Railway Upgrade Plan – Western

2017/18
Glossary

**CaSL** – Cancelled and Significantly Late. This measures how many trains are cancelled or are more than 29 minutes late at their terminating station.

**Passenger satisfaction measure** – How this is measured is determined by route, but is normally from the National Rail Passenger Survey conducted by Transport Focus.

**PPM** – Public Performance Measure. This is the percentage of trains that arrive at their terminating station within five minutes (for commuter services) or ten minutes (for long distance services) of when they were due.

**Reduction in railway work complaints measure** – We believe that the number of complaints that we receive from the public about our work could be reduced if we improve how we inform people about work due to take place, and ensure all our staff behave considerately towards those living and working close to the railway. Each route is therefore aiming to reduce the number of complaints it receives in the coming year.

**Right Time Arrival** – This measures the percentage of trains arriving at their terminating station early or within 59 seconds of schedule.
Introduction from the route managing director – Mark Langman

The Western route stretches across the Thames Valley to Oxford, Worcestershire, the Cotswolds, South Wales, the West and South West. It encompasses some of Britain’s most important towns and cities, as well as one of Britain’s busiest rail routes, the Great Western Mainline. We own and manage over 900 miles of track; as well as London Paddington, Reading and Bristol Temple Meads stations.

The route is currently undergoing the largest period of investment and modernisation since it was built by Brunel over 175 years ago. In 2017, the Greater West Programme, delivered by Network Rail, Great Western Railway, the Department for Transport, Hitachi and Bombardier, will enable passengers to benefit from new electric services and upgraded trains across the route.

In January this year, passengers benefited from new ‘Electrostar’ trains running more frequently between London Paddington and Hayes & Harlington. By June 2017, these services will extend to Maidenhead, providing 6,550 extra seats per day in each direction.

In autumn 2017 the new, British-built, Intercity Express Trains (IET) will start running on our network. Each IET will offer up to 24 per cent more seats per service over the existing trains on long distance services. We are making all of this possible by raising bridges, lowering track, extending platforms and installing the hundreds of miles of overhead electric wires required to run electric trains.

We are putting passengers at the forefront of everything that we do. We have established an alliance with GWR to deliver more improvements to passenger services. This year we have established an independently chaired Route Supervisory Board comprising Network Rail, GWR, Heathrow Express and Transport Focus to help drive more improvements for passengers from our joint working. Improving capacity for passengers remains vital given that we expect journeys into Paddington to increase by 29% by 2019, and by 99% by 2043.

Route at a glance

- CPS (2014-2019) renewals and refurbishment spend – £1.27bn
- 2,100 train services per day
- 7,058 bridges, 700 level crossings, 65 tunnels
- 198 stations
- 2,400 track miles and 933 route miles
- C. 2,500 employees
- 50m annual rail passenger journeys

Our customer focused targets for the year ahead

[NB these are a selection of our targets, and remain subject to ORR and DfT approval].

Great Western Railway
PPM – 90%
CoSL – 2.8%

Heathrow Express
PPM – 90.1%
Right Time Arrival – 70%

Route-wide
Passenger satisfaction – 85%
Railway work complaints – 1,285
Electrification of the main line from London to Cardiff via Bristol, and to Newbury

West of England rail upgrade programme
Elizabeth line (Crossrail)
Environmental resilience improvements
Cornwall resignalling
Western Rail link to Heathrow
North Cotswolds rail upgrade plan

1. Filton Bank additional tracks
2. Bristol Temple Meads
3. Bristol Parkway capacity works
4. Paddington station
Greater West Programme
A number of projects to improve the railway in the West, including:
- Electrification of the main line from London to Cardiff via Bristol, and to Newbury
  In the year ahead: By June we will have electrified the line between Paddington and Maidenhead and by the end of the year between Paddington and Didcot. New Intercity Express Trains (IETs) will start running between London Paddington and Bristol Temple Meads, and other destinations, in the autumn.
  By 2019: We will complete electrification between Paddington, Bristol, Cardiff and Newbury.
- Bristol Area Signalling Remodelling
  In the year ahead: We will continue to install new state-of-the-art signals across the Bristol area, including beyond Bath Spa.
  By 2019: The project will be completed by Easter 2018.
  Passenger benefits: Improved infrastructure reduces the risk of delays and cancellations.
- West of England rail upgrade programme
  As the new ‘Electrostar’ trains are rolled out in the Thames Valley, the old diesel trains being used in the Bristol, Bath, Somerset and Wiltshire area can be replaced by the more modern ones currently used in the Thames Valley. We are upgrading the infrastructure to allow this to happen.
  In the year ahead: Platform works to enable the new trains to begin operating.
  By 2019: Work continues.
  Passenger benefits: More modern trains, with more seats and an improved passenger experience.

Elizabeth line (Crossrail)
We are upgrading and electrifying the infrastructure to allow Elizabeth line services to run from Paddington to Heathrow and Reading.
In the year ahead: Electrification between Maidenhead and Heathrow airport.
By 2019: Services between Heathrow and Paddington will begin in May 2018 and the line will open in full by December 2019.
Passenger benefits: New, longer trains, new services and destinations, better stations, faster journeys, improved connections, reduced risk of delays and cancellations.

Environmental resilience improvements
We are doing work to reduce risks from flooding.
In the year ahead: Work at Exeter Cowley Bridge and Chipping Sodbury; and between Exeter and Newton Abbot.
Passenger benefits: Reduced risk of delays and cancellations.

Western Rail link to Heathrow
A new, five kilometre tunnel will link the Great Western Main Line directly to Heathrow Terminal 5.
In the year ahead: Consultation will go ahead on the detailed design.
By 2019: If planning consent is received we will be preparing for work on site.
Passenger benefits: Faster journeys, easier connections to Heathrow from the Midlands, West of England and Wales, reduced crowding at Paddington.

North Cotswolds rail upgrade plan
We are lengthening platforms at seven stations along the North Cotswolds line.
In the year ahead: Developing the project.
By 2019: Work will be completed.
Passenger benefits: Access to new, longer trains.

Cornwall resigndallng
We are adding new signals in Cornwall, to allow more trains to run.
In the year ahead: We will complete our work.
Passenger benefits: An hourly train service can run throughout the day.

Filton Bank additional tracks
The number of tracks between Bristol Parkway and central Bristol will be doubled from two to four, along with station improvements along the line.
In the year ahead: Earthworks and station works continue, and new Intercity Express Trains will run along existing tracks.
By 2019: Four tracks in place and ready for use.

Bristol Temple Meads
We are constructing new entrances to the station.
In the year ahead: Project development.
By 2019: New entrances.
Passenger benefits: Improved passenger experience and accessibility at the station.

Bristol Parkway capacity works
We are building a new platform, lengthening existing platforms and improving signalling to allow the new Intercity Express trains to use the station.
In the year ahead: Platform and signalling work undertaken.
By 2019: New platform into use.
Passenger benefits: New trains with more seats and improved passenger environment. Less crowding at the station.

Paddington station
Improvements to the busiest station on the route.
The year ahead: Preparation for Crossrail, including access from the Bakerloo line. Platforms enabled for electrification.
By 2019: Crossrail station will be open and operational; improved ticket gates.
Passenger benefits: More trains; faster, longer trains; improved retail experience; better connections.

Forecast growth for journeys

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<tr>
<th>Journey</th>
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<td>London Main Lines</td>
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<td>London Relief Lines</td>
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<td>Into Reading</td>
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<td>Thames Valley Branches into London</td>
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<td>Greater Bristol Area</td>
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<td>London to Cornwall</td>
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<td>Between Cornwall and Exeter</td>
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