

Date: 15 October 2014

Item 9: Key Findings from Internal Audit Reports

This paper will be considered in public

1 Purpose

- 1.1 The purpose of this paper is to inform the Panel about Internal Audit Reports related to Safety, Accessibility and Sustainability issued during Quarter 1, 2014-15.

2 Recommendation

- 2.1 **The Panel is asked to the paper.**

3 Background

- 3.1 Appendix 1 provides a summary of the HSE and Technical audit reports issued during Quarter 1. On completion of each HSE and Technical Audit, an audit report is issued to the 'Client' within the business who commissioned the work and copied to other relevant staff involved in the audit. Where corrective actions or improvement actions are agreed to address issues identified by the audit, these are tracked by the audit team, including review of supporting evidence, in order to confirm that the issues have been properly addressed.
- 3.2 The HSE&T reports now include an overall audit conclusion in the same way as for other internal audit reports. One HSE&T report issued during the quarter had a 'poorly controlled' conclusion. The audit of management of Temporary Approved Non-Compliance (TANC) for signal asset planned maintenance identified a number of issues in relation to the control over and approval of TANCs. Urgent management action is being taken forward to address the issues found.
- 3.3 One of the Interim Internal Audit Reports issued during Quarter 1 is also of relevance to the panel. This was in relation to the Road Safety Action Plan and was concluded as 'well controlled'. A summary is included as Appendix 2.

Embedded assurance

- 3.4 In addition to HSE and Technical audits carried out by Internal Audit, a number are carried out during the year by staff 'embedded' throughout TfL for whom auditing is just a part of their role. At this time, we are aware of audits being carried out in the following areas:
- Surface Transport

- London Overground
 - LU Capital Programmes Directorate
- 3.5 Embedded audit work in relation to Surface Transport and London Overground was incorporated in the Integrated Assurance Plan for 2014/15 approved by the Audit and Assurance Committee in March, and progress is reported here for the first time. Information from the LU Capital Programmes Directorate, and other areas that may be identified, will be incorporated into reports in due course.
- 3.6 Surface Transport - No audits were completed by embedded auditors within Surface Transport in Q1.
- 3.7 London Overground – Two audits were delivered during Q1, in respect of Accident and Incident Investigation Reporting; and Standards Management Procedure. There were no significant findings from either of these audits, with six minor observations raised in total.

List of Appendices to this Report:

Appendix 1: Health, Safety and Environment and Technical Reports Issued - Quarter 1 2014/15

Appendix 2: Interim Reports Issued – Quarter 1 2014/15

List of Background Papers:

None

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Finals
WC= Well Controlled
AC= Adequately Controlled
RI= Requires Improvement
PC= Poorly Controlled

Reference	Report Title	Report Issued	Original Objective	Summary of Findings
Rail and Underground				
Delivery of capital investment portfolio and contract management				
IA_13_860	Civil Engineering Design Management – Embankment Escalator Replacement Project	02/04/2014 AC	To review the adequacy and effectiveness of civil engineering design management and interface processes.	<p>This audit is one of five covering different civil engineering design management areas.</p> <p>The Civil Engineering Internal Design process in the areas audited complies with specified requirements, except for two issues as noted below:</p> <ul style="list-style-type: none"> • The mechanism to be used to manage proposed design changes during Stage 5 (Delivery) could not be clearly established. • It was not clear during the audit if and how drawings issued for construction were to be updated, and by whom, to reflect the as-built status.
IA_13_750	Civil Engineering Design Management - Bridges and Structures	02/04/2014 AC	To review the adequacy and effectiveness of civil engineering design management and interface processes.	<p>This audit is one of five covering different civil engineering design management areas.</p> <p>In the areas audited, the Civil Engineering Internal Design process for Bridges and Structures projects complies with specified requirements, is consistently applied and is working well.</p> <p>One minor issue was raised as a result of this audit.</p>
IA_13_861	Civil Engineering Design Management - External Design (SWIP - Fairhurst)	02/05/2014 AC	Examination of civil engineering design management and interface processes and procedures	<p>Issues identified were:</p> <ul style="list-style-type: none"> • Some of the baseline drawings prepared by Fairhurst are in Auto CAD (Computer Aided Design) system, and are currently noncompliant. • Increased clarity is required regarding the meaning of “drawn by”, “checked by”, “approved by” and “endorsed by”. • Arrangements for managing proposed design changes that arise during Stage 5 (Delivery) are not clearly defined.
IA_13_862	Civil Engineering Design Management - Vauxhall Station Capacity Upgrade (VSCU) Project	02/05/2014 AC	Examination of civil engineering design management and interface processes and procedures.	<p>Issues identified were:</p> <ul style="list-style-type: none"> • The Bechtel Contractor Quality Assurance Plan and Design Management Plan create the expectation that a three-stage Prepare / Check / Approve process applies to all Bechtel design deliverables. In practice, this three-stage process is applied to Conceptual Design Statements (CDSs) and Design Check Certificates (DCCs), but is not applied to individual drawings. LU requirements were unclear.

Reference	Report Title	Report Issued	Original Objective	Summary of Findings
				<ul style="list-style-type: none"> Bechtel has numerous Quality Control Procedures (QCPs) that describe design change processes; however, the processes that would involve LU in the review and acceptance of proposed design changes were also unclear.
IA_13_863	Civil Engineering Design Management - External Design (SWIP - Pell Frischmann)	02/05/2014 AC	Examination of civil engineering design management and interface processes and procedures	<p>Issues identified were:</p> <ul style="list-style-type: none"> LU Standards describe a two-stage Author / Approve process for the Contractor, but Pell Frischmann Procedure BP007 describes a three-stage internal Design / Check / Approve process. Pell Frischmann Procedures do not specify the use of any formal mechanism for proposing design changes to LU, and it was not clear whether LU has contractually specified any formal mechanism for proposing and approving any design changes that may arise. For the Hammersmith Station Gateline project, the supply of as-built drawings was not included in the Pell Frischmann commercial submission to LU, and it was not clear what arrangements would apply.
IA_13_768	Implementation of Earth Structures Designs – Clancy Docwra	15/04/2014 AC	To examine the implementation of earth structure designs during the delivery phases of various projects, to determine the degree of compliance with specified requirements and to identify any improvement opportunities.	<p>This audit is one of three undertaken on three different contractors.</p> <p>In the areas audited, LU and Clancy Docwra Limited (CDL) are generally complying with specified requirements. However, there have been significant delays to the programme and increased costs. Communication between LU, CDL and CDL’s designer Sinclair Knight Merz (SKM) has been less effective than it could have been, and it was generally agreed that it would have been beneficial for SKM to have attended the Project Progress Meetings with LU and CDL.</p> <p>A number of issues were raised, the most significant of which were:</p> <ul style="list-style-type: none"> The generic Verification Activity Plan (VAP) is out of date, and a project specific VAP was not made available during the audit. The CDL and LU Construction Inspector signatures on the Inspection Checklists do not directly confirm that the requirements of LU Standards and Specifications and associated acceptance criteria have been met.
IA_13_865	Implementation of Earth Structures Designs (Cementation Skanska)	01/05/2014 AC	Examine the implementation of earth structure designs during the delivery phases of various projects	<p>Issues identified were:</p> <ul style="list-style-type: none"> There were a number of discrepancies relating to Setting Out Reports, Inspection Records and Pile Installation Check Sheets leading to a lack of clarity that the requirements of LU Standards and Specifications and associated acceptance criteria have been met. There was no evidence that the design change control process had been agreed by LU and Cementation Skanska and documented in an appropriate manner.
IA_13_866	Implementation of Earth Structures Designs (LU Construction Management Team)	01/05/2014 AC	Examine the implementation of earth structure designs during the delivery phases of various projects	<p>Issues identified were:</p> <ul style="list-style-type: none"> An approved Temporary Works plan has been submitted and approved by competent persons. Experienced Construction Managers are in place to monitor implementation. These Construction Managers have not been formally appointed as Temporary Works Co-ordinators as required by LU Standards and attended the appropriate training course for the role.

Reference	Report Title	Report Issued	Original Objective	Summary of Findings
				<ul style="list-style-type: none"> Overall, assurance was provided that the team has the necessary competencies and people knew their roles and responsibilities. Records demonstrating how competence had been assessed and people roles and responsibilities had not kept pace with some staff moves and so need reviewing. The project has progressed to delivery stage. The document produced at the start of the project defining the project requirements was not linked to the The Gate Management Plan to ensure it was available for future reference Overall, inspection and test plans are in place including acceptance criteria and evidence provided that inspection and tests had occurred as required, The exception was for 'soil nailing', which does not yet have inspection and test arrangements agreed as tests are being undertaken to verify the designs.
Disruption to quality of service				
IA_13_755	Temporary Approved Non-Compliance (TANC) management for Signal Asset Planned Maintenance	16/06/2014 PC	To provide assurance in relation to the delivery of Signals asset maintenance.	<p>The status of issued TANCs was adequately recorded with visibility to management via established reporting processes.</p> <p>However, the following significant issues were identified:</p> <ul style="list-style-type: none"> There were a number of steps in the process that were not being complied with; assets were found to have expired TANCs or have no TANC where maintenance schedules had not been met. It was not possible to confirm that TANCs sampled had been written and verified by TANC authorised persons. There is no system for authorisation traceability. Independent verification of TANCs is not being carried out, only an ad-hoc random sampling. Planning staff were found to be using uncontrolled TANC management reference documents for TANC mitigation, the closure requirements and maintenance cycle reference. New or changed signals assets may not be identified in Ellipse within the expected seven day period.
IA_14_734	Supplier Audit – Otis Ltd Escalator Maintenance	09/05/2014 RI	To provide assurance in relation to Otis Ltd's compliance to London Underground procedures, Otis Ltd procedures and regulatory requirements regarding the maintenance of escalators.	<p>The audit found that:</p> <ul style="list-style-type: none"> Escalator maintenance is being managed to the required specification and frequency. Drugs and alcohol testing is effectively managed. Local procedures are being developed for the maintenance of escalators and associated processes. This will ensure the procedures are formalised to manage the increase in work as more escalators enter into the maintenance contract. <p>However, three significant issues were noted:</p> <ul style="list-style-type: none"> There is no procedure for labelling and quarantining defective materials. There is no register of equipment requiring calibration, or a procedure to ensure equipment remains in calibration. Otis failed their Freight Operator Registration Scheme (FORS) audit in May 2013 and have a follow up audit booked for June 2014.
IA_13_808	Project Data – JNP Lifts and escalators	16/06/2014 RI	To determine the level of compliance with the Asset Registration procedure to	<p>Issues identified were:</p> <ul style="list-style-type: none"> A number of key process steps in the Asset Registration Procedure are not being complied with. This

Reference	Report Title	Report Issued	Original Objective	Summary of Findings
			ensure a current and up to date asset register is maintained for JNP lifts and escalators.	<p>has led to a lack of confidence in the asset data held on Maximo.</p> <ul style="list-style-type: none"> Changes to lift and escalator assets which occur during maintenance are not being captured in Maximo. The Asset Manager is being circumvented by Projects in terms of requesting information on existing assets and supplying information on changes to assets. . Asset data is being supplied at the end of the project rather than pre-construction as required by the procedure. The procedure does not reflect current business structure and arrangements.
IA_13_803	Northern Line Upgrade Configuration Management	27/05/2014 AC	To provide independent assurance over configuration control for Transmission Based Train Control (TBTC) on the Northern Line as part of the recent upgrade.	<p>Issues were identified in relation to:</p> <ul style="list-style-type: none"> The completeness of part numbers and serial numbers for newly commissioned signalling equipment handed over to maintenance; and, a number of project documents had not been updated to reflect changes to other documents and changes in process.
IA_14_762	Hot Weather Preparedness - JNP	16/06/2014 AC	To provide assurance of compliance to Category 1 Standard S1177 – Track – Prevention of Buckling and associated procedures and work instructions before the onset of hot weather.	<p>Plain Line Site Diagrams detailing the entire track lengths in 10m increments are used by APJNP. This good practice allows plain line sites to be checked for gaps and overlaps remotely.</p> <p>Track registers, including inspection dates and CRTs (Computer Rail Temperatures), are in place. The registers are being updated to reflect changes to track site numbering and track categorisation.</p> <p>One issue was noted in relation to Track thermometers which are not being calibrated in compliance with S1177.</p>
IA_13_753	Management of Extra Low Loss Conductor Rail	06/05/2014 AC	To confirm appropriate management systems were in place to ensure compliance against the relevant Category 1 Standards for the inspection and maintenance of Extra Low Loss Conductor Rails (ELLCR).	<p>Overall, the location of ELCCR is known and mandatory inspections and maintenance planned and undertaken in accordance with LU standards.</p> <p>Minor issues identified were:</p> <ul style="list-style-type: none"> There was no evidence of inspection of the vertical gauge of both conductor rails over a distance of 65m in the rear of station platform stop markers across all Lines. There is a large number of overdue Maintenance Level Targets on the Jubilee line. These represent no safety risk but their reduction would ensure assets are maintained to optimum levels. There is no mandatory requirement for ultrasonic inspections of ELCCR. Within a TfL Guidance Document there is indication that this should occur every five years or where excessive wear is identified. This has not occurred or been programmed on any Line.
IA_14_735	Clayton Equipment Limited	14/05/2014 AC	To provide assurance to TfL and London Underground that Clayton Equipment Limited has implemented and is working in compliance with acceptable business procedures	<p>The findings of the audit were:</p> <ul style="list-style-type: none"> Clayton Equipment Limited is working in compliance with a Management System that is registered with Lloyd's and assessed by a UKAS accredited assessor and were maintaining quality processes and records and continually improving the management system. Clayton Equipment Ltd had satisfactorily embedded procedures and processes to manage the delivery of client specified requirements through the design, build and commissioning stages of vehicle delivery.

Reference	Report Title	Report Issued	Original Objective	Summary of Findings
				No Non-Conformances, Business Improvement Actions or Observations were identified.
Major Incident - External				
IA_13_784	Facilities Management – Operational Premises	15/04/2014 RI	To determine whether LU Office Facilities are being inspected in accordance with the requirements of LU Category 1 Standard, Reference Documents and associated LUL Specification Contract.	<p>Inspection activities and frequencies are adequately defined with management generally operating effectively to ensure that these activities are delivered by LU and its contractor (Vinci). There was good performance in relation to reactive faults. A number of monitoring activities (PGIs and Cleaning Inspections) exceed the stated requirements.</p> <p>However, a number of significant issues were also identified:</p> <ul style="list-style-type: none"> • LU Management System documentation was found to be under-developed with regard to defining how managers and inspectors should undertake their tasks. Other documents were found not to reflect current organisational arrangements and systems • Whilst evidence indicated that LU inspectors have sufficient competence, LU does not define the competence levels of its facilities inspectors or utilise tools to ensure that inspectors refresh training and licences. The Vinci competency matrix which is a contractual requirement was found to be poorly maintained. • Some requirements for monitoring activities (Quality Checks and Joint Inspections) are not currently undertaken. • A sample of checks found assets not labelled with service information as required • Some statutorily required documentation and other information was not available or stored as required within the Technical Library.
IA_13_780	JNP Temporary Works	17/04/2015 AC	To provide assurance in relation to the compliance with and overall effectiveness of the JNP processes for temporary works and to ensure that temporary works are being undertaken by competent people.	<p>The audit found that temporary works are being managed in accordance with TLF-716 – Temporary Works Design Statement. The documentation submitted to the Temporary Works Controller in support of the TLF-716 is being effectively managed.</p> <p>The two most significant issues were as follows:</p> <ul style="list-style-type: none"> • P-2-092 – Temporary Works Planning and Execution had not been referenced for guidance on any of the three temporary works audited. The auditees were unaware of the procedure. • Assurance package requirements need to be developed for inclusion in the tender package sent to contractors.
IA_13_798	JNP Flood Protection (Canning Town and Westminster)	30/05/2014 RI	To provide assurance that COO APJNP maintenance processes are in place to guarantee functionality of flood protection at Canning Town portal and Westminster (Storey's Gate) flood-gates.	<p>Issues identified were:</p> <ul style="list-style-type: none"> • The Canning Town floodgates did not operate as expected whilst in automatic mode. They did function correctly whilst in manual operational mode. • There is no programme in place to ensure ongoing maintenance and testing of the Canning Town and Westminster flood protection systems. • No date has been set for the testing of the Westminster (Storey's Gate) flood protection system.
IA_13_776	Lift Competence Management Assessments	15/05/2014 AC	To assess whether competence assessments of station staff who undertake lift procedures are undertaken in	<p>Issues identified were:</p> <ul style="list-style-type: none"> • The expectation of a 'simulated' lift assessment needs clarifying so that it is as real as possible in all cases. • Assessor notes do not include all required information. This is being addressed through a planned

Reference	Report Title	Report Issued	Original Objective	Summary of Findings
			compliance with Competency Management System (CMS) requirements.	upgrade to the CMS SAP system in June 2014.
Environmental Impact of Delivering a Transport Service				
IA_13_858	Compliance with ISO 14001	15/04/2014 RI	To determine the level of compliance of the management systems in place across London Underground (LU) with the requirements of BS EN ISO 14001.	<p>The audit found that all areas of LU have an Environmental Management System (EMS) in place. Overall the structure and the management of the EMSs meet the requirements of the ISO 14001 Standard.</p> <p>There are a large number of processes and documents in place in relation to management of the environment. The Environment Team have an objective for 2014-15 to review and amalgamate the JNP (former Tube Lines) and LU EMSs. Work is already underway on elements of this.</p> <p>A number of significant issues were identified, as follows:</p> <ul style="list-style-type: none"> • The LU HSE Policy does not contain all of the elements required by the ISO Standard. • Environmental objectives and targets for the forthcoming year have been set but are not currently integrated into relevant business areas. • Opportunity exists to enhance training by integrating JNP and LU training courses where practicable. • An evaluation of compliance against non-legal requirements relevant to the organisation needs to be undertaken. • The Environment Team's role in environmental incident investigations needs to be clarified. <p>Some more minor issues were also raised.</p>
Crossrail				
IA_13_521	Health & Safety Performance Index (HSPI) Reporting	20/05/2014 AC	The audit focused on the processes around the Health and Safety Performance Index (HSPI) including the requirements of the Health and Safety Rating and Recognition Scheme (CR-XRL-Z7-GPD-CR001-50001 rev 6) and recognised industry best practice.	<p>Overall, the HSPI reporting process is effective. However, the audit noted the following:</p> <ul style="list-style-type: none"> • There was inconsistency in level of detail to support KPIs recorded by Principal Contractors (PCs). • The validity of information supplied by the PCs was not independently checked as part of the KPI process. • There is an opportunity for formal training and guidance to be provided to ensure a consistent approach to the assessment, verification and moderation practices in relation to evidence supplied during Gateway Assessments. • A number of the PCs see the KPI process as a duplication of work they have to undertake in their own Health and Safety Management system.

Interim
AC= Adequately Controlled
RI= Requires Improvement
PC= Poorly Controlled
WC= Well Controlled and Audit Closed
AC/ACL = Adequately Controlled and Audit Closed

Reference	Responsible Director	Report Title	Interim Report Issued	Original Objective	Follow-up Audit	Summary of Findings
Surface Transport						
IA_14_110F	Director of Strategy and Planning	Road Safety Action Plan	18/06/2014 WC	To review the implementation of the Action Plan.	18/06/2014 WC	<p>The audit ascertained that the Action Plan is being implemented. All the relevant parties have been identified, and each is aware of the actions it is responsible for. While some actions have implementation deadlines ranging from 2013 to 2016, a good number are of an open-ended nature.</p> <p>As part of its monitoring function, Delivery Planning holds regular meetings with the representatives of the teams responsible for implementing the actions, to discuss any relevant issues and obtain information on the status of the actions. Fifty four of the actions are already being implemented, while the implementation of the remaining two will begin later in 2014. An effective process for tracking the delivery of the actions is in place.</p> <p>The road safety budget for the 10-year period 2013/14 to 2021/22 is over £200M. Effective controls are applied to ensure effective and efficient utilisation, and expenditure within budget.</p> <p>In addition, TfL provides funds to the London boroughs for their Local Implementation Plans (LIPS). The LIPS set out how the boroughs will deliver better transport in their area in the context of the Mayor's Transport Strategy, and include road safety improvement schemes. The amount available for 2014/15 is £148.8m, out of which almost £55m will be allocated to road safety schemes.</p> <p>An appropriate governance framework is in place, including the Reduced Casualties Steering Group, chaired by the Director of Surface Strategy and Planning, which oversees the implementation of the Action Plan; and the Road Safety Steering Group, chaired by the Deputy Mayor for Transport, with representation from a number of</p>

Reference	Responsible Director	Report Title	Interim Report Issued	Original Objective	Follow-up Audit	Summary of Findings
						<p>organisations, including the Metropolitan Police, London boroughs, London Ambulance Service etc. One of this group's main duties is to review and report on progress in implementing road safety policy in London.</p> <p>Terms of reference have been developed for the two groups, and they meet regularly. In accordance with the Action Plan, ST continues to publish reports and information describing the casualty situation in London. This includes the annual Collisions and Casualties on London Roads report, and the Health, Safety and Environment report.</p> <p>The audit did not identify any issues and is therefore now closed.</p>