

**Date:** 13 October 2015

**Item:** Key Findings from Internal Audit Reports

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

### **1 Summary**

- 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.

### **2 Recommendation**

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

### **3 Background**

- 3.1 Appendix 1 provides a summary of the Health, Safety, Environment and Technical (HSE&T) 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 One HSE&T report issued during the quarter had a 'poorly controlled' conclusion. The audit of change control of engineering asset information identified a number of significant issues leading to asset information not being updated on a timely basis in the asset register. Management actions have been agreed to address these issues, four of which have already been completed. The other four actions are in progress and have been incorporated into a wider review of the Pathway project management system.
- 3.3 Currently there are 103 open HSE&T actions, of which 11 are overdue, although none by more than 60 days. The overdue actions do not give any grounds for concern. If a Rail and Underground audit action does go overdue, it is reported to the Value Programme Board (VPB), and the manager responsible for the action is required to attend the VPB to explain what is being done to get the action back on track. A similar process is in place for reporting to the Surface Transport Board. These reports ensure an appropriate focus by senior management on the completion of audit actions.

### **Embedded assurance**

- 3.4 In addition to HSE&T audits carried out by Internal Audit, a number are carried out during the year by staff 'embedded' in parts of Surface Transport and Rail and Underground. This was incorporated in the Integrated Assurance Plan for 2015/16 approved by the Audit and Assurance Committee in March, and work done during Q1 is summarised below.
- 3.5 Surface Transport – 25 audits were completed in Q1, including 15 audits of Bus Companies, three of Dial A Ride operators, and seven audits of procedural compliance at contractors. There were no significant issues identified.
- 3.6 Rail and Underground – Five audits were delivered during Q1, including two contractor audits, and audits of site management, competency management, and constructability review. There were no significant issues identified.

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

Appendix 1: HSE&T Reports Issued in Quarter 1 2014/15

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

None

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|---------------------------|
| <b>Finals</b>             |
| WC= Well Controlled       |
| AC= Adequately Controlled |
| RI= Requires Improvement  |
| PC= Poorly Controlled     |

| Reference                               | Report Title  | Report Issued    | Original Objective  | Summary of Findings  |
|---|---|------------------|---|--|
| <b>Rail and Underground</b>             |   |                  |   |  |
| <b>Disruption to quality of service</b> |   |                  |   |  |
| IA_14_774                               | Management of 3 <sup>rd</sup> Party Supply of Safety Critical Rolling Stock Parts | 29/04/2015<br>RI | To provide assurance that engineering and technical detail relating to the supply of Safety Critical parts and equipment is maintained by LU in material data records and communicated to supply organisations by LU Commercial as an integral part of the purchase order placement and contract award process. | <p>Purchase Orders recently completed or being processed were sampled and it was found that for the examples assessed, the auditees had managed the process in compliance with Commercial established practices and the requirements of the BCV/SSL SAP or JNP Oracle order format used.</p> <p>Areas of Effective Control:</p> <ul style="list-style-type: none"> <li>• Auditee awareness of Commercial management system procedure relating to their Commercial business area.</li> <li>• Auditee familiarity with and use of SAP and Oracle electronic Purchase Order generation systems.</li> <li>• Auditee liaison with Fleet Engineering to clarify technical requirements, specification and correct drawing issue.</li> <li>• Material changes are proposed by a supply organisation and its management via the LU or JNP Commercial and Engineering departments.</li> </ul> <p>There are four Priority 2 findings that relate to the following areas:</p> <ul style="list-style-type: none"> <li>• Weakness involving the issue of formal Commercial documentation for the management of Purchase Orders using Oracle and Maximo data management systems.</li> <li>• Weakness identified for the management of Safety Critical materials data records and the process of advising Safety Critical rating information to supply organisations via SAP, Oracle and Maximo data management systems.</li> </ul> |
| IA_14_765                               | SSL Track Maintenance   | 08/06/2015<br>RI | To assess compliance with LU Category 1 standards in relation to a sample of track inspections, maintenance and management activities.  | <p>Areas of Effective Control:</p> <ul style="list-style-type: none"> <li>• Locations and types of switches and cast crossings were known and documented</li> <li>• Competence of staff was maintained to standard</li> <li>• Equipment used for inspections was maintained and calibrated correctly</li> </ul>  |

| Reference | Report Title  | Report Issued    | Original Objective   | Summary of Findings  |
|-----------|---|------------------|--|--|
|           |   |                  |  | <ul style="list-style-type: none"> <li>• Identified defects were corrected within the stipulated risk based timescales</li> <li>• Rail joint inspections were being managed effectively and the use of temporary rail joints is minimised</li> <li>• SSL South has implemented the requirements for switch inspections following the expiry of a concession in December 2014</li> </ul> <p>Priority 1 Issues</p> <ul style="list-style-type: none"> <li>• SSL North is yet to fully implement the requirements for inspection of switches following the expiry of a concession against the LU standard in December 2014</li> <li>• Examples were found of track geometry faults not correctly categorised because two or more defects in one location identified by Track Recording Vehicles(TRVs) are not being linked and uplifted to Safety Standard as required</li> <li>• Rolling Contact Fatigue faults were partially recorded (SSL South) and not recorded (SSL North) in the asset database (Ellipse)</li> </ul> <p>Priority 2 issues:</p> <ul style="list-style-type: none"> <li>• Commonality of approach across all lines could be developed. Issues for attention include the timely communication of TRV results, registering areas where the TRV is not practicable, mitigating risk from missed TRV runs and managing corrugation values on the rail head.</li> <li>• Whilst evidence was seen that Temporary Rail Joints are generally removed within 24 hours, registers of their location and duration of use together with unique identification numbers were not maintained across the lines as required.</li> <li>• In SSL North some completed forms including Track Inspection reports and Cast Crossing Inspection forms did not meet quality requirements.</li> <li>• The latest Track Tonnage Data had not been received by the lines.</li> <li>• Whilst all Safety Standard faults identified by the TRV were recorded in Ellipse, Maintenance Level faults were not recorded by SSL North.</li> </ul> |
| IA_14_756 | Management of Temporary Approved Non-Compliance (TANC) for Signal Asset Planned Maintenance | 29/04/2015<br>WC | This audit is a reassessment audit for the management of Temporary Approved Non-Compliance (TANC) by SSL Signalling Asset Planned Maintenance. | <p>Signals Planning Management at the Baker Street SSL North and Earl's Court SSL South demonstrated adequate control of the processes and records used for identifying Signals assets that will exceed the maintenance due date. The authorisation and issue of an asset TANC and the subsequent management of maintenance and TANC closure including associated Works Order issue and maintenance delivery was also found to be adequately managed.</p> <p>Areas of effective control were:</p> <ul style="list-style-type: none"> <li>• Performance of TANC management and maintenance delivery has improved significantly and less assets are being TANCed compared with the March 2014 audit. No 'Not TANCed' and 'Expired TANCs' for assets were noted during our testing.</li> <li>• Planning staff were aware of the LU TANC management standard, instruction and guidance</li> </ul>  |

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|           |   |                  |   | <p>documentation and had access to document copies.</p> <ul style="list-style-type: none"> <li>• Signals assets requiring a TANC were identified in advance of the maintenance due date.</li> <li>• Appropriate records were seen to be maintained.</li> <li>• Daily reports compiled by each North and South area were an accurate record of TANC issue and performance management.</li> </ul>   |
| IA_15_728 | Quality Management System within Track Manufacturing Division | 19/05/2015<br>AC | To provide assurance in relation to quality management within Track Manufacturing Division (TMD). | <p>The evidence seen demonstrated that there were established processes in operation that were understood and ensured risks to the operational railway were controlled. Some of these processes were not formalised in procedures and this would prevent full compliance with ISO 9000.</p> <p>Areas of Effective Control:</p> <p>Resource management including:-</p> <ul style="list-style-type: none"> <li>• Competence of staff and training provided. Also the awareness by staff of the controls and processes in place.</li> <li>• Infrastructure – suitability of the buildings and equipment provided.</li> <li>• Work environment provided to achieve a quality product.</li> </ul> <p>Product realisation including:-</p> <ul style="list-style-type: none"> <li>• Determination and review of customer and product requirements.</li> <li>• Customer communication.</li> <li>• Purchasing activities.</li> <li>• Control of production activities and processes.</li> <li>• Identification and traceability of rail.</li> <li>• Product handling.</li> <li>• Monitoring and measuring equipment.</li> </ul> <p>Priority 3 issues:</p> <ul style="list-style-type: none"> <li>• The Quality Policy did not accurately reflect the policy, principles and scope in place across Track Manufacturing Division. This was addressed during the audit.</li> <li>• For full compliance with ISO 9000 additional procedures and resources would be required</li> <li>• Track Manufacturing Division have no means to disseminate detailed information on the P&amp;C layouts they produce across London Underground or have access to similar information where P&amp;C layouts are manufactured by others.</li> <li>• There were no formal records to demonstrate review and reporting of Quality performance within Track Manufacturing Division.</li> </ul> |

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|-----------|-------------------------|------------------|--|---|
| IA_15_735 | Management of Materials | 15/06/2015<br>AC | To provide assurance that the processes for receiving, issuing, rotating, disposing and cycle counting of materials are effectively managed by the stores and the materials control teams. The audit also provided assurance that the processes for material non conformances are being managed. | <p>Areas of Effective Control:</p> <ul style="list-style-type: none"> <li>• Material control is being managed in accordance with the Material Control Supply Planning Handbook requirements.</li> <li>• Stores operations are being managed with the exception of the issues identified below that could strengthen the control environment.</li> </ul> <p>Priority 2 and 3 issues:</p> <ul style="list-style-type: none"> <li>• Stores local processes do not fully meet the requirements of W8900 – Operating stores - in the areas of goods inward inspections and goods issuing.</li> <li>• W8900 does not detail the processes for non conformances or managing Bombardier owned stock.</li> <li>• The requirement that old stock is rotated to the front was not being fully met.</li> <li>• Materials are being removed from stores at times when the stores are unmanned and therefore not recorded.</li> <li>• Checks are not being carried out to ensure that Vendor Managed Inventory (VMI) maximum stock levels are not being exceeded or that the delivery notes match the delivered items.</li> <li>• Bar coding equipment is available at each of the stores audited but is not being fully utilised.</li> <li>• Due to Information Management issues SAP generated cycle count sheets were not being utilised at two of the stores audited.</li> <li>• Audits of the material management processes are not being carried out at three of the stores audited.</li> </ul> |
| IA_14_764 | JNP Track Maintenance   | 26/06/2015<br>AC | To assess compliance with LU Category 1 standards in relation to a sample of track inspections, maintenance and management activities.   | <p>Good Practice:</p> <ul style="list-style-type: none"> <li>• At Edgware depot (Northern Line) the full location details; dates installed and welded, date to be re-inspected and the applicable work order number for temporary rail joints were being recorded. This is the only location across the LU Network where the standard is being fully met</li> </ul> <p>Areas of Effective Control:</p> <ul style="list-style-type: none"> <li>• Locations and types of switches and cast crossings were known and documented</li> <li>• Switches were being inspected in accordance with LU Standards</li> <li>• Competence of staff was maintained to standard</li> <li>• Equipment used for inspections was maintained and calibrated correctly</li> <li>• Identified defects were corrected within the stipulated risk based timescales</li> <li>• Rail joint inspections were being managed effectively and the use of temporary rail joints is minimised</li> <li>• There is an established procedure and documentation to be followed when the Track Recording Vehicle (TRV) does not run</li> </ul>  |

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|---|--|------------------|---|---|
|   |  |                  |   | <p>Priority 1 Issues</p> <ul style="list-style-type: none"> <li>Examples were found of track geometry faults not correctly categorised because two or more defects in one location identified by TRV are not being linked and uplifted to Safety Standard as required</li> </ul> <p>Priority 2 issues:</p> <ul style="list-style-type: none"> <li>Registers of the location and duration of use of temporary rail joints together with unique identification numbers are not maintained for Piccadilly and Jubilee Lines as required</li> <li>Track Tonnage Data being used for reference was not the most current available</li> <li>Form TLF-886-V1 did not require a record of the date an Amber trolley was used to mitigate non-running of the TRV.</li> <li>Across the lines there were variable measures in place to manage corrugation values on the rail head</li> </ul>   |
| <b>Delivery of Capital Investment Portfolio</b> |  |                  |   |   |
| IA_14_701                                       | Change Control of Engineering Asset Information                    | 27/05/2015<br>PC | To provide assurance that the asset information held within the asset database Ellipse is complete and that the processes for updating the Ellipse asset database are being complied with | <p>The process for the update of asset engineering data as defined in category 1 Standard S1041, Pathway and other supporting documentation contains the necessary requirements to govern and assure the process.</p> <p>The audit found that the processes and practices used are not being applied effectively to ensure that the asset database is complete and current. This undermines LU's efforts to maximise reliability as assets may not be subject to asset maintenance and management through the asset database, thereby increasing the risk of asset failure</p> <p>Priority 1 Issues:</p> <ul style="list-style-type: none"> <li>Only one third of completed projects sampled (7 from 21) could be confirmed as having the relevant asset data updated in the Ellipse asset register. This is despite Project Handover Completion Certificates being completed which are designed to be an assurance that this has happened.</li> <li>Commonly there are no agreed, monitored or enforced timescales for uploading asset data as required by LU Standards. There are significant time lags in excess of 360 days between asset data being available and the uploading to the asset register.</li> <li>The Asset Database Team is routinely not informed of project works being undertaken. Commonly, if the Asset Database Team does not have the project work registered in their tracker spreadsheet, the new asset data fails to reach Ellipse.</li> </ul> <p>Priority 2 Issues</p> <ul style="list-style-type: none"> <li>Pathway documentation required to be signed and submitted to the Asset Data and Reliability Manager is not being processed as required.</li> </ul> |
| IA_14_708                                       | Railway Engineering Workshop (REW) – Overhaul of Signal Assets and | 07/04/2015<br>RI | To review processes for the overhaul of signal assets,  | A number of the actions to address the deficiencies identified during the previous audit had been implemented and were effective, whilst improvement is still required in some areas.   |



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|           | Management of Asset Traceability   |                  | including follow up of the agreed actions from our previous audit in this area to ensure they have been successfully implemented and are effective. | <p>Areas of Effective Control:</p> <ul style="list-style-type: none"> <li>A number of the actions to address the deficiencies identified during the previous audit had been implemented and were effective. These included training and competence, calibration controls, control of non-conforming product.</li> </ul> <p>Priority 1 Issues:</p> <ul style="list-style-type: none"> <li>The DEV relay overhaul manual is still in draft. This type of relay previously caused a wrong side failure at Embankment and so having a defined and communicated method for their overhaul is critical.</li> </ul> <p>Priority 2 Issues:</p> <ul style="list-style-type: none"> <li>REW audits its processes for compliance. However there was no evidence to demonstrate a regular systematic review of the overhaul process to identify any potential errors or deviations that might occur and confirm that the defences in place continue to ensure specified integrity levels of the overhaul process as required by LU Standards.</li> <li>Emergency Change Forms which provide details of the initial cause of a failure are not received by REW and so are not used to review processes to mitigate the possibility of future failures.</li> <li>The agreed actions identified to address the business improvement action from the previous audit regarding traceability of Signal assets, had not been communicated to the Network Signals Repairable Section when responsibilities for these assets were transferred from REW.</li> </ul> |
| IA_14_711 | Management of Signalling Materials | 09/04/2015<br>RI | To provide assurance that the processes for introducing new or changed signalling materials are effectively managed.                                | <p>The areas examined were being managed with the exception of the following:</p> <p>Priority 2 and 3 issues:</p> <ul style="list-style-type: none"> <li>Signalling products submitted to the Signalling Products Approval Forum Meeting (SPAFM) should be submitted via the Approved Products Register (APR). Of the 78 products sampled on the SPAFM register 53 did not include an APR number.</li> <li>The signalling product approval process, and applications for products to be included on the APR, do not formally consider if the supplier has been approved for signalling products including safety critical products (as appropriate).</li> <li>There is no process, when requesting that products are added to the SPC, to ensure that the product has been approved and registered on the APR.</li> <li>The APR and SPC do not form a “single source of truth” for signalling products, use common part numbering systems, and cannot be used to identify which products are safety critical.</li> <li>Limitations to usage, trial parts and any concessions are recorded in the conditions section of the APR. There is no process for ensuring these conditions are adhered to.</li> <li>JNUP will be handed over from Projects to Asset Performance in October 2015. The product change control process, post October 2015, has not been determined.</li> </ul>  |



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|------------------------------------|---|------------------|--|---|
| IA_14_832                          | Civil Engineering Inspection and Test Plans | 24/06/2015<br>RI | To assess the overall effectiveness of Inspection and Test Plan (ITP) processes in the Civil Engineering areas of Stations projects. ITPs are of major importance in ensuring that the design intent is met during delivery, and that assets being delivered are fit for purpose throughout their lifecycle. | <p>The project areas examined were Kings Cross Escalators (KCE), Tottenham Court Road (TCR) Tunnels and Fitout, and Station Works &amp; Improvements Programme (SWIP) Projects.</p> <p>The results of this audit indicate that the application of the ITP process has been adequately controlled in the KCE project area, but requires improvement in the TCR and SWIP project areas. A number of opportunities to improve the effectiveness and efficiency of the ITP process in Stations projects have also been identified.</p> <p>Priority 1 Issues:</p> <ul style="list-style-type: none"> <li>• KCE, TCR and SWIP - A number of concerns were identified relating to ITP and Check Sheet correlation. In some cases for TCR and SWIP, work has taken place without approved ITPs being in place. ITP Schedules were not available and it was not clear whether they were contractually required.</li> <li>• SWIP - The intent and requirements of the Purchase Order, Contract and Works Information relating to ITPs have not been fully implemented, and problems with TfL Pathway Product Management Plans (PPMPs) were identified.</li> </ul> <p>Priority 2 Issues:</p> <ul style="list-style-type: none"> <li>• TCR - The Contractor (Taylor Woodrow BAM Nuttall) has produced several ITP Trackers, and LU has prepared its own ITP Tracker. There are also separate TWBN and LU Trackers for Non-Conformance Reports (NCRs).</li> <li>• KCE and SWIP - Evidence was not provided to demonstrate that Non-Conformance Reports (NCRs) were being used if and as appropriate.</li> <li>• TCR and SWIP - It was not clear during the audit and evidence was not provided to demonstrate if and how Hold Points marked by LU had been attended or waived and signed off prior to the work proceeding.</li> <li>• TCR - It was not clear during the audit and evidence was not provided to demonstrate if and how the TWBN Assurance Team undertakes the “targeted surveillance and routine monitoring” of the ITP process.</li> <li>• TCR and SWIP - Numerous concerns for TCR (in particular Fitout Phase 1) and some concerns for SWIP relating to quality records have been identified in the audit report and audit session notes.</li> </ul> |
| <b>Major Catastrophic Incident</b> |   |                  |  |   |
| IA_14_836                          | Apprentice Health and Safety in Depots      | 08/05/2015<br>RI | To establish whether there is a documented process or procedure for the management of Apprentices’ health and safety at training and placement locations, and whether the procedure is   | <p>At the time of this audit the integration of the JNP Apprentice training scheme with the BCV and SSL Apprentice training scheme was in progress. Therefore there were some differences in how the Apprentices were managed in the two areas of the organisation.</p> <p>Areas of Effective Control:</p> <ul style="list-style-type: none"> <li>• The supervision of Apprentices by suitably competent persons was found to be effectively controlled.</li> <li>• The 2014/15 Fleet Apprentice Placement Plan, for BCV /SSL and JNP Apprentices was evidenced at</li> </ul>   |

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|           |   |                  | <p>being complied with by the training staff, depot staff and the Apprentices</p>   | <p>the depots and at Acton Training Centre.</p> <ul style="list-style-type: none"> <li>There was evidence of emails from the Signals Apprentice Controller (BCV/SSL) to the Signals Placement Managers, alerting them about the imminent arrival of the Apprentices for placements, the course they have completed, what they are expected to cover at the location and the duration of the placement.</li> </ul> <p>Priority 1 Issues:</p> <ul style="list-style-type: none"> <li>The 'Engineering Apprentice Handbook' used for managing Apprentices' health and safety at their placement locations is not currently in the company document management system.</li> <li>The set objectives for Fleet Apprentices at Cockfosters and Northumberland Park depots were evidenced, but are not aligned to the National Vocational Qualification (NVQ). There were no set objectives evidenced for Apprentices at Neasden depot.</li> <li>There was no evidence of documented communications between the Fleet Apprentice Controller (BCV/SSL) or Apprentice Manager (JNP) and the respective Placement Managers; informing them of the imminent arrival of and the arrangements for the Fleet Apprentice placement.</li> </ul> <p>Priority 2 issues:</p> <ul style="list-style-type: none"> <li>The newly integrated 'Engineering Apprenticeship Handbook' does not explicitly identify the Depot Manager as the Placement Manager; therefore the Duty Depot Manager at Cockfosters depot was unaware that he is the Placement Manager. He was not aware of the forthcoming Apprentice placements in the depot.</li> <li>The 2014/15 Placement Plan for JNP Apprentices did not cover 3rd year Apprentices.</li> </ul> <p>The hazards in the risk assessment at Cockfosters depot were not broken down into individual ratings for severity and likelihood, with identified risk controls against each hazard. It is therefore not possible to determine which controls are effective or to prioritise each hazard in terms of risk.</p> |
| IA_14_807 | Health and Safety Change Control in LU Capital Programmes | 18/05/2015<br>RI | <p>To provide assurance that the health and safety implications of changes to project baselines are adequately identified, assessed and controlled.</p> | <p>All the scope areas were examined during the audit, in addition to broaden the sample, Victoria Station Upgrade (VSU) and Station Upgrades were included.</p> <p>Areas of Effective Control:</p> <ul style="list-style-type: none"> <li>Project Managers and HSE Managers were aware of the general principles of change control and Integrated Project Control as detailed in Pathway</li> <li>Specific examples were seen where scope changes had occurred and safety implications had been identified and new safe methods of work produced</li> <li>There was an awareness by Project Managers of the need to consult HSE Managers on scope changes to ensure that any safety implications are managed</li> </ul> <p>Priority 1 Issues:</p> <ul style="list-style-type: none"> <li>Specific changes were made to Pathway in 2014. These related to keeping records to show</li> </ul>   |

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|           |  |                  |   | <p>assessment of baseline scope changes to ensure that resources were adequate to ensure work could be done safely, and that HSE Managers and other stakeholders are consulted. These changes were provided to the Office of Rail Regulation by LU as corrective actions following a safety incident where safety impacts for a scope change were not assessed. The templates provided in Pathway to ensure these records are kept are not used by projects and instead forms and records retained are the same as before the changes were made.</p> <ul style="list-style-type: none"> <li>Changes that are not baseline changes are not governed by the Change Control Register Product. It is likely that the change that led to the Earls Court incident would not have been considered a baseline change in scope</li> </ul> <p>Priority 2 Issues:</p> <ul style="list-style-type: none"> <li>The Project Controls Handbook states that the Project Manager must “adhere to the quality criteria set out in the Change Control Register Product description”. However, the product description PD 0012 does not contain a Quality Criteria.</li> </ul>  |
| IA_14_831 | Management of Short Circuiting Devices | 22/05/2015<br>RI | To provide assurance of the correct manufacture, usage and storage of Short Circuit Devices (SCD) in regards to the category 1 standards and the LU Rule Books; it was also to gain assurance that the maintenance and inspection of the equipment is undertaken at the agreed intervals. | <p>Good Practice:</p> <ul style="list-style-type: none"> <li>The Jubilee line fleet and Emergency Response Unit maintenance schedules operate at a greater frequency than that required by the standard. This provides for contingency and ensures compliance should an inspection be missed.</li> </ul> <p>Areas of Effective Control:</p> <ul style="list-style-type: none"> <li>The manufacture and testing of SCDs by WECS is compliant with LU standards</li> <li>Those required to use SCDs are adequately trained in their use including a practical assessment.</li> <li>The CPD Protection Services Stores and ERU both maintain logs and records of the location and status of their SCDs.</li> <li>With the exception of 92TS, the SCD maintenance regimes applied by the fleet teams are effective.</li> </ul> <p>Priority 1 Issues:</p> <ul style="list-style-type: none"> <li>The SCDs sampled from the 92TS fleet were found to be out of date; an effective SCD maintenance regime was not in place.</li> </ul> <p>Priority 2 and 3 issues:</p> <ul style="list-style-type: none"> <li>SCDs are not recorded on the Ellipse or Maximo asset databases, the location and condition of SCDs is not recorded.</li> <li>There is no work instruction regarding the inspection of SCDs that may have been used and possibly exposed to traction current.</li> <li>The maintenance intervals for S-Stock and therefore SCDs is mileage based, which does not easily align with the calendar based requirements of standard S1116.</li> </ul> |

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|           |  |                  |   | <ul style="list-style-type: none"> <li>The S-Stock SCD labels had not been updated following the most recent inspections.</li> <li>The CPD Protections Services Stores have not documented their inspection and maintenance regime.</li> </ul>  |
| IA_14_816 | Environmental Management through Pathway       | 19/06/2015<br>RI | To provide assurance that the environmental requirements required by TfL project management system Pathway are being delivered as required.                         | <p>Areas of Effective Control:</p> <p>The design of Pathway is such that it has the capability to assist the project teams to deliver its environmental obligations. Each project was able to provide some evidence and documentation that, either individually or as a suite of documents, environmental aspects of the project had been addressed.</p> <p>Priority 1 issues:</p> <ul style="list-style-type: none"> <li>None of the projects reviewed were fully compliant with the requirements of Pathway. Pathway was not the single consistent project management system used for the management of the projects sampled.</li> <li>Specific environmental records required by Pathway were not being filed and archived as per the Pathway document 'Management System Requirements'</li> </ul> <p>Priority 2 issues:</p> <ul style="list-style-type: none"> <li>Listed recipients of Sustainability Assessment and Carbon and Energy Efficiency Plan data were unaware that a return is required from a project. There is a risk that intended recipients would be unaware should a data submission be omitted.</li> </ul>   |
| IA_14_834 | Northfields Depot Health and Safety Management | 19/06/2015<br>RI | To provide assurance that health and safety legislation is being complied with through the local implementation of the TfL HSE management system and risk controls. | <p>During the audit, there were areas where improvements were identified. The business is aware of the most significant of these and plans are underway to address them as noted below.</p> <p>Areas of Effective Control:</p> <ul style="list-style-type: none"> <li>Statutory inspections of lifting equipment are being carried out to the required frequencies.</li> <li>Competence, including safety critical licensing, is managed and monitored to ensure staff meet licensing requirements.</li> <li>Effective processes exist for ensuring planned general inspections (PGIs) and tours are programmed, escalated where needed and that issues for remediation are allocated and tracked.</li> <li>Robust processes are in place for the management of contractors.</li> <li>Incident trends are monitored and individual incidents investigated in line with procedures.</li> </ul> <p>Priority 1 issues:</p> <ul style="list-style-type: none"> <li>It could not be evidenced that all activities have been suitably risk assessed and risks controlled to as low as is reasonably practicable. Northfields Depot are currently undertaking a project to review work instructions and provide associated risk assessments. Electrical safety is being prioritised and work on this is progressing well.</li> <li>Lifting activities are not covered by suitable lifting plans. A project is underway across London Underground COO to address this.</li> </ul> |

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|-----------|--|------------------|--|---|
|           |  |                  |  | <p>Priority 2 and 3 issues:</p> <ul style="list-style-type: none"> <li>• Manual handling risk assessments are limited to train maintenance activities only; manual handling operations which may be taking place within the wider depot activities have not been assessed.</li> <li>• The majority of COSHH risk assessments have passed their three year review date.</li> <li>• Maintenance arrangements have not been defined or implemented for some items of workshop equipment.</li> <li>• There is a lack of clarity regarding where former Tubelines processes have been replaced by TfL HSEMS requirements.</li> </ul>   |
| IA_14_803 | LU Service Delivery Competence Management System       | 22/04/2015<br>AC | To assess key elements of the LU Competence Management System (CMS) in relation to LU Service Delivery to ensure it meets the requirements of legislation and guidance provided by the Office of Rail Regulation (ORR) | <p>Areas of Effective Control:</p> <ul style="list-style-type: none"> <li>• There are defined objectives for the CMS and its implementation is measured through reports and targets</li> <li>• Roles and responsibilities are defined and Assessors' competence is ensured through an NVQ Level 3 Award and internal assessment</li> <li>• Records of assessments always include the date, time, location, standard met and method of assessment to demonstrate compliance with ORR requirements</li> <li>• Changes to the CMS are being identified and progressed in response to the Fit for Future Stations Change Programme</li> <li>• The CMS Team communicate changes, performance of the CMS and progress of actions plans to Employing Managers and assessors</li> <li>• Sub standard competence is being identified and addressed through action plans</li> </ul> <p>Issues:</p> <ul style="list-style-type: none"> <li>• 30% of assessor notes sampled did not contain qualitative information such as how the assessment was undertaken and any feedback given. These are designed to support the validity of the assessments. Verification checks are undertaken by CMS-Co-ordinators in line with written LU guidelines, but these were not available on the LU Competence Management Sharepoint site.</li> <li>• A number of CMS documents have not been reviewed for a number of years and there is no written process detailing how documents are periodically reviewed and in response to changes where required</li> <li>• Whilst it was found that the CMS team undertake a number of communication activities, there is no defined communication process.</li> </ul> |
| IA_14_835 | The Maintenance of Water Systems to Control Legionella | 27/05/2015<br>AC | To provide assurance that maintenance of water systems to control legionella bacteria  | <p>Data and records from maintenance activities carried out on behalf London Underground by M.J. Quinn were sampled from the following areas;</p> <ul style="list-style-type: none"> <li>• Heathrow Terminals 1,2,3 (APJNP)</li> </ul>  |



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|-----------|---------------------------------|--------------------------|---|---|
|           |                                 |                          | contamination was being undertaken to specified requirements in compliance with the HSE Approved Code of Practice (L8).   | <ul style="list-style-type: none"> <li>• Hammersmith Depot (AP SSL)</li> <li>• Golders Green Depot (APJNP)</li> <li>• Northumberland Park (AP BCV)</li> <li>• Sample of other sites to confirm the consistent application of requirements.</li> </ul> <p>Good Practice:</p> <p>The APJNP team made changes to the sampling programme and the subsequent improvement in data allowed for a more efficient treatment of the bacteria. These changes should be communicated to other teams so that they may benefit from them. (See paragraph 6.2)</p> <p>Areas of Effective Control:</p> <p>There was evidence of a good working relationship with the contractor, with information gathered from the maintenance sheets, returned by M.J. Quinn, forming part of the management information needed to monitor performance.</p> <p>Evidence was provided to demonstrate that a programme of water storage tank removal is nearing completion. New installations were being designed and installed taking into account best design practices and using Water Regulation Advisory Services (WRAS) approved materials. (See paragraph 4.2)</p> <p>Four priority three issues were identified:</p> <ul style="list-style-type: none"> <li>• Records associated with the management and control of Legionella were not stored on Livelink or a similar shared drive environment.</li> <li>• Complete traceability of inspection and test equipment utilised in the management and control of Legionella is not maintained.</li> <li>• Several management system documents make reference to the control of Legionella and compliance to ACOP L8, but there is no single document that prescribes the process.</li> <li>• Changes to water system usage brought about by organisational change at Heathrow 1, 2, 3 did not prompt a timely review of the Legionella risk assessment.</li> </ul> |
| IA_15_739 | HSE Management in Bakerloo Line | <b>19/06/2015<br/>AC</b> | This audit was part of a rolling programme of HSE Management Audits aimed at providing assurance regarding compliance with HSE legislation and that TfL/LU HSE Management System requirements were being followed and were working effectively. | <p>Areas of Effective Control:</p> <ul style="list-style-type: none"> <li>• Roles and responsibilities for the new Area Managers are clear and defined</li> <li>• Workplace Risk Assessments were undertaken and reviewed</li> <li>• Noise Assessments have been completed where required</li> <li>• Competence, including safety critical licensing was managed and monitored</li> <li>• Periodic medicals were planned and attended at the required intervals</li> <li>• Staff hours were monitored and changes recorded</li> <li>• Suitable processes were in place for managing staff and tenants familiarisation</li> </ul>  |



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|-----------|---|------------------|--|--|
|           |   |                  |  | <ul style="list-style-type: none"> <li>• Current Station Security Programmes were available and adequate checks were completed</li> <li>• Pro-active monitoring programmes were undertaken, findings reported and remedial actions implemented</li> <li>• Incident trends were monitored and individual incidents investigated</li> </ul> <p>Priority 1 Issues:</p> <ul style="list-style-type: none"> <li>• Display Screen Equipment (DSE) training and assessments were not completed for all users</li> </ul> <p>Priority 2 or 3 Issues:</p> <ul style="list-style-type: none"> <li>• Changes to Workplace Risk Assessments for medically restricted staff were not recorded on F1030 to ensure there is a recorded agreement between the manager and member of staff</li> <li>• Evacuation Safety briefings were not provided to the auditor on arrival at stations</li> <li>• Sub-surface stations were not in compliance with the Operation Standard No. LF24 which reflects an agreement between LU and the LFEPA for annual live evacuations</li> <li>• Fire call point testing at Elephant &amp; Castle’s Train Crew Depot did not meet requirements</li> <li>• The Health &amp; Safety and Train Operator Notice Cases at Elephant and Castle’s booking on point were not suitably managed</li> <li>• A Line Speed Checks Risk Assessment was not completed. The frequency of current speed checks did not meet minimal requirements</li> <li>• There were no records that night worker health questionnaires were issued</li> <li>• Working Exceedance Authority forms were not completed when working hours are exceeded.</li> <li>• First Aid provision arrangements have not been assessed at all locations</li> </ul> |
| IA_15_745 | LU Emergency Response Unit (ERU) HSE Management | 24/06/2015<br>AC | This audit is part of a rolling programme of HSE Management Audits aimed at providing assurance regarding compliance with HSE legislation and that TfL/LU HSE Management System requirements are being followed and are working effectively. | <p>Good Practice:</p> <ul style="list-style-type: none"> <li>• There is an app on the team’s iPads that directs the user to all current risk assessments so there is no need to carry hard copies to site.</li> </ul> <p>Areas of Effective Control:</p> <ul style="list-style-type: none"> <li>• All generic risk assessments are in date and are easily accessible by all ERU staff</li> <li>• The training matrix is monitored and managed to a high standard ensuring that licences and competence is maintained</li> <li>• Reactive monitoring is well controlled and actions followed through to closure</li> <li>• All PGIs are completed within the timeframe set and actions tracked</li> <li>• There is good staff awareness on all HSE issues, especially regarding electricity at work and manual handling.</li> </ul>   |

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|-----------|--------------|---------------|--------------------|--|
|           |              |               |                    | <p>Priority 2 and 3 issues:</p> <ul style="list-style-type: none"> <li>• There is a lack of consistency of how dynamic risk assessments are being used. Some teams are completing them for every task and others by exception.</li> <li>• The Management System (Working at TfL – Safety Tours) requires senior managers to complete safety tours at all their locations. There was no evidence that the Head of AP JNP or Stations Manager had completed any tours in ERU</li> <li>• Equipment stored on the higher drawers of the ERU van was not easily accessible. A specialist company, dorsaVi, have been procured to undertake a Manual Handling assessment.</li> <li>• Although first aid equipment and trained first aiders were provided there was no first aid risk assessment completed showing how the levels had been determined</li> <li>• Where staff are on medically restricted duties, there was evidence showing what duties can be completed. However, the Management System form was not being used to record agreements between the manager and the member of staff.</li> </ul> |