# A guide to the rail programme for Network Rail 2014-19

OFFICE OF RAIL REGULATION

**October 2013**

# Contents

# Setting the context

## About the review

**This guide explains the Office of Rail Regulation's (ORR's) role in regulating Britain's railway. It outlines the main decisions we have taken in setting the direction for Network Rail between 2014-19 and is based on our final determination, published on 31 October, 2013.**

**It also outlines how we will regulate Network Rail over the next five years.**

## The Office of Rail Regulation (ORR)

ORR is the independent safety and economic regulator for Britain's railway. Our main roles are:

- to regulate health and safety on Britain's rail network, including all mainline and regional routes, London Underground, light rail, heritage railway and trams; and
- to regulate Network Rail and set its funding following government policy – to ensure that it delivers high levels of performance and service, as well as good value for money for passengers and taxpayers.

We also make sure that train and freight operating companies enjoy fair access to the rail network. We encourage closer working between Network Rail and its industry partners to increase performance, reduce costs and maximise rail network capacity. We also have some statutory competition and consumer functions.

There have been significant improvements on the railway in the last decade:

- We now have one of the safest railways in Europe;
- Around nine out of ten trains run on time today – up from 79% in 2002;
- Day-to-day running costs have fallen by 40% since 2004; and
- Passenger satisfaction with train services has risen to a record level of 85%.

We have helped Network Rail and the train operating companies to achieve all this at a time when major works were necessary to upgrade the network and demand for rail travel has increased rapidly. In 2012, there were nearly 1.5 billion passenger journeys on the railway, up more than 50% over the past decade. Between 2014 and 2019, we're expecting passenger traffic to grow by a further 14% and freight volume by 4%. This has also been a period of significant government investment and it is planned for the governments investment to be £18bn over the next five years.

## Holding Network Rail to account

Against this backdrop of significant improvements on the railway – and with investment in infrastructure and new capacity set to rise – our role in holding Network Rail to account in its delivery is vital to the continued success of the railway. The company has a monopoly over most of the rail network and is part-funded by considerable amounts of taxpayer's money. So it's essential that we regulate it properly to ensure that it operates efficiently and delivers an improving and safe service for passengers and freight customers.

Regulation also plays an important strategic role in ensuring the railway is run as a network for the benefit of the whole country, that the best use is made of scarce capacity and that decisions are made for the long term.

While our preferred approach is to create incentives for the industry to work together to deliver greater efficiency and safety without too much intervention from us, there are some key areas where Network Rail has not met the required targets in this current control period (CP4, running from 2009 to 2014) which mean we will need to work more closely with it in control period 5 (CP5, 2014-19). Our role includes the following:

- ensuring that Network Rail and other rail businesses operate safely in compliance with the law;
- monitoring the company's performance;
- reviewing its work and spending plans;
- setting targets for performance and efficiency; and
- taking enforcement action where necessary, including financial penalties when performance does not meet the required standard.

## The 2013 Periodic Review

One of the main ways we determine Network Rail's performance targets is through our review of the company's five-yearly Strategic Business Plan. It is our job to check that the plan is both affordable and that every penny counts towards delivering what governments and customers want.

We have just completed our review of Network Rail's Strategic Business Plan for the years 2014-19 – control period 5 (CP5). We started the process in 2011 by holding a series of public events in London, Manchester, Edinburgh and Cardiff and we have also consulted widely among stakeholders including governments, passenger and consumer groups, train and freight operating companies, freight users, local authorities and Network Rail itself.

Our decisions are informed by what passengers, freight users and other stakeholders have told us. They will determine how the railway improves and develops, without compromising safety levels over the next five years – when it will have a vital role in supporting the national and local economy.

Network Rail will now prepare a delivery plan setting out how it will implement our decisions for the next five years, as well as a route utilisation strategy (RUS) on how it will meet predicted demand for capacity on the rail network. The new plan will begin on 1 April, 2014.

**"Over the next five years, devolution from the centre to the 10 regional operating routes will allow the routes to develop regional expertise and respond to regional demands more efficiently and effectively."**

## Our main decisions at a glance

We have set targets for Network Rail that are **stretching but deliverable,** provided it improves its performance in some key areas. We require Network Rail to deliver the following from its £38bn of funding by the end of CP5:

- **To become more efficient and deliver better value for money.** Our evidence shows that Network Rail can deliver what the governments want for less than the company proposed – while still ensuring safety. Our assessment shows that day-to-day running costs should be £1.7bn less than it proposes, and it may be able to make additional savings on improvement projects. However, we have funded it to continue to spend at close to its current levels on maintenance for the early years of the next period and improve the quality of its structures such as bridges and tunnels.

- **To deliver a set of improvement projects, increasing capacity and service to passengers.** There will be around £13bn available for improvement projects between 2014 and 2019. Already-approved schemes such as Crossrail and the Edinburgh-Glasgow Improvement Project will go ahead as planned. To protect taxpayers' and users' interests, projects at an early stage of planning will be developed further so that we can be sure that they represent value for money and will deliver the improvements that customers want. We'll therefore require that train operators and passengers have a say in the specification and delivery of Network Rail's projects.

- **To improve reliability across the sector.** We've set a target of an average of 92.5% for passenger trains arriving on time by 2019. We've also set a target to reduce the average number of cancelled and significantly late-running passenger trains (over 30 minutes late) to no more than 2.2%. This performance improvement needs to be delivered in spite of the predicted growth in passenger numbers.

- **To keep disruption to a minimum.** Network Rail should keep disruption caused by engineering work to a minimum. We recognise that localised disruption may increase at times, reflecting the amount of new investment going into improvements – but we've set targets of 8% less disruption to passenger trains and 17% less for freight. We'll monitor the disruption to make sure the impact is reduced and take action if necessary.

- **To manage network infrastructure better.** This is crucial to safety, efficiency and the network's performance – so we will pay close attention to how Network Rail performs in this vital area. We are requiring specific improvements, so that by 2017 Network Rail will have a much better knowledge of the condition of its track, bridges and other assets. This will make it more able to predict and prevent faults before they occur, and to reduce significantly the delays caused by asset failures. We'll specify how to measure asset management and set Network Rail some stretching targets. We've allowed investment levels which tackle decades of underinvestment in the network's assets.

## Who's who?

**Office of Rail Regulation (ORR)** – the independent safety and economic regulator for the railway.

**Network Rail** – the private monopoly company that owns and operates most of Britain's rail infrastructure, and which is regulated by ORR.

**The ten regional operating routes** – the ten routes within Network Rail that are now devolved from the centre, allowing them to develop regional expertise and respond to regional demands.

**Department for Transport (DfT)** – the government department at Westminster that sets transport policy for England and Wales.

**Transport Scotland** – the national transport agency for Scotland that sets transport policy in Scotland.

**Train operating companies (TOCs)** – the companies that operate passenger train services, in most cases under franchises let by DfT or Transport Scotland.

**Freight operating companies (FOCs)** – the companies that operate freight services on Britain's railway.

**Passenger Focus -** Independent public body set up by the Government to protect the interests of Britain's rail passengers

**Passenger Transport Executives (PTE) -** PTEs are local government bodies which are responsible for public transport within large urban areas

**Transport for London (TfL) -TfL** is the local government body responsible for most aspects of the transport system in Greater London.

**Supply chain -** The private companies which supply engineering and other services to

- **To reduce safety risk to the public, passengers and workers.** There will be £250 million to improve worker safety, including new equipment to reduce the risks from high voltage electricity, being hit by a train and working with road rail vehicles. A further £109 million will be ring-fenced to reduce the risk posed by level crossings (including 500 level crossing closures). We'll ensure that Network Rail provides more detail on its plans to reduce accident risk by 50%.

- **To provide greater transparency on expenditure.** Recognising that passengers, taxpayers and the freight industry have a significant amount invested in the railway, we'll require improved transparency from Network Rail on how money is spent, where it is spent, and what it delivers, disaggregated to a route level. We'll also report on how all parts of the industry are performing and what we've done to address performance levels that are below expectations. We'll also publish and monitor key information for passengers. There will be improved financial reporting for Scotland.

## How we'll work with Network Rail

We will be:

- looking much more closely at what Network Rail is doing, particularly how they are managing, maintaining and renewing the rail network;
- checking closely on the company's progress to make the network more resilient to adverse weather;
- more specific about what is required to improve asset management and what the priorities are;
- getting better information from Network Rail to help us decide how it is performing; and
- intervening at an early stage, so that emerging problems don't have a chance to escalate.

If performance improves, then we will be willing to adapt our approach to monitoring performance.

# Who pays for the railways?

**Our determination provides for Network Rail to spend around £38bn on the railway during CP5 (2014-19). In the 2013 periodic review we have worked to ensure that the company uses this money efficiently, so that customers and taxpayers get a good deal.**

Britain's railway is vital to the country's economy. More people and more goods than ever - now move by train – passenger journeys are up by more than 50% over the last decade and the railways carry 17% more freight than in 2001. Last year alone, over 1.5 billion passengers used the rail network – and increase of 8%. That's 24,000 trains every day. Forecasts show that demand will continue to rise with 14% more passengers and 22% more freight by the end of CP5.

New projects to increase capacity of the railway, such as Crossrail, Thameslink and the Edinburgh-Glasgow Improvement Project, are needed to keep pace with growing demand– and they form part of governments' plans to boost economic growth through investment in major infrastructure. Other projects specified by the governments' include the creation of the English Electric Spine (from the south coast to the Midlands and Yorkshire), the electrification of the Welsh Valleys lines, the Northern Hub capacity enhancements and improvements in railway links to ports and airports.

However, it's important that passengers, freight customers and taxpayers get value for the contribution they make. In 2011-12, passenger fares made up almost 60% of total railway income at £7.2bn (in 2011-12 prices).

Taxpayers also make a significant contribution. More than 30% of total railway income in 2011-12, amounting to £4bn, came from the governments.

## Bearing down on costs

Government funding has been very high because of the investment needed to upgrade the railways and ensure safety, particularly since a number of high-profile, multiple-fatality rail accidents at the turn of the 21st century. Through our previous reviews, we've required Network Rail to deliver significant reductions in the cost of its operations, such that by March 2014 Network Rail should have improved its efficiency by 40% since April 2004.

## More value for money

Between 2014 and 2019, Network Rail will need to work harder than ever to ensure that passengers, freight users and taxpayers get maximum value for the money they spend on our railways. Our review has involved looking at the Network Rail plan from top to bottom in significant depth and detail, drilling down to costs at route level. We have also collected our own evidence and drawn on international studies comparing railway costs around the world.  We have also reviewed in detail the biggest areas of proposed spending by Network Rail: improvement projects and investment in replacing infrastructure such as track, buildings and bridges. We also want passengers and train and freight operating companies to have a bigger say in how the network is improved.

Our analysis of Network Rail's proposed plan shows that it can run the network for £1.7bn less than it originally proposed. Our analysis also showed that Network Rail can achieve nearly 20% greater efficiency compared to the end of CP4. If the company can do this by 2019, we believe that the efficiency challenge identified in the Rail Value for Money (RVfM) study (led by Sir Roy McNulty and published in May 2011) will have been fully addressed for CP5.

## How the rail industry is funded

Total income in 2011-12: £12.5bn

(all figures in 2011-12 prices)

This figure is made up of….

- £7.2bn from passengers
- £1.3bn from commercial operations such as station shops and car parks
- £4.0bn in subsidy from the taxpayer

Of this £4.0bn taxpayer subsidy…

- £0.1bn went to train operating companies
- £3.9bn went to Network Rail

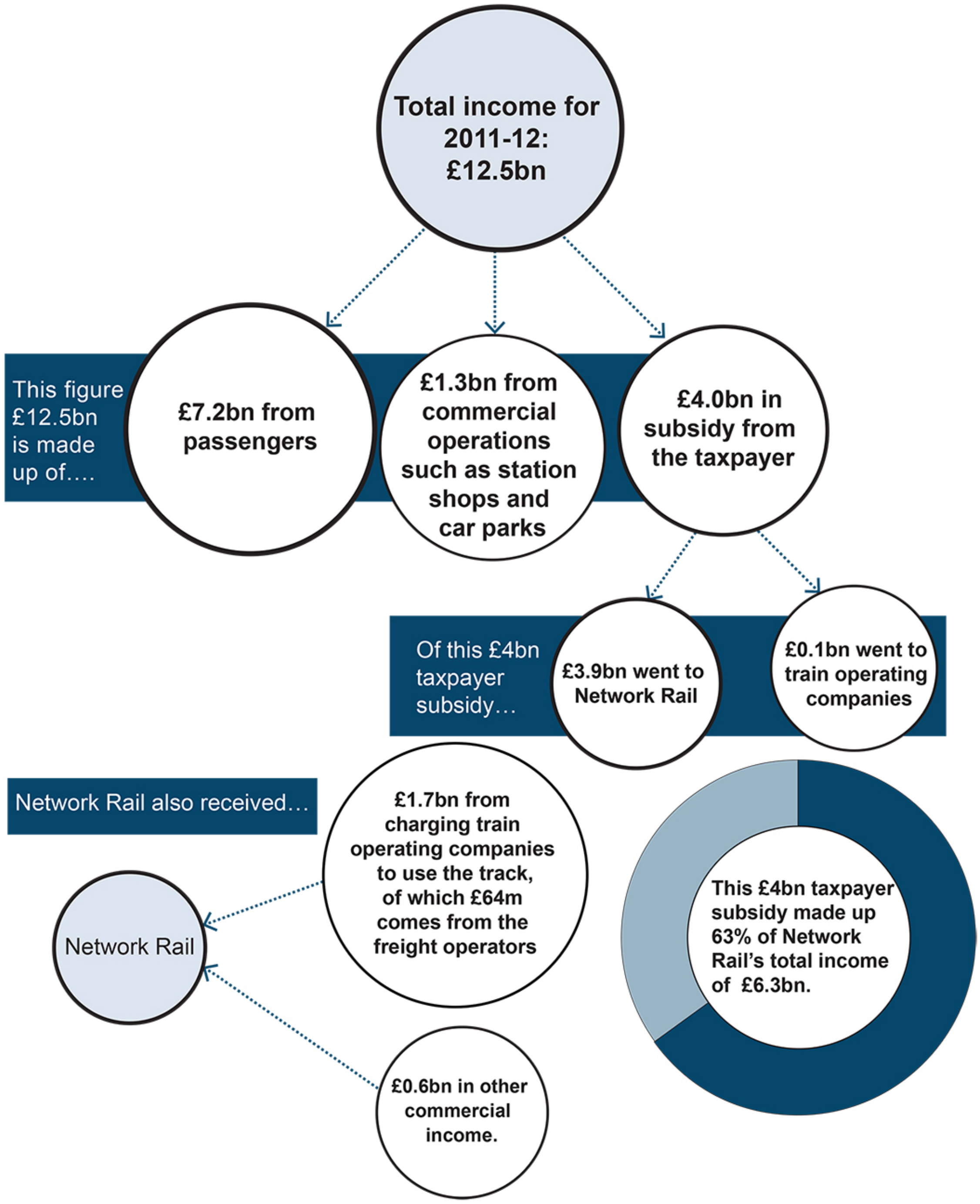
Network Rail receives 63% of its income in the form of a grant from government and

- £1.7bn from charging franchised train operating companies to use the track
- £0.6bn in other commercial income.

## Who pays for the railway?

It is our view Network Rail should spend more than £38bn on the railway during Control Period 5 (2014-19). It's our responsibility to ensure that the company uses this money efficiently, and to get a better deal for passengers and taxpayers.

### How the rail industry is funded: 2011- 2012 (in 2011-12 prices)




# The decisions we've made

## Ensuring value for money

**It's our responsibility to ensure that Network Rail delivers what governments want, provides what is in the best interests of customers and taxpayers and provides real value for the money available.**

## What the governments want

The governments want the rail industry to be more financially efficient – without compromising levels of performance or safety.

## What Network Rail proposed

Network Rail says that it is on target to make total savings of 40% by 2014 compared to 2004. Our analysis of its plan showed that it planned to deliver a further 13.8% in efficiency savings by the end of CP5. It intended to do this through measures such as: alliances with train companies; devolution of decision-making to the 10 regional operating routes; better work scheduling, standardised processes; use of new technology; consolidation of operating centres and many other initiatives.

## What ORR has decided

- In response to the governments' requirements, ORR has examined Network Rail's plans right down to route level to see whether additional savings are possible. We have focused on the biggest area of proposed spending by Network Rail- investment in replacing infrastructure such as track, buildings and bridges.

- Network Rail identified significant potential savings. However, our analysis has shown that there are more savings to be made and that the company can run the Network for £1.7bn less than Network Rail estimated. We have asked for further savings of nearly 20% by the end of CP5 compared to the end of CP4. There may also be additional potential savings to be made on railway improvement projects

- New regulatory targets will require levels of passenger train punctuality increase to a minimum average of 92.5%, with cancellations and significant lateness accounting for an average of no more that 2.2% of passenger services; higher standards of network infrastructure management; and improved safety for passengers and railway workers. We will focus on the worst-performing areas.

- Some of Network Rail's investment plans have already been approved and work has already commenced in many cases, including Crossrail and the Thameslink upgrade. We'll ask

Network Rail to do further work on the scope of those other projects which are at an early stage of development. Network Rail will also have to consult widely with train companies and passengers and other relevant stakeholders before we approve the cost of these projects.

- We'll continue to monitor efficiency closely. But we will also ensure that it never comes at the expense of safety. For example, funding will allow Network Rail's expenditure on maintenance to stay at or close to current levels in the first few years of CP5 to allow the introduction of new initiatives that will deliver efficiencies later. We have assumed funding for civil structures such as bridges and tunnels to tackle historic under-investment.
- We're developing better ways to measure performance and identify whether Network Rail is performing cost-effectively. Devolution from the centre to 10 key routes will allow us to compare how efficiently different parts of the network are delivering.
- We'll require Network Rail to improve openness about how money is spent on infrastructure plans and what it achieves, giving us and taxpayers a much clearer view of exactly how much is spent on each route.
- We'll also report on how all parts of the industry are performing and what we've done to address poor performance, including at route level and more locally where feasible, and we'll ensure greater transparency on expenditure and better information for passengers.
- In summary, Network Rail can deliver what the governments in Scotland and Westminster have asked for by spending less money. In total, the savings amount to £1.75 billion. Investment in the railways will continue but it needs to be spent carefully – and much more efficiently.

We're asking Network Rail to deliver stretching efficiency improvements for control period 5.

**Summary of our CP5 efficient expenditure assumptions**

| £m (2012-13 prices) | PR08 | CP4 (adjusted) | SBP | DD | FD | FD (on a comparable basis to the SBP) |
|---|---|---|---|---|---|---|
| Support costs | 4,113 | 2,740 | 2,232 | 2,093 | 2,119 | 2,119 |
| Network operations | | 2,239 | 2,027 | 1,968 | 1,968 | 1,968 |
| Traction electricity, industry costs and rates | 2,175 | 2,349 | 3,701 | 3,114 | 3,056 | 3,056 |
| Network maintenance | 6,126 | 5,553 | 4,669 | 4,645 | 4,645 | 5,166 |
| Schedule 4 costs | 870 | 875 | 712 | 1,131 | 1,058 | 1,058 |
| **Total operating expenditure** | **13,284** | **13,756** | **13,341** | **12,950** | **12,846** | **13,367** |
| Renewals | 13,141 | 12,686 | 14,365 | 12,681 | 12,822 | 12,107 |
| Enhancements | 9,296 | 11,294 | 12,388 | 12,239 | 12,625 | 12,818 |
| **Total capital expenditure** | **22,437** | **23,980** | **26,754** | **24,920** | **25,447** | **24,925** |
| **Total expenditure** | **35,721** | **37,735** | **40,095** | **37,869** | **38,293** | **38,293** |

The table above contains a summary of our efficient expenditure assumptions (FD) compared to PR08, forecast CP4 outturn (adjusted to make it more comparable to this determination), Network Rail's SBP and our draft determination (DD). The comparability adjustment to the FD column reflects the combined effect of the adjustments in terms of the classification of reactive maintenance and ETCS cab fitment.

# Investing for the future

**We've examined the company's plans for improvement works carefully and will approve them when we are sure they offer good value for money.**

## What governments want

The governments expect strong passenger growth to continue throughout CP5, with 14% more passenger demand by 2019 – much of it on commuter services. So they have asked Network Rail to increase capacity at major stations and on key lines into cities such as London, Manchester, Leeds, Edinburgh and Glasgow, as a priority. The governments have also committed to electrify more of the rail network in order to speed up journey times, increase capacity for both passenger and freight trains and reduce the environmental impact of the rail industry.

## What Network Rail proposed

Network Rail's Strategic Business Plan outlined improvement works totalling £11bn in England and Wales and £1.4bn in Scotland for CP5. These are designed to increase the capacity and resilience of the network and improve service to customers. Some of these, totalling over £6bn, are either committed or have been specified by the governments – examples are Crossrail and the Edinburgh-Glasgow Improvement Project.

## What ORR has decided

- Network Rail will invest around £13bn in improvement projects. It's our responsibility to ensure that those in Network Rail's Strategic Business Plan will deliver the benefits specified by governments and provide actual improvements to the railway and passengers. On Network Rail's plans for investment, nearly £6 billion of projects that have been committed, like Crossrail, the Thameslink upgrade, the electrification of the Welsh Valleys line and the Edinburgh-Glasgow improvement project will proceed as planned.

- But we have asked Network Rail to do further work on those projects which are at an early stage of development to ensure that they demonstrate good value for money and have proven benefits to the railway and its users. Around £7bn of the projects, such as the East-West Rail programme and the Highland Mainline in Scotland, are in the early stages of planning. This means there is not yet a defined option on how to proceed and it's hard to predict costs accurately. Without more detail, we can't be sure the planned scope and timings are appropriate.

- To ensure better value for money we have taken a new approach to setting the efficient level of costs for these projects, building on a proposal made by Network Rail. We have made a provisional cost assessment now but we will finalise the total efficient cost in March 2015.
- This will give Network Rail more time to work with the train operators, customer and business groups to get the scope of the projects right.
- We're working closely with Network Rail to ensure they have formal processes to deliver the projects. This includes involving train operators and passengers to ensure their views are taken on board and that the projects deliver what they as customers want.
- There are opportunities for the company to reduce spend by more than we have assumed in this assessment. We want to incentivise Network Rail to work with the industry to 'outperform' this determination, and the company, rail user and taxpayer should benefit from this outperformance.


1 - Aberdeen to Inverness improvements: improved train services and new stations at Dalcross and Kintore.

2 - Highland Main Line improvements: more frequent and faster journey times on the route including better freight connections.

3 - Edinburgh to Glasgow improvements: faster journeys and longer trains providing greater capacity between Scotland's two major cities.

4 - Borders Railway: construction of a line connecting Edinburgh to Tweedbank for the first time since 1969.

5 - East Coast improvements: faster journeys and more train capacity from line improvements between the North East and London.

6 - The 'Northern Hub': track and capacity upgrades across Manchester city centre, Manchester Airport and across to Liverpool, as well as electrification of the North Trans-Pennine route between York and Manchester.

7 - North West electrification: between Manchester and Liverpool, Preston and the Pennines.

8 - Midland Main Line: electrification and capacity improvements including remodelling at Derby.

9 - More commuter capacity: longer platforms and track upgrades creating enough capacity for 140,000 extra daily rail commutes at peak times in cities such as London, Birmingham, Leeds and Manchester.

10 - Great Western Main Line: electrification from London to Oxford, Newbury and Bristol. Capacity works around Reading and Bristol.

11 - An electrified East West railway: providing new links for passengers and freight between Bletchley and Oxford which will also allow Oxford to Marylebone services to be introduced.

12 - Major station improvements: including completion of the schemes at Reading and Birmingham New Street and capacity works at Bristol Temple Meads, Derby and London Waterloo.

13 - An electric spine: an electrified route for passenger and freight services from the South Coast via Oxford and the Midlands to South Yorkshire.

14 - Thameslink: increasing capacity and improving journey times on the existing cross-London route between Bedford and Brighton.

15 - Crossrail: a major new cross-London route which will improve journey times and reduce congestion across the capital, linking Maidenhead and Heathrow in the west with Shenfield and Abbey Wood in the east.

16 - Welsh Valleys line electrification: Valleys near Cardiff and in south Wales plus the mainline from Bristol to Cardiff and Swansea.

**Improving the network**

Major improvements planned for the next five years include:

**Crossrail:** a major new cross-London route which will improve journey times and reduce congestion across the capital, linking Maidenhead and Heathrow in the west with Shenfield and Abbey Wood in the east.

**Thameslink:** increasing capacity and improving journey times on the existing cross-London route between Bedford and Brighton.

**Edinburgh-Glasgow Improvement Programme:** an upgrade and electrification of the main railway line between Edinburgh and Glasgow.

**An electric spine:** through England connecting Yorkshire and the West Midlands to the South Coast ports.

**Great Western:** electrification of the line between London and Swansea.

**Regional routes:** electrification of the lines between Manchester and Liverpool, Preston and across the Pennines to Leeds and York, as well as Welsh Valley lines.

**More commuter capacity:** longer platforms and track upgrades creating enough capacity for 140,000 extra daily rail commutes at peak times in cities such as London, Birmingham, Leeds and Manchester.

**The 'Northern Hub':** track and capacity upgrades across Manchester city centre, Manchester Airport and across to Liverpool, as well as electrification of the North Trans-Pennine route between York and Manchester.

**Major station improvements:** including completion of the new Reading station.

**East Coast improvements:** faster journeys and more train capacity from line improvements between the North East and London.

# Driving high performance

**Reliability has improved on the railway, but there are still too many service delays. We want Network Rail to reach higher performance levels and to manage its maintenance and renewal work better to achieve this.**

## What the governments want

The Westminster and Scotland governments have said that they want an average of 92.5% of all passenger trains to arrive on time by the end of CP5 in 2019. They want no more than 2.2% of passenger trains to be cancelled or arrive significantly late by 2019.

'On time' is defined as within 5 minutes of the advertised time on commuter routes and within 10 minutes on long-distance routes. 'Significant lateness' means any passenger train that arrives more than 30 minutes later than the advertised time.

## What Network Rail proposed

Network Rail estimated that between 91% and 93% of trains would run on time for CP5 (2014-19) and that cancellations would be between 2.16% and 2.36%.

In its plan, the company was confident that increased capacity would improve performance towards the end of the control period, with cancellations at new lows from 2017 and beyond. It also proposed that the target of 92.5% should be phased in over the control period.

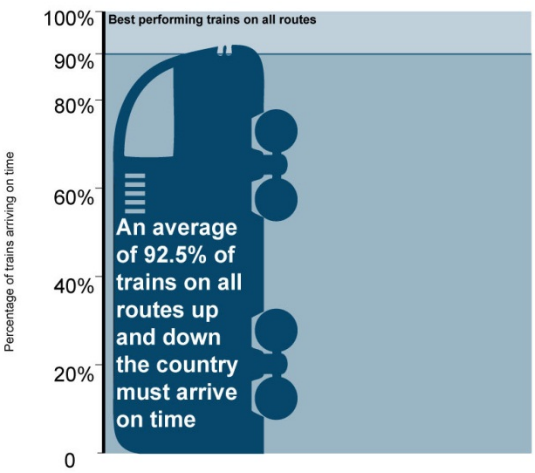
## What ORR has decided

- We'll require Network Rail to achieve an average of 92.5% of passenger trains on time across the network by 2019, with additional annual performance targets being agreed with Network Rail and the train operators. The focus will be on improving services in the worst performing areas.

- We want nine out of every ten regional, Scottish, Southeast and London passenger trains to arrive on time – and for the proportion of cancellations and very late-running passenger trains to reduce to no more than 2.2% of the total.

**By the end of 2019,
ORR will require Network Rail to deliver:**

**Improved performance for passengers**



- We want most passenger train operators to achieve at least 90% of trains running on time by the end of 2019.
- There are three exceptions to this, based on what the train operating companies concerned and their passengers told us about what is important to them.
- Subject to national targets being met by Network Rail, we have agreed a target of 88% for Virgin and East coast lines. This is in exchange for more stretching cancellation and significantly late (CaSL) targets of 2.9% for Virgin (reduced from 4.3%) and 4.2% (reduced from 6%) for East Coast. First Great Western's 90% PPM minimum includes both its long distance and commuter services, but we are also setting a separate 88% minimum target for its long distance services.

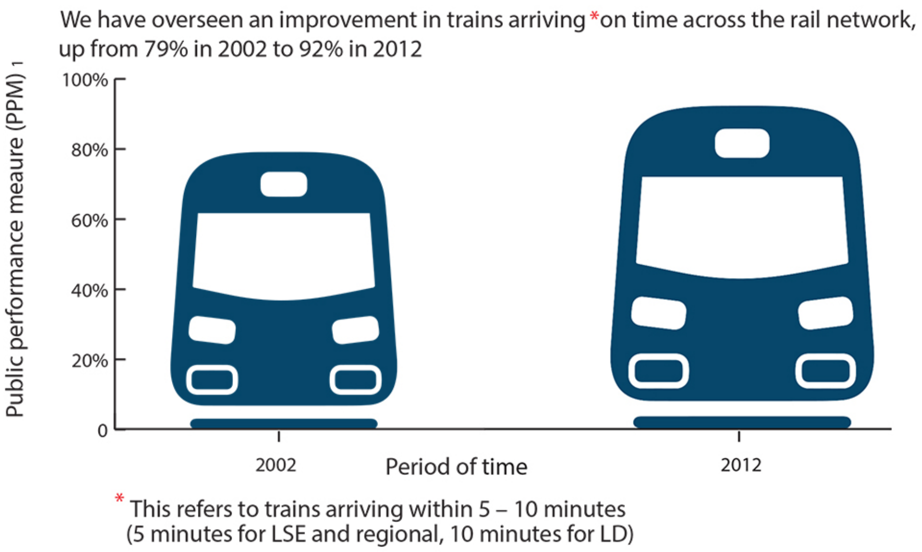
**"Disruption to passengers is down by half since 2008-09.**

**We'll expect Network Rail to deliver the target of 92.5% of trains arriving on time across all ten routes by the end of 2019"**

- There will also be flexibility for train operators to agree joint performance plans with Network Rail so that these can better represent local opportunities and constraints.
  To make sure that the industry stays on track to achieve these targets by the end of the review period, we'll monitor performance closely and step in early to prevent things from going wrong. We will act if any train operating company falls more than two percentage points below its target.
- Although the government has not set targets for freight, we have developed a new Freight Delivery Metric in agreement with the industry, which measures the percentage of freight trains arriving within 15 minutes of scheduled time. We'll require Network Rail's minimum performance to be 92.5% of freight trains arriving within 15 minutes.

There are also plans to improve the information provided to passengers to help them plan their journey. Additionally, a significant fund to improve stations will bring better access for disabled people and older passengers.

## Driving high performance

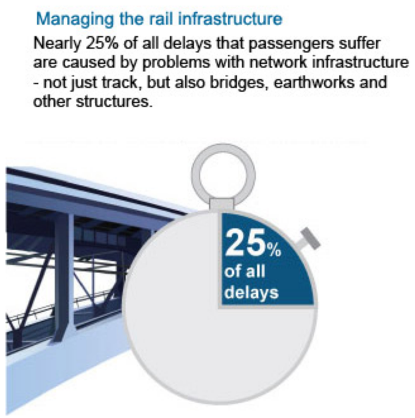



LSE = London and South East, LD = Long Distance

1. Punctuality targets are measured on a public performance measure basis (PPM). PPM is a measure of the percentage of trains arriving at their final destination within ten minutes of the advertised time for long distance trains, and within five minutes for London and South East trains.

# Managing the rail infrastructure

**Nearly 25% of all delays that passengers suffer are caused by problems with network infrastructure – not just track, but also bridges, earthworks and other structures. Any of these can cause delays when they fail, with the potential for costly knock-on effects across the network. Network Rail needs to improve the way it manages its assets to avoid delays and reduce costs. Effective infrastructure management is also critical to safety as it ensures that maintenance can be better planned and implemented.**




## What governments want

The governments have asked Network Rail to make a rapid improvement in its understanding of all the assets it owns in order to minimise disruption and keep the cost of repairs and renewals to a minimum.

## What Network Rail proposed

Network Rail owns around 30,000 bridges, 2,500 stations and 20,000 miles of track across Britain. The company has recognised that it does not have a full picture of the condition of all of its assets and it is putting systems in place to change this, including: using technology, such as handheld devices, to gather real-time information at a route level; improving the asset management competency of staff; and making financial decisions based on the whole-life asset costs. The company's ambition is to be a benchmark for excellence in infrastructure management by 2019, the end of CP5.

## What ORR has decided

- Although Network Rail has improved the performance and condition of the track, it does not have a clear enough picture of the other parts of the railway infrastructure. Up-to-date, accurate data about the condition of its assets enable Network Rail to carry out proactive maintenance to prevent disruption and delays or ensure the safety of the network. Accurate data also enable it to plan work ahead efficiently.

- In order to speed up improvements in asset management, we've proposed a number of targets at the national level so that we can hold Network Rail to account.

- These targets will cover areas such as:
    - the company's overall capability in asset management;
    - the quality of the data it gathers; and
    - the success of its internal asset management programmes.
- We've set strict targets for Network Rail about the way it manages its assets because we want to see fast progress in this area. If our confidence increases in the action Network Rail is taking, we'd expect to be able to adapt our approach to monitoring in the future.
- On civil assets such as bridges, embankments and tunnels, we have allowed specific funding to tackle decades of under-investment. This is essential to underpin reliable delivery by Network Rail and to ensure better punctuality and reliability for customers. We expect this programme to make the railway more robust for the future and more resilient to climate change.

**"We'll be requiring Network Rail to make significant improvements in the way it manages assets like bridges and earthworks"**

- Learning lessons from CP4, we've given Network Rail more time to make sure that when they make changes, such as the introduction of new technology, they do so in a way which achieves sustainable efficiencies in maintenance and renewals and is also safe.

# Making the railway safe for everyone

**Since 2002, there have been considerable improvements in safety on Britain's railway and we now have one of the safest railways in Europe – but we aren't complacent. We'll require Network Rail to build on this success, embedding safety into every activity across the railway – and we won't let efficiency affect this.**

## What governments want

Network Rail is legally required to do everything reasonably practicable to continue to improve safety on the railway. Governments have also allocated £250 million to improve worker safety and ring-fenced funding of £109 million to reduce the risk of accidents at level crossings – one of the largest sources of safety risk on the railway.

## What Network Rail proposed

Network Rail proposed that it intends to eliminate all industry-caused fatalities and major injuries by 2019 and to reduce train accident risk by 50% and level crossing risk by 25% over the next five years.

## What ORR has decided

- For CP5, Network Rail's Strategic Business Plan did not show how progress on safety will be measured and tracked. For example, we need much greater detail from Network Rail about how it will cut train accident risk by 50% – and will monitor this closely.
- We'll continue to monitor Network Rail's safety performance using a wide range of indicators across the business and through our rail safety maturity model, RM3
- In particular, we'll monitor Network Rail's progress in reducing risks at level crossings, using the £109 million of ring-fenced funding. This will include closing 500 level crossings.
- We'll also look at its progress in eliminating all industry-caused fatalities and major injuries to passengers, workers and the public. This includes £250 million for improving track worker safety.

**Britain's railway is now one of the safest in Europe for passengers."**

**"Network Rail intends to eliminate all industry-caused fatalities and major injuries by 2019."**

- We want Network Rail to achieve best practice in occupational health for its workforce and save costs by reducing levels of sickness absence.

# Building a greener railway

**Plans to electrify much of the network by the end of CP5 will go a long way to reducing the railway's environmental impact. We will also seek progress from Network Rail on issues such as energy efficiency and adaptation to climate change.**

## What governments want

The Westminster and Scottish governments want the railway to become more environmentally sustainable for CP5 (2014-19). They have asked Network Rail to measure and reduce the amount of carbon embedded in new infrastructure and to publish regular, accurate data on carbon emissions and energy efficiency for both traction (train-related) and off-track operations such as offices and stations. It also needs to show how it will manage anticipated climate change.

## What Network Rail proposed

Network Rail's long term goal is to achieve an 80% reduction in carbon emissions by 2050. Plans to electrify large parts of the rail network will be a big step towards achieving this, ultimately enabling operators to retire the majority of diesel trains from the network. The company will implement its sustainable development strategy, delivering a significant reduction in carbon emissions from its electricity supply. It will also invest in new clean technology such as regenerative train braking and smart metering. Climate change planning will be built into Network Rail's infrastructure plans, helping the railway to become more resilient to the effects of global warming such as extreme weather.

## What ORR has decided

- We want the Network Rail's carbon reduction targets to be sufficiently stretching, so we will therefore subject each aspect of the company's programme to independent review.
- We'll monitor operations closely to ensure they meet the carbon reduction programme.
- We'll check that Network Rail's improvement works, including electrification projects, reduce the amount of carbon used by the rail infrastructure.
- We'll oversee implementation of Network Rail's delivery plan to ensure that it reports regularly on both train-related and off-track carbon emissions and energy efficiency.

- We'll review Network Rail's progress on climate change adaptation and the company's wider environmental impacts on a project by project basis.

# The next five years: holding Network Rail to account

**As the regulator for Network Rail, we decide how the company is funded to meet the priorities of the Westminster and Scottish governments. During CP5, we'll also make sure that it meets its obligation to provide a safe, high-performing and efficient railway.**

## Incentivising industry co-operation

Where we can, between 2014 and 2019, we will provide incentives to Network Rail and the industry to operate efficiently without compromising safety. Here is how we will incentivise them:

- the route level benefit sharing mechanism – this is designed to encourage Network Rail and the industry to work together to reduce the day-to-day running costs of the railway;
- we will promote co-operative working to deliver improvement projects cost-effectively, such as projects to increase capacity and electrification of the railway;
- a volume incentive to encourage Network Rail to operate following a commercial model and maximise capacity on the network; and
- a fund of £50 million to incentivise cross-industry innovation.

## How we monitor Network Rail

Our preferred approach is to create incentives for the industry to work together to deliver greater efficiency without too much intervention. Much of this review has focused on how Network Rail can be given the flexibility and incentives to deliver its targets more reliably and more sustainably. To that end we have given the company flexibility in how it uses its finances to deliver and to apply its expertise in establishing how best to improve efficiency, reliability and safety on the network. However, due to under-performance in the current control period, we have strengthened targets and sought more assurance in certain key areas where we have particular concerns – and which are critical to future performance, efficiency and safety - most notably asset management.

- We will review Network Rail's and the rest of the industry's performance in health and safety, and we'll publish this information in the Health and Safety report.

- We will monitor Network Rail's performance in areas such as reliability, punctuality, improvement work and customer service – and we will publish our findings on our website in the Network Rail Monitor.
- We will monitor Network Rail's progress in areas such as in financial performance and efficiency. To ensure this is delivered, we will publish an annual Efficiency and Financial Assessment of Network Rail.
- We will also monitor the indicators and enablers set out in the regulatory outputs package.
- If Network Rail is at risk of not meeting its targets, then we will intervene to try and prevent or resolve the problem, seeking assurance that it has delivery risks under control. If appropriate, we may enforce compliance through sanctions, such as fines.
- We will monitor Network Rail to ensure it complies with the conditions of its Network Licence, such as effective stewardship of the network, cooperating with stakeholders, providing clear information on performance

**Summary of regulated outputs for CP5**

| Area | Outputs |
|---|---|
| Train service reliability | • Annual target for the percentage of trains on time (measured by PPM) for England & Wales and Scotland, with 92.5% on time by March 2019.<br>• All franchised operators in England & Wales to reach 90% PPM by March 2019, except Virgin Trains which has a combined target of 88% PPM and 2.9% CaSL and East Coast which has a combined target of 88% PPM and 4.2% CaSL. First Great Western will have a minimum of 88% PPM for its long distance services. |
| | • Annual target for the percentage of trains cancelled or very late in England & Wales (measured by CaSL), with no more than 2.2% in this category by March 2019. |
| | • Annual target of 92.5% of freight trains on time (measured by the Freight Delivery Metric[1]). |
| Enhancements | • Wide range of improvement projects completed. Delivery milestones will be published in March 2014 delivery plan alongside development milestones for early stage projects. Includes funding for initial ETCS[2] cab fitment. |

[1] Freight Delivery Metric (FDM) measures the percentage of freight trains arriving at their destination within 15 minutes of scheduled time, covering delays for which Network Rail is responsible.

[2] ETCS is the agreed future train control and command system for the European main line network. It forms part of the European Rail Traffic Management System (ERTMS).

| Area | Outputs |
| --- | --- |
| Safety | • Network Rail required to deliver a plan to maximise the reduction in risks of accidents at level crossings, using £99m ring-fenced fund[3]. This fund combines £67m from the DfT HLOS and £32m of further funding. |
| Disruption to passengers and freight caused by engineering works | • Disruption reduced by 8% for passengers and 17% for freight in 2019 compared to 2014, supported by an extension of funding for '7 day railway' projects. |
| Network capability | • Track mileage and layout, line speed, gauge, route availability, electrification at least maintained, and improved where there are enhancement works. |
| Stations | • Average condition maintained. |
| Asset management | • Asset management capability excellence achieved. |
| | • Asset data quality standards for all asset types. |
| | • Milestones for 'ORBIS' data improvement project. |

## Taking enforcement action

We want to see Network Rail succeed and, wherever possible, we will work closely with the company to help it deliver. This approach has worked in the past – to give just one example, 2012 saw a 12% reduction in the number of delays to freight services after we worked with Network Rail and the freight sector to set up a recovery board to resolve the underlying issues.

But when we have to, we will intervene with enforcement action – including financial penalties if appropriate – just as we have in the past. For example, if the Network Rail fails to deliver its performance target for long distance rail routes in 2013-14, it faces a substantial financial penalty, up to £1.5m for each 0.1% it falls below target.

## Providing transparent information

Part of our mission is to provide stakeholders and passengers with better information so they can hold the company to account. As well as the reports we publish about Network Rail's performance against our targets, we will also publish the following:

[3] Note that safety is not a devolved responsibility. All safety related outputs, indicators and enablers therefore apply to England & Wales and Scotland.

- **The GB Rail Industry Financial report:** financial data from train operators, Network Rail and government showing how the railway are funded and highlighting how money flows across the rail industry, helping to drive better value for money. http://www.rail-reg.gov.uk/upload/pdf/gb-financials-2012.pdf
- **Detailed train performance figures:** including the number of trains arriving within one minute of schedule, across all routes. These figures give passengers a more accurate picture of train performance than the normal 'on time' measure of trains arriving within 5-10 minutes of schedule and are helpful in assisting them to plan their journeys better.