

# **EDITED PRESS RELEASES**

## **TRANSPORT FOR LONDON**

### **LONDON UNDERGROUND OUTLINES PLAN TO CUT UNDERGROUND DELAYS EVEN FURTHER**

**29 January 2013**

London Underground has today outlined far-reaching plans to meet the Mayor's commitment of reducing delays by a further 30 per cent by the end of 2015. The ambitious strategy, which will be presented to the TfL Board on 6 February, will see LU examining every aspect of how the Underground is operated and maintained to further embed reliability and to radically reduce delays to passengers.

The move follows the creation of an LU reliability task force in 2011, which oversaw the introduction of a range of initiatives to predict and prevent failures, respond more quickly to problems and roll out better equipment. As a result Underground performance reached its best ever levels in 2011/12, and the period covering the London 2012 Games saw reliability at the highest level in London Underground's history. On a line-by-line basis, the additional reduction in delays will be achieved by grouping LU's 11 lines into three levels to get the most from their current and planned condition.

- Newly upgraded lines, such as the Victoria, Jubilee and DLR, will see emphasis on getting the maximum performance from the new trains, track and signalling introduced on those lines.
- Transition lines – the Northern, District, Circle, Hammersmith & City and Metropolitan lines – which are undergoing upgrades, will be focused on to ensure service levels are protected and enhanced while improvement work is going on, and will benefit from the lessons learnt from the upgrades of the Jubilee and Victoria lines.
- The lines which remain to be upgraded (the Bakerloo, Piccadilly and Central lines) will be looked at to ensure that service levels are maintained and ageing assets such as trains and signals are managed in a targeted and intelligent way to prevent service dips, while work to develop the ambitious and integrated programme of upgrades for those lines continues.

LU will also be taking a systematic approach to managing trains, signalling and track. LU will be engaging with and listening to passengers to explore new ways of working together to ensure the Underground is as reliable as possible. New reliability initiatives will include:

- A package of improvement works to both the Central and Piccadilly Line fleets. For the Central Line, the programme will tackle major sources of unreliability stemming from power, electrical and train coupling components, with the potential to reduce fleet-related delays by 14 per cent a year. The Piccadilly Line will benefit from improvements to power systems, a braking system upgrade and communications system overhaul.
- Installation of remote signal condition monitoring equipment on the machines that drive sets of track points and point heaters, giving an early warning of potential failures. The new equipment is now being developed with installation due to begin in 2013.
- Exploring the feasibility of using wi-fi head-mounted cameras for technical staff, so that live video can be beamed to relevant experts to support faster fault diagnosis and repair on signalling and train faults.
- The continuation of a comprehensive £200m track replacement programme, which will underpin the performance of both trains and signalling. Work will be ramped up on the Jubilee, Northern and Piccadilly lines, with 50km of track to be replaced by 2015, providing a 50 per cent improvement in track performance. Rail grinding, which improves ride over worn track, will be almost doubled to reduce speed restrictions across the network.
- The rollout of the Automatic Track Monitoring System (ATMS) over the coming months, enabling continuous and accurate monitoring of rail condition, using in-service trains.
- Further work to encourage passengers to help reduce delays, including highlighting how discarded litter and door-holding can lead to delays for themselves and others, use of passenger emergency alarms, and dealing with people falling ill on trains, the largest passenger-related factor causing delays. LU will be looking to improve the effectiveness of response of staff trained in first aid, and will work with major London hospitals to explain the balance of risks between ill passengers and those travelling on the rest of the network, such as those on crowded trains in tunnels.

- Further development of LU's Station Assistant Train Services (SATS) role which, during peaks, helps to keep busy trains moving. An initial trial is planned for ten central London stations including Oxford Circus, London Bridge and Victoria.
- Exploring the potential for new way-finding signage such as seen during the Games, with work at King's Cross St. Pancras, Stratford, Paddington and London Bridge.
- Developing a Travel Demand Management (TDM) programme building on the success of the *Get Ahead of the Games* campaign to help passengers avoid hotspots during times of peak demand;
- Working with frontline staff to build on the Games-time performance and deliver even greater operational excellence, by exploring new ways of working supported by technology to reduce disruptions to customers. New systems to support deployment of staff at local and network levels will also be developed.

LU's reliability programme will look to deliver best in class reliability on newly upgraded lines. On the Victoria Line for example, work has been undertaken to equip the new train fleet to enable maintenance staff to remotely monitor the trains' systems using the Wi-Fi network being rolled out on the Underground. This will enable technicians to carry out a health check on any Victoria Line train in service to see if any systems are in need of attention, allowing staff to take real-time decisions on whether to take a train out of service to prevent delays from occurring. On the Jubilee Line, feasibility work is underway to look at extending the automated signalling into depots to manage train movements more effectively, and remote condition monitoring of trains to stop failure before they happen. The foundations of the programme were set up under the LU reliability task force. That was established in 2011 and contributed to LU's current record performance with a range of measures, including:

- A trial of the Underground's Emergency Response Unit vehicles responding to incidents under blue-light conditions. This has halved average response times in central London from around six minutes per mile travelled, to three minutes, and has been made a permanent arrangement.
- A cross-the-board review of response to incidents on the network which has seen LU working even closer with emergency services colleagues.
- A 50 per cent reduction in delays related to fleet failures on the new rolling stock on the Victoria and Metropolitan lines.
- Fitting of covers to Passenger Emergency Alarms on trains on the Jubilee, Northern, Piccadilly and Victoria lines, helping to prevent accidental and malicious activation.
- Investment of £1m to train 20 BTP officers in providing advanced medical support quickly where customers are taken ill on the network, enabling services to resume quickly and prevent trains queuing behind incident trains. LU has now confirmed that the trial will be continued.

## **LONDON OVERGROUND INTRODUCES FIVE-CAR TRAINS TO MEET INCREASING DEMAND**

**6 February 2013**

A programme to introduce five-car trains on all London Overground routes and increase the capacity of the railway by 25 per cent, to meet rapidly increasing demand for the network's services, was announced by Transport for London today. The £320m programme includes the construction of longer platforms and the delivery of an extra 57 carriages by the end of 2015, each of which will have the capacity to carry approximately 150 passengers. To accommodate the longer five-car trains some infrastructure upgrades will be required. They are:

- Additional capacity for stabling trains overnight at Silwood Sidings, south east London and also at Willesden depot in north west London.
- Reconfiguration of the New Cross Gate and Willesden depots.
- Platform extensions at some stations on the North and East London lines and associated signalling and power works.
- TfL is entering into negotiations to finalise the delivery and leasing arrangements of the new carriages.
- Enabling works for the infrastructure improvements are due to begin from March 2013 at Silwood (subject to receiving planning approval).

The London Plan forecasts that employment will grow by 670,000 jobs from 2007 to 2021, and population by 810,000 people over the same period. With the impact of schemes such as Crossrail

also taken into account, this will mean that growth in Overground demand is predicted to have increased by 400% between 2007 and 2021 (33m passengers per annum increasing to 165m passengers per annum – put another way about a third more than existing passenger numbers).

## **MARK WALLINGER UNVEILS LARGEST ART COMMISSION EVER FOR THE UNDERGROUND'S 150th ANNIVERSARY**

**7 February 2013**

A total of 270 art works are to be displayed at Underground stations, with the first ten (at Baker Street, Bank, Embankment, Green Park, King's Cross St. Pancras, Oxford Circus, St James's Park, Tottenham Court Road, Victoria and Westminster) going on display from 7 February. In the largest ever commission of its kind, Mark Wallinger today unveiled *Labyrinth*, 270 unique works one for each of the 270 stations on the London Underground network. Inspired by the lexicon of the symbols of London Underground that have become some of the most recognised in the world, Mark Wallinger chose the ancient symbol of the labyrinth with its single path as the theme of the work. Each station will have its own unique Labyrinth design, emblazoned in black and white on a single 600mm<sup>2</sup> vitreous enamel panel, located in a prominent position, representing the journey through the network taken by millions of individuals each year from that place.

*Labyrinth* will be installed across the whole network during the next few months, completing the permanent installation in all 270 stations in the summer.

## **LONDON OVERGROUND CONCESSION EXTENDED UNTIL NOVEMBER 2016**

**11 February 2013**

Transport for London announced today that it has granted a two-year extension to its contract with London Overground Rail Operations Ltd (LOROL) to operate the London Overground network on its behalf. Following a hugely successful Olympic and Paralympic Games for London Overground with sustained levels of train punctuality since then, TfL has taken up the option of extending its existing contract with LOROL. Under the contract, LOROL will continue to be responsible for the operation of the London Overground train services, maintenance and operation of the stations which they manage and the maintenance of the Class 172 trains which run on the Gospel Oak to Barking line. The extension will run from 8 November 2014 to 12 November 2016. The concession will be re-tendered in 2016.

## **CROSSRAIL**

### **CROSSRAIL'S SIXTH AND SEVENTH TUNNELLING MACHINES ON THEIR WAY TO LONDON**

**1 February 2013**

Crossrail's sixth and seventh tunnel boring machines (TBMs) have rolled off the production line and are set to start their journey to London. Both machines have recently completed their factory testing at the Herrenknecht factory in Germany and are now in the process of being dismantled, boxed up and transported to Rotterdam, where they will be put on a ferry to Tilbury in Essex. TBM 6, Mary, will drill a tunnel under the Thames from Plumstead to North Woolwich alongside her sister machine Sophia, who commenced tunnelling at the start of January. Known as a 'slurry' machine, Mary is specially equipped to deal with the chalk, flint and wet ground conditions that she will encounter in southeast London. TBM 7 will be used on the drive from Pudding Mill Lane to Stepney Green, which will start in the summer. This is an Earth Pressure Balanced machine designed for the London clay found north of the River. All the machines' components are expected to arrive at Crossrail's sites within the next month where they will be reassembled. There are no manufacturers of tunnel boring machines in the UK.

### **WOOLWICH CROSSRAIL STATION BOX COMPLETED**

**7 February 2013**

The huge station box at Woolwich, which has been built as part of the Crossrail project, has been completed by developer Berkeley Homes at its landmark Royal Arsenal Riverside development. The new station box is 256 metres long, 26 metres wide and 18 metres deep. Berkeley Homes has completed the vast station box four months ahead of schedule. The eastern end of the box will be handed over to Crossrail in early March. The Woolwich box will act as an important staging post for

the two 1,000 tonne tunnelling machines, Sophia and Mary, that are digging twin bore tunnels from Plumstead, underneath the River Thames to North Woolwich.

## **SOPHIA OFF TO A FLYING START ON THAMES TUNNEL JOURNEY**

**7 February 2013**

The construction of Crossrail's Thames Tunnel got off to a flying start with an innovative new tunnel machine launch method developed by Hochtief. This is the first time that the technique, called 'flying shield tunnelling', has been used in the UK, having embarked on its maiden 'flight' in Cologne, Germany in 2005. The pioneering method focuses on the very start of tunnelling, when the tunnel boring machine (TBM) cannot yet support itself on newly created tunnel walls. Traditional methods use a steel support structure and six or seven dummy concrete rings for the machine – a kind of temporary tunnel – that provides a surface for the machine to brace itself against to push forward and begin tunnelling. The Hochtief patented method uses a hydraulic system to pull the TBM forward. As a result, the temporary tunnel is not needed. Sophia, Crossrail's fifth tunnelling machine, began her journey from Plumstead to North Woolwich earlier this year as part of the construction of a tunnel under the River Thames. The 110 metre long machine is scheduled to drill at an average rate of around 100 metres a week, installing precast concrete segments as rings to form the tunnel lining as it advances forwards.

## **CONSTRUCTION STARTS ON CROSSRAIL TUNNEL PORTAL AT VICTORIA DOCK IN EAST LONDON**

**14 February 2013**

Construction work is now underway on a new tunnel portal at Victoria Dock which will help create a key 1km tunnelled section of the new Crossrail route in east London. The Victoria Dock Portal will allow the new Crossrail trains on the existing surface railway from the east to move underground and into Crossrail's tunnelled section beneath central London. Major engineering works were carried out over the Christmas period with 200 workers moving and renewing 420 metres of Docklands Light Railway (DLR) tracks to create space for the construction of Victoria Dock Portal.

With the DLR tracks moved, work is now underway to build the foundations for the portal structure which is close to Custom House DLR station. More than 700 piles (the columns that will support the portal structures) will be driven into the ground to form the foundations for the 20 metre wide, 371 metre long and 13 metre deep portal.

Once the first section of the Victoria Dock Portal has been completed in early 2014, a single tunnel boring machine (TBM) will be launched in summer 2014 from the Limmo Peninsula site near Canning Town, tunnelling its way towards Victoria Dock Portal where it will break-through later in 2014. The TBM will then be taken back to the Limmo site so that it can create a second adjacent tunnel to Victoria Dock Portal, completing a crucial 1km section of the Crossrail route. Once the TBM has departed Victoria Dock, the construction of the remaining sections of the portal structure will continue and will be completed in 2015.

## **CROSSRAIL AWARDS TRACTION POWER SUPPLY CONTRACT**

**28 February 2013**

Crossrail has awarded the contract for the high voltage traction power supply contract to AC Joint Venture (Alstom Transport and Costain Limited). The scope of works includes the provision of traction power, distributed within Crossrail's central section extending from Royal Oak portal in the west to Pudding Mill Lane in the east, splitting at Stepney Green Junction and running to Plumstead portal in the southeast.

The work will involve the construction of a feeder station at Pudding Mill Lane where power from the 400 kV National Grid network will be converted down to 25 kV before being fed into the overhead line equipment that will power the new Crossrail trains. A separate feeder station will be constructed by Network Rail at Kensal Green. Four high voltage auto transformer stations will be also constructed at Westbourne Park, Stepney Green, Custom House and Plumstead to maintain the voltage along the line.