

**Date:** 16 July 2015

**Item:** Managing Director's Report – Rail and Underground

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This paper will be considered in public

## **1 Purpose**

- 1.1 This paper comments on the performance of London Underground (LU) and London Rail (LR), and on the status of all the major investment projects and items of special interest, particularly in Periods 1 to 2 2015/16 (1 April 2015 to 30 May 2015) and interim highlights for Period 3 (31 May 2015 to 27 June 2015).

## **2 Recommendation**

- 2.1 **The Panel is asked to note the report.**

## **3 Summary**

### **Customers**

- 3.1 LU achieved its best ever Customer Satisfaction Survey (CSS) score of 85 in quarter 4 (Q4), 2014/15.

### **Delivery**

- 3.2 Period 2 was marked by record-breaking LU performance, with the quickest journeys and least delay time on record. Lost customer hours (LCH) were 1.05 million, and excess journey time (EJT) was 3.65 minutes.
- Good performance continued into Period 3, with both LCH and EJT better than target. Year to date overall LCH is lower this year than last.
- 3.3 The Docklands Light Railway (DLR) continued its impressive performance in Periods 1 and 2, marking three full years since it missed the on time departures target. In Period 3, DLR performance slipped slightly below target.
- 3.4 Significant injury rates remain better than target on both LU (0.29) and LR (0.18).

### **Value**

- 3.5 Passenger demand continues to rise, with 15.8 million or 5.9 per cent more journeys made on LU than in the first two periods last year (excluding the effect of industrial action). At the same time, LU performance is on track to meet its 30 per cent reliability improvement target in 2015.

Passenger journeys to the end of Period 3 are up 16.8 million, or 5.5 per cent, on last year, excluding industrial action.

## People

- 3.6 The modernisation of LU station service continues. By Period 3, over 2,000 staff members have had the new Fit for the Future – Stations (FftF-S) customer service training. Staff at 103 LU stations have moved out of ticket offices and back areas to public parts of the station such as ticket halls and platforms.

## 4 London Underground

### LU performance

		2015/16 Period 2 YTD	Variance to target	Variance to target excl. IA
Lost customer hours (LCH)	Millions	2.72	-0.20 ▼	-0.20 ▼
Excess journey time (EJT)	Minutes	4.05	-0.17 ▼	-0.17 ▼
Passenger journeys	Millions	216.0	6.0 ▲	6.0 ▲
Significant injuries per million hours (moving annual average - MAA)	Rate	0.29	-0.11 ▼	n/a

- 4.1 LU's service performance is on target, and year to date results to Period 2 for EJT and LCH are both the best ever.
- 4.2 Period 2 was marked by record-breaking LU performance, with the quickest journeys and least delay time on record. LCH were 1.05 million, and EJT was 3.65 minutes.
- The percentage of scheduled kilometres run on the Jubilee, District and Metropolitan lines was the best on record. Records were also broken at line level by the Jubilee, and District Lines in LCH and the Central, Metropolitan and Jubilee lines for EJT.
- 4.3 There were 216 million passenger journeys in Periods 1 and 2, up by 35 million compared to the year before. However, the extended Period 1 means that there have been six extra days this year. Comparing like for like, passenger demand is up 15.8 million compared to last year, equivalent to 7.9 per cent growth (5.9 per cent excluding the effect of industrial action last year).
- 4.4 As reported above, LU's Quarter 4 CSS score was 85, an all-time high. It reflects notable improvements in reliability, the delivery of line modernisations, and increased service frequency.
- 4.5 LU safety performance, measured as significant injuries per million hours moving annual average (MAA), was better than target for year to date, and better than last year.

### Industrial relations

- 4.6 The last LU pay settlement ended on 31 March 2015. LU opened discussions in February with the trade unions, inclusive of Night Tube. An initial offer was made in March and then revised in April. A dispute currently exists with the trade unions on this matter. Talks are continuing at ACAS to reach a resolution, and agree a fair, affordable, sustainable settlement.

## **LU investment**

### **Northern line extension tunnel boring machines**

- 4.7 The Northern line extension took a step forward when we announced that NFM Technologies has been awarded the contract to design, manufacture and deliver two tunnel boring machines.

Starting in 2016, the machines will tunnel from Battersea to Kennington. The Northern line extension, with two new stations – one at Battersea Power Station and another at Nine Elms – will bring those places within 15 minutes of the City, the extension will support 24,000 new jobs and more than 18,000 new homes.

### **S stock fleet deliveries**

- 4.8 With the arrival of the 68th train, we have now passed the half way point in delivering the 133-strong fleet of S7 trains for the Circle, District and Hammersmith & City lines. The Metropolitan line's 58 S8 trains make up the remainder of the S stock fleet (191 trains in all).

### **S stock train operator training completed**

- 4.9 We have now completed S stock train operator training on the District line, which brings to an end a programme that started on the Metropolitan line in 2010. During this time 1,150 train operators have each attended a two-week course to learn how to operate the new trains, supporting their introduction on the Metropolitan line in 2010, the Circle and Hammersmith & City lines in 2012 and the District line in 2014.



*S stock berths at Hammersmith*

### **Remote track monitoring installed**

- 4.10 We have recently installed automated track monitoring equipment on five of the new S stock trains, replacing the ageing track recording vehicle. The system uses a variety of sensors to record the condition of the track continuously while the train is in passenger service.

LU's remote track monitoring programme has already seen the introduction of this equipment on the Bakerloo and Victoria lines. It gives the maintenance team high quality, repeatable track data in almost real time, helping to ensure the safety and quality of LU's railway and contributing to the 'predict and prevent' maintenance strategy.

## Improved customer information on stations

- 4.11 Customers on the Wimbledon branch of the District line have seen new train arrival information boards on the westbound platforms at West Brompton, East Putney, Southfields and Wimbledon Park stations. Train arrival information is now also available on Eastcote, Ruislip and Ruislip Manor stations on the Metropolitan line.



## Shining a light on safety

- 4.12 The interface between the platform and the train is one of the key risks faced by our customers. To help mitigate this risk we have recently fitted blue lights at Baker Street platform 2. The lights, which are triggered by the arrival of a train, highlight the gap between the train and the platform to our passengers, before switching off when the train departs.



*Blue lights seen from outside and inside the train*

## Milestone in step-free travel

- 4.13 There has been a 50 per cent increase in the number of LU stations with manual boarding ramps in the past year. Alongside other improvements, such as permanent platform humps that raise a section of the platform to the same level as the train, and new low-floor trains on the Circle, District, Hammersmith & City and Metropolitan lines, the ramps are enabling us to make more of the network step free for our customers.

## On track for smoother, faster journeys

- 4.14 Over the Easter weekend, as part of our programme to improve asset reliability, we replaced points and crossings at Neasden and Harrow-on-the-Hill as well as ballasted track at Finchley Road.



The existing rail on timber sleepers with limestone ballast was replaced with a modern rail, concrete bearers, granite ballast and modern point machines, greatly improving reliability and reducing future maintenance. As a result Metropolitan and Jubilee line customers can expect a much smoother ride, increased train speeds and greater reliability.

## **Estée Lauder at Piccadilly Circus**

- 4.15 We continue to explore new commercial opportunities to bring in non-fare revenue. A recent example is Estée Lauder (UK & Ireland) signing a one year contract for a pop-up retail unit at Piccadilly Circus. Its botanical hair, skincare and make-up brand Aveda now occupies one of the retail units at the station.



The deal will transform retail facilities available to customers and is part of our efforts to maximise the use of our assets in order to generate £3.4bn in non-fare revenue to be reinvested into the network for improved transport services.

Over the past four months, we have reinstated the original showcase cabinets, which Estée Lauder is now using to display its brands to the 40 million customers who pass through the station each year.

## **Mile End tunnel**

- 4.16 Following two years of planning, the spring bank holiday weekend saw the track partnership and drainage teams delivering a technically challenging ballasted track renewal between Stepney Green and Mile End.



There were a number of added complexities. Of the 84 metres of track replaced, over half sat within the tunnel, with a restricted width of just 16 feet. This, along with the challenge of the tunnel running beneath the Regent's Canal, meant the job had to be done with extreme precision. The work was completed successfully to schedule and will provide a more

reliable service for customers.

## **Track renewals**

- 4.17 In an exceptional three periods for the track renewals programme, we have installed 5.8 kilometres of new track and 13 new sets of points across the network. In addition to the Harrow, Neasden, Finchley Road and Mile End points and track replacements described above, we have modernised all the track and track drainage between Sloane Square and Monument. On the Heathrow branch of the Piccadilly line, we have completed overnight work on 558 metres of track between Hounslow West and Hatton Cross, saving two weekend closures.

From July 2015 we will complete all ballasted track renewals with new padded sleepers spaced at a reduced 60 centimetres apart. This critical change will reduce the load on the ballast and will increase the track life from about 20 to about 40 years. This change will therefore double the life of the ballast and reduce costs and future closures.



## 5 London Rail

### London Overground performance

		Period 2 YTD	YTD variance to target
Passenger journeys	Millions	25.1	1.4 ▲
Public performance measure (MAA)	Per cent	94.9	0.7 ▲

5.1 London Overground (LO) has carried 25.1 million people in Periods 1 and 2, which is 24.1 per cent (4.9 million) more than the corresponding periods in 2014/15, and six per cent more than budget. However, excluding the six extra days in Period 1 this year, LO passenger demand is up 3.0 million compared to last year, equivalent to 13.3 per cent growth (14.4 per cent excluding the effect of industrial action last year).

5.2 LO's operational performance, as measured by the public performance measure (PPM) moving annual average (MAA) was 94.9 per cent at the end of Period 2. This is down 1.3 per cent against the position at the end of Period 2 last year, but 0.4 better than target. LO's 2015/16 target includes an adjustment made for the addition of West Anglia and TfL Rail from Period 3.

Period 2 showed signs of performance recovery on Network Rail infrastructure around London Bridge. There was much more consistent delivery of train services during the morning and evening peaks, resulting in an improvement of almost 1.5 per cent PPM on the East London Line over the period.

5.3 On 31 May, we took control of services running from Liverpool Street to Shenfield, the Great Eastern suburban lines, which will form part of Crossrail. In the meantime this service will be known as TfL Rail. LO also started running services between Liverpool Street and Enfield Town, Cheshunt and Chingford. Stations will be staffed when trains are running and we will introduce a 'turn-up-and-go' accessible service. The stations will also be thoroughly cleaned, properly maintained and added to the Tube map. New trains will be introduced in 2018.

There have been some significant reliability problems with the trains on these routes. Work continues with Abellio (who maintain the trains at Ilford depot) and LOROL (the operator) to improve the situation.

5.4 LO's full year CSS score of 83 was two points ahead of target, including high customer satisfaction with trains and stations.

## Docklands Light Railway performance

		Period 2 YTD	YTD variance to target
Passenger journeys	Millions	19.1	0.2 ▲
On time departures	Per cent	99.2	0.2 ▲

- 5.5 Docklands Light Railway (DLR) passenger numbers in the year to date are 19.1 million, 0.2 million higher than budget and 20.5 per cent higher than the same position last year. Excluding the six extra days in Period 1 this year, DLR passenger demand is up 1.7 million compared to last year, equivalent to 9.8 per cent growth (10.1 per cent excluding the effect of industrial action last year).
- 5.6 DLR departures and service reliability performance for the year to date is 99.2 per cent, or 0.2 per cent better than target. DLR has an unbroken run of being consistently on or better than target for three years.
- 5.7 At 89, the DLR's highest ever full year CSS score was three points better than target.

## Trams performance

		Period 2 YTD	YTD variance to target
Passenger journeys	Millions	4.5	0.1 ▲
Percentage of scheduled kilometres operated	Per cent	99.3	1.3 ▲

- 5.8 Current year Tram passenger journeys were 4.5 million, 1.5 per cent higher than budget.
- 5.9 The year to date scheduled kilometres operated measure was 99.3 per cent, 1.3 per cent better than target.
- 5.10 The full year CSS score for trams at Quarter 4 was on target at 89.

## Emirates Air Line performance

		Period 2 YTD	YTD Variance to target
Passenger journeys	Millions	0.31	-0.01 ▼
Availability	Per cent	96.2	1.2 ▲

- 5.11 Year to date demand on Emirates Air Line (EAL) is 0.3 million passenger journeys; this was 22.4 per cent higher than last year. However, the extended Period 1 means that there have been six extra days this year. Comparing like for like, EAL passenger demand is up 16,000 compared to last year, equivalent to 5.5 per cent growth.
- 5.12 Full year availability is 96.2 per cent, which is 1.2 per cent better than target.
- 5.13 The Quarter 4 CSS score of 94 was the highest since the Air Line opened, meeting its annual target.

## **LR investment**

### **Increased capacity on the North London Line**

- 5.14 Twelve five-car trains on the Stratford to Richmond / Clapham Junction route on the North London Line are now in service.

These have been delivered as part of LO's capacity improvement programme, marking a significant step in our journey towards increasing capacity on the LO network by 25 per cent. Since the programme began in March 2014 we have also extended 31 platforms, moved electrification masts, and worked on six areas of signalling.



### **Improved access at Shepherd's Bush**

- 5.15 LO customers using Shepherd's Bush station have an additional entrance and footbridge. The station modernisation also includes new ticket vending machines and improved customer information screens. The footbridge enables customers to cross from one platform to the other more easily. The improvements will help to reduce customer journey times and relieve congestion at the main station entrance and exit.

### **Easter trams modernisation success**

- 5.16 Over nine days during Easter we completed phase two of the Addiscombe Road track renewals project, replacing 250 metres of embedded tram track with stronger steel along a busy road in Croydon town centre. One of the main challenges was working close to homes and businesses. Some had front doors less than five metres away and had vehicles that required regular access. However we were able to minimise disruption to local residents by planning the work in phases and using barriers to contain noise and dust.

### **Bidding begins for next London Overground operator**

- 5.17 We have issued a notice with the Official Journal of the European Union to select the next train operator to run LO services from November 2016. Under this concession we will bring in new trains, higher frequency services, and continue the programme of station modernisations. The contract will also include options to introduce an all-night service at weekends on vital LO routes and to extend Gospel Oak to Barking line services to Barking Riverside in 2019. The new operator will be responsible for supporting these improvements and will be expected to continue improving LO's performance levels.



## 6 Customers

### Night Tube on track

- 6.1 We plan to start our round the clock Night Tube service on five lines on Fridays and Saturdays from Saturday 12 September. The frequency of the service will vary by line, but on average there will be a train every 10 minutes on the Jubilee and Victoria lines, and most of the Central, Northern and Piccadilly lines.

Demand for night travel in the capital is rising faster than daytime demand: the number of Night Bus passengers has increased 270 per cent since 2000, and the number of passengers on LU services after 21:00 on Saturdays has gone up 50 per cent since 2003. Night Tube will support jobs and commerce, and improve people's journeys, including people who work at night or use Heathrow Airport before 07:00 on Saturdays.

### Paddington and Piccadilly Circus Visitor Centres open for business

- 6.2 Visitor Centres at Paddington and Piccadilly Circus are now open for business, ensuring that first time and infrequent visitors to London have the best possible customer experience. Following a significant refurbishment programme, this spring and summer we are transforming Travel Information Centres into Visitor Centres, at King's Cross, Liverpool Street, Heathrow Terminals 123, Victoria and Piccadilly Circus. We have also introduced three new centres at Paddington, Gatwick and Euston.



## **7 People**

### **Fit for the Future – Stations: a successful start**

- 7.1 Since 1 February, as we transform the LU service through Fit for the Future – Stations (FftF-S), staff from 103 LU ticket offices have moved to public parts of the station such as ticket halls and platforms. Staff are now more visible and able to help customers. Ticket offices have closed at gateway stations including King’s Cross and Waterloo, as well as major stations such as Tottenham Court Road, Covent Garden, Holborn, Oxford Circus and Westminster. As reported above, more than 2,000 staff members have had the new customer service training, with most giving positive feedback and reporting high confidence levels in their newly-acquired skills. Early indications are that customers find staff more available and helpful at transformed stations.

### **Considerate Constructors Scheme honours Victoria, Bond Street and Tottenham Court Road**

- 7.2 The Victoria station and Bond Street modernisation projects have been awarded Gold in the Considerate Constructors Scheme. Tottenham Court Road won Silver. Victoria was also presented with a Most Considerate Site runner-up award.

### **London Overground and Bond Street win at ICE London Civil Engineering Awards**

- 7.3 At the Institution of Civil Engineers’ London Civil Engineering Awards, the LO team won the highest award, for the greatest contribution to London. The award recognises the successes of the LO Capacity Improvement Project delivering five-car trains on the East London Line in record time.

The Bond Street modernisation project took home the Infrastructure award, recognising its extremely restricted city centre location and measures to minimise disruption to the public.

### **User of the year award for Going Mobile Programme**

- 7.4 LU’s Going Mobile Programme has received the Mobile Information Corporation (Mi-Corporation) User of the Year Award for the Mi-Forms mobile app for iPad and iPhone. Cutting through the expensive inefficiencies of paper forms, the app is enabling asset maintenance staff to collaborate on the go, gathering and sharing critical information across teams and locations.

### **Everywoman in transport**

- 7.5 Promising young LU Project Engineer Zoë Dobell has been awarded Rising Star of the Year at the recent 2015 Freight Transport Association Everywoman in Transport and Logistics Awards, which recognise the talents of remarkable women in the sector.

Three other outstanding women at LU were also commended: Sally Clarke, Upgrades Delivery Manager (Crossrail and Third Party), was a finalist for the Industry Champion Award; Tara Parandeh, Project / Mechanical Engineer, was a finalist for the Innovation and Sustainability Award; and Anne Potter, Acting Portfolio Manager for Stations & Infrastructure, was a finalist for Team Leader of the Year.

### **Paddington wins 2015 RIBA London Award**

- 7.6 The Paddington Integrated Project has been awarded a 2015 RIBA London Award for architecture excellence. The project represents a close

collaboration between Crossrail, LU and Network Rail to create an integrated station that offers a superior passenger experience with easy interchanges.

### **LU wins prestigious human factors award**

- 7.7 The Chartered Institute of Ergonomics and Human Factors of Great Britain has awarded its President's Award for 2015/16 to the LU Capital Programmes Directorate human factors team. It is the highest achievement award the institute can bestow and recognises significant contributions to research, development and application of knowledge in the field of human factors.

Since producing the world's first rail human factors standard over 10 years ago, LU has been at the forefront of human factors delivery. In the beginning only train operators were represented within projects. Today, maintainers and customers are championed too and LU plans also describe how re-use of previously assured work supports best value.

### **LU awarded ISO 55001 certification**

- 7.8 LU has become the first metro in Europe, and only the second in the world behind Hong Kong's Mass Transit Railway, to achieve certification against ISO 55001, the international standard for asset management. This follows LU's previous success in gaining certification against the British specification for asset management, PAS 55.

Achieving ISO 55001 certification means that LU is seen as able to invest funds to deliver best value, focused on improving customer service and reliability, and having a good line of sight between its overall vision and strategy and what's happening on the ground.

### **London Overground train named in honour of Sir Peter Hall**

- 7.9 In recognition of his contribution to London's transport infrastructure, we have dedicated a LO train in honour of the late Sir Peter Hall.



Professor Sir Peter Hall was a celebrated planning expert and valued colleague of TfL. Over the past 40 years his ideas helped shape much of the city's transport, including Crossrail, Crossrail 2, High Speed rail and an orbital London railway that was eventually realised as London Overground.

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## **List of appendices to this report**




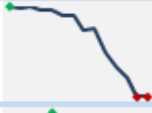





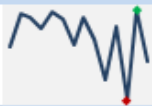
Appendix 1 – Performance Charts








## **List of background papers**











None

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## London Rail and Underground Period 2 2015/16 Performance

			Target	YTD Actual & Variance	Trend*
<b>Service Reliability</b>					
	London Underground	Excess Journey Time (minutes)	4.22	<b>4.05</b> -0.17	
	London Overground	Public Performance Measure (MAA) (per cent)	94.2	<b>94.9</b> +0.7	
	Docklands Light Railway	Scheduled departures operated (per cent)	99.0	<b>99.2</b> +0.2	
	London Tramlink	Scheduled kilometres operated (per cent)	98.0	<b>99.3</b> +1.3	
		Availability (per cent)	95.0	<b>96.2</b> +1.2	








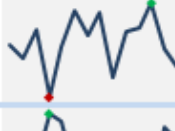


<b>Safety Performance</b>					
	London Underground	Significant injuries per million hours (MAA)	0.40	<b>0.29</b> -0.11	
   	London Rail		0.25	<b>0.20</b> -0.05	

<b>Customer Satisfaction (Overall Evaluation Score)</b>					
	London Underground	Customer satisfaction survey: overall evaluation (score)	83	<b>84</b> +1	
	London Overground		81	<b>83</b> +2	
	Docklands Light Railway		86	<b>89</b> +3	
	London Tramlink		89	<b>89</b> +0	
			93	<b>93</b> +0	

\*Trend is last 14 periods with the red point indicating worst periodic performance, and the green point indicating the best performance

## London Rail and Underground

Period 2 2015/16 Performance

		YTD Target	YTD Actual & Variance	Trend*
<b>Demand</b>				
	London Underground	210.0	216.0 +6	
	London Overground	23.7	25.1 +1.4	
	Docklands Light Railway	18.9	19.1 +0.3	
	London Tramlink	4.4	4.5 +0.1	
		0.32	0.31 -0.01	
Passenger journeys (millions)				

## Lost Customer Hours (000s)

	Asset Performance	1,388	1,313 -74	
	Capital Programmes	176	249 +72	
	Operations (including industrial action)	1,355	1,160 -195	
	<b>Total (including industrial action)</b>	<b>2,919</b>	<b>2,722</b> -197	
	Operations (excluding industrial action)	1,355	1,160 -195	
	<b>Total (excluding industrial action)</b>	<b>2,919</b>	<b>2,722</b> -197	

\*Trend is last 14 periods with the red point indicating worst periodic performance, and the green point indicating the best performance