



Safety Improvement Plan

2005/2006

London Underground Limited



Introduction

London Underground Ltd (LU) provides a key service for the capital. Each weekday over 3 million passenger journeys are made on the network. The operation, maintenance and improvement of the network presents a variety of hazards to customers and staff – each of which require suitable controls to ensure that risks are as low as is reasonably practicable. The efforts made by LU to control safety risk on our network ensure that London Underground is one of the safest forms of travel for customers and a safe workplace for our staff.

LU are committed to continuous improvement in safety performance. The Safety Improvement Plan (SIP) summarises our short and long term plans to improve safety on the LU network both for customers and employees.

The SIPs for LU, Metronet and Tubelines have been drawn up after joint consultation. This ensures coherent improvement programmes across all four companies so that priority areas are comprehensively addressed.

Review of Safety Performance in 2004/05

Unfortunately, there were four customer accidental fatalities during 2004/05. Two fatalities were due to trespass on the track, one was due to a person jumping down onto the track and then being struck by a train and the fourth was due to a person falling against a departing train and then onto the track. This represents approximately one fatality per 250 million customer journeys and is a decrease on the previous two years which recorded 5 and 9 customer accidental fatalities. (Deaths due to suicide, suspected suicide, medical causes and crime are excluded from these figures).

Customer major injuries occurring on the Underground showed a downward trend during the year. The current customer major injury rate is approximately 1 major injury per 8 million customer journeys, which is an improvement on the previous year's rate of 1 major injury per 7 million customer journeys. Around 70% of these injuries involve falls on stairs and escalators where the prior consumption of alcohol often appears to be a contributory cause. The poster campaign to influence customers to avoid these risks continued throughout the year and may have contributed to the downward trends in fatalities and injuries.

During 2004/5 there was one derailment of a train in customer service. This occurred on 11th May 2004 at White City on the Central Line. There were no customer or staff injuries in this incident and services were restored the following day. An LU Formal Investigation was carried out into this derailment to determine the root causes of the incident and ten recommendations were made and have now been implemented to minimise the chances of a recurrence. The level of in-service derailments in 2004/5 was approximately 50% less than the ten year average derailment rate and continues a steady 7 year downward trend in the numbers of all types of derailments each year. This is expected to continue as improvement measures implemented following four in-service derailments over the last two to three years continue to take effect and as the amount of track replacement with modern track forms continues to rise to unprecedented levels as part of the overall investment programme.

LU has comprehensive train protection systems in place to ensure that the residual safety risks from Signals Passed At Danger (SPADs) are very low. SPADs reduced

by 2.8% compared with the previous year (947 in 2004/5 compared with 974 in 2003/4). SPADs due to train operator error reduced by 11% (from 776 to 690) while those due to asset failures increased by 30% (from 198 to 257). The primary impact of SPADS is on train service reliability and a programme launched during the year is expected to produce greater reductions during 2005/6.

Once again there were no fatalities to any employee or contractor in 2004/05. Employee major injuries have increased by 1 since last year to 8 for 2005/04.. However, the number of employee lost time injuries reduced to 670 in 2004/5 from 746 in the previous year, a decrease of 11%. As in previous years, a significant contribution to the lost time figures arises from assault to staff and trauma associated with incidents such as suicides and near misses. This welcome reduction is the result of continuing programmes to help staff reduce the effects of stress and workplace violence.

The number of physical assaults on staff has reduced in 2004/05 to 557 from 605 in the previous year. However, the amount of verbal abuse from members of the public against staff has increased again this year to 1320 reported incidents compared with 1002 in 2003/04. To some extent the increase in numbers of verbal assaults may be due to increased staff awareness of the need to report such assaults resulting from LUL campaigns to support staff against this unacceptable behaviour from some members of the public.

During the year, two enforcement notices were served on LU by the Health and Safety Executive (HSE). A Prohibition Notice was issued in relation to an incorrectly positioned gateway in the temporary works being undertaken by LU at Kings Cross Underground station. The second was an Improvement Notice concerning issues with some platform CCTV monitors used for train despatch on some of the open stations on the Piccadilly line. This compares to two improvement notices served in 2003/04 and 8 in 2002/03.

LU delivered all the safety improvement programmes scheduled during 2004/5 and these have contributed to the improved safety performance reported above and in more detail in the following sections.

Safety Improvement plan 2005/06

Overview

One of LU's six strategic business objectives is **to provide a safe service for customers and a safe environment for all those who work on the Tube.**

To ensure this objective continues to be achieved, this Plan aims to:

- Reduce priority residual safety risks as low as reasonably practicable
- Continue to simplify LU's standards and related assurance regime
- Further enhance the health and safety competencies of LU managers and staff

The programmes to achieve the above are described in the pages which follow. It is important to emphasise, however, that these programmes are supported by and integrated with other programmes designed to achieve LU's five other strategic business objectives which are not described in this document.

Safety Improvement Programme

Sub-Objective One:

Reduce priority residual safety risks as low as reasonably practicable

Purpose:

LU is committed to ensuring that our existing high standard of safety is not only maintained but also enhanced where this is reasonably practicable.

Analysis:

Our extensive safety risk assessments are regularly updated and improved. The results of risk review work in 2004/5 indicate that our priorities need to continue to be focused on further:

- reducing risks of customer accidents at the platform train interface
- reducing the risks of derailments
- decreasing the risk of injury to employees and contractors working on the track
- minimising the impacts of stress and workplace violence on our staff
- reducing the occurrence of signals passed at danger (SPADs)
- Improving the effectiveness and quality of our risk assessment models and related processes, which inform the effectiveness of risk control measures

Programme Summaries:

Platform Train Interface Accidents

Accidents at the Platform-Train Interface (PTI) are one of the most significant contributors to the overall risk profile of London Underground. This programme covers the consistent management and maintenance of the PTI and addresses a number of weaknesses identified by recent safety audits. Improvements are needed in the following areas:

- conformance with relevant standards concerning platform markings
- definitions of different types of PTI related incidents
- operational management and assurance arrangements for checking staff competence - see working reference manual in sub-objective 2.
- customer awareness campaigns on the risks involved
- improve assurance around consistent maintenance and fault fixing of OPO CCTV equipment.

Derailment Risk Reduction

To sustain the significant downward trend in the number of derailments, the extensive improvement measures identified following recent derailments will be completed across the network during 2005/6, as will a two year programme to identify and regularise all existing track non-compliances with LU standards. Further improvement measures are also in progress or are planned, but these are covered in Metronet's and Tubelines SIPs.

Safety when working on the track

LU has not had a fatality of an employee or contractor working on the track since June 1994. This is a record we are proud of, but consider that the nature of the environment means that this risk needs constant attention to determine and implement any further reasonably practicable improvements. These include:

- Completion of equipping all operational and infrastructure staff with self-testing current rail indicator devices
- Clarifying and simplifying possession and protection procedures (as part of the overhaul of the Working Reference Manual, see Sub-Objective Two)

Workplace Violence Reduction

The programme, which started several years ago, continues and includes further training improvements with the accreditation of trainers, development of the British Transport Police (BTP) data-base and consideration of whether to set up a joint LU/BTP Workplace Violence Unit. Work during 2005/06 will focus on managers providing better and earlier support to staff who suffer assault, and refocusing operational managers performance goals to encourage the development of a more supportive culture. This will be underpinned by redesigning the assault reporting system to make it quicker and easier to record assault details.

Signals Passed At Danger (SPADS)

LU already has comprehensive train protection systems in place to ensure that the residual safety risks from SPADs are already very low, but SPADs have a significant impact on train service reliability. There has already been considerable effort, primarily at line level, to tackle this issue, and the benefits of this are starting to be realised. However, there remains a need to tackle some aspects at a corporate level.

A Corporate SPAD Reduction Programme was launched in January 2005 to build on and extend existing line level programmes. This will be implemented throughout 2005/06 with any necessary longer term action being developed dependent on the progress made during 2005/6. The programme aims to improve management of SPADs in the following areas:

- Clarification and simplification of accountabilities and responsibilities in terms of SPAD control, mitigation and investigation
- Clarification and simplification of procedures and standards, identifying and filling any gaps.
- Better quality investigations, action planning and monitoring
- Improvement of training design, materials and techniques for delivery
- A better structured approach to signal sighting improvements
- Improved performance measurement, analysis, feedback and recognition.

Risk Assessment Model and Processes

LUL's major accident Quantified Risk Assessment (QRA) models help us understand our risk profile and identify key contributors to that risk. During 2005/6 the rolling programme of review and development of the models will continue. The output of these models will be utilised to identify areas for improvement within subsequent Safety Improvement Plans. Measures to improve the use of the QRA models by LUL managers are outlined in Sub-Objective Three.

Work to review LUL's Workplace and Customer Risk assessment processes will be completed in 2005/6. The review has sought to increase the benefits derived from the assessments and reduce the amount of duplication in the assessment process. Testing of the draft arrangements during 2004/5 indicates that the review will deliver strengthened, yet streamlined risk assessment arrangements for implementation during 2005/6.

Sub-Objective Two

Continue to simplify LU's standards and related assurance regime

Purpose:

This has and continues to be to improve compliance with legislation and to achieve ever improving safety performance through the rationalisation and simplification of LU standards, processes and associated documentation to make understanding and compliance easier and more efficient to achieve.

Analysis:

During 2004/5, LU completed a four year programme to radically simplify the LU owned standards that apply to LU and all its suppliers. This suite of new standards will be implemented in 2005/6. LU has also identified the need to similarly streamline the assurance arrangements, between LU and its suppliers, by which compliance with standards is assured. The independent safety audit by A.D. Little confirmed this as a priority and particularly highlighted the need for improved safety assessment of third party suppliers and approval of equipment by the Infrastructure Companies, which is addressed in their SIPs.

On the same theme of radical simplification, work started in 2004/5 to rewrite the LU Working Reference Manual, which specifies the work procedures governing the safe operation of the Tube Network. This programme will continue for a further two years.

The HSE, with full involvement from the rail industry, has been overhauling the safety regulations specific to railways. These are planned to come into force during 2005/6 as are arrangements for the new Rail Accident Investigation Board. LU's programmes cover necessary actions to achieve compliance with these planned changes during 2005/6.

Programme Summaries:

Standards Development

During 2005/6, implementation of the new suite of category 1 standards will be completed and a programme to review any safety critical interactions between standards, originally arising from the investigation into the derailment at Camden Town in October 2003, but now being extended into areas beyond engineering standards, will be completed.

As part of this work, a programme to rationalise requirements for fire safety standards for lifts for carrying mobility impaired people is in progress, involving all interested external stakeholders. This will include a programme to progressively upgrade all station emergency plans to be emergency scenario specific during 2005/06 and 2006/07.

Assurance Regime Rationalisation

During 2004/5, LU, Metronet and Tube Lines ran a successful joint programme to rationalise the scoping and technical assurance arrangements for stations refurbishment and modernisation projects. This approach is now being extended to all other types of projects and should be completed in Summer 2005. In parallel with this, work is also in progress to rationalise technical assurance arrangements for the maintenance of all types of assets maintained by the infrastructure companies. This work is scheduled to be completed in September 2005.

Once the above improvements have been achieved, opportunities for further streamlining of assurance activities have been identified such that the assurance arrangements between LU and its major PPP and PFI partners are more coherent, efficient and rigorous, but at the same time involve far less paperwork. LU considers that this can be achieved by further rationalising and linking together the currently largely separate arrangements for technical assurance, operational assurance, safety review and change control, technical, safety and operational compliance auditing and on site inspections. Because of the importance of these processes to managing safety critical activities effectively, the analysis, planning and design of changes to these processes has to be done with considerable rigour. This is planned to be done in 2005/6, with implementation progressively rolled out in the following two years.

Working Reference Manual Rationalisation

This programme extends into 2007/8, and aims to considerably reduce the volume of working procedures and make them far easier to understand and comply with. The work is being done with input from a representative sample of those staff who have to apply the procedures on the railway every day. The work is and will continue to identify and resolve any problems that exist with the practicality of applying the procedures, difficulties in interpretation of the procedures and problems with access to the documentation.

The programme also takes account of new technology being introduced as a result of the investment programme, such as the new 'Connect' radio system being installed across the network, so that work procedures are adjusted to reap the safety and other benefits such investments are designed to achieve.

As with the assurance regime, many of the work procedures are safety critical, so the programme includes a rigorous risk assessment and change control process. This ensures that the risks are minimised of errors occurring in the drafting of new procedures, extensive staff retraining and progressive implementation programme.

In the short term, while the above work is in progress, operational managers and supervisors have asked for better guidance on managing contractors' staff working on their premises. This will be prepared and rolled out early in 2005/6.

Compliance with New/Revised Health and Safety Regulations

Changes to railway specific safety regulations, new regulations bringing the RAIB into operation, a new HSE Approved Code of Practice (ACoP) on the management of fatigue for safety critical workers and revised regulations on noise and vibration all come into force in 2005/6. During 2004/5, LU has had work in progress to ensure it can meet all the new requirements when they come into force. While some further

work, primarily around modifying LU's Safety Case, is needed in 2005/6, no significant issues are expected in achieving compliance.

Sub-Objective Three

Further enhance the health and safety competencies of LU managers and staff.

Purpose:

This is to ensure that managers and staff are clear about their health and safety management responsibilities and have the necessary skills, knowledge and resources to effectively discharge them.

Analysis:

LU has done a considerable amount of work on this subject over the past five years, as reported in previous years' versions of this plan. Review of the outcomes of this work show that considerable progress has been made, but there is further work to do. This is confirmed by the independent safety audit carried out by A.D. Little. Key issues to be addressed are:

- Safety coaching for senior managers, due to the significant number of new senior managers who have joined LU
- Improved accessibility to and usability of the major accident risk assessment models to aid better safety decision making
- Improved definition of safety accountabilities for junior and middle managers, particularly at locations where there are interfaces with Network Rail and other Train Operating Companies (TOCs)
- Enhancement of incident management skills and processes
- Better and more easily accessible health and safety topic briefing materials for use by managers and their staff
- Completion of the competence assurance regime for all LU operational staff, by extending coverage to include service control staff.

Programme Summaries

Safety Coaching for senior managers

A one day coaching course was designed and tested during 2004/5 and will be delivered to the top fifty managers during 2005/6. Thereafter, all new senior managers will receive this course shortly after their appointment. The coaching session focuses on safety law and corporate governance, LU senior managers safety accountabilities and senior level aspects of LU's health, safety and environmental management system (HSEMS).

Decision Making and Better Use of the Risk Assessment Models

During 2004/5, a review was done of the use of the major accident quantified risk assessment (QRA) models within LU and the Infrastructure Companies. Work will be undertaken during 2005/6 to develop a format for the QRA network and line reports which more readily meets the needs of LU managers. A communications plan will be established for future reviews to improve visibility of the models with greater involvement of operational managers in future QRA reviews. The QRA models provide a valuable input to the Safety Improvement Plan and safety management

and assurance activities, but further improvements are needed to make these links more explicit.

Improved Definition of Safety Management Accountabilities

Senior and middle managers safety management accountabilities have been redefined to improve clarity. During 2005/6, these will be included in the LU statutory Railway Safety Case (RSC), which is being revised to meet changes to railway specific safety Regulations expected to come into force in late 2005. These changes will be communicated to all relevant managers as part of the communication programme for revisions to the RSC. Where there are interfaces with TOCs and Network Rail the local operating agreements will be reviewed and amended as necessary to ensure specific local management accountabilities are clearly specified.

The revised definitions will be used to update and improve job descriptions. This work will ensure that health and safety elements are more consistent and clear within the job descriptions of those LU managers with a significant role in the management and control of safety risk.

Enhancement of Incident Management Skills and Processes

Investigations of a variety of different incidents over several years have identified weaknesses in the way some incidents are managed in what is often a challenging environment. An analysis of the root causes of these weaknesses has been completed and a programme to address these is being devised.

Development of Structured Health, Safety and Environment Topic Briefings

To ensure our managers can easily keep their knowledge up to date and can discuss issues with their staff in a well informed way, a series of short topic briefings on all relevant subjects are to be developed and delivered throughout 2005/06 and 2006/7.

Competence Assurance for Service Control Staff

The organisational arrangements for LU service control staff are being completely restructured and will include the introduction of competence assurance for these staff during 2005/6. This will complete the introduction of the competence assurance regime for all LU's c. 11,000 operational staff.

Appendix A

Key Programme Milestones and Management Responsibilities

Sub-Objective 1: Reduce priority residual safety risks as low as reasonably practicable

Programme 1: Platform Train Interface Accidents

Milestone	Date	Lead Manager
Conformance with relevant standards concerning platform markings	August 2005	Kevin Payne, Keith Payne, Station Systems Engineer
Definitions of different types of PTI related incidents	December 2005	Ian Gaskin, SQE Strategy and Planning manager
Customer awareness campaigns on risks involved	March 31 st 2006	Ian Gaskin, SQE Strategy and Planning manager
Improved Assurance around consistent management and fault fixing of OPO CCTV Equipment	TBA	Kevin Payne, Station Systems Engineer

Programme 2: Derailment Risk Reduction

Milestone	Date	Lead Manager
Oversight of the Metronet and Tubelines track improvement programmes	Ongoing	Trevor Jipson, Permanent Way Engineer

Programme 3: Safety when working on the track

Milestone	Date	Lead Manager
Completion of equipping all operational and infrastructure staff with self testing current rail indicator devices.	July 2005	Mike Maynard, Head of Operational Support
Clarifying and simplifying possession and protection procedures	30 th June 2006	Mike Maynard, Head of Operational Support

Programme 4: Workplace Violence Reduction

Milestone	Date	Lead Manager
Improving support to staff who suffer assault, and refocusing operational managers' performance goals to encourage the development of a more supportive culture.	31 st March 2006	Mike Maynard, Head of Operational Support

Programme 5: Signals Passed At Danger (SPADs)

Milestone	Date	Lead Manager
Train Operator Characteristics – Recommendations Report	16 September 2005	Ian Gaskin, SQE Strategy and Planning manager
Signal Sighting Improvements – New Draft Standard Produced	2 August 2005	Ian Gaskin, SQE Strategy and Planning manager

Signal Sighting Improvements – Training Course Created	19 April 2006	Mike Maynard, Head of Operational Support
Revised Job Descriptions – Trainer Manager JD Agreed	17 November 2005	Ian Gaskin, SQE Strategy and Planning manager
Revised Job Descriptions – Trainer JD Agreed	15 December 2005	Ian Gaskin, SQE Strategy and Planning manager
SPAD Investigation – New Standard Produced	20 June 2005	Ian Gaskin, SQE Strategy and Planning manager
SPAD Investigation, Produce Job Descriptions – Investigator Manager JD Approved	9 January 2006	Ian Gaskin, SQE Strategy and Planning manager
SPAD Investigation, Produce Job Descriptions – Investigator JD Approved	6 February 2006	Ian Gaskin, SQE Strategy and Planning manager
SPAD Investigation, Training – Training Design Approved	16 March 2006	Ian Gaskin, SQE Strategy and Planning manager
Line Based Risk Model – Issue Final Report	27 September 2005	Ian Gaskin, SQE Strategy and Planning manager
Line Based Risk Model – Final Model Available	27 September 2005	Ian Gaskin, SQE Strategy and Planning manager
Alertness Stimulators – Report Produced	28 July 2005	Ian Gaskin, SQE Strategy and Planning manager
Performance Measurement, Reward, Etc. – Depot Scorecards in Place	4 August 2005	Mike Maynard, Head of Operational Support
Reward Schemes – Implement Reward Schemes	16 March 2006	Mike Maynard, Head of Operational Support
Speed Check Equipment – Procure & Install Plan Developed	22 November 2005	Mike Maynard, Head of Operational Support

Programme 6: Risk Assessment Model and Processes

Milestone	Date	Lead Manager
Update QRA Model for Power Failure	30 December 2005	David Burton, SQE Systems and Assurance Manager
Review QRA Model for Power Failure	31 March 2006	David Burton, SQE Systems and Assurance Manager
Review QRA Model for Derailment	31 March 2006	David Burton, SQE Systems and Assurance Manager
Review QRA Model for Collision between Trains	31 March 2006	David Burton, SQE Systems and Assurance Manager
Review QRA Model for Collision with Object	31 March 2006	David Burton, SQE Systems and Assurance Manager
Update Passenger Loadings Spreadsheet	31 March 2006	David Burton, SQE Systems and Assurance Manager

Sub-Objective 2: Continue to simplify LU's standards and related assurance regime

Programme 1: Standards Development

Milestone	Date	Lead Manager
All Phase 3 Category 1 Standards Issued	19 August 2005	David Burton, SQE Systems and Assurance Manager
Critical Interaction work Completed	28 October 2005	David Burton, SQE Systems and Assurance Manager

Programme 2: Assurance Regime Rationalisation

Milestone	Date	Lead Manager
Get agreement to and assign suitable LUL, Metronet Rail (MR) and Tube Lines (TL) resources to this programme	31 May 2005	Mike Strzelecki, LUL Director of Safety
Analyse current LUL, MR and TL processes for on site technical and safety audits and inspections of engineering works	31 July 2005	Ian Gaskin, General Manager SQE for LUL, Mark Orsman for MR, Andrew Cleaves for Tubelines
Examine options, select and define processes for risk-based, coordinated of site audit and inspection and structured follow up, reporting and analysis, within and between LUL, MR and TL	30 September 2005	Ian Gaskin, General Manager SQE for LUL, Mark Orsman for MR, Andrew Cleaves for Tubelines
Communicate and implement changes to achieve new risk-based, coordinated of site audit and inspection and structured follow up, reporting and analysis, within and between LUL, MR and TL	31 December 2005	Ian Gaskin, General Manager SQE for LUL, Mark Orsman for MR, Andrew Cleaves for Tubelines
Complete agreed improvements to LUL technical assurance arrangements for infrastructure and rolling stock/signalling projects	31 July 2005	Eddie Goddard, LUL Chief Engineer (Various MR and TL managers specified elsewhere)
Complete agreed improvements to technical assurance arrangements for all forms of asset maintenance	31 October 2005	Eddie Goddard, LUL Chief Engineer (Various MR and TL managers specified elsewhere)
Analyse and map technical assurance, operational assurance and safety review and change control processes in LUL, MR and TL	31 December 2005	Ian Gaskin, General Manager SQE for LUL, Mark Orsman for MR, Andrew Cleaves for Tubelines

Identify gaps and overlaps, identify and prioritise improvement options, select and design improvement details and design change implementation programmes	31 March 2006	Ian Gaskin, General Manager SQE for LUL, Mark Orsman for MR, Andrew Cleaves for Tubelines
Roll out change implementation programmes for top priority changes in LUL, MR and TL	Through 2006/7	TBD in stage above
Roll out change implementation programmes for lower priority changes in LUL, MR and TL and review programme results	Through 2007/8	TBD in stage above

Programme 3: Working Reference Manual Rationalisation

Milestone	Date	Lead Manager
Replacement of WRM - Cross-functional module	31 st March 2006	Mike Maynard – Operational Support Manager
Replacement of WRM - Trains module	04 th May 2006	Mike Maynard – Operational Support Manager
Replacement of WRM - Residual interventions	06 th March 2006	Mike Maynard – Operational Support Manager
Replacement of WRM - Training Standards	14 th March 2006	Mike Maynard – Operational Support Manager
Replacement of WRM - Stations-led module	06 th September 2006	Mike Maynard – Operational Support Manager
Replacement of WRM - Safety on Track	29 th February 2009	Mike Maynard – Operational Support Manager

Programme 4: Compliance with New/Revised Health and Safety Regulations

Milestone	Date	Lead Manager
LU Plan to submit a revised safety case, under the new regulations.	Submit 31 October 2005	David Burton, SQE Systems Assurance Manager.
Achieve compliance with Railway Accident Investigation and Reporting Regulations	May 31 st 2005	Ian Gaskin, SQE Strategy and Planning manager
Assess where LU stand with regard to the proposed approved code of practice around fatigue	Dec 31 st 2005	Ian Gaskin, SQE Strategy and Planning manager

Sub-Objective 3: Further enhance the health and safety competencies of LU managers and staff

Programme 1: Safety Coaching for senior managers

Milestone	Date	Lead Manager
Delivery of designed and tested one day coaching course to the top fifty managers.	31 March 2006	Ian Gaskin, SQE Strategy and Planning manager

Programme 2: Decision Making and Better Use of the Risk Assessment Models

Milestone	Date	Lead Manager
Develop proposed format for LU Network and Line based QRA reports	28 October 2005	David Burton, SQE Systems and Assurance Manager
Develop Communications Plan for results of LU QRA reviews	28 October 2005	David Burton, SQE Systems and Assurance Manager
Ensure links between LU QRA Models and other business processes are explicit.	30 December 2005	David Burton, SQE Systems and Assurance Manager

Programme 3: Improved Definition of Safety Management Accountabilities

Milestone	Date	Lead Manager
Revision of railway safety case and job descriptions to include redefinition of senior and middle management safety accountabilities	31 March 2006	David Burton, SQE Systems and Assurance Manager
Review Interface with Train operating companies and responsibilities	31 st March 2006	Mike Maynard, Operational Support Manager

Programme 4: Enhancement of Incident Management Skills and Processes

Milestone	Date	Lead Manager
Analysis of root causes of the current short comings in the management of incidents	June 2005	Mike Maynard – Operational Support Manager

Programme 5: Development of Structured Health, Safety and Environment Topic Briefings

Milestone	Date	Lead Manager
Development of health, safety and environment topic briefing for managers	31 December 2005	Ian Gaskin, SQE Strategy and Planning manager

Programme 6: Competence Assurance for Service Control Staff

Milestone	Date	Lead Manager
Introduction of the competence assurance regime for service control staff	March 2006	Mike Maynard – Operational Support Manager

Appendix B

Criteria for actions driving the Safety Improvement Plan

The agreed drivers for identifying and developing any actions or strategies which need to be included in the safety plan, are as follows:

- Legislation – This includes any legislation / guidance / standards that have been or are going to be introduced or amended and require action to gain compliance.
- Assurance - Results and actions arising from assurance and investigative activities. (Third party audit findings and significant trends identified from internal audits).
- Actions required to maintain compliance with LU's Railway Safety Case and Infracos' Contractual Safety Cases.
- Significant issues raised by staff -This is done through analysis of issues raised through formal health and safety representative meetings and annual safety conferences.
- Significant events – This includes improvements identified as a result of any significant events that have occurred either internally or externally.
- Analysis of Safety Risk Performance statistics.
- Asset maintenance Plans including elements within the Asset Maintenance Plans which are specifically designed to improve safety.
- Significant corporate level improvements identified from both quantified and qualitative risk assessments
- Ongoing activities from the previous safety plan , programmed for completion in 2005/6 or later.