

TRANSPORT FOR LONDON

SAFETY, HEALTH AND ENVIRONMENT ASSURANCE COMMITTEE

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

**DATE: 14 SEPTEMBER 2009**

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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 1 2009/10 Health, Safety and Environment Performance report for each Mode is 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 4 periods in Quarter 3 whilst the other modes report for 4 periods in Quarter 4.

**4 RECOMMENDATION**

4.1 The Committee is asked to NOTE the report.

**5 CONTACT**

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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 1 2009/10 with the exception of those noted below. In particular, a sustained reduction in the number of Category B Signals Passed at Danger (attributable to Service Control) was achieved.
- 1.2 The Safety, Environmental and Health Improvement Plans are progressing in line with the project timescales.
- 1.3 For the first time in two years, there were no overdue safety significant actions at the end of the quarter.
- 1.4 Engineering work to increase lift reliability was undertaken at Hampstead and Goodge Street stations. The number of stalled lifts requiring power winding or cross transfer of customers is expected to reduce at these stations.
- 1.5 Compliance with the Noise Abatement Notice served on Earls Court station in April 2008 was achieved by the required June 2009 deadline.
- 1.6 The highest station and depot waste recycling rate (55 per cent) since reporting began (two years ago) was achieved.

#### Areas for improvement

- 1.7 One Improvement Notice was received from the Office of Rail Regulation (ORR) for Stratford Market Depot in relation to incorrect re-energisation of traction current. The actions have been completed and the Notice confirmed closed by the ORR.
- 1.8 The upward trend in the number of falls whilst boarding and alighting and in persons caught in train doors continued this quarter. Customer behaviour is the main contributory factor. More strategically targeted customer awareness campaigns are being undertaken to try to influence this behaviour.
- 1.9 Noise and vibration (N&V) complaints continue to be the main contributor (63 per cent) to environmental complaints. Public Announcement (PA) noise (39 per cent) is the most significant source of these complaints. Actions to resolve all N&V complaints have been allocated to the appropriate managers.

#### Significant plans for the next quarter

- 1.10 LU BCV/SSR Nominee Companies environment complaints data will be reported from next quarter.
- 1.11 A renewable energy sourcing consultation exercise will be launched in Quarter

2. This will bring together energy suppliers, consultants, and financial experts to seek ways for London Underground to deliver 30 per cent of its energy from renewable energy.

1.12 A low carbon station project feasibility study report will be delivered and the implementation of initiatives across London Underground's station portfolio will be scoped.

## 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 1:-

- a) The Health Fair Programme for 2009/10 is progressing as planned. Positive feedback from employees is continuing to be received and will be measured throughout the programme.
- b) The work stream Improving Safety Critical Communications is continuing to progress ahead of schedule.

## 3 STATUS OF HSE MANAGEMENT SYSTEM

3.1 Compliance with London Underground's Health Safety and Environmental Management System (HSEMS) is monitored via audit. London Underground and Tube Lines audits continue to programme with no safety critical adverse findings in Quarter 1. The former Metronet and London Underground audit programmes have been combined.

## 4 HSE PERFORMANCE

### Health

4.1 There were 29,633 working days lost to sickness absence in Quarter 1, representing an average of 2.3 days per employee. For comparison, in the previous quarter there was 2.3 days absence per employee and in the same quarter last year 2.2 days absence per employee. The top three categories of sickness absence in Quarter 1 were musculo skeletal, mental health and gastrointestinal.

Days lost	Q1 2009/10	Q4 2008/09	Q1 2008/09
Sickness absence	29,633	29,764	29,573
Average / employee	2.3	2.3	2.2

4.2 Medical advisory, physiotherapy services, counselling and drug and alcohol services were extended from April 2009 to the former Metronet employees who transferred into London Underground.

4.3 The long term improving trend seen since 2005/06 in the percentage of staff taking time off for sickness due to stress anxiety and depression continued in Quarter 1 2009/10. However, the number of employees taking time off sick per period has increased by 17.8 per cent when compared to Quarter 1, 2008/09.

Trains staff had the highest increase this quarter, with 1.3 per cent of staff being absent per period compared to 1.1 per cent per period in Quarter 1, 2008/09.

- 4.4 The average number of employees taking time off sick with back conditions increased by 7.3 per cent this quarter, when compared to Quarter 1 2008/09. On average 124 employees (0.9 per cent of staff) were absent per period in Quarter 1 compared to an average of 115 employees (0.8 per cent of staff) per period in Quarter 1, 2008/09. The greatest increase in employees being absent this quarter was within the Management and Administration grades which rose from 26 employees being absent (0.3 per cent of staff) in Quarter 1 2008/09 to 43 employees being absent (0.5 per cent) in Quarter 1 2009/10.

### Safety

- 4.5 The number of accidental customer major injuries in Quarter 1 was 29 (0.11 per million customer journeys at the end of the quarter). For comparison there were 23 accidental customer injuries in the previous quarter (0.09 per million customer journeys at the end of the quarter) and 28 in the same quarter (Q1) last year.

	Q1 2009/10	Q4 2008/09	Q1 2008/09
Customer major injuries	29	23	28
Rate/million customer journeys	0.11	0.09	0.11

- 4.6 There were 2 accidental employee major injuries in Quarter 1, a rate of 0.14 per 1,000 employees. As former Metronet employees are included in this measure for the first time, previous quarters comparisons are not relevant. These data will be included from next quarter.

	Q1 2009/10	Q4 2008/09	Q1 2008/09
Employee major injuries	2	n/a	n/a
Rate/1000 employees	0.14	n/a	n/a

- 4.7 There were 90 physical assaults on employees in Quarter 1. For comparison, there were 102 physical assaults on employees in the previous quarter and 108 in the same quarter last year.

There were 157 verbal assaults on employees in Quarter 1 and 132 threats. For comparison, there were 319 verbal assaults and 102 threats on employees in the previous quarter and 253 verbal assaults and 123 threats in the same quarter last year.

	Q1 2009/10	Q4 2008/09	Q1 2008/09
Employee physical assaults	90	102	108
Employee verbal assaults	157	319	253
Rate/1000 employees	22.41	30.19	32.35

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

- 4.8 One Improvement Notice was received from the Office of Rail Regulation (ORR) for Stratford Market Depot where an incorrect re-energisation of traction

current occurred in January 2009. The actions have been completed and the Notice confirmed closed by the ORR.

- 4.9 A significant reduction in the number of 'Category A' SPADs from 706 to 544 (22 per cent) was confirmed at the end of Quarter 4, last year. This decreasing trend continued in Quarter 1. There were 145 SPADs in Quarter 1, of which 111 (77 per cent) were 'Category A' and 34 (23 per cent) were 'Category B' (due to either signal equipment malfunction or train equipment (30) or to Service Control (4)). There were no Category 'C' SPADs during the quarter. A significant decreasing trend in numbers of 'Category B – Service Control' SPADs (occurring from Period 8 last year) was confirmed at the end of Quarter 1.
- 4.10 The upward trend in the number of platform train interface (PTI) incidents in relation to the number of falls whilst boarding and alighting and persons caught in train doors continued this quarter. Customer behaviour is the main contributory factor. More strategically targeted customer awareness campaigns to influence this behaviour are continuing. The remaining categories of PTI incidents remained stable or improving.
- 4.11 The increasing trend in the number of lift incidents requiring power winding or cross transfer continued in the quarter. A number of engineering solutions to reduce the number of lift failures have been identified and are being scoped. Engineering mitigation for lifts at Hampstead and Goodge Street stations were completed and it is expected the number of lift stalled incidents will reduce over the next quarter as the benefits of these are realised.
- 4.12 There were 190 drugs and alcohol tests in the quarter, 96 unannounced, 17 for cause, 64 routine monitoring and 13 post incident tests. None were positive.

## Environment

### Carbon and energy management

- 4.13 Traction energy in Quarter 1 2009/10 was 3.5 per cent higher than in the same quarter in 2008/09 which is in line with the rise in passenger journeys.
- 4.14 In June 2009, the Department for Food and Rural Affairs (Defra) revised the carbon dioxide conversion factor for electricity from 0.537 to 0.5405 kg CO<sub>2</sub>/KWh. In this report, the quarter one 2009/10 figure for CO<sub>2</sub> is reported against the new factor and comparisons are given using the new factor to enable an accurate comparison with previous quarters. CO<sub>2</sub> emissions in Quarter 1 2009/10 were two per cent higher than Quarter 1 2008/09, though the normalised CO<sub>2</sub> figure has reduced due to the higher passenger km levels in 2009/10. Quarter 1 figures are considerably lower than Quarter 4 due to lower levels of traction energy and passenger km travelled.

	Q1 2009/10	Q4 2008/09	Q1 2008/09
Total CO <sub>2</sub> (tonnes)	145,480	158,101	142,337
Normalised CO <sub>2</sub> (g/passenger km)	73.1	76.3	74.0
Total Traction Electricity (MWh)	224,879	243,592	217,320
Traction Energy Efficiency (MWh/million passenger journeys)	903	938	892

- 4.15 London Underground's latest carbon footprint report was published. This comprehensive assessment builds on previous work and identifies the key focus areas for our CO<sub>2</sub> mitigation activities.
- 4.16 The Carbon Guide for the Carbon Reduction Incentive Mechanism under the Tube Lines Restated Terms for Period 2 of the PPP Contract was finalised.

### Recycling and waste management

- 4.17 The tonnage of commercial and industrial waste collected in Quarter 1 (2,711 tonnes) was lower than that collected in any quarter in 2008/09. The reasons for this are being investigated.

	Q1 2009/10	Q4 2008/09	Q1 2008/09
Commercial and Industrial Waste (tonnes)	2,711	3,624	6,203
Commercial and Industrial Waste Recycled (tonnes)	1,497	1,511	2,362
Commercial and Industrial Waste Recycled (%)	55	42	38

- 4.18 The paper recycling collection activities continue to deliver excellent recycling rates. The highest station and depot waste recycling rate, since reporting began (two years ago), was achieved in the quarter, with 55 per cent of waste collected (more than 122 tonnes of paper) recycled. In addition to more paper being recycled through the dedicated paper recycling route this quarter, the trial in central London at 22 BCV and SSR stations, in partnership with the local authorities for the City of London and City of Westminster, helped to deliver these excellent recycling rates.
- 4.19 In Quarter 1, 22,187 tonnes of construction and demolition waste was generated compared to 17,039 tonnes in Quarter 1 2008/09. Of this, 69 per cent was recycled, which is consistent with the amount recycled last quarter. This reflects improved waste data collection systems in London Underground and Tube Lines as reported last quarter.

	Q1 2009/10	Q4 2008/09	Q1 2008/09
Construction and Demolition Waste (tonnes)	22,187	40,072	17,039
Construction and Demolition Waste Recycled (tonnes)	15,297	27,606	6,653
Construction and Demolition Waste recycled (%)	69	69	39

### Noise and vibration

- 4.20 63 noise and vibration (N&V) complaints associated with the Chief Operating Officer's operations were received in the quarter. PA noise continues to be the most common source of N&V complaints (39 per cent of all N&V complaints in

London Underground). Actions to resolve all N&V complaints have been allocated to the appropriate managers.

- 4.21 Work also continued to ensure that London Underground remains compliant with the conditions of the noise abatement notice served on Earl's Court station in April 2008. The Notice includes operational and technical conditions set out by the Royal Borough of Kensington and Chelsea (RBKC). Following refurbishment of the roof at the station, a modified PA system was installed to comply with the conditions of the notice by the compliance date (12 June 2009). Ongoing monitoring by London Underground and RBKC shows that the station is now compliant with all conditions of the notice.
- 4.22 London Underground BCV/SSR Nominee Companies received 67 N&V complaints in Quarter 1. Of these, 46 per cent related to the Chief Maintenance Officer's team and 54 per cent to Projects and Line Upgrades. These complaints have been assigned to appropriate managers for resolution to ensure the overall N&V complaint rate for the London Underground BCV / SSR Nominee Companies is achieved. The rate for Quarter 1 was 1.26 complaints per 100,000 hours worked against the annual target for N&V complaints of 1.25 complaints per 100,000 hours worked.

## **5 MAJOR INCIDENTS**

- 5.1 There were no major incidents in the quarter.

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

### 1 SUMMARY

#### What went well

- 1.1 Surface Transport Strategy Board approved the support fleet environmental policies and targets which will result in an annual five per cent reduction in carbon emissions across the Surface Transport support fleet of some 220 leased vans and cars. This would amount to savings of 1,110 tonnes of CO<sub>2</sub> over five years.
- 1.2 At the first annual awards of the Mayor's flagship energy efficiency programme Green500, EnterpriseMouchel, one of Streets Highway Maintenance Contractors, received a prestigious Platinum Award in recognition of having significantly reduced their carbon footprint. The Platinum Award is the highest award possible for a first time entry.
- 1.3 Following a series of engine fires, remedial work by LTI on approximately 680 taxis suspended from service has been completed and these taxis are now back in service. LTI have also completed remedial work on the remainder of the TX4 fleet (approximately 3,600 in total). These works were completed at the end of May.
- 1.4 The overall annual Vehicle and Operator Services Agency (VOSA) bus fleet inspection test pass rate for London buses was 96 per cent at the end of the first quarter of 2009/10. This compares favourably with the national average at around 55 per cent.

#### Areas for improvement

- 1.5 The Low Carbon Taxi programme has been delayed due to a potential legal challenge from one of the bidders. The Invitation to tender will be reissued and it is expected that the supplier of the low carbon taxi will be appointed in Quarter 3. Delivery of up to ten hybrid taxis for trial in London is still expected from 2010.
- 1.6 Improvement opportunities were identified in current organisational arrangements and controlling of the flow of safety information to suppliers to the Hydrogen Bus Project following an independent evaluation. A designated working group was established to take forward these and other identified actions/deliverables.

## **Significant plans for next quarter**

- 1.7 The tenders for the New Bus for London supplier will be received and evaluated. The process will include evaluation against challenging environmental criteria.
- 1.8 Several bus operators have reported visits by the Health and Safety Executive (HSE) as part of its bus operations audit programme. London Buses has written to the HSE for a progress update, an indication of its audit objectives and potential issues identified to date. London Buses has also proposed a joint seminar involving the HSE and TfL to identify and share best practice amongst all bus operators.
- 1.9 A London Road Safety Unit (LRSU) application to the Economic and Social Research Council to 'Explore Ethnic Differences in Pedestrian Road Accidents in London for Populations Aged 5 – 16' was successful and the project is expected to start in October 2009.
- 1.10 London River Services (LRS) have written to all boat operators using its piers asking for written confirmation that they will comply with the new Code of Practice for Passenger Vessel Operations on the Thames which was recently issued by the Port of London Authority (PLA). A number of initiatives are planned to monitor their compliance, including separate boat observations over the summer period.
- 1.11 A working group to assist in identifying an effective approach to raising bus drivers' awareness of the Cycle Hire Scheme and the Cycle Highways initiatives was convened. The group consists of representatives from three bus companies, members of both cycling initiatives, the Surface Safety Team and colleagues involved in developing communication materials for bus drivers.
- 1.12 Work to improve further control centre resilience continues with the co-location of the Surface Control Centres project scheduled to complete in September. This new control centre, Surface Transport and Traffic Operations Centre (STTOC), will enhance resilience capabilities by co-locating CentreComm, MetroComm and LTTC into a new and bespoke floor in Palestra that has had considerable resilience and security enhancements designed into the build. Benefits such as increased information sharing with other strategic stakeholders are anticipated. A new fall back site for STTOC is currently in the planning stage.

## **2 PROGRESS AGAINST HSE PLAN**

### **London Road Safety Plan**

- 2.1 The Injury Inequality Reduction Scheme has commissioned the production of an under fives Music DVD which will highlight identified road safety issues in the targeted communities. LRSU will work in partnership with four boroughs and up to eight nurseries. Songs on the DVD will be translated into five languages, and will be distributed to all nurseries in London prioritising those in areas of deprivation.

- 2.2 As part of TfL's work to reduce the number of cyclists killed and seriously injured, thousands of cyclists in the Capital were sent a link to a new cycle safety training film. The fifteen minute film has been designed to help cyclists and lorry drivers navigate London's busy roads and each other safely. The video link is currently on the TfL homepage, and can be viewed at: <http://www.tfl.gov.uk/roadusers/cycling/11687.aspx>
- 2.3 This year's LRSU Pan London Road Safety Conference will be held on 24 September. The event will provide an opportunity for road safety stakeholders in London to attend presentations from Industry professionals around the theme of "Towards the Year 2010 and Beyond".
- 2.4 The Powered Two Wheeler (P2W) "*Optical Illusions*" safety campaign is to be re-run on TV in a newly edited 30 second format; the campaign is scheduled for the autumn of 2009.
- 2.5 The Department for Transport is launching a new anti drug driving campaign nationally. Working in partnership with them, TfL is supporting the project and increasing the London focus; this is a new approach for both partners.
- 2.6 Work is continuing to support the reduction of accidents involving death or serious injury with a new teenage pedestrian campaign themed '*Don't let your friendship die on the road*' launched in March 2009. The campaign aims to encourage road safety among the Capital's teenagers. The new theme for the campaign is based on the insight that friendship is one of the most important things in young people's lives. In addition to the poster adverts, a moving radio advert dramatises the effects of young loss as a teenager reads an eulogy for a best friend at their funeral while a series of online banners will appear on popular websites including Bebo and MSN Messenger.

### **Community Safety Plan**

- 2.7 The Community Safety Plan for transport and travelling 2009/10 was approved at the July 2009 Board. This Plan is produced annually by TfL in partnership with the Metropolitan Police, British Transport Police, City of London Police and the wider London Transport Community Safety Partnership (LTCSP). The Plan sets out TfL and partners' vision, priorities and activities to increase community safety and security across the transport system, so that all journeys are safer and feel safer, free from the fear of crime and the anti-social behaviour and incivility that drives fear of crime.
- 2.8 With increased joint operations between TfL and Metropolitan Police staff around the objectives of the community safety plan, a need has arisen to develop closer working relationships and greater understanding of the roles and expectations of each organisation. To this end, a joint training package was delivered to all parties, using realistic on-bus scenarios and police instructors. This will further improve the management of "on-bus" incidents.

### **Safety of highways and the TLRN**

- 2.9 TfL facilitated two forums with London Boroughs to share best practice in relation to the application of Construction (Design and Management) Regulations 2007 in Highway design with 18 boroughs represented. The

forums enabled discussions based on delegates' experiences and sharing of health and safety information and best practice.

### **Safety of public transport**

- 2.10 The programme to install iBus was completed with all 8,256 buses fitted with the system. The system also incorporates a low bridge warning device and an improved vehicle location system to allow driver emergency calls to be dealt with more efficiently.
- 2.11 The increase in joint initiatives between Public Carriage Office licensing and enforcement officers and other agencies has been progressing successfully. This is reducing the risks posed to the public from unlicensed vehicles and drivers.

### **Reducing risks to staff**

- 2.12 The Workplace Violence Unit (WVU) initiative continues.
- 2.13 Two Health Fairs for Surface operational employees were held at different locations with a further two planned for later this year. They are being run by Occupational Health using a similar format to that currently being used in London Underground.

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

- 3.1 Progress continues to be made in the development of the Surface Transport HSE management systems following the engagement of additional resources. The revised systems will be in place by the end of 2009.
- 3.2 As part of the commitment to continuous improvement and following an audit undertaken by the Royal Society for the Prevention of Accidents, the HSE management system for non-public transport modes was updated. Two procedures, Provision of Health and Safety Assistance and Cycling at Work, were developed and implemented.

## **4 HEALTH AND SAFETY PERFORMANCE**

### **Health**

- 4.1 There were 9,599 working days lost due to sickness absence in Quarter 1, representing an average of 2.4 per employee. For comparison, in the previous quarter and corresponding quarter last year the figures averaged 2.3 days absences per employee. The top three categories of sickness absence were musculoskeletal, mental health and gastrointestinal.

Days lost	Q1 2009/10	Q4 2008/09	Q1 2008/09
Sickness absence	9,599	9,452	9,742
Average / employee	2.4	2.3	2.3

## Safety

- 4.2 The number of accidental customer major injuries in Quarter 1 was 223 (0.39 per million customer journeys). For comparison, there were 192 accidental customer major injuries in the previous quarter (0.29 per million customer journeys) and 236 in the same quarter last year.

	Q1 2009/10	Q4 2008/09	Q1 2008/09
Customer major injuries	223	192	236
Rate/10 <sup>6</sup> customer journeys	0.39	0.29	0.46

- 4.3 There were three accidental employee major injuries in Quarter 1. For comparison, there were two employee major injuries in the previous quarter and three in the same quarter last year.

	Q1 2009/10	Q4 2008/09	Q1 2008/09
Employee major injuries	3	2	3
Rate/1000 employees	0.65	0.45	0.58

- 4.4 There were 33 physical assaults on employees in Quarter 1. For comparison, there were 62 physical assaults on employees in the previous quarter and 46 in the same quarter last year. There were 15 verbal assaults on employees in Quarter 1. For comparison, there were 17 verbal assaults on employees in the previous quarter and 14 in the same quarter last year. There were two threats with offensive weapons in Quarter 1, none in the previous quarter and two in the corresponding quarter of last year.

	Q1 2009/10	Q4 2008/09	Q1 2008/09
Employee physical assaults	33	62	46
Employee verbal assaults	15	17	14
Employee Threatened with offensive weapon assaults	2	0	2
Rate/1000 employees	10.81	17.63	12.06

- 4.5 There were 115 physical assaults on contractors in Quarter 1. For comparison, there were 139 physical assaults on contractors in the previous quarter and in the corresponding quarter of last year, there were 209 physical assaults.

## Crime and disorder

- 4.6 The Workplace Violence Unit initiative continues to engage with bus garages as part of a phased roll-out of the scheme. The Unit is continuing to support the investigation into cases occurring since January 2009. There have been 458 reported crimes, of which 182 have been dealt with and 90 cases are ongoing.

## 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 are currently provided annually, it is not possible to report quarterly.
- 5.2 The Surface Transport Strategy Board approved the support fleet environmental policies and targets which will result in an annual five per cent reduction in CO<sub>2</sub> emissions from the fleet, equivalent to savings of 1,100 tonnes of CO<sub>2</sub> over five years.
- 5.3 The three principal policy elements require Surface Transport to:
- Ensure that it operates vehicles used for business purposes in the most efficient way. The targets include reducing staff owned vehicle mileage claims (grey fleet) from 250,000 miles in 2008 by 27 per cent by 2012 and reducing support fleet mileage by 15 per cent by 2012.
  - Purchase or lease the least polluting support fleet vehicles that meet operational needs. The target is to reduce support fleet average CO<sub>2</sub> emissions by 15 per cent by 2012 compared to a 2008 baseline.
  - Trial new and innovative fuels and technologies that will help deliver TfL's environmental objectives on reducing CO<sub>2</sub> and improving air quality. The objective is to accelerate the market by trialling new fuels and technologies.

### Waste and recycled materials

- 5.4 The Highways Maintenance and Works contractors (HMWC) recycled and reused 99.9 per cent and 95.9 per cent of excavated and non excavated materials respectively against a target of 90 per cent for 2009/10 (up from 88 per cent in 2008/09). Excavated waste recycled and reused is lower than previous quarters due to a decrease in projects and maintenance works.
- 5.5 The target for 2009/10 is to procure 45 per cent of requirements as recycled and green material (up from 40 per cent in 2008/09). The target for the quarter was not met with only 27.2 per cent being procured. The performance and target is being reviewed and industry benchmarked with assistance from the Government's Waste & Resources Action Programme.

<b>HMWC waste and recycled materials</b>	<b>Q1 2009/10</b>	<b>Q4 2008/09</b>	<b>Q1 2008/09</b>
Excavated waste recycled and reused - percent (tonnes)	99.9 (5,161)	98.8 (53,467)	99.2 (19,727)
Non-excavated waste recycled and reused – percent (tonnes)	95.9 (747)	94.7 (760)	91.5 (862)
Recycled and green material procured – percent (tonnes)	27.2 (2,925)	28.7 (18,416)	20.3 (2,009)

- 5.6 London Buses have a target to recycle 10 tonnes of paper from offices and bus stations (excluding customer waste) in 2009/10. To test this target, London Buses are conducting a trial of paper recycling at staffed bus stations and offices in the East Region. In Quarter 1, 0.674 tonnes of paper was recycled.
- 5.7 Office recycling facilities are now in place in all six Dial a Ride depots. In Quarter 1, 4.20 tonnes of office waste was recycled. No recycling target has yet been set for DaR.

<b>Recycled waste (tonnes)</b>	Q1 2009/10	Q4 2008/09	Q1 2008/09
London Buses office waste	0.674	n/a	n/a
DaR office waste	4.20	n/a	n/a

### **Built environment**

- 5.8 The removal of pedestrian guardrail in Quarter 1 was programmed to be low to allow Road Network Maintenance's new delivery mechanisms to bed in - there was a change in the process and the contractors undertaking the work. The project is now running at a much higher output rate which will be reflected in Quarter 2 onwards. The target is to remove 60km by June 2010.

<b>Pedestrian guardrail removed from TLRN (m)</b>	Q1 2009/10	Q4 2008/09	Q1 2008/09
Pedestrian guardrail	1,140	6,139	300

### **Henly's Corner A406/A598 junction improvement**

- 5.9 The Environmental evaluation process identified the likely environmental impacts of each of the eight project options. The results, along with engineering perspective, traffic and political considerations, fed in to the option selection process in March 2008.
- 5.10 Following selection of the preferred option, further site work was undertaken to investigate key impacts identified in the desktop study, including ecological surveys and noise measurements. The conclusion of this site work was that there would be no significant environmental effects as a result of the proposed project.
- 5.11 The environment report was submitted in support of the application to London Borough of Barnet under permitted development rights. Environmental requirements are now being incorporated into the detailed design, procurement and construction phases.

## **East London Transit (ELT) phase 1B**

- 5.12 The Environmental evaluation is close to completion and will be used to inform stakeholders, including the Environment Agency and Natural England, of any likely impacts resulting from the project. It will also inform the environmental mitigation plan, prior to start of construction in 2010.
- 5.13 The Environmental evaluation process is currently proving to be valuable in gaining support from London Borough of Barking and Dagenham on environmental matters including tree planting.

## **6 MAJOR INCIDENTS**

- 6.1 There were four fatalities on the bus network during the quarter. Two pedestrians and a motorcyclist were fatally injured following road traffic collisions with buses and a bus passenger was fatally injured after a fall. These incidents are currently under investigation.
- 6.2 Following an incident in which a TfL-owned tree on Clapham Southside fell onto a private vehicle fatally injuring one of the occupants in August 2008, an inquest was heard at Southwark Coroner's Court on 14 July. The Coroner's finding was accidental death and he gave a narrative verdict, saying that there were no other contributory factors other than the tree falling onto the deceased's van. He found in respect of TfL that systems and processes were in place and if there had been failings they were around the judgment of individuals in assessing the urgency of the need to fell the tree.
- 6.3 Following this and another fatality in 2008 involving a tree, the tree inspection and maintenance regime for the TLRN was benchmarked against London boroughs at a meeting facilitated by the London Tree Officers Association. The meeting concluded that TfL is doing better than boroughs on tree inspections but less well on tree asset management systems as boroughs use systems specifically designed for trees. We aim to maintain the level of inspections and our highway asset management system (AIMS) now has an improved tree dataset ready to be populated with data from tree surveys as an interim measure until 'AIMS II' is developed.

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

- 1.1 The Safety Authorisation Application for the 'core route' on the East London Line was sent to the Office of Rail Regulation (ORR) during Quarter 4 2008/09. The ORR have responded with comments and a revised submission has been submitted. The ORR has confirmed that Safety Authorization will be given in the next quarter.
- 1.2 A series of presentations to all Docklands Light Railway (DLR) staff on the Integrated Management System, the Railways and Other Guided Transport Systems (Safety) Regulations (ROGS), key processes and 'One on One' meetings have been conducted by the management system project team.
- 1.3 On London Overground, both workforce and passenger assault rates are showing signs of decreasing. There have been eight consecutive periods of decreasing rates for workforce assaults.
- 1.4 On the DLR, a study to identify whether there is a correlation between operational issues and particular types of weather has been undertaken. In particular, damp and misty weather can cause problems with the equipment that senses the location of trains. In the study, weather observation sites were set up across the DLR network and the control room was kept constantly updated on conditions. If misty weather was detected, a brake rate restriction was applied to prevent the vehicles slipping and causing vehicle and signalling system issues. Whilst it has not been conclusively proved that the procedure adopted reduces vehicle/signal issues, the brake rate restriction will continue to be applied during misty weather as the situation was certainly not worsened.
- 1.5 Recycling facilities for passengers have been provided at virtually all London Overground stations. Initially, these are for paper materials but, if successful, additional facilities will be installed for other materials such as cans and plastic bottles. TfL expects these facilities to result in a reduction in the waste collected from platforms and trains. A wide range of recycling initiatives are now also in place across the rest of the London Overground network, including recycling of scrap metal, waste oil and glass at the train depot in Willesden and recycling as much of the waste collected by train cleaners as possible.

- 1.6 Landscaping and ecological enhancement plans are being finalised now that Phase 1 of the East London Line extension project is nearing completion. Landscaping designs have been developed to diversify and enhance the species composition of existing habitats, through the use of appropriate native species and species of local provenance. Designs will incorporate both replacement habitats and additional features aimed at enhancing local biodiversity. Such enhancements include nesting boxes for a variety of bird species including Black Redstarts and Kestrels, bat boxes, and habitats suitable for a variety of reptiles and small mammals.
- 1.7 London Tramlink has been nominated for an environmental excellence award for a carbon foot printing project for Tramlink operations.

### **Areas for improvement**

- 1.8 The accident frequency rates on DLR for major projects are decreasing. Further work is planned to bring the accident rates down further on the Stratford International Extension Project and the 3 Car Upgrade Works.
- 1.9 In the last quarter we reported a derailment on the DLR at a set of points in the Canary Wharf area. This quarter, a near miss incident occurred at the same set of points. The controller used the emergency power isolation switch to stop a train moving across the set of points that had reversed automatically, setting the wrong route for the train. The train was successfully stopped and there were no injuries to passengers or staff. This second incident has been subject to a full independent investigation. Rail Accident Investigation Board (RAIB) have written to DLR and Serco, as a result of their investigations into both incidents, setting out remedial action that RAIB believe the two organizations should take to prevent the reoccurrence of similar incidents. Substantial work has already been undertaken to resolve the issues identified by the RAIB. The ORR has also written to DLR and Serco following the two incidents and a meeting is planned for October at which DLR will explain the measures that are now in place to prevent re-occurrence.
- 1.10 The operator of the London Overground concession, LOROL, continues to have problems with obtaining waste data from one of their contractors who collects commercial waste from stations. A meeting has been arranged between LOROL's Head of Procurement, Head of Safety, Quality and Environment, and the contractor to identify a way forward or whether an alternative contractor will have to be found.
- 1.11 An environmental review of the Tramlink depot at Therapia Lane has been carried out. The review identified that in the majority of areas good practice was being adopted. However, some specific areas for improvement were identified, including the management of maintenance issues and ensuring compliance with discharge regulations. These areas will be addressed to ensure the procedures used are fully compliant with good practice.

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

- 1.12 Work will continue to finalize the London Tramlink Safety Management System. This work stream includes developing new documentation to include the

additional responsibilities of Infrastructure Manager and fully integrating the HSE management arrangements.

- 1.13 On DLR, as part of the Capability Enhancement Programme, the following areas of work are planned for the next Quarter – a review of the automatic train control systems and management arrangements, a review of assurance arrangements and the development of SharePoint as the document management system.
- 1.14 London Rail is investigating the feasibility of installing electric vehicle charging points at car parks on the London Overground network. Owners of electric vehicles would be able to park their cars for free in designated spaces where they could charge up the car's battery. If this initiative is shown to be practicable in London Overground car parks, implementation will be considered.
- 1.15 Initiatives for improving the carbon efficiency of London Tramlink were identified in a carbon foot printing report. One of the proposals is to install solar panels at the Therapia Lane depot to provide on-site renewable energy generation. London Tramlink intends to assess the feasibility of this in the next quarter.

## **2 PROGRESS AGAINST HSE PLAN**

- 2.1 London Tramlink are primarily concerned with the development of their new safety management systems and as such the development of strategic safety objectives will not be finished until later this year, but this work has begun.
- 2.2 The DLR improvement plan has been reviewed and rescheduled to run on an annual basis from January to December. This change aligns better into the reporting arrangements specified in the ROGS. To date, good progress has been made on all elements. In response to emerging issues, to supplement the existing HSE plan, DLR has also developed a capability enhancement programme. The programme identifies a number of prioritized issues for which good progress is also reported.
- 2.3 London Overground Infrastructure have developed a new set of objectives and to date good progress has been made on all objectives. The plan has been developed to run from April to the end of December at which point all further plans will run over a calendar year.

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

- 3.1 The DLR framework has been revised during the last year, and is now an integrated management system which has been communicated to staff and is operating. The system in Trams is also being revised, with the aim of implementing an integrated system in Quarter 2 2009/10.

## 4 HEALTH AND SAFETY PERFORMANCE

### Health

- 4.1 There were 164 working days lost due to sickness/absence in Quarter 1 by employees of London Rail. This represented an average of 0.71 days per employee. For comparison, in the previous quarter there was 127 days lost equating to 0.55 days absence per employee and in the same quarter last year there was 243 days lost, equating to 1.19 days absence per employee. The top three categories of sickness absence in Quarter 1 were Neurological including Eye and Ear, Gastrointestinal, and Coughs and Colds.

Days lost	Q1 2009/10	Q4 2008/09	Q1 2008/09
Sickness absence	164	127	243
Average / employees	0.71	0.55	1.19

### Safety

- 4.2 There were no employee major injuries or physical assaults in London Rail in the last quarter, or during last year.
- 4.3 There were no accidental customer major injuries for London Overground in Quarter 1. 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 or verbal assaults in Quarter 1 was four and six respectively. For comparison, there were three and two in the previous quarter. The overall low rates in staff assaults is encouraging and is the result of a number of initiatives including the LOROL Staff Welfare and Assaults working group. This group includes representatives from the British Transport Police and reviews each incident and identifies action plans to deal with particular issues.

LOROL	Q1 2009/10	Q4 2008/09	Q1 2008/09
Physical assaults	4	3	10
Verbal assaults	6	2	29
Rate/1000 employees	11.7	7.6	59.5

- 4.5 There were no accidental customer major injuries for DLR in Quarter 1 (16.6 million customer journeys). For comparison, there were five accidental customer major injuries in the previous quarter and four in the same quarter last year.

DLR	Q1 2009/10	Q4 2008/09	Q1 2008/09
Customer major injuries	0	5	4
Rate/million customer journeys	-	0.25	0.24

- 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). The number of employees of our franchisee Serco, who suffered workplace assaults in Quarter 1 was zero and 15, for major and minor respectively. For comparison, there were zero and 13 in the previous quarter and zero and 13 in the same quarter last year. The majority of the minor assaults are made up of verbal assaults.

DLR	Q1 2009/10	Q4 2008/09	Q1 2008/09
Major assaults	0	0	0
Minor assaults	15	13	13
Rate/1000 employees	24	22	24

- 4.7 There were no accidental customer major injuries for London Tramlink in Quarter 1. For comparison there were no accidental customer injuries in the previous quarter. Historic data regarding customer injuries are not currently available.

	Q1 2009/10	Q4 2008/09	Q1 2008/09
Customer major injuries	0	0	N/A
Rate/million customer journeys	-	-	N/A

*\*6.3 million customer journeys Quarter1*

- 4.8 In London Tramlink, there were no TfL employee assaults this quarter. The number of workforce physical and verbal assaults in Quarter 1 for our contractor TOL on London Tramlink was two and 13 respectively. For comparison, there were three and 11 respectively in the previous quarter. Historic data regarding assaults are not currently available, but we are trying to recover them.

	Q1 2009/10	Q4 2008/09	Q1 2008/09
Contractor physical assaults	2	3	N/A
Employee verbal assaults	13	11	N/A
Rate/1000 employees	93	86	N/A

- 4.9 On London Overground Infrastructure, there were two contractor RIDDOR (Reporting of Injuries, Diseases and Dangerous Occurrences Regulation) reportable accidents during the quarter. The cumulative contractor accident rate was 0.17 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 two contractor RIDDOR accidents in Quarter 1. The cumulative contractor accident rate was 0.47 per 100,000 hours worked at the end of the quarter. From period one this year, rates are calculated on a 13 period rolling average. It should also be noted that data contained within the DLR 'rate' have been adjusted to reflect the completion of the Woolwich Arsenal project. The accident frequency rate now includes the following projects: Stratford International Extension, 3 Car Enhancements works, Serco projects and the new vehicles project. The accident frequency rate is showing a gradual reduction through the first quarter of this year.

## 5 ENVIRONMENTAL PERFORMANCE

### Carbon and energy management

- 5.1 CO<sub>2</sub> emissions for Quarter 1 2009/10 are shown in the table below. The total emissions are lower than Quarter 4 2008/09 because there are three periods in Quarter 1 instead of four in the previous quarter. However, on an equivalent basis emissions have increased. This was due to an increase in vehicle kilometres as a result of continuing improvements to the network, for example, this was the first quarter with full running of the DLR Woolwich Arsenal extension.
- 5.2 CO<sub>2</sub> emissions per passenger kilometre has shown a significant increase because the increase in vehicle kilometres has not been matched by an equivalent increase in passenger kilometres. In part this is due to the lag between provision of network capacity and increases in passenger demand, but also due to lower passenger numbers generally.

	Q1 2009/10	Q4 2008/09	Q1 2008/09
Total CO <sub>2</sub> (Tonnes)	12,726	15,457	11,309
Normalised CO <sub>2</sub> (g/passenger km)	60.1	55.9	54.0

- 5.3 These data are still considered to be of medium quality and contain some significant assumptions, e.g. the data for DLR, London Tramlink and the East London Line Project are estimates based on annual reporting rather than the more detailed periodic reporting available for London Overground.

### Waste management

- 5.4 Waste produced and recycled from London Rail's major infrastructure projects that are underway is reported below. There was a significant increase in waste generated compared to previous quarters. This is entirely due to the inclusion of all London Rail's major infrastructure projects, including the East London Line Extension Phases 1 and 1a, DLR Stratford International Extension and DLR 3-car upgrade. Data are not available on a comparative basis for previous quarters. The majority of the construction and demolition waste produced is from East London Line Extension Phase 1a (the extension from Dalston Junction to Highbury & Islington). The percentage of waste recycled is slightly lower than Q4 2008/09 when all of London Rail's projects are taken into account. However, the overall figure remains high for this type of project.

	Q1 2009/10	Q4 2008/09	Q1 2008/09
Construction and demolition waste (tonnes)	362,209	101,779	79,544
Construction and demolition waste recycled (%)	91.1	92.9	98.9

## 6 MAJOR INCIDENTS

- 6.1 There were no major incidents in the quarter.

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

- 1.1. Crossrail continues to set up systems and plans based on this year's Annual Health and Safety Plan. The phased Zero Accident plan will provide a programme of work by January 2010. The key themes include: Zero Accidents, Communications and Occupational Health.
- 1.2. Crossrail has set a minimum standard for all staff, contractors and visitors to Crossrail managed sites to attain a Construction Skills Certification Scheme (CSCS) card or an industry equivalent. The standard became effective from July and to date over 150 staff have attended internal CSCS Awareness sessions and passed the CSCS test. LU has also adopted this standard for Crossrail branded sites under their project management control.
- 1.3. A workshop held with Industry Partners this quarter successfully established a number of common Health and Safety Key Performance Indicators (KPIs). Agreement was reached to adopt and share performance measures on 11 health and safety indicators which will be reported on each period.
- 1.4. Osborn Abas Hunt (regulatory, compliance and enforcement solicitors) have been appointed to provide legal advice on health and safety matters. Osborn Abas Hunt has extensive experience and involvement with the improvement of Health and Safety in the Construction industry.
- 1.5. Work to develop the operational safety risk model and construction risk model has commenced, plans are underway to finalise the scope of work in Quarter 2 and be ready to go to the market. This work will support the assurance process and also feed into the Crossrail risk management activity.
- 1.6. The third contractors' engagement meeting was held this quarter with the enabling works contractors. Contractors were invited to share information on aspects of their own Safety systems and best industry practices and briefed the meeting on Permits to dig and Pre-work briefings (STARRT Cards). Contractor interest was high for both practices and information sheets were distributed for review and cascade within their organisations.
- 1.7. The Crossrail Leadership Tour Programme is gathering momentum with the Executive Team booked to undertake regular tours, and reported periodically as a Safety KPI.
- 1.8. Crossrail is committed to achieve an Environment Management System (EMS) certified to ISO 14001 by March 2010. This goes one step further than what was stipulated under the Crossrail Environmental Minimum Requirements (EMR) which requires that the EMS of the nominated undertaker for Crossrail be consistent with the principles of ISO 14001. Development of the Crossrail

EMS has progressed well this quarter and was verified via an internal audit which found no non – conformances in the system.

- 1.9. The Crossrail Statutory Agencies Forum was held at the beginning of the quarter. The forum was attended by representatives from the Environment Agency, Natural England, British Waterways Board, Royal Parks, and the Port of London Authority. The forum signed off two documents produced under the EMR, which are the general ecological management plan and the water resources strategy. The Environment Agency noted that the process for Environmental consents is working well.
- 1.10. The Crossrail EMR (including the Construction Code representing best practice environmental management requirements for construction sites) has been incorporated into a comprehensive contract volume (Works Information Volume 1 – General; and Volume 2 – Site Specific) to ensure that contactors comply and carry out their works in accordance with the EMR.
- 1.11. Regular meetings with the Industry Partners continue and agreement in principle has been reached on reporting requirements which include TfL's annually reported KPIs.
- 1.12. The Canary Wharf Group (CWG) appointed their main contractor to construct the Canary Wharf station. The first activity to commence at the station, dewatering of the lower aquifer, is ongoing. This was followed by silt relocation from Adam's Place and the station box construction area to the west end of North Dock which was completed in May 2009.

#### **Areas for improvement**

- 1.13. Construction (Design Management) Regulations 2007 (CDM) compliance development work is being undertaken to finalise all duty holder roles across each of the central section, project work packages.
- 1.14. A number of incidents involving buried services have been reported this quarter and lessons from incidents have been fed back to the newly formed Crossrail Contractors forum. In future, this information will be incorporated into a Health and Safety newsletter.
- 1.15. A steering group has been formed to review and update Crossrail induction training materials as the Crossrail project matures. Crossrail recognises the importance of providing new starters and contractors with the right level of information particularly relating to Health and Safety and how this can be delivered effectively to those working on construction sites. Both content and method of delivery will be reviewed in future.
- 1.16. A leadership workshop was held with key managers within Crossrail and the Crossrail Central Programme Delivery Partner (PDP) as a first step in the implementation of the Crossrail Health and Safety Zero Accident campaign. Personal commitment statements and Safety plans were agreed and published as a direct outcome from this workshop.
- 1.17. Further development and improvements identified through internal audit are in progress on the EMS to prepare it for certification against ISO 14001.

- 1.18. Further work with the Crossrail Industry Partners to ensure that their EMSs align with Crossrail's standards on environmental performance and incidents is ongoing.
- 1.19. The development of a comprehensive staff awareness campaign with the use of the Crossrail intranet, e-learning, traditional class room training for new starters and existing staff is ongoing. Environment information will be published in a Crossrail employee handbook.

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

- 1.20. Crossrail is working closely with the Crossrail Central (PDP) team on the introduction of a software package that will assist in the management and tracking of CDM projects and assurance information.
- 1.21. The PDP has initiated a Contractors Health and Safety Forum to replace the Contractors Engagement meeting. This forum will bring together a wider group of contractors and will target ways to improve Health and Safety communications with the supply chain and how best to promote industry best practice.
- 1.22. Duradiamond Healthcare has been retained to provide advice on four of the design packages. Meetings with the respective design teams have commenced and generic guides on delivering Occupational Health good practice within construction and ongoing maintenance are to be developed for cascade across all design works. In addition, site specific occupational health advice is to be provided to designers and contractors.
- 1.23. Crossrail are to introduce weekly Health and Safety team briefings. They will be phased in across the programme and will consist of 15 minute topical briefings. The briefings will be conducted to raise staff awareness and promote Health and Safety. The first of these briefings will highlight stress, workplace contributors and the need for a work/life balance.
- 1.24. Crossrail will be running a number of CDM awareness courses for senior managers with a focus upon the principles of construction Health and Safety management and the general requirements of CDM. It will provide attendees with clarity on CDM roles and responsibilities within the Crossrail Project.
- 1.25. There are plans for Stage 1 ISO14001 verification by external auditors. Environment management training will be delivered for all Crossrail staff.
- 1.26. There are plans to undertake the quarterly Crossrail Management Systems Review (the first under the consolidated environment, quality and health & safety management review process) and obtain initial approval for the 2009/2010 Environmental objectives, targets and Environmental management programmes prior to submission to the Crossrail Executive.
- 1.27. There are plans for the development of a combined HSE incident procedure, and associated incident management system.
- 1.28. Tenders for the Behavioural Management of the Environment (BME) contract

will be evaluated and awarded.

- 1.29. A framework contract to provide Archaeological services to the Crossrail Project will be awarded. Individual works packages will be awarded under the framework for specific Crossrail sites for all archaeological requirements for those sites from enabling through to main works construction.

## **2. PROGRESS AGAINST ANNUAL HEALTH & SAFETY PLANS**

- 2.1 A new high level user requirements statement has been defined to enable the selection of a suitable Incident Management System within the timeframes specified within the Health and Safety Improvement Plan.
- 2.2 A detailed action plan is in place and tracking implementation progress of all key deliverables against time.

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

- 3.1 Development of the health and safety management system to BS OHSAS 18001 continues as a key focus of the Health and Safety team with a number of revised procedures/documents being placed into the Crossrail document Management System for wider consultation.

## **4 HEALTH AND SAFETY PERFORMANCE**

### **Health**

- 4.1 There were 312 working days lost due to sickness/absence in Quarter 1 which represents an average of 1.35 days per employee. The top three categories of sickness absence in Quarter 1 were Accident and Injuries (25.5%), Coughs and Colds (24.5%) and Heart Disease (12.8%).

Days lost	Q1 2009/10	Q4 2008/09	Q1 2008/09
Sickness absence	312	301	326
Average / employees	1.35	1.46	1.98

### **Safety**

- 4.2 There were no accidental employee major injuries in Quarter 1. For comparison, there was one employee major injury in the previous quarter and none in the same quarter last year.

	Q1 2009/10	Q4 2008/09	Q1 2008/09
Employee major injuries	0	1	0
Rate/1000 employees	0.0	3.32	0.0

- 4.3 There were no physical assaults on employees in Quarter 1, nor in the previous quarter or in the same quarter last year.
- 4.4 There were no verbal assaults or threats to employees in Quarter 1, nor, in the

previous quarter or in the same quarter last year.

	Q1 2009/10	Q4 2008/09	Q1 2008/09
Employee physical assaults	0	0	0
Employee verbal assaults	0	0	0
Rate/1000 employees	0	0	0

## 5 ENVIRONMENTAL PERFORMANCE

### General

- 5.1 In the quarter, Crossrail carried out seven ground investigation surveys and three trial trenches for archaeological evaluation were dug.

### Carbon and energy management / Carbon emissions,

- 5.2 Electricity consumption data for 25 Canada Square, obtained via online meter readings, is being validated by TfL Group Property and Facilities. It is planned to complete the validation in time for the next report.
- 5.3 Contract requirements have been issued in relation to energy, including developing an energy management plan for minimising energy use and implementing energy efficiency measures. Where possible, the contractor is required to investigate options for procuring energy from renewable sources. The contractor is further required to use commercial road vehicles that meet Euro 3 standards and, where feasible, implement sub metering. These measures are subject to monitoring regimes to identify unexplained consumption and provide an opportunity to address such occurrences.

### Environmental Complaints

- 5.4 During Quarter 1, Crossrail received 18 complaints. Nine of these were directly attributable to Crossrail with the other nine directed to London Underground (the nominated undertaker for station works at Tottenham Court Road) and Network Rail in relation to the Thameslink project. Analysis of the complaints has revealed no discernable trends.

### Environmental Site Inspections

- 5.5 During the period, Crossrail carried out 22 site inspections. These identified 13 non-conformances. Analysis of the non-conformances has identified that one particular package had issues with oil storage. Remedial action has been implemented with the contractor and the situation has been resolved. No other discernable trends were identified.

## 6 MAJOR INCIDENTS

- 6.1 There were no major Health and Safety incidents in Quarter 1.

6.2 There were two major Environmental incidents in the quarter:

- a) A geotechnical investigation in Custom House – North Woolwich reported an incident whereby a tanker which had collected waste effluent (water and chalk) from site had discharged some of its load into a nearby storm water drain. The investigation has been completed and appropriate action taken by the contractor.
- b) Canary Wharf Group reported an incident whereby diesel had entered the dock. The spill was contained using appropriate measures and an investigation report is in progress.

## CORPORATE DIRECTORATES QUARTERLY HEALTH, SAFETY AND ENVIRONMENT REPORT

### 1 SUMMARY

#### What went well

- 1.1 The 2009 HSE Assurance Letter for the Corporate Directorates was agreed and signed off with Chief Officers and communicated to the Commissioner, the Safety Health and Environment Committee and senior teams within each Corporate Directorate.
- 1.2 Work to reinforce HSE assurance on Oyster Expansion National Rail Stations continued with the setting up and execution of a programme of sub-contractor audits involving Prestige PFI partners.
- 1.3 HSE implications arising from the use of volunteers from the Corporate Directorates were raised during the industrial dispute on London Underground and recommendations made relating to additional volunteer risk assessment work were agreed. These are now being taken forward.
- 1.4 A draft of the Annual TfL Environment Report 2008/09 was completed.
- 1.5 Following submission of a paper and presentation on TfL's climate change mitigation and adaptation activities, TfL was shortlisted for the Business in the Community Climate Change Award for Excellence sponsored by the Bank of America. TfL is the first public body to be shortlisted. The presentation event was hosted by Business in the Community's Patron, HRH The Prince of Wales, at Clarence House. The Award was won by Marks and Spencer's 'Plan A' Sustainability Programme.

#### Areas for improvement

- 1.6 The 2009 HSE Assurance Letter for Corporate Directorates identified four 'improvement actions' to be taken forward during 2009/10. These are:
  - a) Using outputs from the TfL Group Competency Framework, a gap analysis will be undertaken to develop a training programme that addresses identified HSE competency requirements;
  - b) HSE Consultation arrangements will be rolled out across Corporate Directorates to an agreed structure;
  - c) Necessary input will be made to the planning and implementation stages of organisational change;
  - d) Appropriate HSE input will be delivered at identified stages of the procurement lifecycle in conformance with TfL HSE Procurement Guidelines.

## Significant plans for the next quarter

- 1.7 The audit programme for Prestige PFI partners, Electronic Data Systems (EDS) and Cubic Transportation Systems (CTS) HSEMSs will be continued.
- 1.8 Gap analysis against the requirements of the finalised HSE Competence Framework for managers will continue.
- 1.9 HSE issues related to the relocation of staff to North Greenwich will be addressed.
- 1.10 The major review of the Group HSE Management System will be continued.

## 2 PROGRESS AGAINST HSE PLAN

- 2.1 The Corporate Directorates Occupational Driving Assessment standard is being amended to incorporate the requirements of the TfL Group Driving/Riding Standard.
- 2.2 The Dseasy programme continues its roll-out to programme. Work was completed to plan in each of the three Corporate Directorates.
- 2.3 Risk assessment for two vulnerable employee groups (new expectant mothers and young persons) were carried out.
- 2.4 Work is being taken forward with Prestige PFI partners to review existing controls for the management of contractors and sub-contractors.

## 3 STATUS OF HSE MANAGEMENT SYSTEM(S)

- 3.1 A comprehensive review of the Group HSEMS has commenced. This will be the first comprehensive review since the HSEMS was introduced in 2004.

## 4 HEALTH AND SAFETY PERFORMANCE

### Health

- 4.1 There were 3,982 working days lost to sickness absence in Quarter 1, representing an average of 1.8 days per employee. This represents a slight increase from the previous quarter (1.7 days) and an increase from the same quarter last year (1.5 days)

Days lost	Q1 2009/10	Q4 2008/09	Q1 2008/09
Sickness absence	3,982	3,744	3,179
Average / employees	1.8	1.7	1.5

- 4.2 The top three sickness absence generator categories comprised (in descending order) musculo-skeletal disorders, mental health and coughs and colds.

### Safety

- 4.3 There were no customer accidental major injuries, employee major accidental injuries or any physical assaults on employees during Q1, 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 helps to maintain this low risk environment.

## 5 ENVIRONMENT PERFORMANCE

- 5.1 The target for CO<sub>2</sub> emissions for Quarter 1 in Head Office buildings was met. Emissions were 29.1 kg CO<sub>2</sub>/m<sup>2</sup> against the target of 31.4 kg CO<sub>2</sub>/m<sup>2</sup>.

CO <sub>2</sub> kg/m <sup>2</sup>	Q1 2009/10	Q4 2008/09	Q1 2008/09
Target	31.4	46.6	27.0
Emissions	29.1	45.5	28.2

- 5.2 The water consumption target for Quarter 1 for the Head office buildings was met with consumption of 1.68 m<sup>3</sup>/person against the target of 1.74m<sup>3</sup>/person.

Water consumption m <sup>3</sup> /person	Q1 2009/10	Q4 2008/09	Q1 2008/09
Target	1.74	2.15	1.62
Usage	1.68	1.96	1.60

## 6 MAJOR INCIDENTS

- 6.1 There were no major incidents.

**QUARTER 1 2009/10 HEALTH AND SAFETY PERFORMANCE - DATA  
SUMMARY\***

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

n/a - not available

NB: LU reported for 3 periods in Quarter 4 whereas other modes reported for 4 periods.

**Health**

	Sickness absence days lost			Average days lost / employee		
	Q1 2009/10	Q4 2008/09	Q1 2008/09	Q1 2009/10	Q4 2008/09	Q1 2008/09
LU	29,633	29,764	29,573	2.3	2.3	2.2
ST	9,599	9,452	9,742	2.4	2.3	2.3
LR	164	127	243	0.71	0.55	1.19
CR	312	301	326	1.35	1.46	1.98
CD	3,982	3,744	3,179	1.8	1.7	1.5

**Employee major injuries**

	Employee major injuries			Rate / 1000 employees		
	Q1 2009/10	Q4 2008/09	Q1 2008/09	Q1 2009/10	Q4 2008/09	Q1 2008/09
LU*	2	n/a	n/a	0.14	n/a	n/a
ST	3	2	3	0.65	0.45	0.58
LR	0	0	0	0	0	0
CR	0	1	0	0	3.32	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		
	Q1 2009/10	Q4 2008/09	Q1 2008/09	Q1 2009/10	Q4 2008/09	Q1 2008/09
LU*	247	421	361	22.41	30.19	32.35
ST	50	79	62	10.81	17.63	12.06
LR	0	0	0	0	0	0
CR	0	0	0	0	0	0
CD	0	0	0	0	0	0

\*LU data are for Chief Operating Officer Staff only

### Customer major injuries

Customer major injuries				Rate / 10 <sup>6</sup> customer journeys		
	Q1 2009/10	Q4 2008/09	Q1 2008/09	Q1 2009/10	Q4 2008/09	Q1 2008/09
LU	29	23	28	0.11	0.09	0.11
ST	223	192	236	0.39	0.29	0.46
DLR	0	5	4	0	0.25	0.24
LOROL	0	0	0	0	0	0
TRAM	0	0	n/a	0	0	n/a

### Contractor staff assaults (Total)

Contractor staff assaults				Rate / 1000 staff		
	Q1 2009/10	Q4 2008/09	Q1 2008/09	Q1 2009/10	Q4 2008/09	Q1 2008/09
BUSES	115	139	209	n/a	n/a	n/a
LOROL	10	5	39	11.7	7.6	59.5
DLR	15	13	13	24	22	24
TRAM	15	14	n/a	93	86	n/a