

Transport for London

Safety and Sustainability Panel

Subject: Quarterly Health, Safety and Environment Performance Reports – Quarter 4, 2012/13

Date: 16 July 2013

1 Purpose

1.1 To inform the Safety and Sustainability Panel of the key health, safety and environment matters during Quarter 4, 2012/13

1.2 The Panel is asked to note the report.

2 Background

2.1 Full reports on Health, Safety and Environmental performance are produced annually. Quarterly reports are produced to update the Panel on any significant matters from the previous quarter. Transport for London (TfL) has three main delivery businesses, Rail and Underground, Surface Transport and Crossrail, with support from the Specialist Service Directorates. To reflect this, the quarterly business reports have been amended to provide a combined Rail and Underground Report, with the Surface Transport and Crossrail Reports as before. Any key activities related to the specialist directorates will now be highlighted on an exception basis, in this cover page.

3 Information

3.1 The Quarter 4 2012/13 Health, Safety and Environment Performance Reports for each business area are attached as follows:

Appendix 1 Rail and London Underground

Appendix 2 Surface Transport

Appendix 3 Crossrail

5 Recommendation

5.1 The Panel is asked to NOTE the report.

6 Contact

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Rail and Underground Quarterly Health, Safety and Environment Report

1. Summary

What went well

- 1.1 The safety, environmental and health performance indicators are made up from a suite of leading and lagging indicators, some of which are simple outcome measures and others are precursors into the top event risk models. During the quarter these have either remained stable or are improving, with exceptions noted below. No regulatory enforcement notices were received. At the year end it has been 432 days since the last major incident on London Underground (LU) infrastructure, and 306 London Rail (LR) Infrastructure.
- 1.2 The long-term trend for Lost Time Incidents (LTIs) across LU's Operational Directorate continues to decrease from 30 per period on average in 2008/09 to an average of 16 per period at present. The Incident Frequency Rate (incidents that have caused harm, loss or damage) in Capital Programmes Directorate has reached its lowest level for 13 periods. The Asset Performance Directorate (maintenance) met their aim of fewer than 4 LTIs per period. In Rail there were no LTIs to staff in the Quarter. The pressure on further reduction in the lost time injury rate will continue through the continued use of 'safety hours', 'go look see', near hit close out and the employee engagement strategy.
- 1.3 On Docklands Light Railway (DLR), the Safety Performance Index has shown much greater volatility since the re-baseline work undertaken toward the end of 2012. The re-baselining was directed at focussing attention on key areas of underperformance, in particular action close out, and since the re-baseline work performance has shown a consistent improvement.
- 1.4 The long term trend in the total numbers of SPADs on LU continues to show a reduction. This quarter on London Underground the figure was 142 Cat A and 31 Cat B, while on Rail there were 10 Cat A and 9 cat B SPADs.
- 1.5 The average noise complaint rate related to construction works on LU Infrastructure in quarter 4 2012/13 was 0.72 complaints per 100,000 hours worked. This is slightly better than LU's annual "N&V complaints – works" target of 0.75 complaints per 100,000 hours worked. There were no noise complaints on Rail.
- 1.6 LU recycled or recovered 86 per cent of its waste over the year, exceeding the 80 per cent target.

- 1.7 The quarter saw the commencement of the LU Capital Programmes Directorate's waste management action plan. This will help deliver cost savings, improved compliance and improved environmental performance for LU.
- 1.8 The preparations put in place by Rail and Underground for Winter weather were effective over the period, with ice and limited snow being well managed. The excessive rain was also dealt with well.
- 1.9 Rail and Underground has continued to assist the Centre for the Protection of the National Infrastructure (CPNI) by actively participating in, and providing feedback on, their trial training day which set out the Cyber security training for the whole UK Rail sector.
- 1.10 The HSE elements in the DLR and Crossrail Train Operating Company (CTOC) Franchise documents were developed, with lessons included from across TfL. The work on assessing the returns will run into Quarter 1 and Quarter 2 of 2013/4.
- 1.11 The Rail and Underground Safety Improvement and Environment Improvement Plans were agreed and will begin in Quarter 1 2013/14.

Areas for Improvement

- 1.12 Recycling rates for some construction wastes have dropped slightly as a result of the recycling sites we use having to reduce their own recycling rates, reportedly as a knock on effect from changes in the Landfill tax reclassifications. We are working with those operating recycling sites to see if and where we can reverse this.
- 1.13 The Major Injury indicator which tracks Major Customer and employees/suppliers Injuries per million hours on Rail and Underground infrastructure did not meet the performance Level for the Year by the end of the quarter. LR saw more injuries at the start of the year, while LU saw more toward the end. This remains a stretching target which goes forward to next year to continue to drive performance. All incidents are investigated to identify if further mitigation is possible, and a series of customer awareness campaigns will continue.
- 1.14 Two Broken Rail incidents were reported on LU Infrastructure in quarter 4, 2012/13. These were picked up through the proactive precursor checks that are key to the system safety controls that are in place. Both were meeting their maintenance programmes, and LU and Rail continue to strive for no rail breaks.
- 1.15 Signal issues on the London Overground, have included power failures on the Gospel Oak to Barking Line, and aspect changes on other parts of the Network rail maintained and operated lines, which has an impact on the potential for SPADs due to unexpected signal aspect change. The impact of Network Rail infrastructure failures has accounted for 46 per cent of total lost

time in the quarter on Overground. LOROL is pressing Network Rail for improved maintenance and signal operation.

Key deliverables in the next quarter

- 1.16 Integration of Tube Lines, London Rail and London Underground HSE teams in the Directorate structure, which will allow the development of ever better and more consistent ways of working internally and interacting with suppliers, with a clear focus on safety leadership and behaviour. The formal changes will occur next Quarter.
- 1.17 Roll-out of Supplier HSE Maturity assessment, which is designed to assist in rating contractor's HSE performance helping both at the procurement and contract management stages. This will start in June 2013.
- 1.18 Continue to roll out the Safety performance index developed in DLR to London Overground and London Tramlink. The development of real data inputs to create baselines is planned for completion in Quarter 1 of 2013/14.
- 1.19 Agree the methods for measuring the current development of the Safety Management System with Office of Rail Regulation (ORR) so we can undertake the assessment against the ORR Management Maturity Model (RM3). The assessment work will occur during Quarter 2 and 3 this year.

2 Major Incidents

- 2.1 There were no major incidents in Quarter 4

Surface Transport Quarterly Health, Safety and Environment Report

1 Summary

What went well

- 1.1 Safe Streets for London, the new Road Safety Action Plan for London was approved by the Mayor in April and has been published. The plan sets out an objective to reduce people killed or seriously injured on London's roads by 40 per cent by 2020 compared with the 2005-2009 baseline.
- 1.2 The Bikesafe-London scheme aimed at reducing accidents involving motorcycles celebrated its 10th anniversary with more 26,000 having completed a motorbike rider skills day. The scheme is jointly run and funded by TfL and Metropolitan Police Service.
- 1.3 The objective to install Pedestrian Countdown at Traffic Signals technology at 55 sites throughout London was met. This means TfL leads the development of this technology in the UK which greatly enhances pedestrians' understanding of the pedestrian traffic signals and, in particular, the time they have left to cross the road before traffic starts. A further 145 sites are programmed to be installed at key locations during 2013/14.
- 1.4 The latest bus-related crime figures for 2012/13 (April – February 2013) show a decrease of 6.4 per cent (1,270 fewer crimes) compared to the year before. On the bus network there were notable reductions in robbery (460 fewer offences – down 18.1 per cent); criminal damage (228 fewer offences – down 14 per cent) and violence against a person (606 fewer offences – down 11.7 per cent).
- 1.5 TfL has been recognised as a Highways Electrical Registration Scheme registered organisation. This follows the work of the Traffic Directorate to have all 202 eligible personnel achieving the National Highways Sector Scheme 8 (NHSS 8) qualification and the organisation's commitment to compliance with national and industry recognised accreditation schemes. TfL is seen to lead the industry by example in this area.
- 1.6 The review of the 2012/13 health and safety improvement plan shows good progress was made against objectives. However, six actions (3 per cent) are to be carried forward to 2013/14 for completion.

- 1.7 The health and safety audit programme for 2012/13 was completed. Identified areas for further improvement were either addressed through an action plan or incorporated into the 2013/14 health and safety improvement plan. No significant compliance issues were identified.
- 1.8 TfL delivered the Mayors target of installing 1,300 publicly accessible Electric Vehicle charge points across London in April 2013. This makes Source London the largest charging scheme in Europe. Of the 1,303 charge points on network, 482 are fast chargers. The ongoing work to install charge points in 20 LUL car parks by UK Power Network and Siemens has the potential to add a further 100 charge points to the network
- 1.9 TfL is on track to introduce 1700 hybrid buses into the London bus fleet by 2016. As of March 2013, 421 hybrid buses were delivered.
- 1.10 New signal installations will now be Extra Low Voltage (ELV) sites instead of Low Voltage (LV 230v). This will mean a reduction in power consumption and potential electrical hazards to signal operatives and members of the public. At the end of quarter four, 18 ELV sites were installed.

Areas for improvement

- 1.11 In quarter four, a total of 8,206 working days were lost to staff sickness, equivalent to an average of 2.59 days per employee. Although the increase in quarter remains within normal distribution a notable rise in coughs and cold related illnesses is a factor in the overall rate rise. Surface Transport is increasing its collaboration with Occupational Health Services and more work is being done with business units to set specific health related objectives as part of the safety improvement plan.

Key deliverables in the next quarter

- 1.12 The 2012 road casualty figures will be published in June in the 'Casualties in Greater London 2012' report. Additional factsheets will be made available to key stakeholders including London boroughs. The report highlighted that 24,059 road traffic collisions involving personal injury were reported to the Metropolitan and City Police within Greater London which is a 2 per cent reduction compared with 2011. Fatalities also fell by 16 per cent (159 to 134) to the second lowest level since recent records began. However, Killed or Seriously Injured (KSI) casualties increased by 8 per cent in 2012 (2,805 to 3,018) compared to 2011. Slight injuries fell by 3 per cent (26,452 to 25,762).

- 1.13 London Buses will continue work with bus operators to implement a bus safety awareness campaign. TfL marketing has been engaged to develop the design concept based on the successful approach used in LUL. The intended campaign will be aimed at passengers with a view to reducing incidents with the potential to cause harm. The campaign will focus on trips and falls on buses and wheelchair buggy related incidents which account for a large proportion of injuries.
- 1.14 A review of the advance low bridge warning functionality within the iBus system will be undertaken to ensure it continues to be effective in preventing bus collisions with arch or low bridges in London. The review will focus on the technical design of the system and will involve bus operators in relation to their driver training and familiarisation processes.
- 1.15 A major cycle safety research project to trial new and innovative junction layouts and traffic technology will continue. If successful, the scheme could be introduced in London and potentially more widely across the UK. The trials, which are being carried out for TfL by the Transport Research Laboratory in Wokingham, will examine a range of suggestions such as “Dutch style” roundabouts and low level cycle signals to assess their suitability for introduction on UK’s roads, subject to Department for Transport (DfT) approval.
- 1.16 Three major initiatives involving pure electric and range-extended diesel-electric hybrid buses in London moved closer to implementation in 2013/14. The first initiative will deliver two leased pure-electric buses for trial on routes 507 and 521 from later this summer. The vehicles will remain in service until the existing operating contract expires. The second and third involve partnership funding bids for introducing and evaluating wireless induction charging for range-extended diesel-electric hybrid buses. The first of which has passed the initial hurdle of being judged suitable for funding bids by the European Commission.

2 Major incidents

2.2 In the quarter, there were four accidental fatalities in road traffic incidents involving London buses which are still under investigation, they are listed below as;

- 2.2.1 A female tourist suffered fatal injuries in a collision with a route 29 bus on Charing Cross Road, WC2, on December 30.
- 2.2.2 A male pedestrian was fatally injured in a collision first involving a taxi and then with a route N159 bus on Westminster Bridge SE1, on December 22.

- 2.2.3 A female pedestrian was fatally injured in a collision with a route 43 bus on King William Street, EC4, on December 21.
 - 2.2.4 A male motorcyclist was fatally injured when he collided with a route 107 bus on Furzhill Road, Hertfordshire , on 28 March.
- 2.3 The investigations of six previous fatal incidents involving buses where concluded as follow:
- 2.3.1 An engineer employed by a bus contractor was ran over by a bus he was attending to on the highway on Morden Hall Road, SM4, in September 2010. The investigation showed the engineer inadvertently released the handbrake as he worked on the bus. The HSE investigated the incident but is taking no further action.
 - 2.3.2 Route 194 bus collision with pedestrian in May 2011 at Addiscombe Road, Croydon, resulted when 65 year male came from an obscure position into the path of the bus. The driver was cleared of “causing death by careless driving”.
 - 2.3.3 Route 153 bus collision with a cyclist in August 2012 at Holloway Road, N7, occurred when the door of a private car was opened into the path of the cyclist causing him to fall into the path of the bus following behind.
 - 2.3.4 Route 104 bus collision with a private vehicle led to the death of an occupant of the car in June 2011 at High Street, E12. The driver of the private vehicle was found guilty of “causing death by dangerous driving”.
 - 2.3.5 A bus passenger died following a fall on a route 158 bus when the driver took evasive actions to avoid colliding with another vehicle in September 2011 at Billet Road, E17. A verdict of “accidental death” was recorded by the coroner.
 - 2.3.6 An elderly bus passenger fell down the stairs of a bus as the bus started to move from a bus stop in March 2012 at Woodbury Grove, N4. The coroner recorded “accidental death” the investigation did not find fault with the bus operation.

In all of the cases, there were no recommendations made by Coroner’s Courts for TfL or the bus contractors involved.

Crossrail Quarterly Health, Safety and Environment Report

1. What went well

- 1.1 Developed and published H&S Objectives for 2013/14
- 1.2 Crossrail focussed on its Behavioural Programme, Behaviour Influences Behaviour with awareness sessions held across the programme. Drama-based Road shows will be carried out across the programme in the next quarter to drive the Target Zero ethos and to continue to promote Health and Safety as an immutable value.
- 1.3 The Principal Contractor's Target Zero Forum held on the 21st of February 2013 focussed on lifting with the launch of targeted campaign. Directors from the Shard shared best practice by presenting on the challenges faced during the construction of the Shard. Kone Cranes who are a specialist provided of overhead cranes gave interactive sessions on lifting and carried out targeted visits to Crossrail sites to discuss lifting, use of gantry cranes and share best practice.
- 1.4 The Third round of Gateway commenced and the results are due to be circulated in Q4.
- 1.5 Surveillances were carried out on Principal Contractor's arrangements for the management of:
 - Consequence management
 - Electrical isolations
 - Occupational Health arrangements
 - Safe Methods of working
 - SCL working
 - Site security
 - Tunnel safety
- 1.6 In Q4 the second phase of Target Zero visual standards commenced, with work continuing in to the next quarter focussing on all types of material including safety banners, posters, notice boards and guidance booklets.

- 1.7 RIVO Safeguard reporting system has undergone two upgrade projects. Phase 1 has now gone live and has improved KPI return to include information on behavioural based safety programmes, detail on health checks and campaigns.
- 1.8 Leadership Programme – The Crossrail Frontline Leadership Programme commenced in January 2013. The programme is designed to improve the leadership skills and qualities of Supervisors that range from Works Managers and Senior Construction Manager to Gangers and Team Leaders. The Leadership competencies that are the focus of the programme include:
- Understanding People
 - Decision-making
 - Resilience & Focus
 - Seeing the Bigger Picture
 - Motivating Others
 - Communicating Effectively
- Over 50 Supervisors and over 20 Mentors from 8 Principal Contractors have thus far been involved with the programme.
- 1.9 Due to a rise in the number of incidents involving plant and equipment a focussed inspection and root/immediate cause data analysis was undertaken. Opportunities for improvement were identified including a campaign to improve awareness, improve traffic management, share best practice throughout the project and improve methods of communication through toolbox talks, traffic marshal forums and improved briefing prior to task.
- 1.10 Developed and delivered a new health and safety KPI form in RIVO Safeguard. Designed, developed and implemented a new incident and investigation workflow within RIVO Safeguard.

2. Areas for Improvement in the quarter

- 2.1 Behavioural Based Safety programmes – It is a requirement of the Crossrail Works Information that all Principal Contractors implement a behavioural based safety programme. The most common root cause from incident investigation continues to be reported as “Human factors”. Crossrail are investigating this further and, in addition to improvements in RIVO Safeguard, work is ongoing to develop a means of evaluating the overall effectiveness of the PC’s behavioural programme. In addition Crossrail are developing a “Don’t Walk By” Target Zero road show using actors to engage supervisors and targeted working crews to realise the impact they have on others’ behaviour.

- 2.2 Improvements are required in the quality of accident investigations undertaken by Crossrail's supply chain. A project to review best practice and share good methodology has commenced.

3. Key Deliverables in the next Quarter (Q1 – 2013/14)

- 3.1 Phase 2 of the RIVO Safeguard improvement is due to go live in Q1 2013/14 and will improve the incident module allowing for better data capture on activity and causation for analysis purposes, the possibility of multiple outcome events and the functionality for deadline extensions. Training will be rolled out to all key users of the system across the project.
- 3.2 The results from the third cycle of the Gateway Scheme are due during Q1 2013/14.
- 3.3 Develop and modify the Health and Safety Performance Index (HSPI) so that it provides a better relationship with the Accident Frequency Rate.

4. Major Incidents

- 4.1 There were no major incidents in Quarter 4