

TRANSPORT FOR LONDON

RAIL AND UNDERGROUND PANEL

SUBJECT: MANAGING DIRECTOR'S REPORT – LONDON RAIL

DATE: 25 JANUARY 2010

1 PURPOSE AND DECISION REQUIRED

- 1.1 The purpose of the report is to highlight the performance of London Rail for periods 7 to 9 (20 September 2009 to 12 December 2009).
- 1.2 Members are asked to note the report.

2 KEY HIGHLIGHTS

- 2.1 The launch of Oyster Pay as You Go (PAYG) successfully took place on 2 January 2010 as planned. PAYG is now accepted on all major train operating companies serving the London area.
- 2.2 Test running commenced on the East London Line on 5 October 2009 when the first Class 378 train departed from the New Cross Gate depot and travelled to Dalston. Trial Operations are planned to start in early February.
- 2.3 Ten Southern stations south of New Cross Gate transferred to London Rail control on 20 September 2009.
- 2.4 Imperial Wharf station opened ahead of schedule on 27 September 2009, with 800 passengers each weekday.
- 2.5 The new Shepherd's Bush Overground station opened on 29 September 2009, with 3,500 passengers each weekday.
- 2.6 The new DLR South Quay station opened on 26 October 2009. At Limehouse, the link bridge between the DLR and c2c stations was opened on 26 November 2009.

3 MANAGING DIRECTOR'S OVERVIEW

- 3.1 Performance on London Overground was pleasing with the PPM¹ MAA² of 92.9 per cent ahead of last year by 0.2 per cent at the end of period nine.
- 3.2 On DLR, reliability and departures were below target during the quarter due mainly to rolling stock and Thales signalling issues with the trains, but all station equipment targets were exceeded. Management continued to work closely with Serco across a number of areas.

¹ PPM (Public Performance Measure): % of trains that arrived within 5 minutes of their stated arrival time as per the timetable currently in operation.

² MAA: Moving Annual Average.

- 3.3 London Tramlink performance was slightly above target.
- 3.4 Projects generally progressed well across the mode.

4 OPERATIONAL PERFORMANCE

Docklands Light Railway

- 4.1 Passenger journeys of 17.2m in the quarter were above budget by 0.1m.
- 4.2 Reliability and Service Quality

Standard	P 7-9 System Performance (%)	Budget (%)
Departures	95.6	98.0
Service Reliability	93.3	96.0
TVM Availability	99.7	98.0
Lift Reliability	99.9	97.0
Escalator Reliability	99.4	98.0
PID Availability	99.9	98.0

Service reliability and departures suffered during the quarter driven by a series of vehicle failures (both old and new vehicles) and ongoing software issues. DLR is working closely with partners to resolve these issues.

London Overground Operations

- 4.3 PPM MAA was 92.9 per cent at the end of period nine which was below budget by 0.2 per cent but 0.2 per cent higher than for the same period last year.

London Tramlink Operations

	P 7-9	Budget
Passenger Journeys	6.3m	6.8m
% of scheduled service kms operated	99.4	98.0

- 4.4 Journeys of 6.3m during the quarter were below budget by 0.5m due to a combination of the impact of the economy and a slower return of customers following the engineering works at East Croydon.
- 4.5 Percentage of scheduled service kilometres operated was above target.

5 DOCKLANDS LIGHT RAILWAY PROJECTS

Three Car Capacity Enhancement

- 5.1 Productivity during possessions was generally good with the majority of works completed as planned.
- 5.2 DLR services at Bank station have been suspended since 24 December until the end of January to allow for three car works and a new junction at Royal Mint Street. Full service was restored by 1 February.
- 5.3 Overall, Package 1 (Bank to Crossharbour) is progressing well. The new South Quay station opened on 26 October 2009. At Limehouse, the construction work is complete and the link bridge between the DLR and c2c stations was opened

on 26 November 2009 and has been used by an estimated 3,000 passengers per day.

- 5.4 Package 2 (Lewisham Extension): Construction work is complete on all stations and final snagging works acceptance paperwork is being reviewed prior to formal Package 2 close out.
- 5.5 Package 5 (Delta Junction): All construction work is complete, the handover paperwork has been approved and station hoardings have been removed at West India Quay.
- 5.6 Package 7 (Canning Town Junction): Works remain on programme and the Canning Town sidings have been successfully commissioned.
- 5.7 Three Car Route North Package 3 and 4 (North Route and Blackwall and East India): All construction work on Packages 3 and 4 is complete. On Package 3, all stations have been handed over for operational service, final snagging works inspections have taken place and acceptance paperwork is being reviewed.
- 5.8 On Package 4, Blackwall and East India stations have been handed over for operational service and final snagging of the steelwork was completed as scheduled at the end of January 2010.
- 5.9 Three Car East Route: At Custom House, the piling works are complete and the fixing of the reinforcement to the pilecaps has commenced. At Prince Regent, the concreting of the support beams is complete. At Beckton, the erection of the trackside hoardings has been completed.

Stratford International Extension

- 5.10 Package 8 (National Rail Platforms at Stratford): All works are substantially complete with trains in service and running from the high level platforms. All critical operational assets have been handed back to Network Rail (NR) and incorporated into its maintenance regime.
- 5.11 Package 6 (Conversion of NLL to DLR): The overall station construction progress has slipped to approximately one month behind the recovery programme. Cable containment works and cable pulling is ongoing at all stations, with telecommunications installations set to follow.
- 5.12 All stations south of Abbey Road (Canning Town, Star Lane and West Ham), progressed well and are broadly in line with the recovery programme, with the exception of Canning Town. Breakthrough work to the LUL ticket hall at Canning Town is now underway.
- 5.13 At Abbey Road, the station canopies are complete, platform finishes have been applied and the lighting columns are being installed. Overall, the station works are performing in line with the recovery programme.
- 5.14 At Stratford High Street, the installation of the platform canopies, platform finishes, lighting columns and architectural steelwork has continued. Overall, the station works are performing in line with the recovery programme.
- 5.15 At Stratford Regional, the installation of the stair treads and landings are underway, along with work continuing on the canopies, footbridge and architectural finishes. Overall, the station works have slipped by two weeks

from the recovery programme.

- 5.16 At Stratford International, work continued on the canopies, along with the installation of the copers and tactiles. The escalators are in position and mechanical and electrical (M&E) installation work has continued. Overall, the station works experienced further slippage during the period and are four weeks behind the recovery programme, although these works are not on the programme critical path.

Other DLR projects

- 5.17 Woolwich / Three Car / Olympic Railcars: Delivery and commissioning of new vehicles continued in accordance with the agreed programme. Forty three vehicles out of a total of 55 have been delivered to Beckton and Taking over Certificates have been issued on a total of 40. There are a further nine vehicles in various stages of production in Bautzen. Testing of the vehicles in three car configuration and the selective door opening along the south, west and east routes was successfully completed.
- 5.18 Upgrade of Ticket Vending Machines: One hundred and twenty seven TVMs had been installed at the end of period 9 out of a total of 150. The planned completion date for the existing network of 31 March 2010 will be met, which will just leave machines required for the Stratford International Extension to be installed prior to opening in summer 2010.

6 LONDON OVERGROUND INFRASTRUCTURE PROJECTS

- 6.1 East London Line Project (ELLP): Test running started on 5 October 2009 and progressed well during the quarter and focus moved to achieving trial operations by week commencing 25 January 2010.
- 6.2 Crystal Palace commissioning works were completed over the Christmas period and South Croydon commissioning remains on programme for Easter 2010.
- 6.3 North London Railway Infrastructure Project (NLRIP): The Christmas blockade was completed successfully. Sewer and drainage works continued in the quarter and the first sections of track installation commenced. Good progress was made in the quarter for station and platform works within the core area (Caledonian Road to Highbury & Islington). The new possession plan supporting the all lines blockade, which is proposed to take place between February and May 2010, is currently out for industry consultation.
- 6.4 London Overground Rolling Stock: Delivery of the remaining North London Railway (NLR) units recommenced in December, following a halt in production to ensure sufficient East London Railway (ELR) units were delivered for stress testing on the infrastructure. Fourteen NLR units are in service and seventeen ELR trains have been delivered.
- 6.5 East London Line Project (ELLP) Phase 2: Works continued in line with programme. The expected decision from DfT at Christmas for partial funding for a station at Surrey Canal Road was not received and is still outstanding from the Secretary of State. Design works continued in the period.

7 TRAMS PROJECTS

- 7.1 East Croydon site works have been completed and snagging is complete with the exception of three outstanding items, which are not impacting operational performance, which should be resolved by the end of February 2010.

8 GATING AND OYSTER PROJECTS

Wider London Oyster Rollout

- 8.1 The launch of Oyster PAYG took place on 2 January 2010 as planned. PAYG is now accepted on all of the major train operating companies serving the London area.

London Overground Gating and Oyster

- 8.2 Gatelines and new TVMs are now installed at the four new East London Line stations. The two North London stations which are part of the gateline project (Hatch End and Carpenders Park) will be installed in spring 2010.

9 REVIEW OF DEVELOPMENTS ACROSS NATIONAL RAIL

Office of Rail Regulation (ORR) Periodic Review and DfT High Level Output Statement (HLOS)

- 9.1 ORR has announced that it will begin the next periodic review process in autumn 2010.
- 9.2 In December, DfT announced a combined ORR/DfT study into options for improving value for money from the railway. A scoping study will be completed by March 2010 followed by a full study which will be an input into HLOS2. The study will examine the whole industry costs and revenues and their composition.
- 9.3 The study will examine:
- (a) whether legal, operational and cultural barriers currently stand in the way of efficiency and value for money;
 - (b) ways of creating the incentives across different parts of the rail industry to generate greater efficiency;
 - (c) the possible role of new technology, processes and working practices in fostering greater efficiency; and
 - (d) options for generating more revenue, e.g. car parking and gating at stations and better utilisation of property.
- 9.4 TfL will input into the value for money study and DfT's HLOS2 modelling work.

Network Rail Matters

Route Utilisation Strategies (RUS)

- 9.5 TfL has responded to the consultations for both the Great Western and East Midlands RUSs. On the Great Western RUS, TfL's comments focused on the

Crossrail project. The response pointed out that Crossrail should be given more recognition in the RUS considering the magnitude of the impact it will have on the route. The importance of maintaining adequate service levels during construction was also recommended for inclusion in the strategy. TfL supported the increased capacity on services to and from London proposed by the RUS but pointed out that the impact on station capacity, particularly at Paddington and Ealing Broadway, needed to be considered further.

- 9.6 For the East Midlands RUS, which covers services on the Midland Main Line including Thameslink route services, TfL also welcomed the proposed capacity increases. The importance of the Midland Main Line as a freight route was also noted and TfL emphasised that adequate infrastructure needs to be provided to accommodate both freight and passenger growth. As with the Great Western RUS, TfL pointed out the importance of station capacity, with West Hampstead Thameslink and Kentish Town stations the greatest concern.
- 9.7 The West Coast Main Line RUS has also recently got underway and TfL will provide input to this study as required. TfL also continues to maintain involvement in the West Midlands & Chilterns RUS which is currently in progress.
- 9.8 Importantly, the London & South East (LSE) RUS has also recently commenced (the first of the second generation RUSs) which will focus on updating the strategies on various routes across the London area.
- 9.9 Network Rail is using TfL's LTS³ and Railplan models to develop the strategy. London Rail and Group Planning are both on the working group for LSE RUS modelling.

National Station Improvement Programme (NSIP)

- 9.10 Of the 43 stations in London included in NSIP, two projects have been completed and 21 projects are either on site or due to start on site in 2010. Design of the schemes at all but six stations have proceeded as far as Network Rail's GRIP Level 3 (single option selection).

Office of Rail Regulation (ORR) Matters

ORR Consultations

- 9.11 The ORR is consulting on new General Approval documentation governing changes to access arrangements at stations and depots. Detailed comments on the drafting will be returned shortly. The ORR is also currently consulting on a review of the arrangements for establishing the access charges used for Control Period four, to inform the approach taken for the next control period.

DfT Matters

DfT consultations and announcements

- 9.12 The DfT has issued a consultation on the Better Rail Stations report published last autumn. TfL will be responding with the aim of ensuring that the process for taking forward the report's findings promotes Overground standards effectively. TfL Legal is also preparing a response to the DfT consultation on Penalty Fares

³ London Transportation Studies

policy and changes to associated charges. A response has been made to the consultation on updates to the WebTAG⁴ business case assessment guidance, which is used by TfL for appraisal of DfT funded projects.

Franchise replacements and extensions

- 9.13 The South Central franchisee has commenced delivery of the station deep clean programme and South Croydon has been completed. The deep clean has been assessed and the results of this assessment will be discussed between TfL, the DfT and South Central. The deep clean has had a strong positive impact on the station environment.
- 9.14 TfL is working with the DfT to develop the specification for the next Greater Anglia (currently branded National Express East Anglia) and Essex Thameside (currently branded c2c) franchises, both of which are due to commence operations during Spring 2011. TfL is focusing on the delivery of improvements to station presentation, facilities and staffing to deliver Overground standards in the London area, subject to the availability of funding. The integration of the Crossrail project with the Greater Anglia franchise will also be addressed in detail through the refranchising process.

Accessibility and the 'Access for All' programme

- 9.15 Progress continues to be made with the implementation of the Access for All schemes in London. The schemes at six of the 34 stations in London in the whole programme (Phases 1 to 3) are complete (Balham, Herne Hill, Kingston, Lewisham, Orpington and Purley). Contracted works have also been completed at Streatham Hill and West Hampstead Thameslink. Work is ongoing at four further stations with the remainder being at the planning stage. All of the Phase 1 stations are expected to be completed by the end of 2010, with Phase 2 scheduled for completion in 2011 and Phase 3 in 2015.
- 9.16 Network Rail has not found an affordable solution at a number of stations in the original programme. As a result, the DfT is likely to replace any stations taken out of the programme with other stations (nationally) and has been lobbied to include Hackney Central, where there is already a preferred option for a scheme developed by TfL. Peckham Rye is also a potential candidate for replacing one of the withdrawn stations.
- 9.17 TfL has submitted a bid to the DfT for money from the "Small Schemes" programme to carry out minor accessibility improvements at eight of the ten stations recently taken over by London Overground from Southern on the East London Line. A decision on this is expected in February 2010.

Performance of the Passenger Network

- 9.18 London and South East Rail (LSE) demand has fallen in recent periods, although revenue has been maintained by increasing average yields. Data provided by the ORR shows that LSE demand fell by 4 per cent in the second quarter of 2009/10.
- 9.19 Most regulated national rail fares were reduced by 0.4 per cent in January 2010 in line with RPI+1.

⁴ WebTAG is DfT's Transport appraisal guidance

Freight

Strategic Freight Network

- 9.20 All Strategic Freight Network (SFN) schemes for control period 4 (2009 – 2014) are on target to meet completion dates, with the exception of the Channel Tunnel routes where the timescale is yet to be established.
- 9.21 Network Rail's 2030 freight forecasts have been updated to reflect changes to the proposed SFN since the previous forecasts were produced in April 2008. Work is beginning on forecasts for 2019, though like the 2030 forecasts these will reflect unconstrained demand (i.e. with network capacity constraints lifted).
- 9.22 Freight issues in the London area will be considered as part of the London and South East RUS and a Freight Working Group has been established. This workstream is expected to shape TfL's freight recommendations for HLOS2.

Facilities to support freight on the High Speed line (HS1)

- 9.23 Draft reports into the technical feasibility and economic impacts of the freight facilities proposed in the earlier London Riverside Sustainable Logistics study have been received. These address the issues and impacts of locating an inter-modal terminal and a high-speed freight terminal in the London Riverside area. The study's clients are due to meet to consider next steps and further engagement with stakeholders.

Rail freight trends

9.24 Quarter 2 2009-10 figures from the ORR for freight moved (billion net tonne kms) and freight lifted (million tonnes) together with the previous seven quarters are shown below.

Year	Quarter	Freight Moved (bn net tonne kms)	Freight Lifted (million tonnes)
2007-2008	3	5.23	25.8
	4	5.25	25.8
2008-2009	1	5.40	26.3
	2	5.42	26.7
	3	5.00	25.6
	4	4.80	24.2
2009-2010	1	4.86	22.1
	2	4.89	21.8
Year on year change for Quarter 2		-9.7%	-18.2%

Source: National Rail Trends produced by the Office of Rail Regulation
Table subject to rounding

9.25 Quarter 2 showed rail freight moved reduced by nearly 10 per cent when compared with the same quarter last year, this is the same reduction as the previous quarter year on year. Freight lifted showed an 18 per cent reduction on the same quarter in the previous year. This was similar to the previous quarter's reduction. This is the fourth successive quarter where freight use has been below the same quarter one year ago.

Environment and Sustainability

9.26 London Rail participated in a rail industry workshop organised by the DfT on preparing a carbon pathway to 2050 for the rail industry. The purpose of this was to identify which long term initiatives were considered to be potentially viable and worthy of further research. The aim is to enable rail to make a significant contribution towards long term Government carbon emission reduction targets. The workshop also helped to inform potential initiatives that could be introduced in the long term on the Overground, DLR and Tramlink.

9.27 London Rail has also been carrying out work to identify the impact of the Carbon Reduction Commitment on operations. This comes into force in April 2010 and requires non-traction energy use to be reported. Reporting will be carried out at TfL group level. It has been decided that energy use by DLR will be reported by the operator, Serco, rather than TfL but processes will need to be in place to ensure robust reporting on the Overground and Tramlink networks. At a TfL-wide level, the scheme has a financial impact, with penalties for increasing energy use and rewards for reducing energy use.

High Speed Lines

9.28 The Department for Transport's High Speed Two Ltd company submitted its report on preferred options for a high speed line from London to Birmingham and beyond to Lord Adonis on 31 December 2010. Euston is still the favoured location for a London terminus. Lord Adonis has already responded to HS2 requesting more analysis on passenger dispersal in London and London Rail is continuing to co-ordinate with LU and Group Planning to assist with this, including modelling of the additional passengers generated by HS2.

10 RECOMMENDATION

10.1 The Panel is asked to note the contents of this report.

11 CONTACT

11.1 Contact: Ian Brown, Managing Director, London Rail
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OVERGROUND



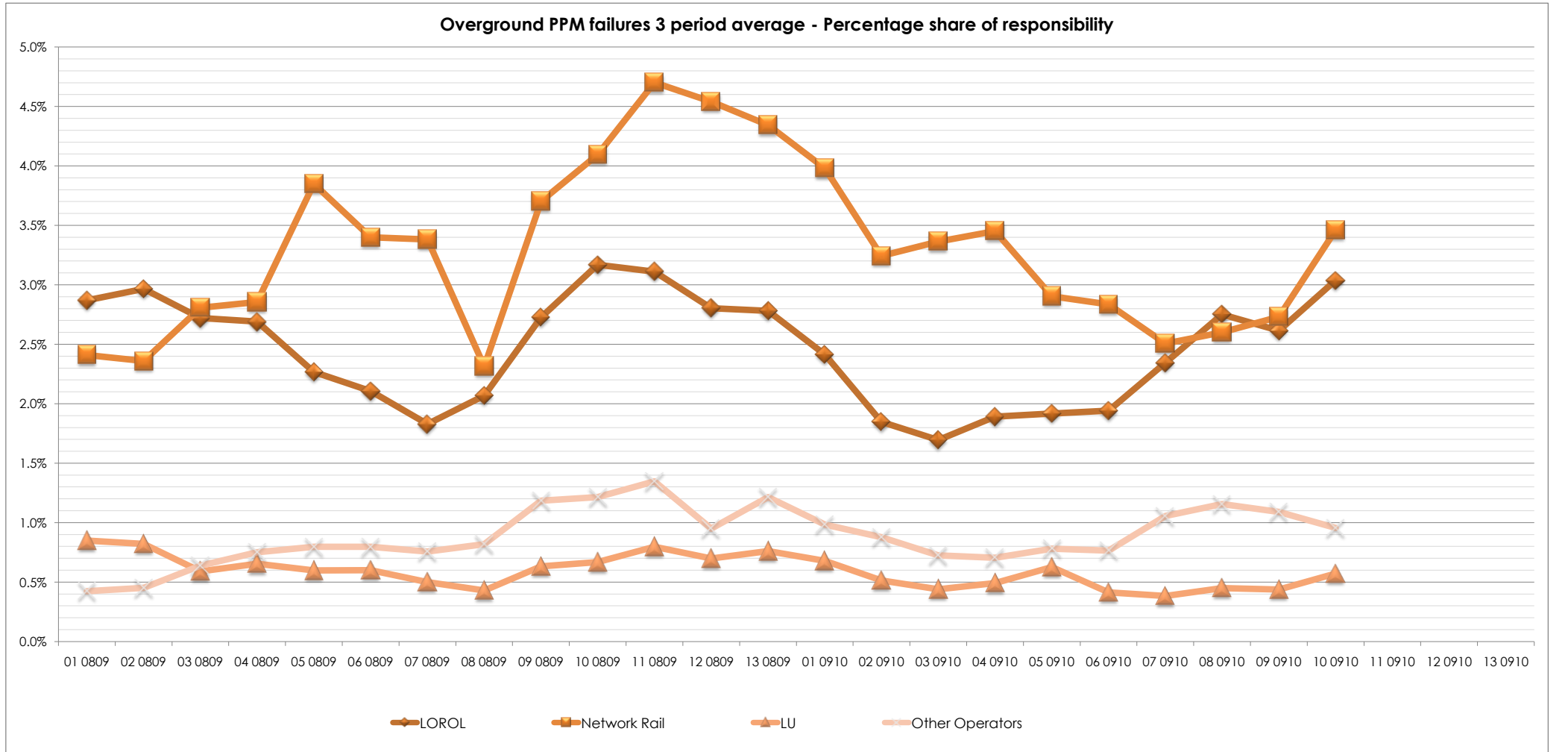
All routes - PPM failures

Number of PPM failures : 3 period average

	01 0809	02 0809	03 0809	04 0809	05 0809	06 0809	07 0809	08 0809	09 0809	10 0809	11 0809	12 0809	13 0809	01 0910	02 0910	03 0910	04 0910	05 0910	06 0910	07 0910	08 0910	09 0910	10 0910	11 0910	12 0910	13 0910	
Overground	715	717	724	758	817	739	702	647	971	1033	1074	954	1020	924	726	660	655	611	600	633	700	695	789				

Percentage share of responsibility for 3 period average of PPM failures

	01 0809	02 0809	03 0809	04 0809	05 0809	06 0809	07 0809	08 0809	09 0809	10 0809	11 0809	12 0809	13 0809	01 0910	02 0910	03 0910	04 0910	05 0910	06 0910	07 0910	08 0910	09 0910	10 0910	11 0910	12 0910	13 0910	
LOROL	3%	3%	3%	3%	2%	2%	2%	2%	3%	3%	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%	3%	3%	3%	3%			
Network Rail	2%	2%	3%	3%	4%	3%	3%	2%	4%	4%	5%	5%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%				
LU	1%	1%	1%	1%	1%	1%	1%	0%	1%	1%	1%	1%	1%	1%	1%	0%	0%	1%	0%	0%	0%	0%	1%				
Other Operators	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%				



OVERGROUND



North London Line - PPM failures

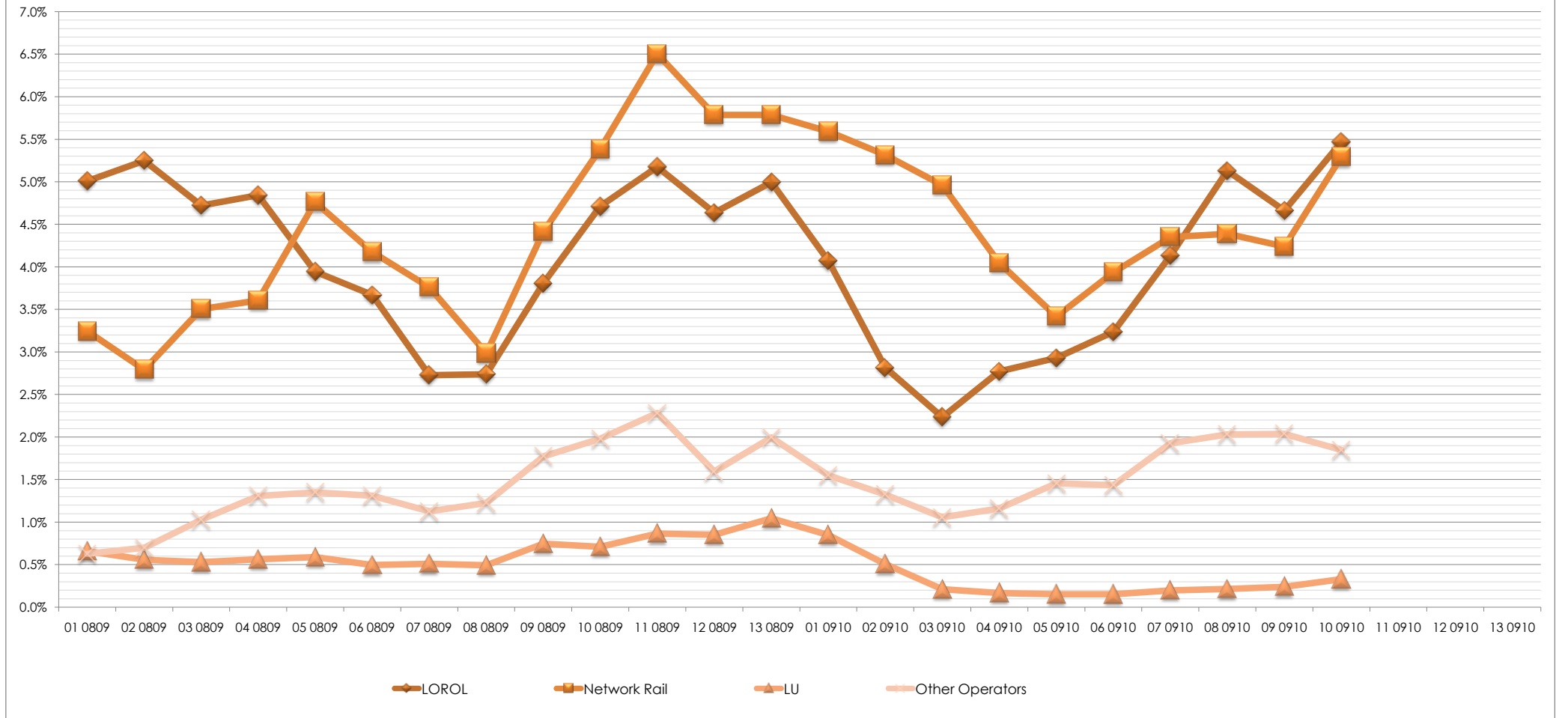
Number of PPM failures : 3 period average

	01 0809	02 0809	03 0809	04 0809	05 0809	06 0809	07 0809	08 0809	09 0809	10 0809	11 0809	12 0809	13 0809	01 0910	02 0910	03 0910	04 0910	05 0910	06 0910	07 0910	08 0910	09 0910	10 0910	11 0910	12 0910	13 0910	
NLL	365	355	367	396	409	396	376	386	546	564	571	474	544	497	412	339	317	315	342	407	456	432	443				

Percentage share of responsibility for 3 period average of PPM failures

	01 0809	02 0809	03 0809	04 0809	05 0809	06 0809	07 0809	08 0809	09 0809	10 0809	11 0809	12 0809	13 0809	01 0910	02 0910	03 0910	04 0910	05 0910	06 0910	07 0910	08 0910	09 0910	10 0910	11 0910	12 0910	13 0910	
LOROL	5%	5%	5%	5%	4%	4%	3%	3%	4%	5%	5%	5%	5%	4%	3%	2%	3%	3%	3%	4%	5%	5%	5%				
Network Rail	3%	3%	4%	4%	5%	4%	4%	3%	4%	5%	7%	6%	6%	6%	5%	5%	4%	3%	4%	4%	4%	4%	5%				
LU	1%	1%	1%	1%	1%	0%	1%	0%	1%	1%	1%	1%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%				
Other Operators	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%	2%	2%	2%	1%	1%	1%	1%	1%	2%	2%	2%	2%				

North London Line PPM failures 3 period average - Percentage share of responsibility



OVERGROUND



West London Line - PPM failures

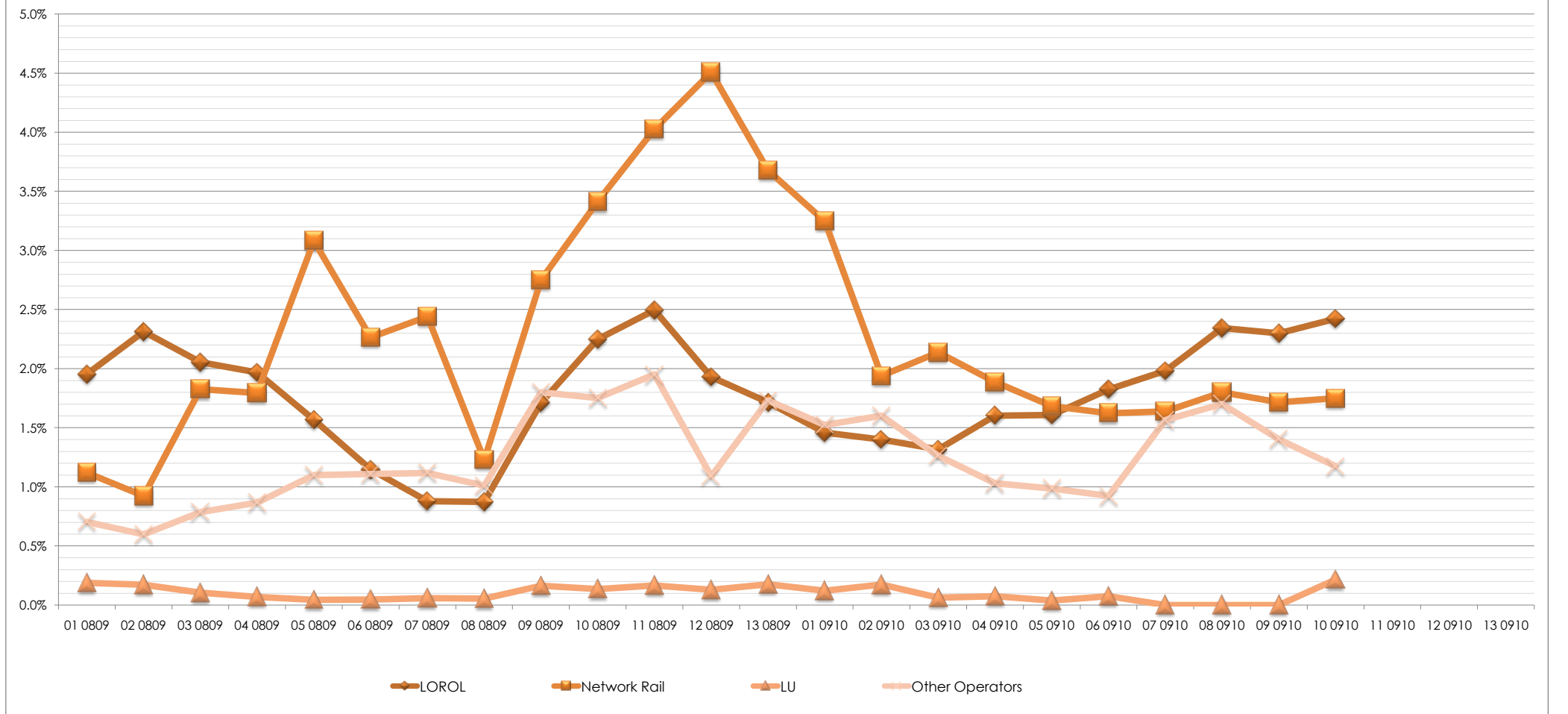
Number of PPM failures : 3 period average

WLL	01 0809	02 0809	03 0809	04 0809	05 0809	06 0809	07 0809	08 0809	09 0809	10 0809	11 0809	12 0809	13 0809	01 0910	02 0910	03 0910	04 0910	05 0910	06 0910	07 0910	08 0910	09 0910	10 0910	11 0910	12 0910	13 0910	
	78	78	91	90	107	82	77	57	116	139	165	148	153	131	95	75	61	57	59	71	79	75	75				

Percentage share of responsibility for 3 period average of PPM failures

	01 0809	02 0809	03 0809	04 0809	05 0809	06 0809	07 0809	08 0809	09 0809	10 0809	11 0809	12 0809	13 0809	01 0910	02 0910	03 0910	04 0910	05 0910	06 0910	07 0910	08 0910	09 0910	10 0910	11 0910	12 0910	13 0910	
LOROL	2%	2%	2%	2%	2%	1%	1%	1%	2%	2%	2%	2%	2%	1%	1%	1%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Network Rail	1%	1%	2%	2%	3%	2%	2%	1%	3%	3%	4%	5%	4%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
LU	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other Operators	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%	1%	2%	2%	2%	1%	1%	1%	1%	2%	2%	1%	1%				

West London Line PPM failures 3 period average - Percentage share of responsibility



OVERGROUND



Gospel Oak-Barking Line - PPM failures

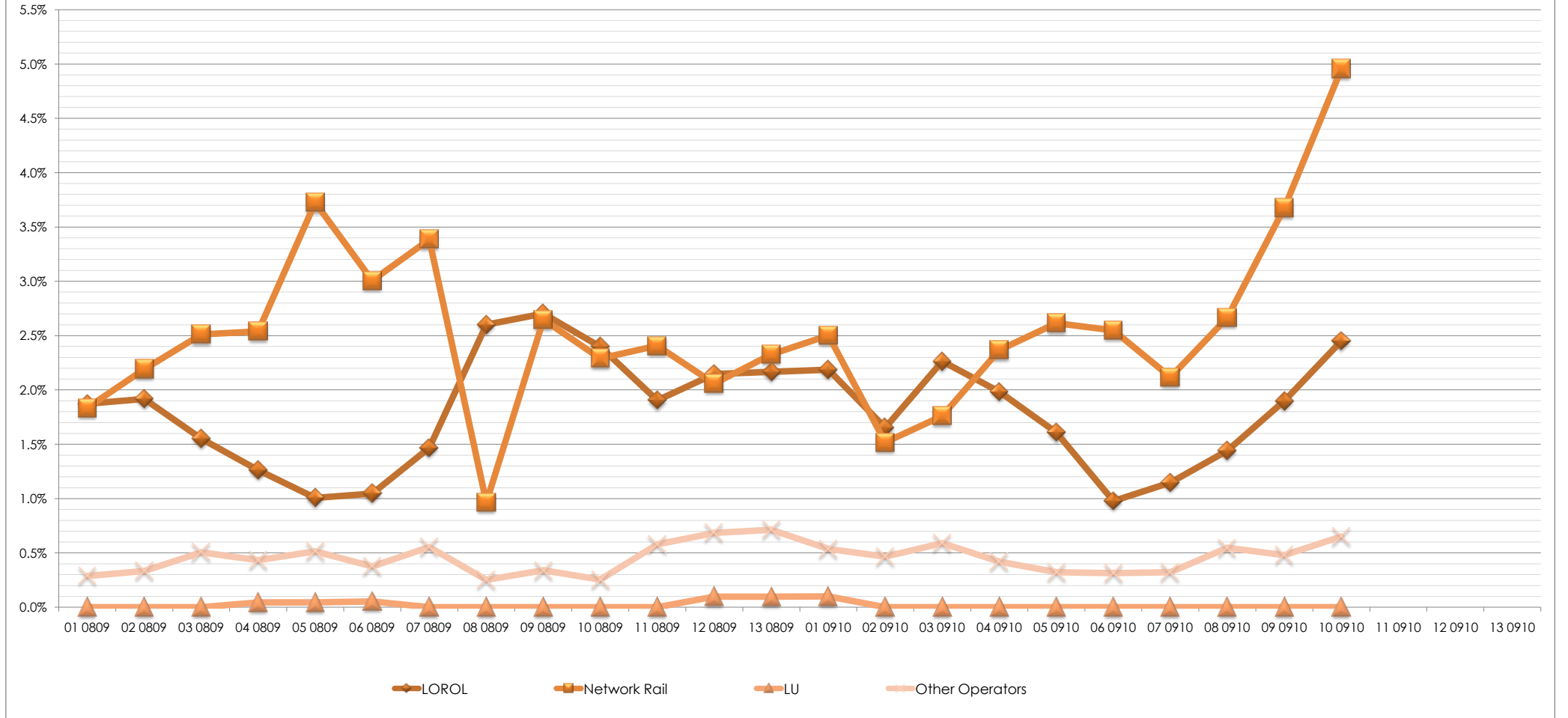
Number of PPM failures : 3 period average

GOB	01 0809	02 0809	03 0809	04 0809	05 0809	06 0809	07 0809	08 0809	09 0809	10 0809	11 0809	12 0809	13 0809	01 0910	02 0910	03 0910	04 0910	05 0910	06 0910	07 0910	08 0910	09 0910	10 0910	11 0910	12 0910	13 0910
	90	100	101	95	118	83	78	56	103	107	106	102	109	106	72	87	87	84	71	67	85	114	152			

Percentage share of responsibility for 3 period average of PPM failures

	01 0809	02 0809	03 0809	04 0809	05 0809	06 0809	07 0809	08 0809	09 0809	10 0809	11 0809	12 0809	13 0809	01 0910	02 0910	03 0910	04 0910	05 0910	06 0910	07 0910	08 0910	09 0910	10 0910	11 0910	12 0910	13 0910
LOROL	2%	2%	2%	1%	1%	1%	1%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	1%	2%	2%			
Network Rail	2%	2%	3%	3%	4%	3%	3%	1%	3%	2%	2%	2%	2%	3%	2%	2%	2%	3%	3%	2%	3%	4%	5%			
LU	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other Operators	0%	0%	1%	0%	1%	0%	1%	0%	0%	0%	1%	1%	1%	1%	0%	1%	0%	0%	0%	0%	1%	0%	1%			

Gospel Oak-Barking Line PPM failures 3 period average - Percentage share of responsibility



OVERGROUND



Watford-Euston Line - PPM failures

Number of PPM failures : 3 period average

	01 0809	02 0809	03 0809	04 0809	05 0809	06 0809	07 0809	08 0809	09 0809	10 0809	11 0809	12 0809	13 0809	01 0910	02 0910	03 0910	04 0910	05 0910	06 0910	07 0910	08 0910	09 0910	10 0910	11 0910	12 0910	13 0910
Total	183	185	166	177	184	179	171	149	206	223	233	231	215	190	147	158	190	155	127	89	80	75	118			

Percentage share of responsibility for 3 period average of PPM failures

	01 0809	02 0809	03 0809	04 0809	05 0809	06 0809	07 0809	08 0809	09 0809	10 0809	11 0809	12 0809	13 0809	01 0910	02 0910	03 0910	04 0910	05 0910	06 0910	07 0910	08 0910	09 0910	10 0910	11 0910	12 0910	13 0910
LOROL	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%	2%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Network Rail	3%	3%	3%	3%	3%	3%	3%	2%	4%	4%	4%	5%	4%	3%	2%	3%	4%	3%	2%	1%	1%	1%	1%	1%	1%	1%
LU	2%	2%	1%	2%	1%	1%	1%	1%	1%	1%	2%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Other Operators	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

