

TRANSPORT FOR LONDON

SAFETY, HEALTH AND ENVIRONMENT ASSURANCE COMMITTEE

**SUBJECT: QUARTERLY HEALTH, SAFETY AND ENVIRONMENT PERFORMANCE REPORTS**

**DATE: 12 MARCH 2010**

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**1 PURPOSE AND DECISION REQUIRED**

1.1 To inform the Committee of the key Health, Safety and Environment matters in the Modes during the last quarter. The Committee is asked to note the report.

**2 BACKGROUND**

2.1 Full reports on Health, Safety and Environmental activities and performance are produced annually. These quarterly reports are to update the Committee on any significant matters from the previous quarter.

**3 INFORMATION**

3.1 The Quarter 3 2009/10 Health, Safety and Environment performance reports are attached as follows:

- Appendix 1 London Underground
- Appendix 2 Surface Transport
- Appendix 3 London Rail
- Appendix 4 Crossrail
- Appendix 5 Corporate Directorates
- Appendix 6 Health and Safety performance data summary.

3.2 It should be noted that London Underground reports for four periods in Quarter 3 while other modes report for three.

**4 RECOMMENDATION**

4.1 The Committee is asked to NOTE the report.

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**LONDON UNDERGROUND QUARTERLY HEALTH, SAFETY AND ENVIRONMENT REPORT**

**1 SUMMARY**

**What went well**

- 1.1 All safety key performance indicators were stable or improving during Quarter 3 2009/10. Significant reductions in the number of confirmed fires are evident this quarter.
- 1.2 The Safety, Environment and Health Improvement Plans are progressing in line with the project timescales.
- 1.3 London Underground's (LU's) new residual risk measure demonstrates continuing improvement in Time Between Major Incidents this quarter. This measure is based on TfL's definition of major incidents and shows a more than 10 fold improvement over the last decade.
- 1.4 Health Fairs were run at 37 locations across LU, including the Chief Maintenance Officer's (CMO) areas for the first time, with more than 1600 employees attending.
- 1.5 Noise and vibration complaints per 100,000 hours worked significantly decreased during the quarter, from 1.5 to less than 0.5.
- 1.6 The Tottenham Court Road Station Upgrade project delivered recycling and reuse rates of 99 per cent for construction and demolition waste.
- 1.7 The long term improving trend in the percentage of staff taking time off due to stress, anxiety and depression continued.

**Areas for improvement**

- 1.8 The Lost Time Injury Frequency Rate (LTIFR) has increased compared with the same period last year for CMO. Local safety improvement programmes have been implemented in all CMO areas. Each involves local employees in developing and implementing further mitigation measures.

**Significant plans for the next quarter**

- 1.9 LU's safety performance standard (1-566) will be revised to include improved classification of Platform Train Interface (PTI) incidents and improved environmental metrics.
- 1.10 Improved safety reporting templates for the Projects and Upgrades Directorates will be introduced.

- 1.11 A tool for introducing environmental and safety criteria into all stages of the procurement processes for capital / infrastructure works will be trialled.
- 1.12 A low energy and LED lighting trial will commence at Charing Cross station.

**2 PROGRESS AGAINST HSE PLAN**

- 2.1 Progress against actions in the Health, Safety and Environmental Improvement plans continue to be tracked via the London Underground Safety Action Tracking System (LUSATS) and via the Executive Committee Investment Delivery Meeting. The following items are of note in Quarter 3:
  - (a) The Health Fair Programme for 2009/10 was completed; a 14 per cent increase on the attendance last year was achieved, with around 60 per cent attending for the first time. Positive feedback from employees is continuing to be received;
  - (b) The work stream Improving Safety Critical Communications is continuing to progress ahead of schedule and has had a satisfactory audit by Her Majesty’s Railway Inspectorate, Office of Rail Regulation; and
  - (c) Delivery of the Environmental Improvement Plan key actions this Quarter included ecology data being uploaded onto the GIS system, delivery of a station electricity metering survey, completion of a renewable energy sourcing industry consultation exercise and completion of a review on environmental training.

**3 STATUS OF HSE MANAGEMENT SYSTEM**

- 3.1 Compliance with LU’s Health Safety and Environmental Management System (HSEMS) is monitored via audit. LU and Tube Lines audit programmes are on target for delivery by year end. There were no safety critical adverse findings in Quarter 3.

**4 HEALTH AND SAFETY PERFORMANCE**

- 4.1 It should be noted that for LU there were 4 periods in Quarter 3.

**Health**

- 4.2 There were 42,845 working days lost to sickness absence in Quarter 3, representing an average of 3.3 days per employee. For comparison, in the previous quarter there was 2.5 days absence per employee and in the same quarter last year 3.3 days absence per employee. The top three categories of sickness absence in Quarter 3 were coughs and colds, musculo-skeletal, and mental health.

Days lost	Q3 2009/10	Q2 2009/10	Q3 2008/09
Sickness absence	42,845	32,910	44,015
Average / employee	3.3	2.5	3.3

- 4.3 The average number of employees taking time off sick due to back pain has

had a minor increase of five per cent this quarter when compared to Quarter 3 2008/09.

- 4.4 On average, 105 employees (0.82 per cent of staff) were absent per period in Quarter 3 compared to an average of 100 (0.75 per cent) per period in Quarter 3 2008/09.

### Safety

- 4.5 There were 34 customer major injures in Quarter 3 (0.13 per million customer journeys). For comparison there were 17 customer major injuries in the previous quarter (0.07 per million customer journeys) and 49 in the same quarter last year.

	Q3 2009/10	Q2 2009/10	Q3 2008/09
Customer major injuries	34	17	49
Rate/million customer journeys	0.13	0.07	0.135

- 4.6 There were five employee major injuries in Quarter 3, a rate of 0.32 per 1,000 employees. As former Metronet employees were included in this measure for the first time in the Quarter 1 2009/10 report, comparison with previous years is not possible.

	Q3 2009/10	Q2 2009/10	Q3 2008/09
Employee major injuries	5	3	n/a
Rate/1000 employees	0.32	0.19	n/a

- 4.7 There were 118 physical assaults on employees in Quarter 3. For comparison, there were 107 physical assaults on employees in the previous quarter.
- 4.8 There were 354 cases of verbal abuse to employees in Quarter 3 and 144 threats to employees. For comparison, there were 207 cases of verbal abuse and 148 threats in the previous quarter.

	Q3 2009/10	Q2 2009/10	Q3 2008/09
Employee physical assaults	118	107	117
Threats to employees	144	148	135
Employee verbal abuse	354	207	302
Rate/1000 employees	39.01	28.59	35.09

\*number of employees only includes Chief Operating Officer's employees

- 4.9 Ticket disputes were down by 1.5 per cent from Quarter 2 this year.
- 4.10 The decreasing trend in 'Category A' signals passed at danger (SPADs) continued in Quarter 3. There were 216 SPADs in Quarter 3, of which 169 (78 per cent) were 'Category A' (i.e. attributable to driver error) and 46 (21 per cent) were 'Category B' (42 due to either signal equipment or train equipment malfunction and four to Service Control errors.) There were no Category 'C'

SPADs during the Quarter. The significant decreasing trend in numbers of 'Category B – Service Control' SPADs (occurring from period 8 last year) continued in Quarter 3.

- 4.11 There were 151 Platform Train Interface (PTI) incidents reported during Quarter 3 and the trend remains stable. There were 25 falls between train and platform, 14 were contact between person and train, 11 were falls from platform and 101 were as a result of person caught in or struck by doors.
- 4.12 In Quarter 3, there were 91 lift incidents reported an improvement on a period by period basis from Quarter 1.
- 4.13 There were 332 drugs and alcohol tests in the Quarter, 253 unannounced, 14 for cause, 56 routine monitoring and nine post incident tests. An employee who went missing from duty was summarily dismissed at Company Disciplinary Interviews (CDI). Two other employees also went missing during this Quarter, one is currently at CDI and the other is still being investigated.

## 5 ENVIRONMENT PERFORMANCE

### Carbon and energy management

- 5.1 Energy consumption and CO<sub>2</sub> emissions for the quarter are tabulated below and, for comparison, data for the previous quarter and the same quarter last year are provided.

	Q3 2009/10	Q2 2009/10	Q3 2008/09
Total CO <sub>2</sub> (tonnes)	187,758	137,491	185,593
Normalised CO <sub>2</sub> (g/passenger km)	70.0	70.3	69.2
Total Traction Electricity (MWh)	296,780	214,102	299,333
Traction Energy Efficiency (MWh/million passenger journeys)	909	907	888

- 5.2 A number of energy related actions under the LU Energy Plan were delivered in Quarter 3 including:
- (a) A metering survey was completed in December 2009. This captured information relating to the metering assets at all stations. The output will be used to improve the accuracy of the energy use data as well as to provide information to enable the training of operational staff in meter reading.
  - (b) Initial conclusions and a proposed way forward from the renewable energy sourcing industry consultation exercise were presented to the Executive Committee in October 2009.

- (c) A strategic review into how LU manages its response to climate change adaptation was completed. The recommended way forward was presented to the Executive Committee in December 2009. The results are being incorporated into the 2010/11 improvement programme.

### Recycling and waste management

	Q3 2009/10	Q2 2009/10	Q3 2008/09
Commercial and Industrial Waste (tonnes)	4,382	3,270	4,101
Commercial and Industrial Waste Recycled (tonnes)	1,652	1,555	1,696
Commercial and Industrial Waste Recycled (per cent)	38	48	41

- 5.3 Station and depot Commercial and Industrial waste recycling rates in Quarter 3 (38 per cent) resulted in a 45 per cent recycling rate for the year to date. The 2009/10 recycling target for Commercial and Industrial waste is 45 per cent.
- 5.4 In Quarter 3, 40,632 tonnes of construction and demolition waste was generated compared to 44,538 tonnes in Quarter 3 2008/09. Of this, 89 per cent was recycled, which means LU's 2009/10 recycling target for Construction and Demolition waste of 50 per cent, is currently being met.

	Q3 2009/10	Q2 2009/10	Q3 2008/09
Construction and Demolition Waste (tonnes)	40,632	51,410	44,538
Construction and Demolition Waste Recycled (tonnes)	36,315	39,330	40,291
Construction and Demolition Waste recycled (per cent)	89	77	90

## 6 MAJOR INCIDENTS

- 6.1 There were no major incidents in the quarter.

## SURFACE TRANSPORT, QUARTERLY HEALTH, SAFETY AND ENVIRONMENT REPORT

### 1 SUMMARY

#### What went well

- 1.1 To ensure a co-ordinated approach in the way in which safety activities around the proposed cycle hire scheme are undertaken, a calendar of activities was produced in collaboration with a variety of key stakeholders. The calendar identifies stakeholders (including London boroughs), their activities and timeframes.
- 1.2 TfL's London Road Safety Unit (LRSU) hosted the first day of the European Road Safety Expo 2009, with delegates from around the world. Delegates visited the Surface Transport and Traffic Operations Centre (STTOC), tested the Intelligent Speed Adaptation (ISA) cars and took a bus tour around central London to see sites of particular road safety interest.
- 1.3 The new incident reporting system (IRIS) for the bus and Dial-a-Ride network was launched in October 2009. The system offers enhanced incident reporting capabilities for Surface Transport.
- 1.4 A designated working group continued work with key suppliers on safety aspects of the hydrogen bus programme. Planning approval for the construction of the new hydrogen refuelling facility at Lea Interchange was granted in December 2009. A full safety review will be carried out on the facility during the commissioning phase scheduled for September 2010.
- 1.5 A bid submitted by Surface Transport to DfT's Green Bus Fund was successful with £5 million awarded to TfL. This will enable contracted bus operators to procure 46 hybrid (diesel-electric) buses.
- 1.6 At the end of the quarter, 98.5 per cent of Display Screen Equipment (DSE) users had completed their DSE assessment using the DSEasy system.

#### Areas for improvement

- 1.7 The published analysis of police collision files for pedal cyclist fatalities in London between 2001 and 2006 by the LRSU identified a relatively high number of HGV-cyclist collisions, especially HGVs without sidebars. Through the Freight Operator Recognition Scheme (FORS), the Cycling Safety Working Group will encourage companies operating HGVs in London to respond to recommendations to improve and/or install side guards on HGVs, retrofit mirrors and improve the mirror configuration. Other recommendations being taken forward include raising awareness of cyclists by other road users, improving training, improving cyclists' conspicuousness and encouraging better speed management.

- 1.8 In addition, Surface Transport raised the issue of HGV safety with Lord Adonis, Secretary of State for Transport, with a view to pressing the Government to take action to remove the current exemption for construction vehicles from requiring side-bars.
- 1.9 Two passengers and nine third parties were fatally injured on the bus network during Quarter 3, higher than previous quarters (see 6.1). There were no discernible reasons for the increase.

### **Significant plans for next quarter**

- 1.10 To support efforts aimed at ensuring bus contractors share learning and collectively establish industry best practice on health and safety matters, two separate workshops exploring major incident investigation arrangements and bus driver exposure to risks following an incident which may require them to leave the cab (following HSE's comment on inconsistency in guidance issued to drivers) are planned in the next quarter. The workshops will be facilitated by the safety team and have the endorsement of the managing directors of major bus companies.
- 1.11 A Cycle Safety campaign which builds on the very successful "moonwalking bear" advert is being developed to communicate safety issues to both drivers and cyclists. The initiative is in response to the increasing number of new cyclists on London's roads and in preparation for the launch of new cycle schemes in the summer. The campaign will commence in March and will have a number phase in 2010/11.

## **2 PROGRESS AGAINST HSE PLAN**

### **Priority 1: Road casualty reduction**

- 2.1 Using the Local Implementation Plan (LIP) funding system, in the current financial year (2009/10), TfL supported 89 20mph zones in various stages of their development (feasibility, design, implementation and review). The zones are distributed across 28 London boroughs with a total allocation of £8.5m.
- 2.2 In the first six months of 2009, 100 people were killed on London's roads, eight per cent more than in the first six months of 2008. "Killed and seriously injured" fell to 1,484 in the same period, 15 per cent fewer than in 2008. 'All casualties' were 13,118, 3.9 per cent lower than the first six months of 2008.
- 2.3 Eight cyclists died on London's roads in the first six months of 2009. In total, there were 1,464 cyclists injured in the first six months of 2009, 17 per cent more than the same period in 2008.
- 2.4 LRSU published a report on signalised junctions in London in October 2009 as part of the TfL pedestrian signal "Countdown" programme. Overall, the results for the indicators of safety used in this research suggest that there was no significant effect on safety from the re-timing of the signals.



- 2.5 The intelligent speed adaptation (ISA) team arranged to have ISA technology fitted to three Royal Borough of Kensington and Chelsea vehicles. In addition, two black cabs and two private hire vehicles have been fitted with ISA. The team is also planning to fit the device on a private vehicle owned by a young driver as part of ongoing work with the insurance industry.
- 2.6 As part of its commitment to address the inequality in London road casualties, TfL continues to support six local borough community road safety projects in Haringey and Enfield, Hounslow, Newham, Croydon, Hackney and Hammersmith and Fulham. The projects are coming to the end of their second year and are complete or nearly complete. The Haringey and Hounslow schemes recently won London Compact awards. The projects have been noted by other boroughs, some of which are looking to introduce similar schemes in the future.

### **Priority 2: Safety of highways and the TLRN (including tunnels)**

- 2.7 A joint Construction Design Management (CDM) forum was held in October 2009 between Surface Transport, London Underground, Crossrail and London boroughs. The purpose of the meeting was to share developments that encourage a consistent approach to the application of the CDM Regulations across TfL.
- 2.8 Representative from the Construction and Tunnels Safety Team within the Streets Roads Directorate have contributed to the recently released Construction Industry Research and Information Association (CIRIA) guide on Unexploded Ordnance through a cross sector steering group. This authoritative guidance is supported by the Health and Safety Executive (HSE).
- 2.9 An internal Audit in February 2010 reviewed the Streets Directorate risk assessment process for the safe operation of TfL's 13 road tunnels.

### **Priority 3: Health and safety of staff and contractors**

- 2.10 As part of the National Stress Awareness Day (4 November 2009) a stress awareness stall was staffed by members of the Occupational Health counselling team. The aim was to increase staff awareness of ways to reduce the risk of stress and its symptoms and also introduce staff to various "positives" for a better life.
- 2.11 Counsellors from the occupational health team also offered "on the spot" advice and information about services readily available to staff. Free pedometers, to encourage a healthier lifestyle, were handed out. The event was attended by 102 staff from across Surface Transport, the highest recorded for such an event.
- 2.12 There have been 877 staff (including bus contractors) assaults reported since January 2009. The Workplace Violence Unit has dealt with 330 cases with 178 cases ongoing. To date, 123 cases have received judicial disposals.

#### **Priority 4: Safety and security of the public transport network and its users**

- 2.13 The annual bus operators' audit programme is on schedule for completion by the end of the financial year. From those completed, there were no significant issues and good progress was made with closing the previous year's recommendations.
- 2.14 A programme of boat mooring audit observations was undertaken at Westminster Pier; the final report is currently with London River Services for consideration. The audit was undertaken by London Underground SQE staff against the recent Code of Practice for Passenger Vessel Operations on the Thames.

### **3 STATUS OF HSE MANAGEMENT SYSTEM**

- 3.1 The status of the revised public transport HSE management systems is as follows:
- (a) London Bus Services Ltd is completed. The management system was launched to senior managers and individual directorates are developing their own department manuals;
  - (b) Public Carriage Office and London River Services procedures are almost complete; and
  - (c) Those for Victoria Coach Station are subject to delay due to an ongoing organisational change review.
- 3.2 A programme was drawn up to ensure that all procedures which fall under the Streets Health, Safety and Environment Management System are fully reviewed in line with TfL's three year cycle requirement.

### **4 HEALTH AND SAFETY PERFORMANCE**

#### **Health**

- 4.1 There were 10,160 working days lost due to sickness absence in Quarter 3, representing an average of 2.8 per employee. For comparison, the previous quarter's average was 2.5 days absences per employee and the corresponding quarter of last year was 3.5. The top three categories of sickness absence were coughs and colds, musculoskeletal and mental health.

Days lost	Q3 2009/10	Q2 2009/10	Q3 2008/09
Sickness absence	10,160	10,019	13,828
Average / employee	2.8	2.5	3.5

## Safety

- 4.2 The number of accidental customer major injuries in Quarter 3 was 163 (0.30 per million customer journeys). For comparison, there were 212 accidental customer major injuries in the previous quarter (0.41 per million customer journeys) and 245 in the same quarter last year.

	Q3 2009/10	Q2 2009/10	Q3 2008/09
Customer major injuries	163	212	245
Rate/10 <sup>6</sup> customer journeys	0.30	0.41	0.47

- 4.3 There were two accidental employee major injuries in Quarter 3. For comparison, there were two employee major injuries in the previous quarter and four in the same quarter last year.

	Q3 2009/10	Q2 2009/10	Q3 2008/09
Employee major injuries	2	2	4
Rate/1000 employees	0.65	0.50	0.92

- 4.4 There were 19 physical assaults on employees in Quarter 3. For comparison, there were 27 physical assaults on employees in the previous quarter and 34 in the same quarter last year. There were eight verbal assaults on employees in Quarter 2. For comparison, there were five verbal assaults on employees in the previous quarter and 10 in the same quarter last year. There were five threats with offensive weapons in Quarter 3, two in the previous quarter and three in the corresponding quarter of last year.

	Q3 2009/10	Q2 2009/10	Q3 2008/09
Employee physical assaults	19	27	34
Employee verbal assaults	8	5	10
Employee threatened with offensive weapon assaults	5	2	3
Rate/1000 employees	10.47	8.0	10.86

- 4.5 There were 70 physical assaults on contractors in Quarter 3. For comparison, there were 98 physical assaults on contractors in the previous quarter and in the corresponding quarter of last year there were 155 physical assaults.

## Crime and disorder

- 4.6 A review has been undertaken of key Mayoral and TfL priorities regarding safety and security on public transport. The review shows that:
- (a) Bus-related crime reported through the Metropolitan Police Services (MPS) fell by 10.7 per cent in the period April to December 2009/10. This is equivalent to 2,216 fewer offences.
  - (b) TfL's quarterly safety and security survey for October 2009 shows that the proportion of Londoners who have significant concerns about crime and anti-social behaviour on public transport, such that it deters from

using it, decreased to 29 per cent from 35 per cent recorded in April 2008.

- (c) For the first three quarters of the year the provisional crime rate per million passenger journeys for the bus network fell to 10.8 compared to 12.0 in 2008/09.
- (d) Close working with the MPS and the City of London Police, and in partnership with Taxi and Private Hire trades, to tackle taxi touting across London continues with the number of enforcement officers doubled to 68. Between August 2008 and January 2010 1,116 arrests were made.
- (e) Over the Christmas period TfL and its police partners also ran hard hitting multi-media campaign on safer travel at night and over 100 drivers were arrested for touting.
- (f) As part of the “Earn your travel back” initiative, 244 of the 1,682 individuals invited to participate in the scheme had their concessionary travel reinstated after successfully volunteering with London Wildlife Trust or British Trust for Conservation Volunteers. Other young people choosing to enter the appeal process are given the opportunity to take part in the scheme if their appeal is unsuccessful. This is expected to improve the up take of the scheme.
- (g) The consultation on the revision of the bye-laws on the carrying and consumption of alcohol at TfL’s Railways and Road Transport Premises (bus garages, depots, stations and shelters) has concluded. Once fully in place anyone found breaching any of the bye-laws could be liable to a criminal record and a fine up to £1,000.

## **5 ENVIRONMENTAL PERFORMANCE**

### **CO<sub>2</sub> emissions**

- 5.1 The bulk of CO<sub>2</sub> emissions come from bus operations and as the supporting data is currently provided annually, it is not possible to report quarterly.

### **Waste and recycled materials**

- 5.2 In the quarter, the Highways Maintenance and Works contractors (HMWC) recycled and reused 93.4 per cent and 91.2 per cent of excavated and non excavated materials respectively, against a target of 90 per cent for 2009/10.
- 5.3 The target for 2009/10 is to procure 45 per cent of material requirements as recycled and green material. The target for the quarter was not met, with only 43.7 per cent being procured. The performance and target are being reviewed and industry benchmarked through the Government’s Waste and Resources Action Programme (WRAP). Surface Transport will work with Crossrail and London Underground to ensure that WRAP advice is applied consistently across TfL.

HMWC waste and recycled materials	Q3 2009/10	Q2 2009/10	Q3 2008/09
Excavated waste recycled and reused - percent (tonnes)	93.4 (4,544)	99.2 (7,602)	96.7 (27,032)
Non-excavated waste recycled and reused – percent (tonnes)	91.2 (713)	96.3 (866)	84.6 (2,493)
Recycled and green material procured – percent (tonnes)	43.7 (2,924)	28.1 (3,581)	24.9 (4,866)

5.4 London Buses conducted a trial of white paper recycling at staffed bus stations and offices in the East Region. In Quarter 3, 0.27 tonnes of paper was recycled. The trial has been completed and the initiative has been rolled out to the remaining three regions. The initiative will include mixed paper, batteries and toner cartridges. There are 33 bus stations and area offices in the recycling scheme up from the original seven in the East Region.

5.5 Office recycling facilities are now in place in all six Dial-a-Ride (DaR) depots. In Quarter 3, six tonnes of office waste was recycled. The figure has increased from Quarter 2 due to the addition of the DaR head offices and the call centre at Mandela Way. No recycling target has yet been set for DaR.

Recycled waste (tonnes)	Q3 2009/10	Q2 2009/10	Q3 2008/09
London Buses office waste	0.27	0.14	N/A
DaR office waste	6.00	3.45	

### Built environment

5.6 The target is to remove 60km of pedestrian guardrail by June 2010. The 2009/10 target for the end of Q3 was 11,989m and this was exceeded with a total of 18,540m removed. The assessment part of the programme has been completed but stakeholder consultation is still ongoing. The original forecast of June 2010 will still be achieved.

	Q3 2009/10	Q2 2009/10	Q3 2008/09
Pedestrian guardrail removed from TLRN (m)	18,540	10,773	N/A

### Natural Environment

5.7 Environmental awareness training sessions (by Surface Transport environmental professionals) were delivered to London Streets and contractor staff to ensure that damage to trees and other similar incidents involving the 'green estate' is prevented.

- 5.8 With support from the Environment Team and TfL Legal, London Streets is in the process of recovering the cost of damage to trees done by BT's sub-contractor which failed to follow industry guidance on working near trees. Assuming a successful outcome, the same model will be used to recover the cost of any further damage to trees on the TLRN by third parties or contractors. TfL's experience will be shared with the London Tree Officers Association.
- 5.9 London Streets successfully bid for funding from the Mayor's 10,000 tree planting initiative in two of the initiative's priority areas. New trees have been planted on the TLRN in Mortlake; East Sheen; New Cross and Deptford.

### **Cycle Superhighways**

- 5.10 The environmental evaluation has been completed for routes 3 and 7 and no significant environmental impacts are expected. Group Planning and TfL Legal have provided advice on elements of the scheme that may require planning permission.

### **Oxford Street bus diversion**

- 5.11 The environmental evaluation has supported Surface Transport's successful application for Temporary Traffic Orders from Westminster and Camden Councils. The diversion of buses from the eastern end of Oxford Street is needed to facilitate the utilities work to support Crossrail.

## **6 MAJOR INCIDENTS**

### **Fatalities on the bus network**

- 6.1 There were 11 fatalities on the bus network during the quarter. These included a passenger who died following a fall on the stairs of a stationary Route 254 bus and an elderly passenger who died two weeks after he was taken to hospital following a fall from a seat onboard a Route 353 bus. Seven pedestrians, a cyclist and the driver of a private hire vehicle were also fatally injured as a result of road traffic collisions with buses. The incidents are currently under investigation.

### **Customer non-accidental fatalities**

- 6.2 A passenger on a Route 56 fell unconscious and was attended to by emergency services but later died in hospital.

### **Fatality caused by tree at Clapham in 2008**

- 6.3 The Health and Safety Executive confirmed in writing that no action will be taken against individuals or organisations as a result of the TfL tree on Clapham Southside falling on a van in August 2008.

## **Fatality at Uxbridge Bus Garage in 2004**

- 6.4 First Group was convicted of health and safety breaches following an incident in 2004 where its driver died after he was crushed between two buses at Uxbridge bus garage. London Buses took steps to ensure lessons learned at the time of the incident were shared with all bus operators.

## **Private car fire in Blackwall Tunnel**

- 6.5 On Sunday 29 November, a people carrier entered the northbound bore of the Blackwall Tunnel. Approximately 80m from the tunnel exit the vehicle suffered a fire and came to a halt. Emergency services were called to extinguish the fire. The consequences of this fire were that three people received minor injuries (one sprained ankle, two with mild smoke inhalation) and the northbound bore of the tunnel was closed for over 24 hours to facilitate repairs to the road surface, communications systems, CCTV, tunnel lining panels and lighting.
- 6.6 Research has shown that typical car fires such as this can release up to five MW of energy. An HGV fire in similar circumstances can be of the magnitude of 200 MW. To put this into perspective, the Limehouse Link bus fire in 2005) was estimated to be in the region of 30 MW and the tunnel was shut for 17 days to allow for around the clock repairs to be carried out. Any HGV fire has the potential to impose significantly greater hazards to both the tunnel infrastructure and to persons. Notionally, a 30-50 MW fire could result in temperatures that are too hot for fire service personnel to enter the tunnel, resulting in the fire being left to burn itself out.
- 6.7 A 'lessons learnt' exercise was conducted with the emergency services to identify areas where improvements could be made in dealing with such incidents.
- 6.8 TfL has recently started a tunnel refurbishment project which will be completed before the Olympic and Paralympic Games. As part of this contract, the improvements listed below will be implemented to improve TfL's ability to respond to such incidents:
- (a) Shaft alterations to provide emergency access and ease of maintenance;
  - (b) Ventilation upgrade to control vehicle emission and smoke;
  - (c) Lighting replacement;
  - (d) Drainage containment to replace the current discharge into the River Thames;
  - (e) Increased Emergency points;
  - (f) Improved telephone communications;
  - (g) Fire main and hydrants upgraded to improve fire fighting capabilities;
  - (h) Improved escape route signing to enable controlled evacuation;

- (i) Fire and incident detection upgraded to detect smoke, stopped vehicles, pedestrians and debris;
- (j) Automated tunnel closure system, 100 per cent CCTV coverage;
- (k) Variable message and lane control signs;
- (l) Over height vehicle detection; and
- (m) Radio rebroadcast and public address systems.



**LONDON RAIL QUARTERLY HEALTH, SAFETY AND ENVIRONMENT REPORT****1 SUMMARY****What went well**

- 1.1 Preparations for Trial Operations on the 'core route' on the East London Line, including various assurance activities, were underway and making good progress during Quarter 3. Trial Operations began in Quarter 4. The line is scheduled to open in May 2010.
- 1.2 A new London Overground station, Imperial Wharf, opened in September 2009. The station, on the West London Line, is staffed, has step-free access, CCTV, and the latest security and information features.
- 1.3 On Docklands Light Railway (DLR), the overall Accident Frequency Rate for major projects has fallen to 0.14 per 100,000 hours worked. Major projects include the following: Stratford International Extension Project, the Three Car Upgrade Works, the New Vehicles project and Serco projects. This is the first time that the accident frequency rate on the DLR has reached the same level as that of the East London Line Project. Through considerable effort, there has not been a reportable injury in more than 1 million hours worked in both areas.
- 1.4 DLR developed a Safety Performance Index during Quarter 2 and launched it during Quarter 3. It provides a clearer indication of overall safety performance on DLR.
- 1.5 The LOROL (London Overground concessionaire) safety management arrangements have achieved OHSAS18001 certification. The Serco Docklands Environmental Management System has been reaccredited with ISO14001.
- 1.6 The introduction of the new rolling stock on both the DLR and London Overground is progressing well with 40 new vehicles on DLR and 12 full train sets on London Overground's North London Line now in service. The new trains for the East London Line are now in Trial Operations. All of the new rolling stock has been designed to create the type of service which will assist modal shift and further reduce emissions. The potential for regenerative braking (facilitating a return of power to the distribution network) is being further developed.
- 1.7 Work on the London Overground Station Enhancement Works Agreement has sought, where possible, to drive improved environmental performance. Achievements so far include examining the use of LED lighting at two stations (one new build and one other where re-lamping is taking place), provision of ambient noise detectors in Public Address systems on all refurbishments to reduce noise pollution, existing lamp columns on stations are being used for

new lighting systems and waste controls are being introduced to reduce, toward zero, the amount of waste going to landfill.

- 1.8 LOROL has an Environmental Improvement Plan, which is revised annually and there have been the following developments since the last quarter:
- (a) Significant development of the contractually required ISO14001 Environment Management System, including company-wide briefings;
  - (b) Development of a revised waste management framework, with greater recycling of station wastes occurring;
  - (c) Participation in the Association of Train Operating Companies (ATOC) Sustainability Forum, which is adding to corporate knowledge and benchmarking; and
  - (d) Initial measurement work on carbon emission levels and a defined commitment to reduce carbon emissions across the Concession. This includes development of the LOROL Carbon Footprint and consideration of the potential for energy reduction measures.
- 1.9 Serco (DLR franchise) has an Environmental Improvement Plan, which is revised annually and there have been the following developments since the last quarter:
- (a) The introduction of a Bikes for Work scheme;
  - (b) The successful introduction of a pilot scheme of environmentally themed computer based training module which will be made accessible to all staff in 2010; and
  - (c) An audit of oil storage and purchasing arrangements at Poplar and Becton depots was carried out, leading to enhanced storage bunding and additional training of depot staff on how to contain spillages and use spill kits.

### **Areas for improvement**

- 1.10 While the number of contractor major injuries is low, there are opportunities to improve the minor injury rates on both London Overground Infrastructure and DLR.
- 1.11 London Rail produced an Environment Improvement Plan (EIP) last year. In line with our Safety Improvement Plan the EIP has been reformulated to run as a calendar year rather than financial year plan. Initially, these two plans were integrated but following further discussion it has been decided to separate them. The plan has a core focus on energy but covers all key elements of environment. Further refinement to align better with our contractors and produce a more challenging set of objectives is now being undertaken.

## **Significant plans for the next quarter**

- 1.12 Trial Operations, including the live exercise Operation Vanguard on the East London Line, are scheduled to commence in Quarter 4.
- 1.13 Work streams relating to the development of Quantified Risk Assessment models will be further progressed on both London Tramlink and London Overground in the next quarter.
- 1.14 The annual independent audit of the DLR Safety Management System will be carried out in the next quarter.
- 1.15 London Tramlink will be developing its plans to conduct an environmental compliance audit on all aspects of the Tramlink organization.

## **2 PROGRESS AGAINST HSE PLAN**

- 2.1 In Quarter 3 the London Rail Executive approved the development of a companywide annual safety improvement plan. The overall plan is the sum of newly developed local plans and commences in Quarter 4. Any objectives not completed from previous plans will be incorporated into the new plan.
- 2.2 London Tramlink reported good progress on all objectives.
- 2.3 Progress has been made on all elements of the DLR plan. In response to emerging issues and to supplement the existing HSE plan, DLR has developed a capability enhancement programme. The programme identifies a number of prioritised issues against which good progress is also reported.
- 2.4 London Overground Infrastructure reported good progress on all objectives.

## **3 STATUS OF HSE MANAGEMENT SYSTEM(S)**

- 3.1 DLR and London Overground have established safety management systems in place. The system in London Tramlink is still being revised, with the aim of implementing an integrated system in early 2010.

## **4 HEALTH AND SAFETY PERFORMANCE**

### **Health**

- 4.1 There were 357 working days lost due to sickness absence in Quarter 3 by employees of London Rail. This represented an average of 1.57 days per employee. For comparison, in the previous quarter there was 272 days lost, equating to 1.21 days absence per employee and in the same quarter last year there was 342 days lost, equating to 1.50 days absence per employee. The top three categories of sickness absence in Quarter 3 were coughs and colds, gastrointestinal and musculo skeletal.

Days lost	Q3 2009/10	Q2 2009/10	Q3 2008/09
Sickness absence	357	272	342
Average / employees	1.57	1.21	1.50

## Safety

- 4.2 There was one employee major injury this quarter in London Rail headquarters, the first time such an incident has occurred.
- 4.3 There were no accidental customer major injuries for London Overground in Quarter 3. For comparison, there were no accidental customer major injuries in the previous quarter or the same quarter last year.
- 4.4 There were no TfL employee assaults this quarter on London Overground. The number of LOROL employees, who suffered workplace physical and verbal assaults in Quarter 3 was five and 13 respectively. For comparison, there were two and five in the previous quarter. Despite the increase in incidents in Quarter 3, it should be noted that the physical assaults are mainly minor in nature, such as pushing and spitting. Analysis has revealed that most assaults are associated with service disruptions and revenue collection and LOROL is working with the British Transport Police to target specific locations.

LOROL	Q3 2009/10	Q2 2009/10	Q3 2008/09
Physical assaults	5	2	3
Verbal assaults	13	5	2
Rate/1000 employees	17.9	8.1	7.6

- 4.5 There were three accidental customer major injuries on DLR in Quarter 3 (17.8 per million customer journeys). These were mainly the result of slips, trips and falls. For comparison, there were six accidental customer major injuries in the previous quarter and five in the same quarter last year.

DLR	Q3 2009/10	Q2 2009/10	Q3 2008/09
Customer major injuries	3	6	5
Rate/million customer journeys	0.18	0.37	0.33

- 4.6 There were no TfL employee assaults this quarter on DLR. On DLR, assaults are classified as major or minor (minor includes verbal abuse and pushes and shoves, and the majority are verbal abuse). The number of employees of the franchisee Serco who suffered workplace assaults in Quarter 3 was zero and 21, for major and minor respectively. For comparison, there was zero and 18 in the previous quarter and one and 12 in the same quarter last year.

DLR	Q3 2009/10	Q2 2009/10	Q3 2008/09
Major assaults	0	0	1
Minor assaults	21	18	12
Rate/1000 employees	31	28	23.2

- 4.7 There was one accidental customer major injury for London Tramlink in Quarter 3 (6.3 million customer journeys). For comparison there were no accidental major customer injuries in the previous quarter and two in the same period last year.

	Q3 2009/10	Q2 2008/09	Q3 2008/09
Customer major injuries	1	0	2
Rate/million customer journeys	0.16	-	-

- 4.8 In London Tramlink there were no TfL employee assaults this quarter. The number of workforce physical and verbal assaults in Quarter 3 for our contractor TOL on London Tramlink was two and five respectively. For comparison there was one and nine respectively in the previous quarter and five and seven in the same quarter last year. There has been a gradual reduction in physical assaults over the last year.

	Q3 2009/10	Q2 2009/10	Q3 2008/09
Contractor physical assaults	2	1	5
Contractor verbal assaults	5	9	7
Rate/1000 employees	43	62	74.5

- 4.9 On London Overground Infrastructure there were no contractor RIDDOR (Reporting of Injuries, Diseases and Dangerous Occurrences Regulations) reportable accidents during the quarter. The cumulative contractor accident rate was 0.14 per 100,000 hours worked. Overall performance was significantly better than the benchmark rate of 0.59 per 100,000 hours worked, set for the project.
- 4.10 On DLR Major Projects there were no contractor RIDDOR accidents in Quarter 3. The cumulative contractor accident rate was 0.14 per 100,000 hours worked.

## 5 ENVIRONMENT PERFORMANCE

### Carbon and energy management/Carbon emissions

- 5.1 CO<sub>2</sub> emissions for Quarter 3 are set out below.

	Q3 2009/10	Q2 2009/10	Q3 2008/9
Total CO <sub>2</sub> emissions (Tonnes)	12,958	13,113	11,942
CO <sub>2</sub> emissions (g/passenger km)	56.4	59.6	58.9

- 5.2 Change in the total power use continues to be matched by changes in passenger numbers.

### Waste Management

- 5.3 An improved approach to waste management continues to be developed. There is good data on construction waste and there is good performance against the general trends for the sector. On customer produced wastes,

collected through station and rolling stock cleaning, there is good data from LOROL showing increased levels of recycling. The reuse/recycling of waste from offices is also being developed.

- 5.4 For the most advanced project, the East London Line Project, waste minimisation targets continued to be met with 93 per cent of Construction and Demolition waste and 70 per cent of Commercial and Industrial waste being recycled.
- 5.5 Opportunities to use materials with recycled content have continued to be identified and the project has incorporated 58 per cent by value of recycled content in materials procured.

## **6 MAJOR INCIDENTS**

- 6.1 There were no major incidents in the quarter.

**CROSSRAIL QUARTERLY SAFETY, HEALTH AND ENVIRONMENT REPORT****1 SUMMARY****What went well**

- 1.1 The stage one visit by the accreditation body Lloyd's Register Quality Assurance (LRQA) which is required as part of achieving an Environmental Management System (EMS) certified to BS EN ISO 14001: 2004 and a Safety Management System (SMS) certified to BS OHSAS 18001: 2007 was successfully completed. LRQA recommended that the stage two assessment be conducted as planned in Quarter 4.
- 1.2 The Health and Safety Directorate with support from Environmental Resources Management (ERM) conducted a study of safety attitudes and behaviours within Crossrail. The results from the survey will be used to develop the Crossrail behavioural safety action plan.
- 1.3 The incident management system was launched as planned in January 2010, with data on all incidents being captured within the system from this date.
- 1.4 The lorry driver safety course was launched with four pilot courses being run. The feedback from the pilot courses indicates that it will raise driver safety awareness with all attendees grading the course as good or excellent. Of the attendees, 92 per cent stated that the course would make them a safer driver.
- 1.5 The staff training plan to address health, safety and environmental requirements detailed within the TfL competency framework is progressing well with training courses on corporate manslaughter, making it personal, directing safety and environmental training for directors and senior managers being run. The development of eLearning training packages went well enabling them to be launched in January 2010.

**Areas for improvement**

- 1.6 Awareness of health issues within the offices is being increased through the introduction of health related campaigns covering topics such as healthy eating and use of stairs.
- 1.7 Staff awareness of environmental issues and the EMS will be increased.

**Significant plans for the next quarter**

- 1.8 Preparations for an Health and Safety Executive inspection are being made. The inspections will assess Crossrail's compliance with the Construction (Design and Management) Regulations.

- 1.9 There will be a meeting with the Office of Rail Regulation to discuss future operational issues including fire containment within rolling stock.
- 1.10 Preparation for, and implementation of, a programme of activities for the March 2010 'Environment Month' will be actioned.
- 1.11 The Stage two assessment for ISO14001 and BS OHSAS 18001 verification by LRQA is scheduled for February 2010.

## **2. PROGRESS AGAINST HEALTH & SAFETY PLAN**

- 2.1 Progress on the achievement of the key deliverables contained within the annual health and safety improvement plan and the associated action plans are on track. Work has started on the development of an annual health, safety and security action plan for the period 2010/2011.

## **3 STATUS OF HEALTH & SAFETY MANAGEMENT SYSTEM**

- 3.1 The health and safety management system was subject to minor revision to incorporate comments from the stage one assessment by LRQA.

## **4 HEALTH AND SAFETY PERFORMANCE**

### **Health**

- 4.1 There were 459 working days lost due to sickness absence in Quarter 3 which represents an average of 1.69 days per employee. The top two categories of sickness absence in Quarter 3 were coughs and colds (30.7 per cent) and mental illness (24.4 per cent).

Days lost	Q3 2009/10	Q2 2009/10	Q3 2008/9
Sickness absence	459	329	268.5
Average / employee	1.69	1.25	1.40

- 4.2 Crossrail provided free seasonal flu vaccinations for employees on request.
- 4.3 The procurement process for occupational health provision across the Crossrail Programme has commenced with the three preferred suppliers to be announced in the next quarter.

### **Safety**

- 4.4 There were no employee major injuries in the quarter and none in the previous quarter or the same quarter last year.
- 4.5 There were two contractor major injuries reported in Quarter 3. For comparison there were none in the previous quarter and none in the same quarter last year.



	Q3 2009/10	Q2 2009/10	Q3 2008/09
Contractor major injuries	2	0	0
Rate/1000 contractor employees	7.00	0	0

Note: London Underground data associated with the Crossrail Programme is not included to avoid duplication.

- 4.6 There were no physical and verbal assaults on employees in Quarter 3. For comparison, there were none in the previous quarter and none in the same quarter last year.

## **5 ENVIRONMENTAL PERFORMANCE**

- 5.1 Electricity consumption data for the Canada Square office are included in the TfL energy leagues published on Source to assist in occupant behavioural change campaigns. Energy usage in common areas of the building including lifts and lighting are not metered, TfL is working with CitiGroup to obtain an estimate of this energy usage to enable inclusion of this data in future reports. Crossrail consumption over the four floors occupied at Canada Square was 417,756kWh. Crossrail energy consumption data for the two floors occupied at Pier Walk is not available as there is no sub-metering for this building.
- 5.2 During the quarter, four complaints relating to noise were received; three of these were attributed to the Canary Wharf Group, and one was attributed to London Underground.
- 5.3 In the quarter, Crossrail planned and carried out 18 site environmental inspections, these identified three non-conformances and made 29 observations, there were no trends identified.

## **6 MAJOR INCIDENTS**

- 6.1 There were no major incidents in Quarter 3.

## CORPORATE DIRECTORATES QUARTERLY HEALTH, SAFETY AND ENVIRONMENT REPORT

### 1 SUMMARY

#### What went well

- 1.1 A successful health and wellbeing event was held on 20 November 2009 for employees based at the recently opened Pier Walk building. The event comprised display stands, free literature and professionally-led activities to raise employee awareness on health issues. Employee take-up and feedback was positive.
- 1.2 A survey into home working within General Counsel was carried out. The survey provided useful insights into work patterns which were relayed to senior management. Participants were given feedback on survey findings and individual concerns were addressed as appropriate.
- 1.3 Work is underway to review HSE-related documents under the Prestige PFI Future Ticketing Agreement (FTA). Following the first review, Cubic Transportation Systems has started work to redraft baseline documents governing the delivery of HSE under the FTA.
- 1.4 The TfL Annual Environment Report 2008/09 was published.
- 1.5 The TfL Destination Green Environment Awards were held in November 2009. These recognised the achievements of individuals and teams who developed new ideas and practices that bring environmental improvements to the workplace and operations. For example, awards were given to colleagues in London Underground for designing a new uniform fleece jacket made from recycled plastic bottles and in Group Customer Services for rolling out a new eco induction module.
- 1.6 Group Property & Facilities has determined that 32 of the Head Office buildings will be able to reduce their carbon emissions by 10 per cent in 2010/11 with projected CO<sub>2</sub> savings of some 2,700 tonnes. This has enabled TfL to commit to the nationwide 10:10 CO<sub>2</sub> saving campaign.
- 1.7 There were 26 Display Energy Certificates (DECs) updated in Quarter 3. DEC ratings improved for the majority of the buildings, reflecting the work done to reduce the environmental impact of the building stock. The average DEC score improved by five per cent on 2008 levels and showed a four per cent reduction in absolute CO<sub>2</sub> emissions from the same period last year.
- 1.8 At the end of Quarter 3, the Head Office recycling rate was on track to exceed the year end target of 65 per cent and some sites are now recording figures as high as 85 per cent.
- 1.9 A review of the efficiency of Group HSE, particularly in relation to environment and sustainability activities continued.

- 1.10 Following an open recruitment a second Adviser to the Committee has been appointed. The appointee has particular expertise in relation to sustainability and environment matters.

### **Areas for improvement**

- 1.11 Current improvement areas comprise:

- (a) the need to ensure that necessary HSE input is made to the planning and implementation stages of organisational change; and
- (b) issues requiring resolution at Travel Information Centres arising from recent refurbishment and cold weather.

- 1.12 The prolonged cold weather will make it particularly challenging to meet the energy use reduction targets for this year. Works to improve the building energy management system, along with the connection of 10 current portfolio sites and the two new sites (Palestra and Pier Walk) will contribute significantly to closing the gap.

### **Significant plans for the next quarter**

- 1.13 An audit will take place on Prestige PFI partner, Transaction Systems Limited's HSE MS.
- 1.14 The gap analysis against the requirements of the finalised Group HSE Competence Framework for managers will continue.
- 1.15 A further wellbeing event will take place at Windsor House to target the Corporate Directorate employees working in central London. This event will give staff the opportunity to discuss aspects of healthy living and have assessments made of key health indicators eg cholesterol levels.
- 1.16 This event will allow staff to better understand the services Occupational Health provide, give them the opportunity to discuss aspects of healthy living and have assessments made of key health indicators eg cholesterol levels.
- 1.17 Work on the development of proposals for Group wide environmental targets for a number of key performance indicators, commenced in Quarter 3, will be completed.
- 1.18 Proposals for the development of an approach to providing a systematic approach to the delivery of assurance on the mainstreaming of sustainability in TfL will be finalised.
- 1.19 The 'pod' area at street level in Palestra that contains the recently installed fuel cell will be refurbished to increase public awareness of this innovative technology and to communicate the environmental performance of Palestra to a wider audience. The wider carbon reduction programme in the building also includes a thermal store, a gas combined heat and power (CHP) plant, rainwater harvesting and on-site renewable generation from solar panels and wind turbines.
- 1.20 The environmental champions network will launch a new champions toolkit which contains inspirational ideas and collaboration methods to encourage

employee participation, as well as practical suggestions to reduce environmental impact at work and at home.

- 1.21 The Carbon Trust Standard (CTS) has replaced the Energy Efficiency Accreditation Scheme (EEAS) and is recognised as the leading accreditation for organisations to quantitatively demonstrate their improving environmental performance. TfL Head Offices have been accredited by EEAS since 2003 and will be applying for CTS accreditation next quarter. Only some 200 organisations in the UK were accredited under the EEAS.

## **2 PROGRESS AGAINST THE HSE PLAN**

### **Corporate Directorates HSE Management System**

- 2.1 Implementation of the TfL Health and Safety Consultation Arrangements is underway at Local Safety Consultation Committee level. HSE input continues to be made to enable Group Employee Relations to close outstanding issues with recognised trades unions.
- 2.2 Arrangements are now in place with Group Procurement for the sharing of procurement strategies and the Procurement Calendar with Group HSE. This allows strategies to be assessed for HSE risk and it enables timely intervention and support to be provided where necessary. Further assurance is provided by all Pre-Qualification Questionnaires which include standard HSE questions. Further HSE input will occur during the remainder of the year.

### **Management of specific areas of risk**

- 2.3 The programme to assess and mitigate Display Screen Equipment risks using the software tool Dseasy continued, in particular, necessary assessments for some 900+ staff moving into the recently occupied Pier Walk building were carried out.
- 2.5 Workplace risk assessments were made at the new IM Data Centre in Woking, resulting in the need for a full noise assessment to be made.
- 2.6 A report was commissioned from Financial Services Centre into 'grey fleet' (private cars used on company business) usage. This is being reviewed to determine the work needed to address this occupational risk.
- 2.7 Work continues with London Fire Brigade and London Underground to reach agreement on the fire risk assessment requirements for Travel Information Centres sited within London Underground stations.

## **3 STATUS OF HSE MANAGEMENT SYSTEM(S)**

- 3.1 Work on the review of the Group HSEMS has continued to schedule.

## **4 HSE PERFORMANCE**

### **Health**

- 4.1 There were 4,961 working days lost to sickness absence in Quarter 3, an

average of 1.8 days per employee. This represents a rise from the previous quarter (1.6 days) and a rise from the same quarter last year (1.3 days), due to increases in cold and influenza sickness absence.

Days lost	Q3 2009/10	Q2 2009/10	Q3 2008/09
Sickness absence	4,961	3,605	3,562
Average / employees	1.8	1.6	1.3

- 4.2 The top three sickness absence categories were coughs and colds, musculo-skeletal disorders and mental health.

### Safety

- 4.3 There were no accidental customer major injuries, employee major accidental injuries or any physical assaults on employees during Quarter 3, during the previous quarter or during the same quarter last year. The Corporate Directorates consist mainly of non-operational staff and periodic workplace assessments and the implementation of adequate controls help to maintain this low risk environment.

## 5 ENVIRONMENTAL PERFORMANCE

### Carbon Emissions

- 5.1 The target for CO<sub>2</sub> emissions for Quarter 3 in Head Office buildings was met. Emissions were 23.5kg CO<sub>2</sub>/m<sup>2</sup> against the target of 26.2kg CO<sub>2</sub>/m<sup>2</sup> and is on track to meet the year end target of 125kgCO<sub>2</sub>/m<sup>2</sup>. This represents a three per cent reduction on 2008/09 emissions.

CO <sub>2</sub> kg/m <sup>2</sup>	Q3 2009/10	Q2 2009/10	Q3 2008/09
Target	26.2	27.4	30.8
Emissions	23.5	25.2	30.7

- 5.2 The water consumption target for Quarter 3 for the Head office buildings was met with consumption of 1.07m<sup>3</sup>/person against the target of 1.26m<sup>3</sup>/person and is on track to meet the year end target of 6.0m<sup>3</sup>/person which represents a 12 per cent reduction on 2008/09 consumption and is lower than the Environment Agency's best practice benchmark of 6.4m<sup>3</sup>/person/year.

Water consumption m <sup>3</sup> /person	Q3 2009/10	Q2 2009/10	Q3 2008/09
Target	1.26	1.56	1.62
Usage	1.07	1.26	1.63

## 6 MAJOR INCIDENTS

- 6.1 There were no major incidents in Quarter 3.

**QUARTER 3 2009/10 HEALTH AND SAFETY - DATA SUMMARY\***

LU – London Underground; ST – Surface Transport; LR – London Rail;  
 CD – Corporate Directorates; CR – Crossrail; DLR – Docklands Light Railway;  
 LOROL – London Overground.

Note: London Underground reports for four periods in Quarter 3 while other Modes only report for three periods.

n/a - not available

**Health**

	Sickness absence days lost			Average days lost / employee		
	Q3 2009/10	Q2 2009/10	Q3 2008/09	Q3 2009/10	Q2 2009/10	Q3 2008/09
LU	42,845	32,910	44,015	3.3	2.5	3.3
ST	10,160	10,019	13,828	2.8	2.5	3.5
LR	357	272	342	1.57	1.21	1.50
CR	459	329	268.5	1.69	1.25	1.40
CD	4961	3605	3562	1.8	1.6	1.3

**Employee major injuries**

	Employee major injuries			Rate / 1000 employees		
	Q3 2009/10	Q2 2009/10	Q3 2008/09	Q3 2009/10	Q2 2009/10	Q3 2008/09
LU*	5	3	n/a	0.32	0.19	n/a
ST	2	2	4	0.65	0.50	0.92
LR	1	0	0	4.0	0	0
CR	0	0	0	0	0	0
CD	0	0	0	0	0	0

\*Comparable data for earlier quarters are not available as current data include Chief Maintenance Officer staff.

**Employee assaults (Total)**

	Employee assaults			Rate / 1000 employees		
	Q3 2009/10	Q2 2009/10	Q3 2008/09	Q3 2009/10	Q2 2009/10	Q3 2008/09
*LU	472	314	554	39.01	28.59	35.09
ST	32	34	47	10.47	8.0	10.86
LR	0	0	0	0	0	0
CR	0	0	0	0	0	0
CD	0	0	0	0	0	0

\*LU data is for Chief Operating Officer Staff only

### Customer Major Injuries

	Customer major injuries			Rate / 10 <sup>6</sup> customer journeys		
	Q3 2009/10	Q2 2009/10	Q3 2008/09	Q3 2009/10	Q2 2009/10	Q3 2008/09
LU	34	17	49	0.13	0.07	0.135
ST	163	212	245	0.30	0.41	0.47
DLR	3	6	5	0.18	0.37	0.33
LOROL	0	0	0	0	0	0
TRAM	1	0	0	0.16	0	0

### Contractor Staff Assaults (Total)

	Contractor staff assaults			Rate / 1000 staff		
	Q3 2009/10	Q2 2009/10	Q3 2008/09	Q3 2009/10	Q2 2009/10	Q3 2008/09
BUSES	70	98	155	n/a	n/a	n/a
LOROL	18	7	5	17.9	8.1	7.6
DLR	21	18	12	31	28	23.2
TRAM	7	10	12	43	62	74.5