



OFFICE OF RAIL REGULATION



# Network Rail Monitor

Quarter 3 of Year 5 of CP4 | 13 October 2013 – 4 January 2014

# Overview

The third quarter of 2013-14 (13 October 2013 to 4 January 2014) saw some very challenging weather conditions with major storms at the end of October and over the Christmas and New Year period. Network Rail and the wider industry dealt with these conditions well. In ORR's view, the decision to lift restrictions on advance tickets on Christmas Eve to encourage people to travel early was a good one, and every effort was made to ensure the safety of passengers and staff while continuing to run services as normally as possible. The challenging weather conditions persisted into the fourth quarter.

## Passenger train performance

Performance, particularly in the London and South East (LSE) sector was severely impacted by the weather and the company cannot now meet the targets for Public Performance Measure (PPM) and Cancellations and Significant Lateness (CaSL) for that sector. At the end of the third quarter (Q3) punctuality as measured by PPM MAA varied between 1.2 percentage points (pp) behind the target for regional services and 5.3pp behind the target for long distance services. Nationally, some 222,700 services missed their PPM target during this quarter. Network Rail cannot now achieve its target for long distance services at the end of the current five-year control period (CP4).

Passenger Focus' autumn report of the National Rail Passengers' Survey shows that the percentage of passengers satisfied with their journey overall was 83%. This is down compared to autumn 2012 (when 85% of passengers questioned said they were satisfied). (See page 8.)

As CP4 draws to a close we will be looking to the company's quarterly reports on performance in all sectors for evidence that it is doing everything reasonably practicable to close the performance gap.

## Freight train performance

At the end of period 10 (4 January 2014) delays to freight trains were well behind target. We will be engaging with Network Rail and the freight operating companies to understand the causes of this. (See page 7.)

## Developing the network

Network Rail remains on course to deliver the programme of enhancements agreed for CP4. 2013 saw the biggest programme of Christmas and New Year works undertaken during the control period and despite the challenging weather conditions, all the key milestones were met. This has given us greater assurance about Network Rail's ability to deliver the enhancements programme in CP5. We are however continuing to monitor delivery of the Great Western electrification programme which does appear to be at risk. (See page 11).

In this Q3 edition of the Network Rail Monitor, we focus mainly on England and Wales - we publish a separate edition covering Scotland ([available here](#)).

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## Train service performance

We have been following Network Rail's performance closely over Q3. The company cannot now meet its end of control period regulated performance targets for the London and South East sector and its PPM target for the long distance sector. It is also likely that Network Rail will not achieve a number of other regulated outputs for PPM and CaSL with only the regional sector CaSL output likely to be achieved.

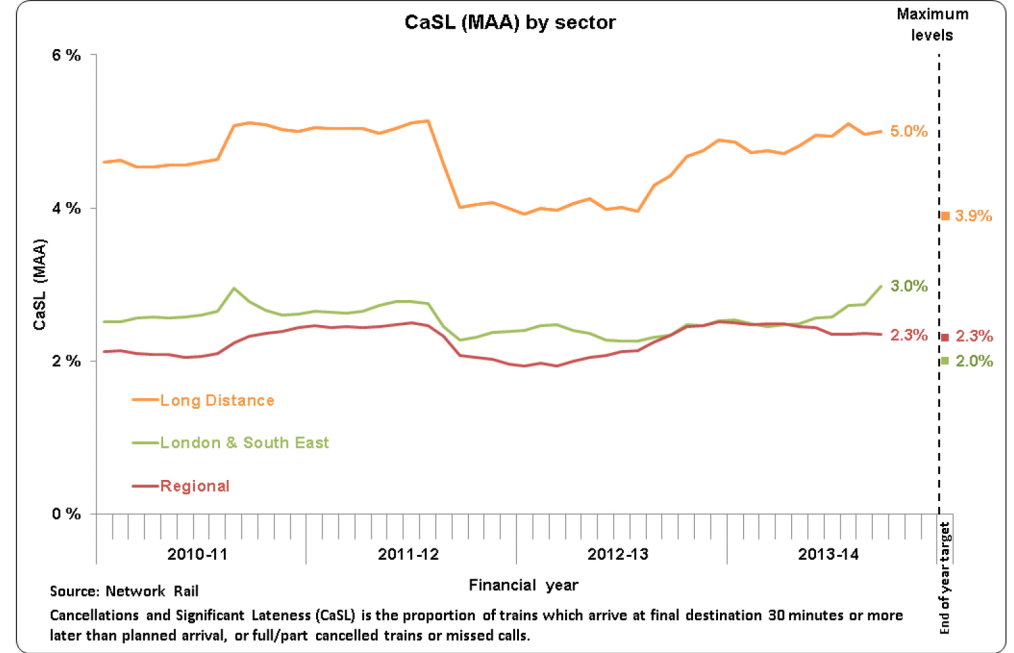
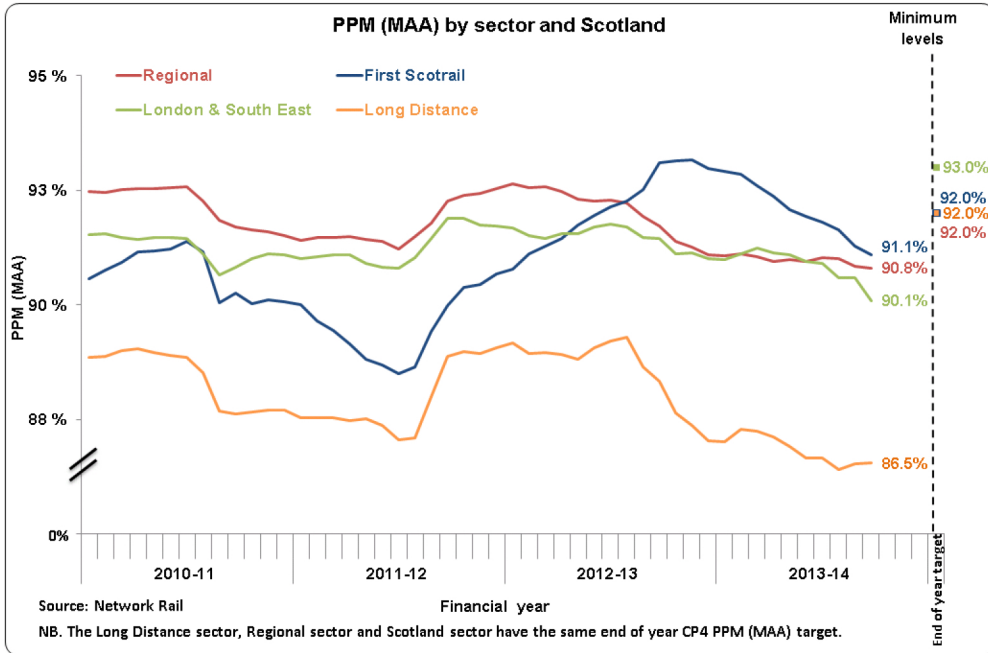
At the end of Q3, punctuality as measured by PPM (MAA) in England and Wales was 90.0%, which is 1.3pp less than at the same time last year.

Each year Network Rail agrees Joint Performance Improvement Plans (JPIPs) with each train operating company. These plans specify targets for PPM, CaSL and delay minutes. At this point the agreed JPIP targets have been met for only one of those companies, Chiltern Railways.

We have reviewed Network Rail's second quarter performance and our analysis will inform our conclusion on whether the company did everything reasonably practicable to achieve its CP4 regulated outputs.

Delay minutes attributed to track faults were 28.4% higher than at this point in 2012-13 and delay minutes attributed to overrunning engineering work and timetable planning errors have also increased. To reduce current levels of delay Network Rail needs to do more to improve performance in areas such as these where it has a direct influence.

Faced with some extremely challenging weather conditions over the Christmas and New Year period, Network Rail focused, in our view quite rightly, on getting people home rather than on performance. During those periods of disruption, the industry worked hard to keep passengers safe and informed. Our initial view is that the use of emergency timetables has largely been appropriate, allowing passengers to access reliable information. However we need to continue to work with the industry to ensure the impact of these arrangements on reported performance is understood clearly.



## Sector performance

### Long distance passenger trains

PPM (MAA) for long distance services is currently 86.5%, which is 5.3pp short of the regulated target and 1.8pp worse than it was at the same time last year. CaSL at the end of period 10 was 5.0% which is 1.1pp worse than the regulated target.

Network Rail delay affecting East Coast was more than expected during Q3, with track assets, non-track assets (e.g. overhead line equipment and signalling) and network management and other category groups all behind JPIP target. East Coast experienced severe weather delays over the Christmas and New Year period with the imposition of speed restrictions due to high winds. However, over the course of the year to date weather delays for this operator were 27% better than the JPIP target.

Year to date, Network Rail delay affecting First Great Western (FGW) was behind JPIP target in every category other than external (e.g. trespass and animals on or near the line). This operator's JPIP PPM target has not been achieved for seven consecutive periods. At the end of Q3, FGW's long distance services showed a PPM MAA of 82.8% having been affected by a wide range of issues - in particular track faults and train detection problems.

Network Rail's performance for Virgin Trains has been mixed. The company has confirmed that it is seeing improved asset reliability feeding through into improving performance over the recent period. However, issues with non-track assets, external delays and delays caused by other operators over the year to date mean that PPM MAA is 0.8pp behind the JPIP target and 1.7pp behind last year. In particular, Virgin Trains was affected by signalling and power supply issues as well as a number of suicides. Network Rail in conjunction with industry stakeholders

and the Samaritans, continues to take steps to reduce the number of suicides on the railways.

PPM MAA for CrossCountry is 2.0pp behind the JPIP target and 0.4pp behind that achieved at this point last year. Network Rail delay affecting this operator is behind target for all category groups with the exception of severe weather, autumn and structures. More positively, CrossCountry's CaSL score at the end of Q3 was 0.7pp better than last year.

Track and non-track asset failures have combined with train crew shortages to leave First Transpennine Express (TPE) 1.1pp adrift of its PPM MAA trajectory. CaSL at the end of Q3 was 1.2pp behind the JPIP target. With the train crew issues now resolved, TPE will be looking for performance to recover to previous levels.

East Midlands Trains' JPIP PPM target has not been achieved for eight periods, with all Network Rail delay categories behind target. PPM MAA for this operator is 1.7pp behind JPIP target, although the CaSL picture is more promising and the target could be achieved by the end of the year.

### London and South East passenger trains

The London and South East sector PPM MAA was 90.1% at the end of Q3 which is 2.8pp below the regulated target and 1.3pp less than at the same point in 2012-13. The current CaSL MAA is 3.0% which is 1.0pp worse than the regulated target and 0.6pp behind the figure achieved at this stage last year. This sector can no longer achieve either of its regulated performance outputs.

Network Rail performance delivery for First Capital Connect (FCC), was varied across the routes. The Great Northern service group was significantly below the levels agreed in the JPIP and all Network Rail delay category groups for this operator are behind the year to date target. The JPIP PPM target for FCC has not been achieved for 15 consecutive periods.

The JPIP PPM target for Southern Railway, whose operations are predominantly based on Network Rail's Sussex route, has also not been achieved for 15 months. External delays and engineering overruns have had a major impact here.

Performance for South West Trains (SWT) is also behind - 1.6pp short of the PPM MAA target specified in the JPIP. Network Rail caused delays are 22% behind target. SWT and Network Rail operate an alliance under which track and trains are operated by one management team.

At the end of Q3, performance on services operated by Southeastern was also behind the JPIP PPM target. Weather delays were 38% up on last year but delays resulting from engineering overruns were also greater than target. This is a significant factor in the network management and other delay category which was 46.8% greater than last year. We have required Network Rail's Route Managing Director to explain her plans to address the issues Southeastern is currently facing.

London Overground, Greater Anglia and C2C are all slightly below the PPM MAA JPIP targets, although performance for these operators remained relatively strong.

Performance for Chiltern Railways remained the strongest in both the LSE sector and nationally, with a PPM MAA 0.9pp better than the JPIP target.

## Regional passenger trains

The regional sector is very broad with services serving both rural branch lines and major cities such as Birmingham, Leeds and Manchester. Because of the wide variety of service characteristics, the regional sector experiences a range of operational issues every day. The recent weather has affected this sector. At the end of Q3 PPM MAA was 90.8% which is 1.2pp behind the regulated target. CaSL was on target at 2.3%.

First Great Western operates in all three UK sectors. Its London and Long Distance operations have been subject to delays around the Reading area during a period of major enhancement work. The regional services have performed solidly albeit behind the JPIP target and we expect to see Network Rail's Western route delivering a much more robust service to this important operator across all sectors.

PPM MAA for London Midland is 2.4pp behind the JPIP target. Delays resulting from reduced capacity at Birmingham New Street during the station's redevelopment remain a significant factor. Delays arising from external causes and non-track assets have also increased during Q3.

PPM MAA for Northern is slightly behind JPIP target. This is mainly due to track, non-track and external delays. Performance on Arriva Trains Wales and Merseyrail is also slightly behind target. We are aware of the impact of freight delays on Arriva Trains Wales and are working with the operator to understand the causes and impact of these failures.

## Freight trains

The regulatory performance measure for freight is Network Rail caused delay normalised per 100 train kilometres run. At the end of Q3, this stood at 3.68 minutes per 100 kilometres. This is 9.1% down on last year and 24.1% behind target and reflects the impact of a variety of performance issues across the industry on the freight sector.

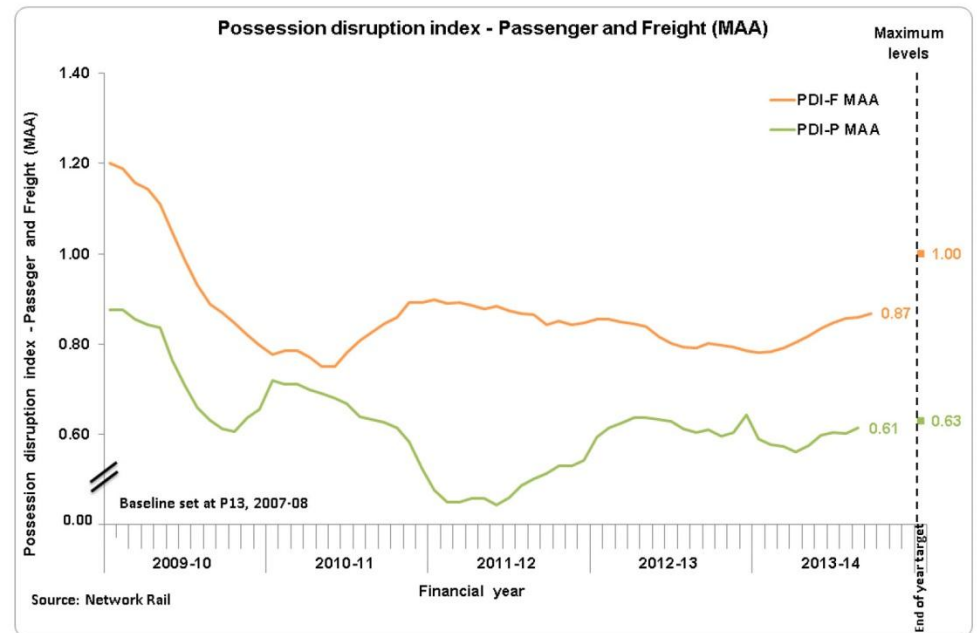
The Freight Performance Measure (FPM) which measures arrival at destination within 10 minutes of booked time, is 1.0pp adrift of target at 73.6%. This measure, although used by ORR as a key indicator of freight performance, is not used as a regulatory requirement and therefore the target is set and monitored by Network Rail.

ORR will work with the freight industry to understand performance in this sector and ensure that Network Rail is meeting the targets agreed with its freight customers. It must also manage the impact of freight performance on its other rail customers.



## Disruption from planned engineering works

During Q3 the indices for disruption caused by engineering works (known as PDI-P for passenger and PDI-F for freight) remained ahead of target. Disruption was significantly lower in this quarter than at the start of the control period despite an increased amount of work having been done over the last year. Network Rail still expects to better its PDI-F target for CP4. See chart below.



## Customer service

The results from the Passenger Focus autumn National Rail Passengers' Survey (September to November 2013) show that nationally the proportion of passengers satisfied with their journey overall was 83%. This is down compared to autumn 2012 (when 85% of those passengers questioned reported that they were satisfied).

Overall satisfaction by train operator varied between 76% and 96%. The lowest ratings were given to Southern (76%), Northern Rail (78%), First Capital Connect (79%), First Great Western (80%) and Greater Anglia (80%). The highest ratings for overall satisfaction were achieved by Heathrow Express (96%), Grand Central (95%), Merseyrail (93%) and c2c (92%). Chiltern Railways, East Coast and Virgin Trains all had 91% of passengers satisfied.

79% of passengers were satisfied with punctuality/reliability. In autumn 2012 83% were satisfied and this decline reflects our increasing concerns with Network Rail's performance delivery.

The proportion of passengers satisfied with value for money for the price of their ticket nationally was 45%; again a decline compared to autumn 2012 (47%). Satisfaction with sufficient room for all the passengers to sit/stand also declined, with 66% satisfied (69% in autumn 2012).



During the autumn Network Rail carried out its annual customer satisfaction survey – the satisfaction of its train operator customers. Emerging results show that overall satisfaction (the percentage of those fairly and very satisfied with Network Rail) had declined from 66% in 2012 to 58% in 2013. The more detailed results show that satisfaction scores with individual activity areas have mostly declined, with network operations having the biggest fall (-13 percentage points), but it remains the highest rated activity area.

Satisfaction was highest with Anglia route and lowest with Sussex. The survey results seem to align with the National Rail Passengers' Survey supporting the view that train operators (and by extension their passengers) are concerned with performance and reliability alongside other issues such as fares and crowding.



# Asset management

## Asset performance

Asset performance refers to all the network infrastructure including track, signalling and structures such as embankments and bridges. It is critical to safety, train performance and efficiency. In the year to date there have been 29,132 infrastructure incidents across England and Wales, 7.5% more than over the same period last year. These incidents were associated with 3,141,742 minutes of delay to trains, which is 7.5% more than last year. Network Rail has made progress reducing incidents associated with temporary speed restrictions, points and track circuits, however, track faults, axle counter, electrification and signalling power supply faults have all increased.

## Asset renewals

Network Rail has deferred renewals work from 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 and Q2 Network Rail did not deliver the higher volume of asset renewals it had planned in some areas. After Q3 the situation is broadly similar for track, with switches and crossings renewals close to plan, but plain line track renewals 13% behind plan for the year. Network Rail has succeeded in accelerating work on civils assets (structures such as bridges, tunnels and embankments). Work on [overbridges](#) is 66% ahead

of plan, on [underbridges](#) 103% ahead, and on earthworks 21% ahead. However signalling volumes have fallen back to 34% behind plan.

Network Rail's latest forecast for the end of CP4 for plain line track renewals amounts to an overall shortfall of 700 kilometres, or 20 weeks' delivery at current productivity. Network Rail has assessed the implications of the shortfall for sustainability, and concluded there will be no material impact provided work is delivered to plan during CP5. However the resilience of the network against future under-delivery is reduced. During Q4 we will review Network Rail's CP5 plans to recover the slipped work items in key asset areas, including how any safety, performance or maintenance risks will be managed in the meantime.

In Q3 we saw the benefits the Network Rail/South West Trains alliance has had in terms of the high output track renewals delivery.

## Track quality

Over the year to date there have been 17.8% more track faults (including broken rails) than in the same period last year. Delay minutes attributed to track faults (including broken rails) have increased by 28.4% compared to the same period last year, although the position appears to have stabilised. Good track geometry has turned around nationally with noted improvements in the South East. Secondary lines have achieved internal track quality targets but rural and freight lines still require further work.



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We will be monitoring maintenance activity more closely in CP5 to better understand cause and effect relationships, for example by looking at [tamping](#) activity and [wet bed](#) removals. We are currently reviewing the underlying reasons for the track quality issues particularly over the last year.

### Civil engineering assets

Network Rail continues to improve its data describing civil engineering assets so that a robust and complete register is available for use during CP5.

Safety of civil engineering assets is managed largely through examinations or strength assessments and responding appropriately to any recommendations and outputs. We continue to monitor Network Rail against a commitment to provide up-to-date assessments for bridges by the end of CP4.

During Q3, the independent reporter, Arup, reviewed the progress Network Rail had made in implementing previous recommendations on the day to day management of its civil engineering assets. The reporter found that overall reasonable progress had been made, although the extent to which the recommendations had been embedded varied across the routes. Progress with risk management had been slow in all routes. We will monitor Network Rail's progress at route level to ensure specific actions are addressed in this important area.

The government's £250m fiscal stimulus package for additional maintenance and renewals works for civil engineering assets is due to conclude on 31 March 2014. In excess of 1000 projects were identified and good progress has been made towards the completion of the programme. The independent reporter Nichols reviewed a sample of projects focusing on value for

money and quality. The results of that review show that the funding was allocated to projects which reduced risk and were generally good value for money.

Network Rail has submitted details of changes to its earthworks standards and examination procedures for our review. These changes mainly relate to the frequency of examination for assets. We will meet with Network Rail on a frequent basis to discuss earthworks in Q4 with an emphasis on the management of risk.

There were multiple earthworks failures across the southern and western parts of England and Wales during the storms at the end of December, with landslips at Wadhurst and Ockley causing amongst the greatest performance impacts on the network. ORR continues to investigate these with Network Rail.

### Asset resilience

We have worked with Network Rail to better understand its plans for improving the resilience of the network to moderate and severe weather patterns. The plan developed for the Western Route provides better information on the adequacy of drainage and other features of the assets and puts forward a range of proposals to improve resilience. The government has announced £31million to deliver this programme of interventions to improve flooding resilience. By September 2014, we expect that similar plans will be in place covering all other routes.

# Developing the network

## Achievements

A number of projects were completed before the timetable change in December 2013. These included platform lengthening at stations such as Guildford, Epsom and Thornton Heath as well as power supply enhancement works. This has allowed Southern to start operating its new trains on 10-car suburban services.

Despite the difficult weather conditions, Network Rail successfully achieved key milestones over Christmas and New Year period, working on over 300 projects at 1,300 worksites. Availability of resources is always an issue at this time of year and this year's programme was the largest undertaken in CP4. In that context, only the Swindon B resignalling works were postponed to ease the requirements for signalling testers. In addition to the planned works, severe weather over the period caused landslips, flooding and lines to be blocked by fallen trees. In some cases the infrastructure works were successfully re-planned to allow cranes to be used safely.

Works completed in Q3 included track renewals at Waterloo station, demolition of London Road bridge in Derby and commissioning of a new platform and resignalling at Gatwick Airport. At Peterborough work was completed to lengthen existing platforms, construct three new ones and construct a new footbridge. A 15-day blockade was successfully completed at Gravesend with the installation of a new footbridge and island platform. Other platforms were extended to allow Southeastern to operate 12-car trains on this route.



## Projects at risk

We raised some concern in 2012 that there had been delays to the early development and design of the electrification of the Great Western mainline. We escalated our concerns last year because we were not satisfied that sufficient progress was being made. In particular this was with regard to the integration of the complex set of projects (involving new trains and new infrastructure) which will enable the first tranche of electric trains to run in December 2016 from London to Bristol. Network Rail has since completed a detailed review of how it is managing this complex programme, and is currently implementing changes to its organisation and governance arrangements to give more system integration focus. We are meeting Network Rail every six weeks to check progress, and continue to look for assurance that the required work will be delivered to enable the December 2016 timetable change to go ahead as planned.

The December 2013 timetable change introduced faster journey times on the Midland mainline which links London to Sheffield and Nottingham. Although Network Rail completed the majority of the work to allow the timetable change to be introduced, there is still some outstanding work that Network Rail needs to finish so that the journey times can be more consistently achieved with passengers seeing the benefits they rightly expect. We are currently considering how to treat this missed milestone.

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

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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.



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