/ Leavers	To provide assurance on the adequacy and effectiveness of controls in place over staff leaving or moving within the organisation. The audit will follow up on the poorly controlled audit report issued in August 2015.	
	Staff Induction Process	To provide assurance on the adequacy and effectiveness of controls in place over the staff induction process.	
Management of the Pension Fund	Auto Enrolment	To provide assurance on the adequacy and effectiveness of controls in place over the auto enrollment process following changes to legislation	Pensions
	Data Access/Security	To provide assurance on the adequacy and effectiveness of controls in place over pension data access and security.	
	Profund Systems Ltd	To provide assurance on the adequacy and effectiveness of controls in place over the implementation of the new pensions administration system.	
TfL03: Delivery of Capital Investment Portfolio			
Capital programme management	Management requests associated with projects	An allowance of audit time to carry out independent investigations of project issues as and when they arise, to ensure that root causes are understood, and that lessons are learned and promulgated.	Pan-TfL
	Series of TfL Integrated Assurance Reviews and related work by IIPAG **[Work carried out by Project Assurance and IIPAG]**	Risk based programme of Integrated Assurance Reviews (IARs) of projects caried out the TfL Project Assurance team, supported by IIPAG where appropriate,as part of the Pathway Project Management Framework.	

	Various assignments in consultation/ collaboration with TfL PMO and Project Assurance	Internal Audit is liaising with the TfL PMO and Project Assurance over potential collaborative working during the the year. The scope of such work is still to be decided, but possible areas for review include: Project estimating, resourcing of projects, Value Management in the IP, Benefits realisation reviews, cost control in the IP, handover of projects from Group Planning to delivery (including HS2), peer reviews with Project Assurance, Pathway refresh.	
Procurement and contract management	Retention of procurement records	A review of a sample of procurements to ensure that all necessary documentation is in place and available, in accordance with regulatory and TfL requirements.	Pan-TfL
	Real time procurement audits	Audits of specific higher risk procurement tender processes to ensure these are carried out in accordance with TfL and regulatory requirements. Specific procurements to be determined.	
	Security and business continuity in projects	A review of a sample of projects to assess the extent to which TfL's security and business continuity requirements are met.	
	Single Sourcing in procurement	To review controls over the use of single sourcing	
	MTR Crossrail Commercial Management by RfL	To review the effectiveness of the management of the MTR Crossrail contract by RfL	Rail & Underground
	Various assignments in consultation/collaboration with TfL and R&U Commercial	Internal Audit is liaising with the TfL Commercial and R&U Commercial over potential collaborative working during the the year. The scope of such work is still to be decided, but possible areas for review include: Use of refreshed Commercial Toolkit, Effectiveness of target cost contracting, Commercial Systems project, Commercial People project, Peer reviews with TfL Commercial.	Finance
	Commercial Management within Planning	A general audit of commercial management processes within Planning to provide assurance over compliance with TfL policies and good practice.	Planning
Delivery of reliable and safe assets	TfL Lesson Learned Process	Provide assurance that previous audit actions to improve implementation of the process have been undertaken and embedded	Pan-TfL
	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	Rail & Underground
	LU Plant Approval Process for Construction Sites (non-rail borne)	To provide assurance that non-rail track plant on construction sites is subject to suitable approval processes before it is used.	
	Management of LU Land and Property and interface with third parties	To assess the adequacy of arrangements regarding the management of LU Land and Property including the interface with third parties	
	LU CPD Track Clearances	Provide assurance that controls are in place over designs to ensure that track clearances are maintained	
	LU Four Lines Modernisation Project Signalling	Detailed scope to be determined based on local surveillance results etc.	
	LU CPD - Load Application Process	To provide assurance that the Power Load Application process is being followed by LU Projects and is effective in ensuring the integrity of the power system	
	LU Project Specific Works Information Documents	To provide assurance over the preparation, checking and approval of Works Information documents prior to sending to contractors	
	LU Project Requirements	To provide assurance that Project Requirements are adequately identified and are suitable and sufficient	
	Various quality audits **[Work carried out by the Embedded LU CPD team]**	To carry out a programme of quality audits, with specific scopes to be confirmed.	

TfL04: Technology Risk (cyber security)

Information Security & Data Privacy	PCI-DSS - Non compliant areas	To assess the ongoing work to implement effective controls over payment card data in business areas know to be non- compliant (including DLR, EOS and LTM)	Pan TfL
	Contract Management - Technology/ Information Security Clauses	To review the contractual mechanisms used to ensure that TfL's suppliers adequately meet TfL's security requirements.	
	Controls over disclosure of personal information to external agencies	To evaluate the controls in place over disclosure to external agencies (including police and security services) concerning staff and customers	
	Cloud Computing	To evaluate the processes and relationships governing TfL's pan-TfL response to cloud computing strategy, implementation and governance.	
	Reviews of data security, including incident response arrangements, in selected high risk areas	A programme of reviews of controls over security of sensitive data, including incident response arrangements, in some high risk areas. Specific areas to be determined.	
	Data Privacy & Protection - CCTV	To provide assurance over the controls over the use of CCTV footage and the associated data.	
	Data Loss Prevention Control Tools	To audit the controls in place and the tools used within TfL to manage the security of sensitive data at all stages of the information cycle	Customer Experience, Marketing & Communications
	Access to Central Journey Data	To review the effectiveness of the controls over the various systems/applications providing access to Central Journey Data	
	Data Privacy & Protection - Marketing Data	To evaluate the data security governance and control arrangements operated by Dawley's (or alternative 3rd party provider)	
	Data Protection and Security	For a sample of areas across TfL review the processes that have been established to classify data and protect it in line with the classification. This follows on from work on data protection controls carried out within Information Governance in 2015/16	General Counsel/ Pan-TfL
IT Project Assurance	Project Governance & Delivery	To evaluate the operating effectiveness of governance processess driving project and programme management decision making in relation to IT projects	Customer Experience, Marketing & Communications
	Third Party Project Delivery Model	Assess process design and effectiveness to enable project delivery in most cost effective and efficient manner	
IT Systems Network and Infrastructure	Infrastructure Control audits	A programme of audits to assess the design and effectiveness of the controls over key elements of TfL's IT Infrastructure, including: Wi-fi networks, Datacentres and Telephony.	Pan-TfL
	Patch Management	To assess the effectiveness of the patch management programme for critical parts of the IT infrastructure.	
	IT Disaster Recovery: Service Continuity Management	To assess TfL's arrangements to effectively recover key systems and resume regular system performance in the event of disruption or disaster	
	Threat and vulnerability management programme assessment	To evaluate the threat and vulnerability management (TVM) programme, possibly incorporating a risk based attack and penetration (A&P) review to assess actual ability to detect and respond to threats	

	Strategic Datacentre Rationalisation	To provide assurance over the process for assessing and managing risks associated with the Datacentre Technology refresh, and evaluate actions taken to mitigate these risks	
	End User Computing: Desktop Futures	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	
	Remote Access Control (T-SNAP)	To provide assurance over the controls over remote access to TfL's networks	
	Security Operations Centre (SOC) - Model Design	To evaluate the design of SOC model to assess whether it is designed appropriately to meet strategic objectives and industry best practice.	
	IM Strategic Framework Agreements	To assess the framework and processes embedded within the function to assess and manage risks. Evaluate the actions taken to mitigate the risks and the level of accountability within the process	
	Connect Network Security	To provide assurance over controls over Connect network security	Rail & Underground
	Supervisory Control and Data Acquisition (SCADA) Network Security	Provide assurance over SCADA network security - scope to be agreed	
	Engineering Operational Assets: Application Control Review	To provide assurance that the application controls over engineering operational assets are operating effectively as designed	
	Engineering Network Control: Neasden Depot Signalling	To provide assurance that the network security process and controls in respect of Neasden Depot signalling are operating effectively as designed	

TfL05: Disruption to Quality of Service			
Assurance of Suppliers	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 **[Work performed by Embedded auditors]**	Various audits to provide assurance that TfL's suppliers can be relied upon to provide the quality of goods and services that are required.	Pan-TfL
	Mobilisation of the new London Overground Operator	Follow on from 2015/16 real time audit of London Overground operator procurement, to provide assurance over transition of service provision.	Rail & Underground
	Trams - Bogie Repair	To provide assurance that the new supplier for bogie overhaul has the appropriate competence, capability and quality management systems to undertake this work	
	Trams - Management of Power Assets	To provide assurance that the new power supplier HAVMS is appropriately managing and maintaining the Tram Power assets	
	Supplier Assurance	A series of reviews to provide assurance of supplier performance where concern has been expressed by Commercial, Engineers or where the supplier is new to TfL	
	Contractual relationships with BTP and Met Police	To review the controls governing TfL's relationship with BTP and the Met Police	Rail & Underground/ Surface Transport
	Commercial Management of IM Suppliers (TIM)	A general audit of commercial management of IM suppliers to provide assurance over compliance with TfL policies and good practice.	Customer Experience, Marketing & Communications
Internal systems and processes	IT Software Asset Management	To assess the framework and processes in place to assess and manage risks associated with software licensing	Pan-TfL
	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	Surface Transport
	Topographical Testing	To provide assurance over the revised process and controls around topographical testing.	
	Facilities Management	To provide assurance over the effectiveness of the process and controls over building facilities management	Finance
	Infrastructure Service Delivery	To assess the effectiveness of internal processes and the impact on business operations	Customer Experience, Marketing & Communications
	IM Service Delivery: Major Incident Management	To provide assurance on the processess governing IM Service Delivery in case of a major incident	
Crossrail Transition	Preparation for transition of Crossrail to TfL	Programme of audits in respect of preparations for transition of Crossrail to TfL. Scope to be confirmed, but potential audits include Asset Information Management, Datacentre migration, Programme management strategic alignment, Crossrail Reliability, Availability and Maintainability Plan	Rail & Underground
Asset Management	DLR Adverse Weather Preparedness	To provide assurance that adequate arrangements and systems are in place to ensure risk from seasonal weather has been mitigated	Rail & Underground
	Assurance of DLR Operations	To provide assurance that adequate arrangements exist to ensure the operability of new or altered DLR assets	
	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 - Management of the Line Asset and Network Plan (LANP)	To provide assurance that the LANP is effectively and accurately prepared and managed	
	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 - Obsolescence of Assets	To provide assurance that the risk from obsolete assets and the impact on operation of the railway is mitigated as ALARP	
	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 - NR Maintenance of signals on the Wimbledon Branch	Provide assurance that NR is appropriately maintaining the Wimbledon Branch of the District line sufficient to manage safety and reliability.	
	LU Operations - Change to Signal maintenance regime	To ascertain the level of compliance against the requirements of BCV/SSL Extension of Signal Maintenance – Safety Case (SRX97336) issue 3.5 and provide assurance that activities and processes are in place to ensure continued adherence.	
	LU Operations Communication and Information (C&I) asset maintenance regime	To assess the implementation and effectiveness of the maintenance regime for C&I Systems	

	LU Operations - Signal Maintenance in BCV, JNP and SSL	Three audits to provide assurance over specific elements of signal maintenance controls, covering calibrated tools and equipment, surveillance activities and management of wire degradation.	
	LU Operations - Introduction of new signalling products and management of associated special conditions	To provide assurance that new and novel signalling products are appropriately implemented along with specific control conditions required.	
	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	
	Track Maintenance in BCV, JNP and SSL	Three audits 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).	
	LU Operations Automatic Track Monitoring System	Provide assurance that the processes for fault monitoring and rectification are in line with standard S1159	
	LU Operations - Piccadilly Line fleet Life Extension project	To provide assurance that suitable quality processes and competencies are in place to ensure bogie refurbishment and vehicle floor upgrade meet requirements	
	LU Operations - Fleet Central Line Heavy Overhaul Programme lift	To review assurance arrangements and processes in place to manage the project work stream	
	LU Operations - Fleet Management of safety issues	To provide assurance that current processes are being adhered to for 'unusual noise under car', safety irregularities (brake and doors) and notifiables	
	LU Operations - Fleet Decommissioning of LITE defects database for rolling stock	To ensure robust processes are put in place and business as usual can continue	
	LU Operations - Fleet Calibration process	To assess the process in place to manage and control the calibration of tools to be used on rolling stock, including processes to add and remove from the asset equipment section of Ellipse.	
	LU Operations - Review of Change to Rolling stock process	To review the effectiveness of the new process to ensure it is implemented and having the desired improvements	
	Wheel set Management	To provide assurance that adequate systems are in place to monitor the condition of wheel sets.	
	Management of Power Technical Limitations	To provide assurance that Technical Limitations are process managed to avoid impacts on the operational railway	
	LU Operations - Management of Off Track Drainage Systems	To review the extent to which COO (AP) is complying with the relevant engineering standards for the management of the Off-Track Drainage	
	Maintenance of Air Handling Units for Critical Rooms	Provide assurance that air handling units for Communication Equpiment Rooms and Signal Equipment Rooms are subject to adequate maintenance to prevent failure and impacts on the operational railway	
	LU Operations - Inspections of LU Premises	To follow up on actions taken following the previous audit in this area to ensure they are embedded and working.	
	Completion of Station Electrical Testing	To ascertain the levels of completion of station statutory electrical testing and reasons for any non-completion	
	ST Bus Infrastructure Asset Management	To provide assurance that bus infrastructure assets are being managed in accordance with ISO 55000 principles	Surface Transport

TfL06: Targeting Continued Improvement			
Nothing planned specifically for this risk, but some of the work planned for other risks will also provide assurance over this one.			

TfL 07: Major/ Catastrophic Incident			
Physical security	R&U High Risk Station Security Reviews	Thematic review of the protective security controls in place at high risk stations to assess whether controls are operating effectively	Rail & Underground
	ST High Risk Security Reviews	Thematic review of the protective security controls in place at high risk sites to assess whether controls are operating effectively	Surface Transport
	Contract Management of Building Security Framework	To provide assurance that commercial arrangements in place to provide building security are efficient and effective.	Finance
HSE and Incident Management	Security Incident Management Framework	To provide assurance on the design and operating effectiveness of the Incident Management Lifecycle	Pan-TfL
	Business Continuity	To review the adequacy and effectiveness of the controls operating over the revised business continuity arrangements within TfL.	
	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	
	TfL Management of Risk from Display Screen Equipment	To assess the effectiveness of management arrangements for minimising the risk from DSE use and compliance with legislative requirements (DSE Regulations)	
	TfL Emissions from local generators	To provide assurance that the requirements from the new Non-Road Mobile Machinery regulations have been effectively implemented across TfL	
	Audits of environmental compliance, DLR annual safety management audit, Safety Management System Compliance Audits **[Work performed by embedded auditors]**	Assurance over TfL's approach to health, safety, environment and incident management.	
	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	Rail & Underground
	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.	
	Trams Rolling Stock HSE Management	To provide assurance that legislation is being complied with and HSE Management System requirements are understood and implemented	
	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 controls	
	R&U 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	
	R&U Management of Occupational Noise Risk	To assess the effectiveness of management arrangements for ensuring compliance with legislative requirements (Noise at Work Regulations) and minimise risk to employees	
	R&U HSE Transformation Project	To provide assurance in relation to the HSE transformation project. Scope to be agreed	
	LU Competence Requirements for undertaking civil engineering safety critical work	To review LU's compliance with Cat 1 standards in respect of competence requirements for undertaking civil engineering safety critical work	

		LU Operations - HSE Management	Rolling programme of 10 audits in different areas of LU operations to provide assurance that legislation is being complied with and HSE Management System requirements are understood and implemented	
		LU Operations Changes to Station Fire Precautions	To provide assurance that changes to station fire precautions are controlled adequately and in accordance with the revised standard issued in 2015	
		LU Operations Fit for the Future Stations - transfer of station HSE duties	To provide assurance that all HSE activities on stations have been effectively handed over and all key HSE activities are being completed.	
		LU Operations Fleet Competence Management	Assess implementation of Competence Management System in Fleet Asset area	
		LU Operations Lifts and Escalators Competence Management	Assess implementation of Competence Management System in Lifts & Escalators area	
		LU Operations Training Design and Delivery	Assess controls for design and management of training content and competence management of trainers	
		LU Operations IRSE Competence management system	To provide assurance that an effective management system is in place to manage competence under the IRSE regime, including follow up of findings from previous audits	
		LU CPD - Exclusion zones	To review compliance with new internal systems being developed by LU working group and relevant legislation	
		LU CPD - Construction Design and Management (CDM) Roles in SWIP and L&E Projects	To review compliance with Principal Contractor and Principal Designer duties in CPD as defined by the CDM Regulations 2015	
		LU CPD - Working at Height	To review compliance with Working at Height Regulations 2005	
		LU CPD - Working with Electricity	To review compliance with Electricity at Work Regulations 1989 and with LU process and standards	
		LU Environment Audit of the Paddington Bakerloo Line Tunnel Project	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	
		LU Working on Station Platforms	To provide assurance that the risks associated with changes to rules relating to working on station platforms are adequately managed	
		LU Works Planning Lockdown Procedures	To provide assurance that the procedures for lockdowns as part of planning works effectively ensure safety and project risks are controlled	
		LU access and protection assurance arrangements	To review the effectiveness of the assurance systems related to delivering safe track access and protection for persons working on the track	
		ST Effectiveness of the new ST Command and Control arrangements	To review the effectiveness of the new ST Command and Control arrangements	Surface Transport
		ST Health and Safety competence management	To provide assurance that H&S competence standards have been identified, documented, monitored and maintained in ST	
		ST Health and Safety data quality and reporting	To review the mechanisms in place to ensure the quality of health safety data and reporting thereon	
		ST CDM Principal Designer Role	To provide assurance that ST is appropriately discharging its duty as CDM Principal Designer where appropriate	
		ST Taxi/Private Hire HSE Management	To provide assurance that legislation is being complied with and HSE Management System requirements are understood and implemented	
Finance and Governance				
	Corporate governance	R&U Governance	To provide assurance over the R&U Governance structures	Rail & Underground
		Enforcement and On-street (EoS) Governance	To provide assurance over the effectiveness and efficiency of the introduction of the revised EoS Governance arrangements.	Surface Transport
		Risk Management	To provide assurance over the effectiveness of the revised risk management processes.	Finance
		Gifts and Hospitality	To review the effectiveness of the controls in place to manage the recording, authorisation and monitoring of gifts and hospitality.	General Counsel
		Transparency	To provide assurance over the effectiveness of the controls over the collection and publishing of data under the local government transparency code.	
		Authorities	To review application of delegated authorities, following on from work on Standing Orders in the 2015/16 plan	
	Financial controls	Congestion Charging	To provide assurance on the adequacy and effectiveness of financial and business controls in place within congestion charging following the move to Capita.	Surface Transport
		Road User Charging	To provide assurance on the adequacy and effectiveness of financial and business controls in place within traffic enforcement following the move to Capita.	
		Dial a Ride	To provide assurance on the adequacy and effectiveness of financial and business controls in place within DAR, focussing on key activities.	
		Contact Centre Operations - Temporary Agency Staff Payments	To provide assurance that controls are operating effectively over payments to temporary agency workers engaged in Contact Centre Operations, Marketing and Communications.	Customer Experience, Marketing & Communications
		BBF Transition to BAU	To provide assurance on the transition of BBF to business as usual to ensure objectives of BBF are appropriately managed.	Finance
		Insurance Brokers	To provide assurance that effective controls are in place over payments to insurance brokers.	
		Fixed Assets	To review controls over fixed assets with focus on the use of a range of different asset management systems across TfL and how this impacts on financial accounting.	
		Group Treasury	To review the financial processes and controls operating in Treasury with focus on hedging and investments	
		Project Initiation to Delivery	To review the role of the sponsor in controlling costs and delivery, with a focus on when projects move from planning to delivery.	
Crossrail				
	Finance and Fraud	Accounts Payable	To review the effectiveness of controls over the Accounts Payable	Crossrail
		Commercial gain share	To assess the effectiveness of the commercial gain share process in acheiving best value for the Project Sponsors	
		Crossrail Complaints Commissioner Accounts	Annual audit of the Crossrail Complaints Commissioner Accounts	
		Fraud Risk	To assess the effectiveness of the management of fraud risk across the Project, including contractors	
		Management and Financial Accounting	To review the effectiveness of controls over Management and Financial Accounting processes	
		Crossrail asset management	To assess the effectiveness of the Crossrail asset management process	
	Commercial Assurance	Agreements management process	To review the effectiveness of the Agreements management process to ensure that these are being managed once they have transferred to the Infrastructure Managers	Crossrail

	Project Glide-path monitoring	To assess the effectiveness of Project Glide-path monitoring in managing outturn costs for each project.	
	Urban Realm management	To assess the effectiveness of Urban Realm management for Crossrail stations	
	Transition of the Tunneling and Underground Construction Academy (TUCA)	To provide assurance that TUCA is being transitioned effectively and that commitments made to funders are being met	
	Management of the Apprenticeship Programme	To assess the effectiveness of the Apprenticeship Programme	
Technical Assurance	Asset Handover Strategy and Implementation	To assess the effectiveness of Asset Handover Strategy and Implementation management within Crossrail	Crossrail
	"By-Exception Construction before Gates" process	To assess the effectiveness of the "By-Exception Construction before Gates" process to ensure that there is control over designs that don't pass through Gates	
	Chief Engineers Communications	To assess the effectiveness of Chief Engineer's Communications	
	Effectiveness of the Review Panels	To review the effectiveness of the Review Panels in managing systems integration and operability	
	Engineering Safety Management (ESM)	To assess the effectiveness of the management of the Engineering Safety Management (ESM) process including Common Safety Method management	
	Final Design Overviews (FDOs)	To provide assurance over the effectiveness of the Final Design Overviews (FDOs) process	
	Gates process	To assess the effectiveness of the Gates process for design management	
	Gates process in Systemwide	To assess the effectiveness of the Gates process for design management in Systemwide	
	Hazards Management (part of Engineering Safety Management)	To review the effectiveness of Hazards Management as part of Engineering Safety Management	
	Management of Technical Assurance	To assess the effectiveness of the management of Technical Assurance	
	Network Rail Technical Assurance	To assess the effectiveness of the Network Rail Assurance processes	
	Readiness to energise	To provide assurance that the risk of catastrophic failure of the the electrification process is being managed effectively.	
	Regulatory approvals	To assess the effectiveness of the regulatory approvals process to ensure that the Project is meeting ORR requirements	
	Rolling stock approvals process	To assess the effectiveness of the rolling stock approvals process	
	Rolling stock assurance process	To assess the effectiveness of the rolling stock assurance process by Bombardier	
	Signals Design Management	To provide assurance over the effectiveness of Signals Design Management by Crossrail and the main contractors	
	Testing and Commissioning	To assess the effectiveness of the Testing and Commissioning process	
	Yellow Plant delivery process	To assess the effectiveness of the Yellow Plant delivery process	
Programme Management	Network Rail Reporting	To provide assurance over the effectiveness of Network Rail's Reporting to Crossrail	Crossrail
	Project Delivery Plan	To assess the effectiveness of the Project Delivery Plan process	
	Scheduling process	To assess the effectiveness of the Programme scheduling process	
IT, Security and Data Privacy	Fujitsu performance management	To assess the effectiveness of Fujitsu performance management	Crossrail
	Management of the Configuration Management Database (CMDB)	To assess the effectiveness of the management of the Configuration Management Database (CMDB)	
	Physical security of new stations	To provide assurance over the management of the physical security of new stations	
	Transition of the Data Centre	To assess the effectiveness of arrangements for transition of the Data Centre	
Crossrail HSQE	Audit Process	To assess the effectiveness of the Crossrail audit process following transition to TfL	Crossrail
	Compliance with RIDDOR	To assess the effectiveness of legal compliance with RIDDOR by Crossrail	
	Project Delivery Team management of HSQ&E	To assess the effectiveness of management of HSQ&E by the Project Delivery Team	
People	Organisational Effectiveness	To assess organisational effectiveness in relation to the delivery of the next phase of the Project	Crossrail
Contractor	HSQE and technical audits at contractors **[around two-thirds of this work is delivered by Health and Safety and Environmental auditors in Crossrail]**	A programme of over 170 audits to provide assurance that contractors are effectively managing HSQE&T issues on site	Crossrail
London Transport Museum			
LTM	IT Governance	To provide assurance over LTM's IT governance arrangements	LTM
	PCI DSS compliance	To provide assurance over LTM's compliance with the PCI DSS standard. This will include a review of progress with the Electronic Point of Sale (ePOS) Ticketing System Project, which is intended to deliver PCI-DSS compliance.	
	New Income Generation	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 Project.	
	Safeguarding	To provide assurance over the creation and implementation of the Safeguarding Policy.	
	Security of LTM Pop-up Shops	To provide assurance over the physical and logical security of the LTM pop-up shops.	

Integrated Assurance Plan 2016/17 – Cyclical audit areas

	2014/15 Actual	2015/16 Actual	2016/17 Plan	2017/18 (Indicative)
CORE FINANCIAL CONTROLS				
Procure to Pay/ Accounts Payable/ Receivable	Accounts receivable Procure to Pay	SAP data interrogations	SAP data interrogations	Accounts payable Procure to pay
Payroll	SAP data interrogations	SAP data interrogations Payroll controls (including starters).	SAP data interrogations	SAP data interrogations
Fixed Assets			Fixed asset registers	
Cash	Supplier bank accounts	Cash management re Fit For Future Supplier bank accounts – follow up	Treasury controls	Supplier bank accounts
Revenue	Operation of contactless payment	Oyster and contactless system – IT controls Revenue inspection controls over contactless ticketing	Ticket revenue systems (including contactless)- reconciliation controls Concessionary Travel	Oyster and contactless system – IT controls Revenue protection activities
Insurance			Insurance Brokers	Captive Insurance Arrangements (5 year cycle) Insurance Act 2015

	2014/15 Actual	2015/16 Actual	2016/17 Plan	2017/18 (Indicative)
General Accounting/ Sundry	Project accounting for a sample of major projects Victoria Coach Station healthcheck London River Services healthcheck LBSL healthcheck	TPH financial controls General ledger controls Controls over project spend VAT	Dial A Ride Congestion Charging Road User Charging	Project accounting for a sample of major projects Bank reconciliations Cycle Hire Management accounting
'Hygiene' Audits	Movers/ leavers Staff and Nominee travel cards Declarations of interest	Business expenses and purchasing cards Pool cars	Movers/ leavers Gifts and hospitality Make a Difference Instant Awards	Staff travel facilities Declarations of interest Mobile phones and portable devices
GOVERNANCE				
Risk Management	Risk management – Pan TfL including CRSA Risk management – Specialist Services	CRSA	Risk management – strategic CRSA (working with new FSC Controls Team)	Risk management – Rail and Underground Risk management – Surface Transport
Legal/ statutory compliance		Freedom of Information Data Protection - strategic Legal compliance	Transparency Data Protection – business units targeted	Governance and administration of subsidiaries Bribery Act

	2014/15 Actual	2015/16 Actual	2016/17 Plan	2017/18 (Indicative)
Internal Governance	TfL Management System Procurement authorities	Standing orders/ delegated authorities	R&U Governance EoS Governance Authorities	Policy management TfL Management System
HUMAN RESOURCES				
Core HR Processes	Graduate scheme Equality and Inclusion Employee Relations – R&U	Resourcing strategy and demand planning Recruitment process Managing attendance Performance management Employee Relations – TfL	Agency Temporary Workers Staff induction Grievance Policy and procedures	Equality and Inclusion Learning and Development Managing Essentials
INFORMATION MANAGEMENT				
Information Security	Cyber security PCI DSS Information Security Model Third Party Access to	Cyber security PCI DSS User Access Controls – Active Directory Review of IM Security	Cyber security PCI DSS Network Perimeter Security User Active Controls –	Cyber security PCI DSS Security of Mobile Devices Information Security

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