



OFFICE OF RAIL REGULATION

↑ Platforms 9 to 17 via footbridge

← Platforms 7 and 8

Platform 6

Platforms 1 to 5

Station reception

Network Rail Monitor

Quarter 1 of Year 5 of CP4 | 1 April 2013 – 20 July 2013

Overview

A safe railway

In July ORR issued its [Health and Safety Report for 2013](#). We noted improvements in safety culture leadership in Network Rail, but also identified risks around the resilience of its infrastructure assets and scope to improve worker health and safety.

Passenger train performance

At the end of period 4 punctuality as measured by the Public Performance Measure (PPM) MAA was between 1.1 and 4.9 percentage points behind target. This affected some 145,800 trains in [Quarter 1](#) (Q1) and Network Rail's sector targets for punctuality and cancellations and significant lateness (CaSL) are all at risk. With less than 7 months of the current 5 year [control period](#) left, Network Rail must do what it has said it will do and use the funding it already has for further initiatives to close the performance gap and deliver its commitments.

In July ORR found Network Rail had breached its licence in 2012-13 as it had not done all it should have to deliver punctual Long Distance (LD) and London and South East (LSE) trains. Network Rail faces a substantial penalty at the end of 2013-14 if it does not achieve its target for LD services. This could be of the order of £75m if performance does not improve (page 3).

Freight train performance

At the end of period 4, delays to freight trains were 4.1% behind target. This was mainly due to a landslip at Hatfield Colliery (page 4).

Asset management

As well as underpinning safety, the performance of Network Rail's assets is critical to punctuality. In Q1 there were 7% more infrastructure incidents than last year, responsible for 11% more delay (1.2 million minutes). In one incident in July, a buckled track outside Waterloo station caused 4,649 minutes delay.

The deferral of work earlier in Control Period 4 (CP4) means Network Rail needs to deliver significantly higher volumes of renewals in this final year of CP4 than it has previously achieved. It must also ensure it manages risks around deferred work (page 5).

Developing the network

Network Rail remains generally on course to deliver the substantial, challenging programme of enhancements agreed for CP4. A success in Q1 was the commissioning of a new flyover at Hitchin bringing potential performance and capacity benefits to the East Coast Main Line. We are closely monitoring a few projects at risk, notably the Great Western electrification programme (page 7).

Efficiency

ORR is publishing the [Annual Financial and Efficiency Report for 2012-13](#) this month. It concludes Network Rail is unlikely to deliver the 23.5% potential efficiencies identified for renewals, maintenance and asset management by the end of CP4.

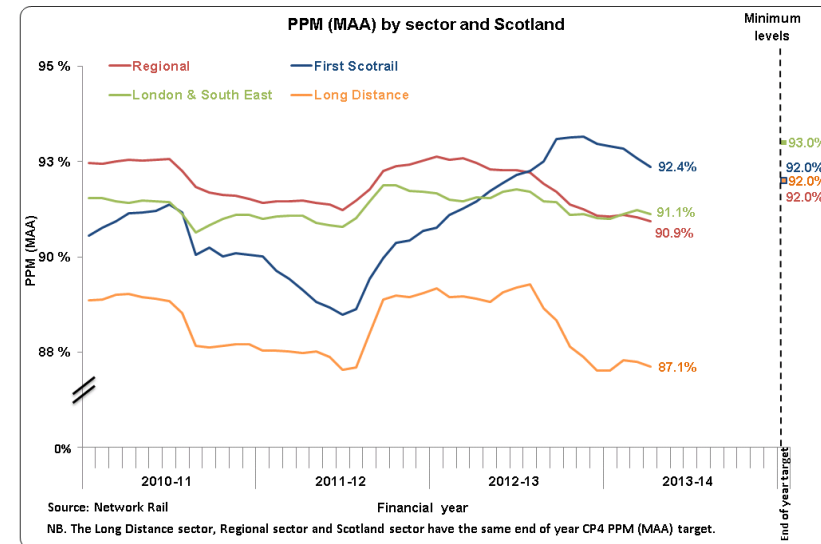
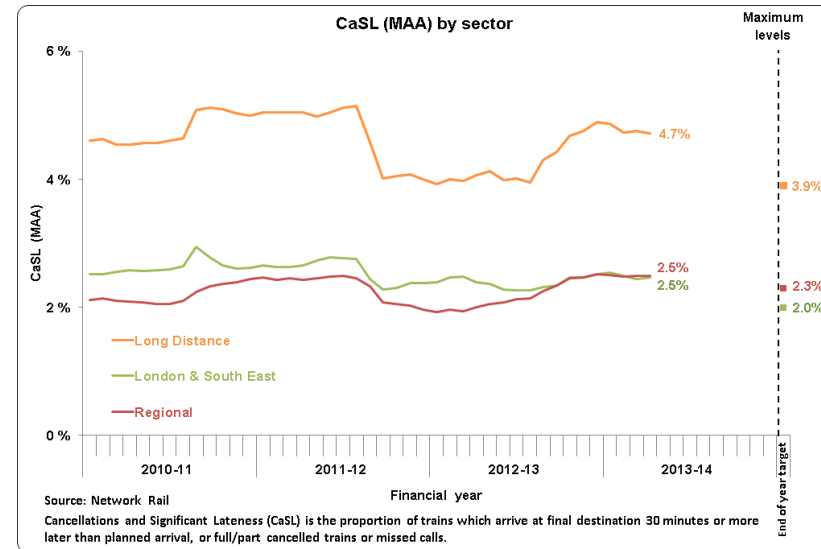
In this quarter 1 *Network Rail Monitor*, we focus mainly on England and Wales - we publish a separate edition covering issues particular to Scotland (available [here](#)).

Train service performance

At the end of the 2012-13 year punctuality was 1.7 and 4.5 percentage points (pp) short of the funded PPM targets for LSE and LD trains respectively. In July ORR found Network Rail had not done all that it should have to deliver punctual trains and meet its PPM targets for these two sectors in 2012-13. Even allowing for some severe weather, it [breached its licence](#). It faces a substantial penalty at the end of 2013-14 for poor punctuality on LD services. This could be of the order of £75m if performance does not improve.

At the end of period 4 PPM MAA was behind target by 1.1 pp for regional, 1.9 pp for LSE and 4.9 pp for LD trains. (The targets were 92.0, 93.0 and 92.0% respectively.) This affected 145,800 services in Q1. Network Rail's targets for PPM and CaSL are all at risk and its recovery plans are yet to make an impact. With less than 7 months of CP4 left, Network Rail must do what it has said it will do and use the funding it already has for further initiatives to close the gap and deliver its commitments.

We are discussing these critical performance issues with the Network Rail board. Improved weather resilience and day to day maintenance along with senior management and board commitment are all needed to achieve its targets. We also need to know what additional resources Network Rail is bringing to bear to recover its performance.



Long Distance passenger trains

Network Rail is funded to deliver 92.0% PPM MAA and 3.9% CaSL MAA in the LD sector this year.

Performance in the first 4 periods of 2013-14 saw some improvement on last year and 3.8% fewer delay minutes affecting LD trains. But the PPM MAA remained 4.9 pp behind target. Similarly, the CaSL MAA was 0.8 pp behind target. Last year some 26,000 LD trains were cancelled or significantly late.

Network Rail is not yet delivering the performance set out in its recovery plan for this sector. Where it is taking action, this is not having the required effect. Network Rail therefore needs to do much more if it is to deliver its commitments, particularly for Virgin Trains, whose performance fell short of its PPM target in every period this quarter. Delays due to track faults and overhead line problems need particular attention.

London and South East passenger trains

Network Rail is funded to deliver 93.0% PPM MAA and 2.0% CaSL MAA in the LSE sector this year. Punctuality at the end of Q1 was 1.9 pp behind target affecting approximately 85,000 trains. CaSL is 0.5 pp behind target. The [Passenger Focus Spring 2013 National Passenger Survey](#) showed that LSE passengers who were very or fairly satisfied overall declined by 1 pp compared to spring 2012.

Problems in this sector included the high volume of delays due to track issues, especially on the Kent, Sussex and Wessex routes, and the network's resilience to weather. In Q1 there were some signs of improvement, for example there were fewer delays caused by track faults. But there is still a lot of work to do.



Regional passenger trains

At the end of Q1 PPM MAA in the regional sector was 90.9%. This is 1.1 pp behind target. CaSL MAA was 0.2 pp behind target at 2.5%. Operational problems (particularly driver shortages) at some regional [TOCs](#) affected performance.

Network Rail now has a reasonable recovery plan in place for this sector; we are monitoring delivery.

Early indications for this year are positive with Network Rail causing 4.7% fewer delay minutes than last year. However, further improvements are needed, for example to reduce the impact of axle counter and other signalling failures. Overhead line problems also need to be addressed.

Freight trains

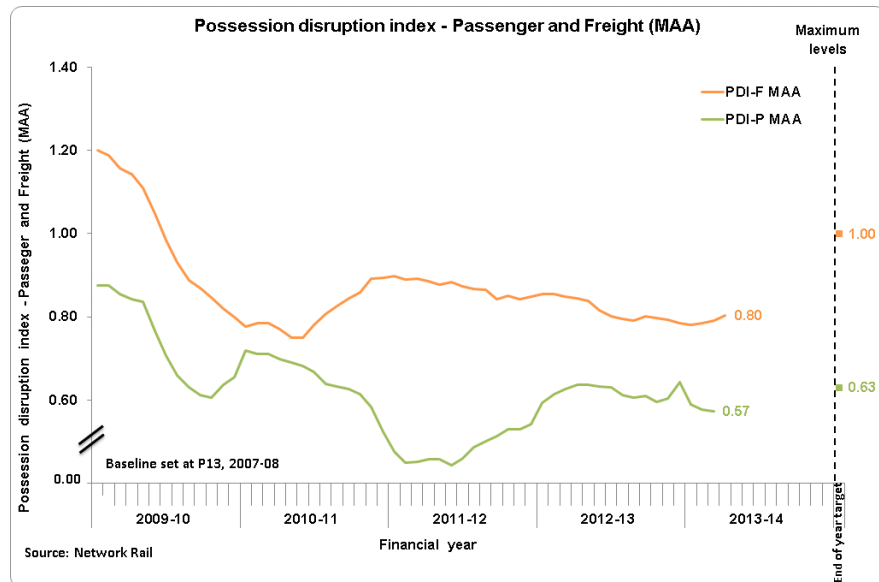
At the end of period 4 delays to freight services was 3.62 minutes per 100 train kilometres. This is 4.1% worse than the target of 3.48 and 6.8% worse than last year. A major factor was the landslip at Hatfield Colliery in Stainforth which caused severe disruption to freight services across the network. The line was reopened on 29 June following 5 months of disruption.

Freight operators' own performance over the first part of the year has been mixed. Freight locomotive failures need to be addressed, especially given the impact these can have on the wider industry. ORR therefore welcomes the commitment made by the [Freight Joint Board](#) to review [FOC](#) on TOC delays each period to increase the visibility of these issues.



Disruption from planned engineering work

In periods 1-4 the [Possession Disruption Indices](#) for both passenger and freight (PDI-P and PDI-F) were better than target; this was to reduce planned disruption to passenger services by 37% over CP4 without disrupting more freight trains. Disruption was significantly lower than at the start of the control period. The MAA reflects the way the industry kept disruptive engineering work to a minimum during the 2012 Olympics and Paralympics, which has offset the impact of some major blockades in 2013.



Asset management

Asset performance

The performance of Network Rail's assets is critical to train punctuality as measured by PPM. In the first 4 periods of the year, there were 11,925 infrastructure incidents across the rail network, 7% more than last year. These incidents were associated with 1,226,081 minutes of [delay](#) to trains, 11% more than last year. Network Rail has made progress reducing incidents and delays associated with point and track circuit failures but temporary speed restrictions, axle counter failures, telecoms failures and cable faults have all increased.

Asset renewals

Network Rail has deferred [renewals](#) work planned for earlier in CP4 for asset categories including plain line track, switches and crossings, level crossings and electrification. The result is that its delivery plan for this final year of CP4 requires a significantly higher volume of renewals than has previously been achieved.

In Q1 Network Rail did not deliver the higher volume of asset renewals it had planned. Plain line track renewal volumes were 21% lower than planned; civils structure volumes were low across multiple categories including overbridges (14% lower) and underbridges (64% lower). Signalling volumes were 65% lower and electrification volumes were much lower than planned for all DC system renewals. At the end of Q1 Network Rail cut its forecast of the renewal volumes it will deliver by the year end for many asset categories. For example, plain line track and signalling by 10% and level crossings by 41%.



Where Network Rail does not deliver renewals in line with its asset policies a question arises as to whether the assets are being managed sustainably. We have challenged Network Rail to show that sustainability will not be affected by the renewals shortfalls now forecast for the end of the control period, and how the risks of any deferrals will be managed.

Unit costs

Network Rail needs good unit cost information to develop robust business plans and to demonstrate efficiency. We set out our requirements for its unit cost framework in May 2011. We required a robust process to be in place to capture unit costs to an accuracy of 5% for the CP5 [Strategic Business Plan](#) (SBP).

The [independent reporter](#) Arup has assessed Network Rail's unit cost framework. It found shortcomings in the processes for collecting unit cost data. For maintenance unit costs, it was unable to assess accuracy as Network Rail could not provide the data requested, although the company has since rectified the problem. Arup also reviewed the process of calculating unit costs for business planning. Network Rail's SBP made limited use of its unit cost data. Arup concluded that its unit cost collection process was not operating effectively as a tool to aid strategic business planning. It flagged concerns about how unit costs are built up for planning, including the robustness of the treatment of overheads. We consider Network Rail's unit cost collection process needs improving to support its claimed efficiencies.

We have raised these issues with Network Rail. We expect it to explain why it is so far behind and to set out in the next few weeks a plan for improvement. That improvement must be delivered by the end of CP4.

Earthworks

Last year's wet autumn and winter weather exposed weaknesses in Network Rail's management of earthworks and drainage. There were 125 earthwork failures in 2012-13, some with safety impacts. Earthwork failures had been declining steadily and in 2011-12 there were only 12.

Network Rail has now changed its processes for managing extremely wet weather and is making better use of local weather forecasts. It has also analysed the causes of each failure to understand where changes in its stewardship would have best effect. It is now reviewing the way it classifies earthworks and its standards and examination regimes. These changes should improve its targeting of intervention work. ORR is pressing Network Rail to deliver these improvements as soon as possible. Effective maintenance and renewal of drainage assets must also be a key feature of Network Rail's forthcoming delivery plan for CP5.

Developing the network

Achievements

Network Rail is generally on course to deliver the substantial, programme of enhancements agreed for this control period although there are a few projects that will be slightly later than originally planned. Many projects will directly improve passengers' experience or help expand the Strategic Freight Network.

A particular success in Q1 was the commissioning of a new flyover at **Hitchin**, bringing potential performance and capacity benefits to the East Coast Main Line.

Over £400m of station improvements were funded in CP4. Work on the **National Station Improvement** and **Access for All** programmes is progressing well. In Q1 improvements were completed at Harpenden and Perth stations which included passenger accessibility enhancements. The Passenger Focus spring satisfaction survey showed that overall satisfaction with stations owned and operated by Network Rail increased from 80% in 2012 to 82% in 2013. Satisfaction increased for all aspects of stations, but particularly for the facilities and services and the upkeep of station buildings and platforms.

Projects at risk

The **Great Northern/Great Eastern (GNGE) joint line upgrade** project will give freight trains a diversionary route off the East Coast Main Line, freeing up valuable capacity on the mainline. The project has slipped to September 2014 for



reasons outside Network Rail's control. However, the delay will only have a small impact on rail users because the major timetable changes that make full use of the upgrade are unlikely to be made before 2016.

The **Strategic Freight Network Fund** is a £280m ring-fenced fund to provide enhanced freight capability on the network. Network Rail has asked to defer £40m of planned works into CP5. We have agreed to this given the support of freight companies and the DfT. However, these projects should have been completed in CP4. We will be assessing whether any inefficient costs were incurred due to these delays.

We have previously raised concern that the early design and development work for the **Great Western Electrification project** has slipped by 18 months against the original plan. The new electric train services are planned to be introduced in phases between 2016 and 2018, but we are not yet confident the sequencing of all the necessary projects on the route is sufficiently locked down and integrated to deliver the overall system functionality needed for the new timetables. In addition, there is an emerging risk that the power distribution companies will not move their power cables that cross the railway in time for powering up the new electrified route. Network Rail needs to manage this risk across the national portfolio of electrification and it may result in delays to delivery.

Some operators using the new **GSM-R** radios are reporting that the failure rate is much higher than they had expected, possibly due to power spikes. We have asked Network Rail to report how widespread this problem is and how it may be solved.

We welcome your feedback on this publication. Please address your comments or queries to:

Train service performance:

Nigel Fisher on 020 7282 2112 or Nigel.Fisher@orr.gsi.gov.uk

Developing the network:

Andrew Wallace on 020 7282 2075 or Andrew.Wallace@orr.gsi.gov.uk

Asset management:

Marius Sultan on 020 7282 2114 or Marius.Sultan@orr.gsi.gov.uk

Statistics in this publication:

Peter Moran on 0207 282 2074 or Peter.Moran@orr.gsi.gov.uk

We publish the *Network Rail Monitor* every three – four months, focusing on Network Rail’s delivery of its obligations to its customers and funders, for which it is mainly accountable under its network licence. We use colour flags to show at a glance our current level of concern with an issue:

Network Rail delivery is satisfactory or good.



Network Rail delivery is currently unsatisfactory and/or we have some concerns about future delivery. We have raised the issue with Network Rail.



The issue is subject to special scrutiny, with intensive investigation and enhanced monitoring.



We have major concerns about current and/or future delivery.



Office of Rail Regulation
One Kemble Street
London
WC2B 4AN

Tel: 020 7282 2000

Fax: 020 7282 2004

www.rail-reg.gov.uk

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