

TRANSPORT FOR LONDON

SAFETY, HEALTH AND ENVIRONMENT ASSURANCE COMMITTEE

SUBJECT: ANNUAL RESILIENCE ASSURANCE LETTERS 2010/11

DATE: 2 AUGUST 2011

1 PURPOSE AND DECISION REQUIRED

- 1.1 To provide the Committee with assurance on the status of the implementation of the requirements of the TfL Resilience Management Policy Framework across TfL. The Committee is asked to note the paper.

2 BACKGROUND

- 2.1 TfL introduced the Resilience Assurance Letters process in 2007 following the introduction of the HSE Assurance Letters process three years earlier. The Assurance Letters process is recognised as best practice and has been well received by the Commissioner and the Committee.
- 2.2 In 2005, TfL developed and agreed a Resilience Management Policy Framework. This was last reviewed in 2010. The Resilience Assurance Letter process is a means to assess the extent to which the Resilience Management Policy Framework has been implemented in each of the businesses.

3 RESILIENCE ASSURANCE LETTERS FOR 2010/11

- 3.1 Early in the financial year 2011/12, all Managing Directors completed Resilience Assurance letters addressing the status of their business's compliance with the TfL Group Resilience Management Policy Framework at the end of financial year 2010/11.
- 3.2 The completed Resilience Assurance Letters were submitted to the Commissioner prior to their submission to the Committee.
- 3.3 In the Assurance Letters, the implementation status of the various elements of the Policy Framework is assessed as being at one of the following levels:
- (a) **'Under development'** – is considered to be the status when work is in progress to deliver documented processes, procedures, standards etc.
 - (b) **'In place'** – describes the status when processes, procedures or standards are already documented but not yet being used as intended.

(c) **'Implemented'** – is the status when all processes, procedures or standards are documented and are being used as intended.

3.4 All the business units have improved the implementation of the Policy Framework during 2010/2011. Crossrail, in particular, made significant progress with most elements moving from 'In place' in 2009/10 to 'Implemented' in 2010/11.

3.5 The Resilience Assurance Letters for 2010/11 are attached as Appendices to this report:

(a) Appendix 1 – London Underground's Resilience Assurance Letter;

(b) Appendix 2 – Surface Transport's Resilience Assurance Letter;

(c) Appendix 3 – London Rail's Resilience Assurance Letter;

(d) Appendix 4 – Crossrail's Resilience Assurance Letter; and

(e) Appendix 5 – Corporate Directorates' Resilience Assurance Letter.

4 RECOMMENDATION

4.1 The Committee is asked to NOTE the report and attached Resilience Assurance Letters for 2010/11.

5 CONTACT

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Transport for London
LONDON UNDERGROUND

Subject: Resilience Assurance Letter

Date: 31 March 2011

1 Introduction

1.1 This Letter documents the status of Resilience Management for London Underground (LU) as at 31 March 2011.

2 Assurance Compliance Statements

2.1 Group Resilience Policy

Status	Implemented
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The Resilience Policy Framework has been communicated to appropriate staff in the contingency planning and business continuity teams in LU. It is also available through Source to all staff.

2.2 Civil Contingencies Act 2004

Status	Implemented
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In line with the regulations of the Civil Contingencies Act 2004 LU is a member of the London Resilience Forum and a member of a number of its committees. LU has participated in government exercises at the COBR level, most recently those that have been held in relation to the 2012 Games.

2.3 Resilience Management Process

Status	Implemented
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The resilience management process which has been developed is in accordance with the TfL Resilience Management Policy Framework. The process covers emergency planning and business continuity arrangements including risk assessments, planning, and assessment of existing controls, mitigating actions to be taken and testing of arrangements. Enhanced resilience structures for the 2012 Games are being developed with other parts of TfL to ensure that fully integrated processes are in place.

2.4 Resilience Planning

Status	Implemented
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Resilience plans have been developed for both operational and non-operational parts of the business based upon worst case scenarios. These plans reflect equality and inclusion matters. Copies are available through the Network Operational Planning & Integration Manager.

2.5 Business Planning

Status	Implemented
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The TfL Business Planning Guidelines were adopted by LU for development of the 2011/12 Business Plan. These guidelines include the need to assess resilience implications during the development of the plan.

2.6 IM Resilience and Security

Status	Implemented
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Information Management has specific responsibility for ensuring that appropriate IM controls, assurance, resource and reporting processes are in place to counter all threats to the organisation's IM infrastructure. The policies, standards, processes and procedures currently implemented ensure that all IT threats are dealt with to minimise their impact on the business. This is achieved by the introduction of control systems, adoption of industry-best practice and the after event investigations and lessons learnt exercises.

This is then supplemented by identifying and documenting the significant risks associated with IM activities and ensuring that these are addressed by establishing and maintaining appropriate processes and internal controls. This is designed to improve resilience by obtaining assurance on an ongoing basis that these controls are operating as intended, reporting any significant control failures as soon as they occur with details of remedial action to be taken.

2.7 Security of Staff, Customers and Assets

Status	Implemented
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LU has adopted the national terrorism threat level as determined by Transec as a means of assessing the security measures to be implemented at operational sites.

The LU Statement of Control of Business Security provides for the implementation of an appropriate system of control over security activities and describes how control, assurance and reporting responsibilities are to be discharged. The Statement is applicable to all of LU's security activities

throughout the business and is reviewed annually to ensure it accurately reflects the arrangements in place.

For assets, security measures have been adopted and there is a continuing programme to review and assess security risks and measures under the resilience programme.

For those roles that have been assessed as requiring security clearance this is obtained from the Department for Transport.

2.8 Project and Change Management

Status	Implemented
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These issues are considered as part of the LU Resilience Programme. In addition, resilience matters are considered during the appraisal of projects by the Central Programme Management Office.

All changes to the resilience arrangements are managed through the Directors Risk Assurance and Change Control Team (DRACCT).

2.9 Procurement Management

Status	Implemented
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Works, goods and services are procured using a process that provides adequate assurance that supply chain resilience risks are appropriately managed, recorded and communicated in accordance with the TfL risk management framework. This process also ensures that business critical contractors and suppliers have business continuity/recovery plans.

LU conforms to the arrangements that have been introduced by TfL regarding critical suppliers.

2.10 Emergency, Contingency and Business Recovery Plans

Status	Implemented
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There are in place Emergency, Contingency and Business Recovery plans in line with the Policy and addressing operational and non operational areas, and as necessary, supporting other parts of TfL and third party partner organisations (e.g. London Resilience and its members).

The plans detailed above have been developed for LU.

2.11 Training, Testing and Exercises

Status	Implemented
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There are plans in place for the training of staff and testing and exercising of plans to ensure that plans remain fit for purpose and that staff develop and retain the necessary skills to execute them and that these exercise and training programmes are recorded for audit purposes.

LU tested the Business Recovery Plan in February 2010 and will be retesting in December 2011.

LU is actively partaking in exercises in relation to the Olympic Games to ensure that the plans for the games are fit for purpose.

2.12 Staffing

Status	Implemented
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Processes are in place for identifying business critical roles and competencies required for them, identifying staff responsible for these roles and identifying 'stand-ins' for emergencies and business disruptions.

The Business Recovery Plans and Operational Contingency Plans provide these details.

2.13 Auditing of Resilience Management Processes

Status	Implemented
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LU has a process in place to review the resilience management process on an ongoing basis and there is a programme in place to review emergency plans quarterly. Additionally, resilience management processes may be subject to review by either TfL Internal Audit or LU Safety audit teams as part of their annual audit plans.

2.14 Management Review of Resilience Management Processes

Status	Implemented
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The Security Steering Group reviews security risks and resilience matters within LU and develops strategies for managing these.

Each Director has confirmed in a Certificate of Compliance that they have complied with the LU Statements on Control throughout the year. These were approved by the Rail and Underground Board in its role of being responsible for all LU business risk and control matters.

3 Future Resilience Management Developments

Over the coming year it is planned to further develop and enhance our ability to respond to and identify potential threats to the IT infrastructure as part of an on-going service improvement approach.

Mike Brown
Rail and Underground Managing Director

July 2010

Transport for London
SURFACE TRANSPORT

Subject: Resilience Assurance Letter for Surface transport

Date: 31 May 2011

1 Introduction

1.1 This Letter documents the status of Resilience Management for Surface Transport as at 31 March 2011.

2 Assurance Compliance Statements

2.1 Group Resilience Policy

Status: **Implemented**

The framework addresses the requirements for the resilience of operational services across TfL and includes business continuity for non operational management and support activities.

2.2 Civil Contingencies Act 2004

Status: **Implemented**

TfL is an active partner in the London Resilience Team (LRT) which is now under the umbrella of the GLA. Surface Transport participates fully in the London Resilience Forum (LRF) along with the LRT through planning, exercises and reviews. As a Category 2 Responder under the CCA, TfL has recently participated in the CCA 2004 Enhancement programme providing responses to consultation on revisions to the Act.

2.3 Resilience Management Process

Status: **Implemented**

Business continuity and resilience are contained under one directorate with the Surface Resilience Management Group (SRMG) overseeing the functions across Surface Transport. It provides a regular update to the Surface Board comprising the MD Surface Transport and other senior directors.

Resilience and business continuity plans exist and are reviewed and updated on a regular basis.

2.4 Resilience Planning

Status: **In place**

The resilience and business continuity plans are focused on ensuring an effective operational response to major planned and unplanned incidents as well as any business disruption. These plans incorporate arrangements for dealing with those with physical disabilities. All current plans when being reviewed and any new plans being produced will include an assessment of best practice in dealing with equality and inclusion matters.

2.5 Business Planning

Status: **Implemented**

The process for assessing, recording and communicating resilience risks is integrated with the quarterly strategic risk reporting and business planning process. This risk process is underpinned by Surface Transport's risk architecture and protocols for communication, and assessment of the changing risk profile of the organisation. The Surface Transport Risk Register has been completely revised and is reviewed bi-monthly at the Surface Resilience Management Group (SRMG) meeting.

2.6 IM Resilience and Security

Status: **In place**

IT systems and services are being reviewed to ensure fitness for purpose with an emphasis on platform resilience rather than single applications.

2.7 Security of Staff, Customers and Assets

Status: **Implemented**

The security of premises is regularly reviewed. All staff in key operational roles are security cleared to the levels required for their roles. There are clear security arrangements with regard to staff roles and their access to key infrastructure.

Regular briefings on threat levels are obtained from the MPS Counter Terrorism Command and arrangements are in place to obtain emergency updates when required. Following a change of threat level that requires a change in current working practices, it can be implemented very quickly.

2.8 Project and Change Management

Status: **In place**

All major current and new projects have resilience and business continuity arrangements set out and taken into account. Business critical projects are reviewed to ensure effective business continuity and resilience arrangements are in place.

2.9 Procurement Management

Status: **In place**

Procurement processes include analysis and assessment of the financial stability of suppliers and their capability to deliver contract requirements. Business continuity arrangements are aligned with project and operational business continuity plans and managed by contract managers as appropriate.

2.10 Emergency, Contingency and Business Recovery Plans

Status: **Implemented**

Plans are in place, which are regularly reviewed to deal with most foreseeable situations. These plans include providing support within TfL, to the London Resilience Team, the emergency services, local authorities and other agencies. Business Recovery Strategy has been developed alongside business continuity plans which will allow Surface Transport to provide Mutual Aid across TfL and vice versa.

2.11 Training, Testing and Exercises

Status: **Implemented**

Regular training of staff and the testing and exercising of current plans via table top exercises take place throughout the year. In the past year TfL have taken part in a National Flood exercise (Project Watermark) as well as testing the new London Strategic Co-ordination Centre (SCC) facilities as part of the aforementioned exercise. Regular exercises are also carried out to test the resilience of critical surface Infrastructure such as the Eastway Tunnel. All operational plans and the results of exercising are reviewed at regular intervals. Non-operational recovery management structure is tested or exercised on a regular basis.

2.12 Staffing

Status: **Implemented**

The roles and responsibilities of all managers who deal with emergency situations are regularly reviewed as part of our command and control processes. Training takes place to ensure that suitable managers are able to cover a number of different roles as and when required and on manager availability.

A programme of workplace recovery and desktop scenario exercises is in place. Resilience testing takes place with strategic business partners to ensure that effective back up arrangements are in place for business critical roles. Back up plans are regularly reviewed at TfL Gold meeting and via the Gold circulation list.

2.13 Auditing of Resilience Management Processes

Status: **Implemented**

There is a Surface Resilience Risk Register which drives the work of the Surface Resilience Management Group. The Risk Register has recently been revised and is reviewed bi-monthly. There is a risk based approach to the audit programme and a number of audits have been completed to address risks identified on the risk register.

2.14 Management Review of Resilience Management Processes

Status: **Implemented**

The Surface Resilience Management Group (SRMG) takes an overview of resilience issues and preparedness across the organisation. This will also be reported via the Safety report to the Surface Strategy meeting on a regular basis. There is a risk register which also ensures regular reviews of all the key elements.

3 Future Resilience Management Developments

Representatives from Bus Operations and London Streets will participate in a number of exercises including one to improve multi-agency preparedness in the event of a significant railway incident.

Representatives from Bus Operations and London Streets will continue to work with local authorities to review and update as required plans for dealing with adverse weather conditions.

Exercise to test new fall back facilities at 172 Buckingham Palace Road for CentreComm and LSTCC.

Finalisation of the Mutual Aid Project to bring Business Recovery in-house, releasing the external SunGard contract.

Review of TfL Recovery Management Structure in light of the new Business Recovery Strategy (Mutual Aid).

Leon Daniels
Surface Transport Managing Director

July 2010

Transport for London

London Rail

Subject: Resilience Assurance Letter

Date: 31 May 2011

1 Introduction

1.1 This Letter documents the status of Resilience Management for London Rail as at 31 March 2011.

London Rail is made up of three separate business areas, Docklands Light Railway (DLR), London Overground and London Tramlink. The transport services themselves are delivered by private sector contractors.

Comments have been made in each section where requirements have not been categorised as implemented.

2 Assurance Compliance Statements

2.1 Group Resilience Policy

London Rail HQ	Implemented	Docklands Light Railway	Implemented	London Overground	Implemented	London Tramlink	Implemented
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The TfL Group Resilience Policy Framework has been actively communicated to staff with a need to know and is available to all employees.

2.2 Civil Contingencies Act 2004

London Rail HQ	Implemented	Docklands Light Railway	Implemented	London Overground	Implemented	London Tramlink	Implemented
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The requirements of the Civil Contingencies Act 2004 are met. TfL is a Category 2 responder under the Act which recognises that TfL as a “co-operating body” will be less likely to be involved in planning the responses to a major incident but will be heavily involved in incidents that affect the transport sector. There is therefore, under the Act, a requirement for TfL as a Category 2 responder to co-operate, share relevant information and have arrangements in place for ensuring the confidentiality of sensitive information with Category 1 and other Category 2 responders, and to come together with them in Local Resilience Forums, ensuring that TfL is represented at these forums.

Key	Under Development	In Place	Implemented
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2.3 Resilience Management Process

London Rail HQ	Implemented	Docklands Light Railway	In Place	London Overground	Implemented	London Tramlink	Implemented
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A structured approach to resilience management has been developed in accordance with the criteria laid down in the TfL Group Resilience Policy Framework and addresses all business critical activities, both operational and non-operational, with risks being assessed and managed in accordance with the TfL risk management processes.

2.4 Resilience Planning

London Rail HQ	Implemented	Docklands Light Railway	Implemented	London Overground	Implemented	London Tramlink	Implemented
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All Resilience planning and responses are based on the principle of ‘prudent over-reaction’ and support the TfL business plan in fully reflecting TfL’s ethical values and vision. This also ensures that resilience takes full and appropriate account of equality and inclusion matters.

2.5 Business Planning

London Rail HQ	Implemented	Docklands Light Railway	Implemented	London Overground	Implemented	London Tramlink	Implemented
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There is a process in place for assessing, recording and communicating resilience risks and their implications during business planning.

2.6 IM Resilience and Security

London Rail HQ	Implemented	Docklands Light Railway	In Place	London Overground	In Place	London Tramlink	In Place
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Office based systems in London Rail are provided by and managed under TfL contract to Your IM. In terms of operational control systems all parts of the London Rail businesses have taken part in the recent TfL led review of cyber security and will ensure that any significant findings are incorporated in the appropriate risk registers for ongoing management.

2.7 Security of Staff, Customers and Assets

London Rail HQ	Implemented	Docklands Light Railway	Implemented	London Overground	Implemented	London Tramlink	Implemented
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Key	Under Development	In Place	Implemented
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Measures are in place to ensure the security of TfL staff, customers and assets, including assessments of threat levels and responses to changes in threat levels.

2.8 Project and Change Management

London Rail HQ	Implemented	Docklands Light Railway	Implemented	London Overground	In Place	London Tramlink	Implemented
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For London Overground resilience risks are included in the risk management process and risk owners have been allocated. Going forward there will be a more robust forum established to ensure better monitoring and reviewing of resilience risks.

2.9 Procurement Management

London Rail HQ	In Place	Docklands Light Railway	Implemented	London Overground	In Place	London Tramlink	Implemented
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Critical suppliers are checked. However the checks for all suppliers have not been consistent across the London Rail businesses. Improvements to the current arrangements are planned for next year.

2.10 Emergency, Contingency and Business Recovery Plans

London Rail HQ	Implemented	Docklands Light Railway	Implemented	London Overground	In Place	London Tramlink	Implemented
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Emergency plans and business continuity plans are available across the businesses, however further improvements need to be made to plans on London Overground to ensure they align with third party partner organisations.

2.11 Training, Testing and Exercises

London Rail HQ	In Place	Docklands Light Railway	In Place	London Overground	In Place	London Tramlink	Implemented
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Exercises (including a significant ‘live’ multi agency exercise) have taken place in the past year. Improvements in the planning and scheduling of testing and exercising will take place in the forthcoming year.

2.12 Staffing

London Rail HQ	Implemented	Docklands Light Railway	Implemented	London Overground	In Place	London Tramlink	Implemented
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Deputies have been identified for all business critical roles. On London Overground the processes of ‘officially’ appointing deputies is yet to be fully completed.

Key	Under Development	In Place	Implemented
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2.13 Auditing of Resilience Management Processes

London Rail HQ	In Place	Docklands Light Railway	In Place	London Overground	In Place	London Tramlink	Implemented
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DLR undertake an annual independent management systems audit which looks at all aspects of the management system, this is supplemented by occasional audits by TfL (e.g. an audit of civilian security officers in 2010). There are no specific audits of resilience management processes however governance and review arrangements are in place to ensure that these systems are operating effectively.

On London Overground resilience has not been included in the audit programme in the past. The programme is being refined to ensure that audits are planned for next year.

2.14 Management Review of Resilience Management Processes

London Rail HQ	Implemented	Docklands Light Railway	Implemented	London Overground	Under Development	London Tramlink	Implemented
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On London Overground resilience has not been included in the management review process. The process will now be changed to ensure that resilience is considered in the next review.

3 Future Resilience Management Developments

As part of the ongoing review and development of Resilience Management the following significant improvement actions are scheduled for 2011/12.

London Rail HQ

- Further development of the London Rail Resilience Improvement Plan.

DLR

- The development of joint systems with the Franchisee covering both operational risk management and change and assurance.
- Preparations for the Olympics, the outputs of which will not only provide improved resilience for Games time but will also provide long lasting legacy benefits to the DLR.

Tramlink

- Review of business contingency plans by June 2011.
- Contributing to the London Olympic Venue Transport Security Risk Assessments workshops.

Key	Under Development	In Place	Implemented
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London Overground

- Other than those actions identified in the text above, London Overground will be heavily involved in planning for the Olympics.

Mike Brown
Rail and Underground Managing Director

July 2011

Key	Under Development	In Place	Implemented
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Transport for London

Crossrail

Subject: Resilience Assurance Letter

Date: 13 April 2011

1 Introduction

1.1 This Letter documents the status of Resilience Management for Crossrail Limited as at 31 March 2011.

Crossrail, unlike TfL's other subsidiaries, is not an operational unit. Crossrail manages the design and construction stages of a new railway. The statements below give an overview of our current position and any planned work.

2 Assurance Compliance Statements

2.1 Group Resilience Policy

Status: **Implemented**

Resilience and Contingency Planning is the responsibility of the Crossrail Programme Director, with the Health & Safety Director leading on delivery of the plan.

In 2011 Crossrail published a joint Security and Resilience Policy that sets out the principles and objectives for the achievement of excellence in security and resilience for our industry partners, stakeholders and contractors.

2.2 Civil Contingencies Act 2004 (CCA)

Status: **Implemented**

Crossrail recognises that the Duty Holders of the final operational railway will collectively perform the requirements of Category 2 responders under the CCA.

In developing the design of the railway Crossrail has applied, in consultation with Rail for London, Network Rail and London Underground and the London Fire Brigade (LFB) design standards and operational concepts consistent with good practice on other railways and which therefore should not unreasonably constrain the future duty holders ability to respond to their duties under CCA.

A dedicated LFB officer joined the Crossrail team in 2010 as a point of contact for Crossrail for comments on issues affecting fire safety design of the railway; and as a sign post to other relevant LFB contacts. As part of the consultative process, and now that the fixed infrastructure is largely determined, we intend to engage with the Local Resilience Forum structure through contacts within London Fire Brigade.

2.3 Resilience Management Process

Status: **Implemented**

The Security and Resilience Policy is supported by a Business Continuity Strategy, which outlines the organisation's commitment to, and the governance structure for, resilience planning. The Strategy sets out the arrangements for the Business Continuity Steering Group chaired by the Programme Director, which has responsibility for managing the strategy, risks to business continuity and the Business Continuity Management Plan.

This structured approach to resilience management has been developed in accordance with the criteria laid down in the TfL Group Resilience Policy Framework and addresses all business critical activities, both operational and non-operational, with risks being assessed and managed in accordance with the TfL risk management processes.

2.4 Resilience Planning

Status: **In place**

All resilience planning and responses are based on the principle of 'prudent over-reaction' and support the TfL business plan in fully reflecting TfL's ethical values and vision. This also ensures that resilience takes full and appropriate account of equality and inclusion matters.

Resilience planning is lead by the Health and Safety Director and the business continuity plan has been reviewed and updated to reflect Crossrail's new operational model. Plans were in place last year and are now being further developed due to the new organisation and managing the major tunnelling in the next stage of the programme. Work to embed these changes into resilience planning will continue throughout the year with workshops, exercises and additional training where required.

2.5 Business Planning

Status: **In place**

The Business Continuity Plan has been developed over the past year to enable Crossrail to manage its activities in the event of a disruption to the Company's operational capability, including any event which would prevent access to Crossrail accommodation and associated IT infrastructure. In addition the IT department has developed an IT disaster recovery plan.

Business continuity continues to be embedded across the Crossrail organisation and is represented and supported at departmental level by service recovery teams, led by a service recovery champion.

Service recovery teams are responsible for defining critical outputs and dependencies through business impact analysis, identifying key risks and planning for the restoration of critical outputs in the event of a disruption. This is coordinated by the Business Continuity Manager who supports and provides guidance to staff engaged in the process.

The scope for Business continuity includes the offices at Canary Wharf and Pier Walk, the warehouse and visitor centres and all site based delivery team activity.

The plan provides a flexible framework within which response and recovery activities can be conducted. It is closely associated to the Crisis Communications Plan, IT Disaster Recovery Plan, Accounting for Staff Procedure and the Incident Notification, On Call and Response Procedure.

Guidance is provided on topics including invocation, roles and responsibilities, response and recovery priorities and standing down. The plan is supported by several appendices which provide information and templates which may be used during a disruption.

The plan is not designed to provide a framework for major incident management but to complement the framework described in the Incident Notification, On Call and Response Procedure. Following the introduction of the new operating model both the plan and the Incident Notification, On Call and Response Procedure are being further developed to ensure Crossrail can coordinate effectively with contractors in the event of an emergency occurring during the future phases of construction.

2.6 IM Resilience and Security

Status: **Implemented**

All information management systems and services are hosted in secure data centres on resilient IT equipment which have in-built fail-over capability and the ability to fail-over between data centres. The data centres are secure and rated to HMG standards for restricted and secret data.

There is an IT Service Continuity Plan which is tested annually. Any failures to the test are recorded and remediated. All remediation activities against the 2010 test have been completed and the facilities will be re-tested in July 2011.

All IT system and services have been reviewed in line with business continuity requirements and the key systems identified. These have a restore point objective of 24 hours.

2.7 Security of Staff, Customers and Assets

Status: **Implemented**

Measures are in place to ensure the security of Crossrail staff, and assets, including assessments of threat levels and responses to changes in threat levels.

Crossrail takes a holistic approach to security by covering the three elements of security – human, physical and information – under one umbrella.

Security policy, processes and standards are published and a security schedule has been added to the Works Information for contractors.

Assurance against the requirements of the Works Information is provided by the Crossrail Security Team.

A range of measures are in place to ensure Crossrail security in respect of staff contractors and industry partners, these include:

- (a) Pre employment screening against human resources industry standards;
- (b) Liaison with the UK Border Agency to ensure that these policies and procedures are being followed consistently by Crossrail business partners;
- (c) Smart card access to all Crossrail floors and areas;
- (d) Photograph identification access to all Crossrail offices, checked by security at entry; and
- (e) Robust floor supervision and patrolling regimes.

Crossrail's main office is located within the Canary Wharf complex which has been designed and is maintained to high security standards.

All Crossrail employees are given information security training via an on-line e-learning Information Security Induction Course.

Crossrail has assessed the threat risk to the project to inform the security strategy and business continuity management. This assessment process reviews the adequacy of security measures in place at each site and identifies recommendations for improvement. The reviews are comprehensive, and topics covered include security of confidential material, IT, perimeter protection and CCTV/alarms.

The security procedure and standard details the standards required to be implemented by our contractors.

2.8 Project and Change Management

Status: **Implemented**

Resilience risks are considered and addressed using the Crossrail risk management framework when projects are planned or changes proposed.

The Head of Risk manages the Crossrail risk registers covering all aspects of Crossrail activities including business continuity. The highest ranked programme and strategic risks are reviewed every period by the Risk Sub-Committee (A Board Sub-committee).

2.9 Procurement Management

Status: **Implemented**

Works, supplies and services are procured using processes, procedures and systems described within the "Works and Services Information" issued to suppliers. Assurance activities provide adequate evidence that resilience risks are appropriately managed.

The Procurement Department has a business recovery plan in place and all procurement documents are backed up and stored electronically at a secure location off site. The current process includes the facility for assessing business continuity/recovery plans of business critical contractors and suppliers at the pre-qualification stage. The process for the ongoing monitoring and review of the fitness for purpose of the business continuity/recovery plans

of business critical contractors and suppliers during the life-cycle of a contract is being developed.

2.10 Emergency, Contingency and Business Recovery Plans

Status: **Implemented**

The Crossrail Business Continuity Plan and other emergency procedures are in place in line with the Policy. They address both corporate and construction site areas. This year Crossrail will join other parts of TfL to provide mutual support in the event of a serious disruption.

In terms of the future operational railway, work is at an early stage involving Rail for London (RfL) and LU to establish the appropriate mitigations and plans. There are also plans to engage with Resilience Forums when this is appropriate.

2.11 Training, Testing and Exercises

Status: **Implemented**

Crossrail recognise the value of a healthy business continuity system and is committed to the development of a programme of exercises which will help test its plan and validate its planning assumptions ensuring that they remain fit for purpose.

Plans are in place for staff training to ensure that staff develop and retain the necessary skills to execute them. Exercises improve the familiarity of those involved in response, and therefore improve the overall level of organisational resilience. Tests, exercise and training programmes are recorded for audit purposes.

Service recovery champions have taken part in a number of business continuity awareness raising exercises and sessions in the past 12 months. These have included the Accounting for Staff procedures and the Crisis Communications Plan. The teams have been able to hold open discussion of the plan where their knowledge is validated.

In March this year, following two earlier exercises, the Business Continuity Steering Group engaged in a table top exercise to rehearse the response to a site incident with a tunnelling contractor. This exercise is part 1 of the development of this response and the actions to improve our processes are being followed up in preparation of a further full simulation exercise later this year.

Over the coming months there will be a number of opportunities for those involved in business continuity to improve their understanding of the plan and management system to become more involved in its maintenance. Crossrail are careful to transfer and develop skills wherever possible.

2.12 Staffing

Status: **Implemented**

Processes are in place for identifying business critical roles and the competencies required for them along with 'stand-ins' for emergencies and business disruptions.

The Business Continuity Plan covers all of the roles needed to support recovery and key roles have been identified and briefed.

The role of Business Continuity Manager has been made permanent as part of the new operating model introduced from April 2011. The role is part of the Health and Safety Team. As well as encouraging improvements in business continuity the role includes supporting stakeholders and contractors in improving emergency preparedness and the new development of an incident control centre, which is a development of the present Crossrail helpdesk.

Other external expert support has been provided to facilitate the full scenario exercise planning and delivery.

2.13 Auditing of Resilience Management Processes

Status: **Implemented**

There is a risk based audit programme in place to provide confirmation of the existence of effective resilience management processes. Crossrail business continuity planning was audited by TfL internal audit in October 2010 and the actions identified have been addressed and accepted as complete.

2.14 Management Review of Resilience Management Processes

Status: **Implemented**

Management reviews are undertaken by the Business Continuity Steering Group. Each exercise is the subject of a report and actions schedule which is submitted to the Steering Group for approval and allocation.

3 Future Resilience Management Developments

3.1 As part of the ongoing review and development of resilience management the following significant improvement actions are scheduled for 2011/12.

Crossrail will in the next 12 months be engaging with the Tier 1 contractors joining the project to ensure compliance with security standards and processes.

Crossrail will continue to develop its intelligence capacity and information sharing arrangements with police and government agencies. Further to the risk assessment mentioned earlier, it will monitor the recognised threats, such as terrorism and crime etc to the project and provide effective security responses.

Business Continuity Management will be extended to cover the activities of the new organisation and review each department's service recovery plans to ensure they are appropriate and coordinated.

As mentioned above a full simulation exercise involving Contractors and emergency services will be held to develop response measures in the event of a serious site incident.

Rob Holden
CEO Crossrail

April 2011

Transport for London
CORPORATE DIRECTORATES

Subject: Resilience Assurance Letter for Corporate Directorates

Date: 17 June 2011

1 Introduction

1.1 This Letter documents the status of Resilience Management for the Corporate Directorates as at 31 March 2010.

Sections 2 and 3 address the processes that are in place for the management of Business Continuity for the Corporate Directorates collectively.

Section 4 addresses the specific roles that Corporate Directorates play in relation to wider resilience matters, including support to the prevention of, planning for and responding to major incidents.

2 Resilience Management Process

2.1 Group Resilience Policy

Status: **Implemented**

A TfL Group Resilience Policy Framework is in place. The policy has been made widely available to staff through Source. The policy is reviewed annually and will be communicated via the weekly staff bulletin via Source.

2.2 Resilience Management Process

Status: **Implemented**

The Business Continuity Management of non operational management and support activities is undertaken within the TfL resilience policy framework and is co-ordinated through Group HSE and led for the Corporate Directorates by a Business Continuity Manager in Group Property and Facilities.

In line with the TfL wide approach, the Corporate Directorates have identified business critical activities and those who deliver them through Business Impact Analyses. Business Recovery Plans that address all areas of the Corporate Directorates have been developed. The Business Recovery Plans document the actions to be taken in the event of the loss of office accommodation or other business disruption.

A Corporate Directorates Lead Director, Business Recovery Management Team and associated Business Recovery Management Team Plan are in place to support and co-ordinate recovery activities in the event of an incident.

2.3 Resilience Planning

Status: **Implemented**

All Business Recovery Plan Holders have been advised to 'prudently over react' to an incident that might cause significant disruption rather than 'under react'.

Due account of equality and inclusion issues has been taken in the development of the Business Recovery Plans and in relation to the selection of recovery sites. All these sites have primary step free access, their facilities are accessible and plans are in place to address other specific equality and inclusion needs that might arise.

2.4 Business Planning

Status: **Implemented**

A business impact analysis is carried out and an updated business recovery plan produced when any significant change or reorganisation to a function takes place.

2.5 IM Resilience and Security

Status: **In Place**

Management reviews of IM resilience to risks and malicious threats are conducted for both systems and processes. When gaps or shortfalls are identified they are recorded within a risk register and necessary improvements are put in place. Appropriate risk based recovery capabilities and procedures are in place for dealing with the failure of IM systems. IM have made good progress towards using a risk based approach within Shared Services including the use of Active Risk Manager (ARM) software, to record and track risks. Work is still in progress to ensure comprehensive cover across all systems and processes. Delivery and implementation will be a strong focus for IM in 2011/12.

2.6 Security of Staff and Assets

Status: **Implemented**

All TfL Head Office buildings have physical security measures in place to prevent unauthorised access and protect staff, visitors and assets. The principle governing these measures is that the primary access points are secured with free internal access as far as Business exigencies permit. This is achieved as appropriate to the building concerned and the functions undertaken within it. These include static guarding by dedicated security staff, building passes, visitor control, electronic access control systems, intruder alarms, CCTV systems etc.

2.7 Project and Change Management

Status: **Implemented**

As part of significant change or reorganisation to a function a business impact analysis is carried out and where appropriate, the Business Continuity Manager is informed, and an updated business recovery plan produced.

2.8 Procurement Management

Status: **Implemented**

Group Procurement processes are followed for the provision of works, goods and services and this ensures, where appropriate, that business critical contractors and suppliers have business continuity/recovery plans in place.

2.9 Emergency, Contingency and Business Recovery Plans

Status: **Implemented**

All TfL Head Offices have well developed Emergency Procedures for a variety of possible events. These are documented and published on Source. Equality and inclusion implications of evacuations are assessed in advance and incorporated into plans. Two assembly points (primary and alternative) have been identified for each building and regular (at least twice per year) fire drills are conducted. These Emergency Plans are supported by a fully documented Facilities Incident Management Plan which is regularly reviewed and updated.

2.10 Training, Testing and Exercises

Status: **Implemented**

The Business Continuity arrangements include an overarching framework for training and testing of Business Recovery Plans, including testing of infrastructure and services at the recovery sites. User testing at the recovery locations is undertaken once per year and the Business Recovery Management Team train at least once per year. Functional Recovery Teams train approximately every two years. Additionally, the Facilities Incident Management Teams undertake testing of various parts of their Incident Management Plan at various times throughout the year.

2.11 Staffing

Status: **Implemented**

Business Impact Analyses have identified business critical roles and Business Recovery Plans identify staff responsible for these roles and 'stand-ins' for emergencies and business disruptions. In addition, Business Recovery Management Team members have deputies identified in the Business Recovery Management Team plans.

2.12 Auditing of Resilience Management Processes

Status: **Implemented**

Internal Audit has a risk based audit programme to provide confirmation of the existence of effective resilience management processes.

The Resilience Assurance Letters provide the Commissioner and the Safety, Health and Environment Assurance Committee with a self audit process for the management of resilience within TfL.

2.13 Management Review of Resilience Management Processes

Status: **Implemented**

High level resilience risks are reviewed through the TfL Risk Management process and through the activities of the TfL Resilience Steering Team. More specifically, in relation to TfL's Business Continuity arrangements for non operational management and support in the Corporate Directorates review of the Business Recovery Plans is undertaken at six monthly intervals by plan owners and any necessary changes addressed.

3 Future Resilience Management Developments

- 3.1 Group HSE continues with supporting the multi agency development of command, control and communications policy and processes, in particular transport arrangements for the 2012 Games and that of London's resilience partnership arrangements.

Business Continuity processes will continue to be improved and aligned with BS 25999 to ensure the standard of the processes and to be able to certify should we wish to.

Following the delivery of the Service Availability and Resilience related upgrade proposals for the top 84 business critical applications, the Enterprise Architecture team in IM, will be implementing necessary modifications to those applications that are not currently able to provide requested levels of service availability and resilience as per the agreed service level agreements.

4 Directorate Specific Resilience Matters

The following sections address the specific roles that each of the Corporate Directorates plays in relation to wider resilience matters

4.1 General Counsel

- (a) The General Counsel chairs the TfL Resilience Steering Team which meets quarterly to co-ordinate resilience matters at the TfL level.
- (b) Group HSE leads the co-ordination of resilience matters in TfL and ensures there is effective liaison with the GLA's London Resilience Team as well as other London resilience partners in regard to civil contingencies activities.

- (c) Delivery of these includes activities such as providing a member of the London Resilience Team Programme Board, attending the London Local Resilience Forum, advising the London Resilience Team on transport matters and supporting a number of task and finish groups and the six sub regional Resilience Forums. Contributions are also made to the development of multi-agency strategic level plans and the development and delivery of pan London strategic exercises.
- (d) Through these activities General Counsel ensures that, for the Corporate Directorates collectively, and for TfL at the Group level, the requirements of the Civil Contingencies Act 2004 are met.
- (e) Through membership of the pan London Operational Safety Planning Group, Group HSE contributes to the co-ordination of safety and contingency planning in relation to major events in London such as the New Years Eve celebrations and the Notting Hill Carnival. In relation to these and other resilience matters Group HSE convenes and chairs the TfL Gold Group at regular intervals.
- (f) Group HSE is supporting the development and roll out of the multi agency command, control and communications (C3) structures for the 2012 Games and in particular transport infrastructure supporting Games venues. Group HSE is also liaising with business units across TfL and the TfL Games Team to ensure appropriate coordination on 2012 Games related resilience matters.
- (g) During this financial year Group HSE was involved in a number of 'unplanned' events, chairing pan TfL Gold Groups to develop TfL wide strategies, supporting business units in their response and liaising with external partners. Unplanned events during the year included industrial action on London Underground, severe winter weather, ash from Icelandic volcanoes and public order events in Central London.
- (h) Group HSE co-ordinates and provides strategic leadership to Business Continuity Management processes for non operational management and support activities across TfL, including pandemic flu planning.
- (i) Group HSE maintains a database of TfL Golds, which includes details of training and experience of individuals and their support staff.
- (j) Group HSE ensures that assurance with regard to resilience matters is appropriately provided to the Safety, Health and Environment Assurance Committee.
- (k) General Counsel maintains TfL's strategic Risk Management Framework and assists the organisation to identify, evaluate, manage, control and communicate the many risks which TfL faces in every part of the business. It provides a systematic approach to risk management and facilitates an Enterprise Wide Risk Management Framework and works to embed risk management in all key work streams, and processes. As part of Project Horizon, the Risk Management function becomes part of the Finance

Directorate. General Counsel staff are working with Finance staff to plan for a smooth and effective transition.

- (l) Internal Audit's Annual Audit Plan regularly includes audits which examine resilience management processes across the organisation.
- (m) In 2010/11 an audit was conducted of TfL's resilience planning processes for potential emergencies. This area was found to be adequately controlled, with just minor issues raised. An audit was also carried out of IT Disaster Recovery and Resilience arrangements. The audit raised some issues that Your IM is now working to address, and Internal Audit will follow up progress during 2011/12.
- (n) General Counsel provides legal advice and support to resilience planning and incident management, including having in place an emergency plan to provide out of hours support should it be needed.
- (o) TfL Legal provides training and guidance on legal issues during incidents and events to mitigate legal and reputational risks.

Howard Carter
Managing Director General Counsel

June 2011

4.2 Group Marketing and Communications

- (a) Group Marketing and Communications are part of the London Resilience Partnership communications structures and liaise with the London Resilience Team and the GLA in regard to resilience matters.
- (b) Group Customer Services through Journey Planner and a number of associated information channels, such as the Travel Information Contact Centre, SMS mobile alerts and Realtime information provide minute by minute information services to Londoners in the event of incidents. The hosting servers have a capacity which allows for 100 percent growth, unexpected demand or single or multiple server failures. This arrangement does not provide resilience against a catastrophic failure of the site, which could result in Journey Planner being unavailable for a significant period.
- (c) As a 24 hour-a-day, 365-day-a-year operation the TfL Press Office has put in place robust resilience plans. There is a structured command system and on-call arrangements, including links with all the relevant TfL operational control centres. There are well practised procedures in place for managing incidents and communicating with the media. The TfL Press Office also leads on TfL's multi-agency communications liaison and planning with the London Resilience Team through their Strategic Communications Group.

- (d) Group Internal Communications develops and delivers employee communications in the event of any major incident or emergency. The team has a nominated lead member and a deputy within the Business Recovery Management Team for TfL. Processes for internal communication are documented within the Business Recovery Plans, the London Influenza Response Plan and the TfL Safety and Wellbeing Policy. These are practiced and updated through the routine recovery workshops.
- (e) Group New Media manage and develop key online services including the TfL website and Intranet. These provide updates to the public and partner organisations on the status of London's public transport and roads networks supporting over 10 million visits per month during normal times. This is supported through a highly resilient hosting environment. Group New Media provide a 24/7 on-call team to support these services.

Vernon Everitt
Managing Director Group Marketing and Communications

25 May 2011

4.3 Finance

- (a) Business Planning ensures that there is an appropriate contingency to deal with unforeseen circumstances which may arise.
- (b) An enhanced Employment Screening Process has been introduced for external recruited employees under which all new roles are assigned a category for employment screening based on the risks associated with the role. Checks include confirmation of identity, financial probity and government security vetting, if required.
- (c) Group Property & Facilities is responsible for the provision of a total facilities management service (strategic, tactical and operational) to the TfL Group Head Office property portfolio.
- (d) Group Property & Facilities responsibility includes ensuring that the TfL Group Head Office portfolio remains capable of both fully supporting the business and complying with legislative requirements and that foreseeable risks to the continuity of business operation are mitigated and asset life optimised. This is achieved by a combination of routine planned and reactive maintenance to the buildings' fabric, services and systems and a programme of more significant maintenance activities known as Property Care and additional activities such as physical security of buildings and Business Continuity planning and implementation.
- (e) In relation to Business Continuity, Group Property & Facilities provides and manages the provision of business recovery accommodation for the Corporate Directorates by ensuring that workstations, facilities, services and IT requirements are available for use by business critical functions based in TfL managed Head Office buildings in the event that their normal

place of work becomes unavailable for an extended period of time. This is achieved by a mix of in-house recovery sites and the provision of mutual aid workstations at designated Head Office buildings.

- (f) Group Property & Facilities ensures that all Corporate Directorates business recovery plans are reviewed twice a year. After each review all business recovery data is consolidated into a report to determine the business recovery requirements for Corporate functions.
- (g) Group Property & Facilities maintain and test TfL Emergency Procedures for all TfL managed Head Office buildings. These procedures are documented and published on Source. A Facilities Incident Management Plan is provided and maintained for use by the Facilities Incident Management Team during a serious incident at a TfL Head Office building.
- (h) The Group Property & Facilities Accommodation Strategy ensures that all new Head Office accommodation provides sufficient resilience in relation to their location, services systems and fabric to meet the functional requirements of the Business Units located in them.
- (i) Following the assessment of resilience across the IM infrastructure and identification of the associated risks to TfL, IM identified the need to define and launch a new initiative to address service availability and resilience issues of IM systems. This is called the Fit-for-Purpose exercise (FfP) and is governed by IM Change Management. Some of the applications currently deployed within TfL are not always able to provide the levels of service availability and resilience required by existing service level agreements. This is a result of these applications (or the technologies the applications depend on) not being deployed in the correct location, not upgraded to the correct versions or simply not architected correctly.
- (j) The Fit-for-Purpose exercise is addressing this issue by creating an understanding of the systems and applications critical to TfL, understanding deficiencies in the design or deployment of those applications and providing recommendations on which applications and technologies TfL's IT investment should be diverted to, in order to maximise the availability and resilience of services provided by IM.
- (k) IM has already initiated phase 1 of Fit-for-Purpose exercise and is in the process of delivering service availability and resilience related upgrade proposals for top 84 business critical applications.

Steve Allen
Managing Director Finance:

24 May 2011

4.4 Planning

- (a) Planning ensures that the projects, policies, strategies and plans it develops address resilience matters in line with Business Planning's documented requirements. Training has been provided to staff on project management and risk management.
- (b) Robust analysis and planning is undertaken to mitigate against potential future difficulties which could significantly impact the operational resilience of the TfL transport network. Appropriate strategic plans are developed through the Mayor's Transport Strategy and other relevant policies to address identified issues.
- (c) A Strategic Assessment Framework has being developed to ensure that all projects being developed across TfL support delivery of the Mayor's Transport Strategy's goals and outcomes. This has been promoted across TfL.

Michèle Dix
Managing Director Planning:

11 July 2011