

PR23 draft determination:

Settlement document for the Southern region

15 June 2023



About this document

This is one of six settlement documents of our draft determination for the 2023 periodic review (PR23).

PR23 will determine what the infrastructure manager for the national rail network, Network Rail, is expected to deliver with respect to its operation, support, maintenance and renewal (OSMR) of the network during control period 7 (CP7), which will run from 1 April 2024 to 31 March 2029, and how the available funding should be best used to support this.

This strongly influences:

- the service that passengers and freight customers receive and, together with taxpayers, ultimately pay for; and
- the charges that Network Rail's passenger, freight and charter train operator customers pay to access its track and stations during CP7.

Our draft determination sets out:

- our review of Network Rail's strategic business plan (SBP); and
- decisions on its proposed outcome delivery and its planned expenditure to secure the condition and reliability of the network;
- changes to access charges and the incentives framework; and
- relevant policies on managing change and the financial framework.

In addition to **this document**, we have also published as part of our draft determination:

Document type	Details
Executive summaries of our determination	Our key proposals from our draft determination for: <ul style="list-style-type: none">• England & Wales• Scotland

Overviews of our determinations What Network Rail will need to deliver and how funding will be allocated in:

- England & Wales
 - Scotland
-

Consolidated decisions A summary of our draft decisions across Great Britain

Introduction An overview of PR23 and background to our draft determination

Settlement documents Detailed draft decisions for each of:

- Scotland
 - Eastern region
 - North West & Central region
 - **Southern region**
 - Wales & Western region
 - System Operator
-

Supporting documents Technical assessments of:

- Health and safety
 - Outcomes
 - Sustainable and efficient costs
 - National Functions
 - Other income
-

Policy positions How we intend to regulate Network Rail during CP7 in relation to:

- Financial framework
- Access charges
- Schedules 4 & 8 incentives regimes
- Managing change

Responding to the consultation on our draft determination

We are consulting on our draft determination and welcome comments from stakeholders on any of our documents which form the draft determination on or before 31 August 2023.

Responses should be submitted in electronic form to our inbox: PR23@ORR.gov.uk. We request stakeholders provide their response using [this proforma](#).

We intend to publish all responses on our website alongside our final determination in October 2023. Annex A to our proforma document sets out how we will treat any information provided to us, including that which is marked confidential.

Next steps

After taking account of stakeholder responses, we expect to issue our final determination on Network Rail's delivery and funding for CP7 by 31 October 2023.

We expect to issue our review notices by December 2023 and, subject to Network Rail's acceptance, issue notices of agreement and review implementation notices. These will give effect to the decisions made during PR23 in time for CP7 to commence from 1 April 2024 and for Network Rail to develop its plans for delivery.

Executive summary

Our determination includes separate settlements for each region and the System Operator in Network Rail. Settlements set out our expectations about the funding that will be allocated to each region and the system operator and the outputs that will be delivered by them.

This regional settlement document provides a summary of the key proposals in Network Rail's Southern region's strategic business plan for control period 7 (CP7) and our review of this, as part of our periodic review 2023 (PR23). For our more detailed assessment of Network Rail's CP7 plans, please see our PR23 draft determination: supporting document on [Health and Safety](#); [Outcomes](#); [Sustainable and Efficient costs](#); [National Functions](#); and [Other income](#).

Network Rail is funded by the UK and Scottish governments for its activities in England & Wales and Scotland respectively. Each respective government also sets out a High-Level Output Specification (HLOS) detailing what it expects the available funding to deliver.

Expenditure on operation, support, maintenance and renewal (OSMR) for England & Wales in the [UK Government's SoFA](#) (Statement of Funds Available) is proposed to be £40 billion for CP7 (excluding charges for electricity traction), which compares to approximately £38 billion in control period 6 (CP6). Planned expenditure on OSMR for Southern is £10.1 billion (2023-24 prices), a reduction of £241 million when compared to CP6.

Reflecting wider fiscal conditions, Network Rail's funding for CP7 is constrained relative to the needs of the asset renewal cycle. This requires Network Rail to make choices about how expenditure should be prioritised to deliver best value for the railway now and in the future. Decisions pertinent to Southern region are detailed in this document.

The England & Wales plan includes two scenarios for expenditure. The first assumes that a £0.5 billion centrally managed fund is used to manage risks that emerge during CP7. The second is a 'risk-adjusted' plan' which is supported by identifying up to £1.5 billion of expenditure (largely renewals) across the England & Wales regions and National Functions that can be descoped if risk materialises. Our assessment and draft determination considers Network Rail's risk-adjusted plan only. This is because our monitoring during CP6 suggests that more than £0.5 billion will be needed to manage unanticipated risks.

In CP7, the Southern region is:

- Planning to spend 17% less on asset renewals than in CP6;
- Forecasting a decline in both asset sustainability and reliability;
- Committed to everyone home safely every day;
- Forecasting a CP7 exit range for On Time passenger performance in line with the CP6 exit range; and
- Planning to deliver £781 million of efficiencies in its risk-adjusted plan (including the region's share of efficiencies in the network wide cost allocation).

We have assessed the region's strategic business plan and identified that it does not have enough expenditure to renew earthworks, structures, operational property and track in CP7. It should increase expenditure on renewals in these asset areas by around £230 million. We have also identified that the region can be more ambitious in its delivery of train performance and we have set ambitious but realistic trajectories for On Time, passenger cancellations and freight cancellations for it to meet.

1. Summary of Network Rail's key proposals for the Southern region

Overview

- 1.1 Network Rail's Southern region links major towns, cities, ports and freight terminals in the South of England. This chapter focuses on Network Rail's delivery in the region's three routes, Sussex, Kent and Wessex, but it does not cover Network Rail High Speed as this is subject to a separate regulatory funding process.
- 1.2 Most passenger rail services are operated by South Western Railway, Govia Thameslink Railway Ltd (GTR) operating Southern, Thameslink and Gatwick Express, Arriva Rail London (ARL) operating London Overground services and SE Trains operating Southeastern services.
- 1.3 Southern region operates some of the busiest and most congested lines on the rail network with the largest number of all passenger journeys. It provides connectivity between London, major towns and cities including Bournemouth, Southampton, Portsmouth, Brighton, Canterbury, Ashford and Dover and the South coast. This is important for access to labour markets, tourism and leisure.
- 1.4 The Network Rail managed stations of London Waterloo, London Bridge and London Victoria are the three busiest stations in the United Kingdom, and Clapham Junction has the largest number of passenger interchanges. The region also serves Gatwick and Southampton air and seaports. Freight from South coast ports use Southern region to access the wider country. The region also supports key freight flows from the Channel Tunnel and Folkstone.
- 1.5 Southern is experiencing increasingly severe weather events from strong winds, heavy rainfall and prolonged periods of hot and dry weather. The hot weather of Summer 2022 had a significant impact on the region. Drought resulted in the



earthworks which support tracks drying out in some locations, causing additional track defects and the implementation of speed restrictions and/or reduced timetables to ensure trains within the region could continue to run safely.

- 1.6 In its strategic business plan, the Southern region describes that its plan will deliver a safe railway. The region does anticipate a small deterioration in infrastructure performance. It commits to deliver the best performance it can, forecasting On Time performance to be within the range of 66.0 to 68.9%.
- 1.7 The region's plan also commits to supporting government objectives around decarbonisation and biodiversity – through net gain in biodiversity and improvements in energy efficiency and an electric road fleet.
- 1.8 The region sets out that it aims to deliver value for money for the taxpayer with over £781m in efficiencies delivered through initiatives which include new arrangements with its supply chain.
- 1.9 Finally, the region recognises that, because of funding constraints, it has had to make some tough choices in developing its plan. It acknowledges that asset sustainability will decrease by 3 percentage points (measured by the Composite Sustainability Index (CSI)).
- 1.10 The main features of the Southern region's SBP are set out below.

Safety

- 1.11 In its plan, the region expects to sustain passenger and public safety at current levels. It is forecasting to maintain level crossing risk through renewals but there is no targeted risk reduction programme.
- 1.12 Workforce safety improvements are forecast from the region's safety strategy and framework, which it is implementing through a plan called 'Thumbs Up'. It plans a 20% reduction in workforce carrying out work on site (referred to as 'boots on ballast') through technology and innovation. The region is forecasting improvement in workforce safety risk as measured by a reduction in Fatalities and Weighted Injuries (FWI) to 0.053 by the end of CP7 and will be working towards silver in the Mind Wellbeing index.
- 1.13 The region states it will be more dependent on operational and maintenance interventions to mitigate safety risks as a result of a reduction in funding in CP7 (the region's plan forecasts a 17% reduction in renewal spend compared to CP6). Southern region is implementing a market-led approach by prioritising additional spend in operations, maintenance and renewals, beyond a base level of safety

and performance, on services with greatest actual, or potential net revenue. The region has identified six key routes where there is 70% of the potential revenue based on pre-COVID-19 data.

- 1.14 The region is maintaining its Train Accident Risk Reduction (TARR) levels and its plan includes addressing the recommendations from the Mair and Slingo reports.

Performance

- 1.15 The Southern region has forecast a range of On Time passenger performance from 66.0 to 68.9% for CP7. This is the same range (66.0 to 68.9%) as for CP6 exit. The region is seeking to protect CP6 exit performance levels but notes that its forecasts are subject to uncertainty about passenger demand (which it states to be 7%).
- 1.16 Southern forecasts that Service Affecting Failures (SAFs) will increase in CP7 compared to CP6 as a result of deferring renewals. However, it is anticipating that a small decline in infrastructure reliability will be offset by other operational improvements that it can make throughout CP7 (such as increasing resilience of the timetable).
- 1.17 Southern forecasts freight cancellations in a range from 2.2 to 4.0% in each year of CP7. This is the same range as for CP6 exit.

Freight Growth

- 1.18 There are 32 active freight terminals on the Southern region. Colas Rail, DB Cargo, DC Rail, Freightliner, GB Railfreight, Rail Operations (UK) Limited, Victa Railfreight all operate in the Southern region.
- 1.19 In its plan, Southern lists freight stakeholders' priorities as: greater certainty around the movement of heavier trains (also known as heavy axle weight trains); additional freight paths to support growth; and enhanced gauge clearance on the routes to the channel tunnel.
- 1.20 To support delivery of these priorities, in its plan, Southern commits to delivering freight growth of 2.9% by the end of CP7. It plans to deliver this growth through expenditure to enable heavy freight trains to run on key routes and continue support for extension of heavy axle weight dispensations. It also plans to support aspirations for gauge enhancement to the channel tunnel freight routes in the Southern region.

Asset sustainability

- 1.21 The region is planning to spend £3.7 billion on renewals in the next control period (excluding any National Function spend). This is approximately 17% less compared to CP6 expenditure on renewals. The overall life remaining in the assets will decrease in CP7 as fewer full renewals are undertaken. The region forecasts a significant impact on long term asset sustainability with CSI falling from -2.9% at the end of CP6 to -5.9% at the end of CP7.
- 1.22 This deterioration will create a bow wave of renewals in subsequent control periods. The region acknowledges that its plan may not represent lowest whole life cost but it thinks that it will deliver value for money and the best set of outcomes for CP7. The region plans more refurbishment and maintenance as opposed to renewals to manage within the available funding.
- 1.23 Southern region's market-led approach will predominantly prioritise spend on operations, maintenance and renewals, beyond a minimum standard of safety, by actual or potential net revenue of its routes. The region is seeking to sustain passenger experience at stations. However, the replacement of London Victoria station roof is deferred again, having already been deferred from Control Period 5 (CP5) and CP6.
- 1.24 Other key asset management proposals include:
- Electrification and power expenditure on aging and deteriorating high voltage cable and switchgear assets has been reduced compared to CP6;
 - Significant spending reduction in signalling, earthworks and track compared to CP6;
 - A commitment to achieving carbon net-zero by 2050 and biodiversity net gain by 2035;
 - A summary of the region's Weather Resilience and Climate Change Adaptation (WRCCA) plan. This sets out Southern's focus on minimising the impact of weather events is on mitigations and rapid recovery and not, as a direct result of a reduced renewals portfolio, on prevention;
 - There are no high output ballast cleaning and track renewals proposed within the Southern plan; and
 - Renewals will be delivered based on a model from the Institution of Civil Engineers called Project 13. This is known as the Southern Integrated

Delivery (SID) approach. It will bring together the supply chain and Network Rail into a fully integrated team that owns the workbank and focuses on the delivery of outcomes for passengers and freight operators. This model will replace the existing Regional Asset Management (RAM) and the Capital Delivery operating structure.

- 1.25 Enhancement projects have a bearing on OSMR because the larger the network the more required maintenance and support. Only enhancement projects that have successfully achieved a Final Investment Decision from the UK Government for funding are included in the region's plan as they would affect future OSMR. We explain this further in the PR23 draft determination: supporting document on sustainable and efficient costs.

Accessibility

- 1.26 In its plan, Southern sets out the following commitments to deliver an inclusive and accessible service and facilities:

- 95% of booked assistance met;
- all staff to be trained on induction and refreshed at least every two years on disability equality awareness;
- collaborate with TOCs to ensure that staff are in the right place, at the right time to provide assistance;
- accessible stations with step free access;
- 100% turn up and go passenger assistance at all managed stations;
- tactile tiles fitted to all platforms;
- changing places toilets in all category A stations (for example as at London Bridge); and
- 95% satisfaction for disabled passenger journeys.

Efficiency

- 1.27 In its risk adjusted plan, Southern is planning to deliver £781 million of efficiency in CP7 (including the region's share of efficiencies in the network wide cost allocation). This represents 15% capex and 10% opex efficiencies.

- 1.28 The region expects to deliver capex efficiencies through its procurement process for the SID (encompassing the delivery of renewals) included workshops with all tenderers to identify challenges and opportunities in CP7.
- 1.29 Opex efficiencies are categorised into ten areas with initiatives including: the transfer of London St. Pancras International station low level to High Speed 1; joint accommodation strategies; pay reform (dependent on the national programme); a management efficiency review; targeting seasonal treatment costs; incident response; and investment in a second mobile maintenance train. Many of these build on the region's priorities of whole system collaboration with TOCs, FOCs and the wider industry and maximising property opportunities.
- 1.30 Southern region has identified high level operational expenditure headwinds of £77 million and capital expenditure headwinds of £51 million and will provide more detailed analysis in future plans. It has not forecast any material tailwinds.

Financial Risk

- 1.31 The region's plan for managing financial risk is to hold back around 5% of its planned spend (largely renewals) that could be deprioritised. If this funding were used for risk, the region is forecasting that performance metrics would decline as service affecting failures increase due to an older asset age profile, lower passenger and station satisfaction scores, reduced asset sustainability and reduced environmental benefits.

Stakeholder engagement

- 1.32 Southern region's stakeholders play an important role in defining the region's strategic priorities. It established a Stakeholder Challenge panel, with membership including: Transport Focus, Community Rail, National Highways, Tourism Southeast, an accessibility advocate, Community Rail Network, Rail Freight Group, Local authorities (Transport for Southeast, East Sussex Council), Enterprise M3 Local Enterprise Partnership, Port of Southampton and Gatwick Airport. Two stakeholder challenge panels provided SBP review and feedback, ahead of 'open and honest' review of final plans in February 2023.
- 1.33 The region also used TOC feedback, ongoing regional stakeholder engagement processes and Alliance Boards to help identify priorities and opportunities.
- 1.34 The region has supplemented its understanding of stakeholder needs with customer research which it commissioned through Transport Focus.

Delivery of funder requirements

1.35 In December 2022, the Secretary of State for Transport published his [High Level Output Specification](#) (HLOS) for England and Wales. This set out what the UK Government wants the railway to achieve during CP7. The Southern plan includes an explanation of how the region has sought to meet the requirements of the HLOS in its SBP. Specific examples provided by the region include:

- Overall long-term asset sustainability – Southern’s plan does not deliver long-term asset sustainability, as set out above, in the plan, and the Composite Sustainability Index decreases from -2.9 to -5.9%.
- Market-led prioritisation – the plan prioritises spend on operations, maintenance and renewals beyond a minimum standard of safety on lines where there is 70% of potential revenue, based on pre-COVID-19 data.
- Stakeholder engagement – the region considers it achieves this requirement through its stakeholder challenge panel, regional stakeholder engagement processes and Alliance Boards.
- Safety and security – Asset Management and Operational Plans that mitigate Train Accident Risk to CP6 levels and full compliance with the National Railway Security Programme across critical national infrastructure sites and upgrades to physical protection and hostile vehicle mitigations at key stations.
- Efficiency and financial sustainability – commitment to deliver £781 million of efficiencies in CP7, including the region’s share of efficiencies in the network wide cost allocation.
- Performance, reliability and use of the network – majority of spend in the plan contributes directly to maintaining the safe and reliable operation of the railway infrastructure.
- Inclusion and accessibility – commitment to maximise accessibility within available assets and plans, including steps set out above.
- Freight growth – supported by enabling continued heavy axle weight dispensations and support for 2.9% freight growth.
- Resilience and reducing environmental impacts – Lord Mair and Dame Slingo recommendations funded within Southern’s plan. While the region has a

Weather Resilience and Climate Change Adaption Plan 2024-2029, its CP7 plan does not include additional funding beyond policy compliant renewals.

- European Train Control System (ETCS) – renewals focussed on life extension in CP7 and commencing train fitment to support the plan for CP8.
- Research, Development and Innovation (RD&I) – utilising modern technology including drones, continue the safer, faster isolations programme by installing remaining planned negative short circuit devices.
- Rail supply chain and pipeline visibility – delivery model for renewals based on Institution of Civil Engineers (ICE) Project 13 with a focus on delivery of outcomes.
- Financial Risk – contingent risk of 5.7% of the region’s total plan, amounting to £456 million has been identified to mitigate risks that materialise during CP7.

2. Our findings and draft decisions on Southern's strategic business plan

- 2.1 We have assessed Network Rail's plan against [guidance](#) which we issued to it in July 2022.
- 2.2 We provide a detailed assessment of elements of Southern region's strategic plan in our supplementary documents, specifically the PR23 Draft Determination: [Health and Safety](#), [Outcomes](#) and [Sustainable and Efficient costs](#) supporting documents.
- 2.3 The main issues from our assessment for the Southern region are discussed below. Our assessment has focused on the delivery of four key objectives:
- (a) **Safety:** the rail network must be maintained in a safe condition for all of its users, workers and the public;
 - (b) **Performance:** the railway must be customer focused, making effective use of its capacity to deliver passenger and freight services that are punctual and reliable;
 - (c) **Asset sustainability:** assets must be planned and managed to deliver their greatest value over the course of their operational lives; and
 - (d) **Efficiency:** Network Rail must be subject to stretching but realistic efficiency targets.

Safety

- 2.4 A summary of our regional safety review is provided here. For our more detailed assessment of Southern's CP7 plans, please see our PR23 draft determination: supporting document on Health and Safety.
- 2.5 Our review has found that:
- (a) Network Rail's market-led approach involves prioritising expenditure on high revenue generating routes, with the potential for more limited renewals and refurbishment work on lower category/lower value lines. Network Rail's market-led approach will lead to increased reliance on maintenance work and operational controls to manage and mitigate risk. Any application of the

market-led approach must continue to ensure that risks are reduced so far as is reasonably practicable (SFAIRP) on all lines irrespective of value.

- (b) Southern is not proposing the renewal of electrical equipment to the same extent as other regions. This portfolio includes assets that are life expired. The SBP states the failure of these assets will be low likelihood but high impact. However, where assets are already life expired, the likelihood of failure is much higher than the low category stated. The region recognises the need to undertake a further review of the inspection regime to mitigate the risks (safety and performance) from continued degradation of the asset base and using distribution assets well beyond their design life.
- (c) The region has deferred the renewal of London Victoria station roof again. The proposal to control the risk by means of catch netting indicates a move down the hierarchy of safety controls – from preventing failure to mitigating the consequences of the failure.
- (d) The region plans to only undertake reactive maintenance at lineside buildings housing high voltage electrification and plant equipment. In light of the incident at Godinton in 2018 (where a Network Rail employee was seriously injured in a fire at the substation), and ongoing reports of faults we are not confident that enhanced examinations and reactive repairs would be sufficient to manage the risks over time. We want to see more detail from the region on this.
- (e) Due to the rephasing of major re-signalling schemes, the opportunity to address fatigue by reducing signallers' working weeks to a 60-hour maximum is, at least partly, lost. This is a concern given the heavy reliance on signaller managed line blocks and a recent upward trend in irregularities right (when the signalling system did not operate in the way it was designed to).

2.6 There are some areas where we need further information from the region – and we will work with it over the summer on these points:

- (a) We expect Network Rail to pay particular attention to the renewals and maintenance needs of earthworks. We are concerned with a reduction in volumes of earthworks specific drainage.
- (b) With a lower level of renewals in CP7, there will be an overall increase in demand on Network Rail's maintenance function. We expect the region to demonstrate that its maintenance plans will be sufficient to support the increased demand on its maintenance function. The success of which is

heavily reliant on implementing the 'Modernising Maintenance' programme with effective implementation and preparedness for CP7. The region will need to demonstrate that it can deliver the required efficiencies and sustain its capability to maintain the assets.

- (c) The region should demonstrate how risks associated with London Victoria station roof are being reduced, so far as is reasonably practicable.
- (d) We want to understand what provision has been made to accommodate potential changes to roster patterns and other fatigue controls arising from the introduction of the new roster tool and update to Network Rail's Fatigue Standard in 2024.
- (e) With the reduced renewal spend and deferral of renewals to Control Period 8 (2029-2034) we would like to understand how risks from deferred renewals will be managed with respect to level crossings replacements, renewals, upgrades and closures.
- (f) There is insufficient detail on planned improvements to risk controls or allocation of funding to deliver the SBP commitments and legal compliance on work related ill-health. This includes, for example plans for managing asbestos in buildings, delivery of improved engineering controls for welding fume and diesel engine exhaust emissions in poorly ventilated tunnels, depots and stations.

Performance

- 2.7 The region has produced its train performance forecasts using a mix of analysis of historical data and trends, bottom-up analysis and modelling of its planned activities and top-down judgments to capture uncertainty and ambition. The region considers that the most significant factor in train service performance is passenger numbers and density of train service.
- 2.8 The region has used ranges rather than point estimates to forecast performance outcomes for passenger On Time, passenger cancellations and freight cancellations metrics.
- 2.9 For On Time, we consider that the central point of the region's forecast range does not provide sufficient performance stretch. Our assessment of the evidence is that a more ambitious On Time trajectory is appropriate but realistic, near the top of Southern's range, but with no deterioration from the start to the end of CP7.

- 2.10 We have assessed that the region's passenger cancellation forecast range provides insufficient stretch compared to historical levels. We have reviewed passenger cancellations since 2014-15, excluding 2020-21 (COVID-19) and 2022-23 (industrial action), and have set a trajectory based on what has been achieved by the best performing region using an historical average.
- 2.11 We have assessed the region's freight cancellations forecast range. We consider that the low end of the region's SBP forecast provides an appropriate balance of ambition and deliverability. Our trajectory removes a methodology change Network Rail was planning in CP7 to include some significantly retimed freight services which are not counted in the existing measure. We have made this adjustment to Network Rail's planned changes following engagement with freight operators who did not support retimed services being counted as cancellations.
- 2.12 Our draft decisions are as follows:
- **Draft decision:** We have set a point (not range) trajectory for passenger On Time broadly at the top of Southern's SBP forecast range for each year of CP7, ending CP7 at 68.9%.
 - **Draft decision:** We have set a point (not range) trajectory for passenger cancellations below (more ambitious than) Southern's SBP forecast range, at 2.3% for each year of CP7.
 - **Draft decision:** We have set a point (not range) trajectory for freight cancellations at 2.0% for each year of CP7.

Freight growth

- 2.13 We have reviewed the evidence and methodologies relied on by Network Rail to determine its freight growth forecasts and we are satisfied that they provide a robust basis for us to set a freight growth trajectory.
- **Draft decision:** We have set the region's freight growth trajectory at 2.9% by the end of CP7.

Asset Sustainability

- 2.14 The region is forecasting to reduce expenditure on earthworks. We do not consider that Southern's plan contains sufficient expenditure for earthwork renewals and this aligns with assurance work undertaken by Network Rail's Technical Authority. In its plan, Southern assumes a reduction in emergency or reactive spend compared to CP6. It is not clear that the region's adoption of

technology (such as condition monitoring) can justify this reduction. Further, the region has an incomplete drainage inventory (asset register) which reduces the level of assurance that we can take for earthworks.

- **Draft decision:** ORR considers increased expenditure on earthworks in CP7 of around £80 million is required.

2.15 We also consider that Southern should increase its expenditure on structures to maintain a sufficiently sustainable railway in CP7 and beyond. The Technical Authority also highlighted that there were shortcomings with the region's planned structures expenditure. In the plan, funding for the structures portfolio has been reduced by 7.4% compared to CP6 which means that replacement activity will be limited and significantly below the volumes from previous control periods.

- **Draft decision:** ORR considers increased expenditure on structures in CP7 of around £50 million is required.

2.16 For operational property, we are concerned about the region's decision to reduce lineside buildings renewals, given the age of the existing portfolio. During our assessment the region was unable to fully demonstrate how it would manage associated risks to the workforce and railway operations. Southern needs to address the vulnerability of aging lineside buildings. We also consider that the renewal of London Victoria station roof should not be deferred again. As noted above, it has already been deferred in both CP5 and CP6.

- **Draft decision:** ORR considers increased expenditure on operational property in CP7 of around £50 million is required.

2.17 Southern is planning to reduce expenditure on track renewals by around 30% in CP7, compared to CP6. In CP6, reliability of track in the region has been generally positive and the region has delivered against its CP6 plans for track renewals. However, on average, the region has the most degraded plain line track assets compared to other regions. It also has a high percentage of the oldest ballast, sleepers and rail. Further significant deterioration in track asset life puts longer-term sustainability at risk. We are concerned that it will be difficult for the region to recover asset sustainability in later control periods.

- **Draft decision:** ORR considers increased expenditure on track in CP7 of around £50 million is required.

2.18 The region did not include expenditure to address the aging/deteriorating High Voltage (HV) cable and switchgear assets in the plan. Excluding this funding may

increase the risk of a major disruption in electric train services but the region considers the likelihood of this happening to be low. It has plans to increase strategic spares in preparation for possible failures. We expect the region to continuously monitor its aging HV cables.

2.19 Network Rail was unable to submit its maintenance plans in time for our review for this draft determination. We therefore do not have sufficient information to form a full and robust opinion on maintenance, a view shared by Network Rail's Technical Authority. We will review the details of the region's maintenance plans following the draft determination. These maintenance plans must align with plans for core asset renewals and include how staff competencies will be addressed.

2.20 We have reviewed Network Rail's forecasts for asset sustainability.

- **Draft decision:** We have set a higher (i.e. improved) Composite Sustainability Index (CSI) target (-2.7 percentage points change in CP7) than proposed by the region (-3.0 percentage points change in CP7). This reflects the impact of our recommendations for the region to increase renewals expenditure. Due to the complex modelling involved in forecasting CSI, Network Rail should generate its own calculations in advance of our final determination to reflect the impact of updated renewals plans.

2.21 The England & Wales HLOS requires Network Rail to improve environmental outcomes by moving towards a low-emissions railway and by conserving and enhancing biodiversity. We consider that Southern's forecasts for environmental outcomes are insufficiently challenging and we propose more stretching trajectories for the carbon and biodiversity measures.

- **Draft decision:** We have set success measure trajectories for carbon emissions scope 1 & 2 (-20 percentage points by the end of CP7) and biodiversity (4 percentage points by the end of CP7) which represent a better balance of being ambitious but realistic.

Accessibility

2.22 We consider that Southern's plan lacked identification and details of how accessibility-related works will be delivered in CP7 and how outcomes can be measured. There was also no information regarding the decision-making process and opportunities that can be taken by the region to improve accessibility with the introduction of step-free facilities where applicable (e.g. when a station footbridge is renewed).

2.23 While Southern plans to increase the number of lifts and escalators renewals by 46% from CP6, based on the budget allocated, this improvement to accessibility could be minor or quite localised.

Efficiency

2.24 Like most other regions, Southern has set itself an efficiency target of 10% in operating expenditure (operations, support and maintenance) and 15% in capital expenditure (renewals) in CP7. In its plan, Southern commits to deliver £781 million of efficiencies, including the region's share of efficiencies in the network wide cost allocation.

2.25 We have set the efficiency requirements at the same level as Network Rail proposed in its SBP for the risk-adjusted plan for each England & Wales region.

2.26 We expect Network Rail to include regional efficiency forecasts in its CP7 delivery plan, which are aligned with our baseline trajectories. We will monitor Network Rail's regions' delivery of efficiencies against these baselines in its CP7 delivery plan.

Financial risk

2.27 Network Rail produced two variants of its strategic business plan: 'the full plan' and the 'risk-adjusted plan'. Network Rail's risk-adjusted plan reduces renewals expenditure in the regions by identifying renewals that can be deprioritised to increase the CP7 cash risk fund.

2.28 The England and Wales full plan has a cash risk fund of £0.5 billion which is held centrally. We have considered this funding in the context of the current economic environment and experience from CP6. As we set out in our PR23 draft determination: [supporting document on sustainable and efficient costs](#), we do not consider a cash risk provision of £0.5 billion is sufficient to manage the risks to Network Rail's plan over the full five-year period (e.g. to manage unexpected events and inflation) in CP7. We have based our determination on the risk-adjusted plan and treated the deprioritised renewals as cash risk funding in the regions. This gives a cash risk fund of £1.5 billion in total, with £456 million in Southern. We will review for our final determination whether the level of risk funding in each region is appropriate.

Stakeholder engagement

2.29 Southern provided evidence of its stakeholder engagement during the development of its plans, with stakeholders responding positively to their role on

defining the region's strategic priorities. Evidence suggests that meetings were well-organised, including two stakeholder challenge panels at which it set out the final plan. However, more tangible evidence as to how the feedback helped to shape the plans would have strengthened the transparency of this engagement.

- 2.30 To complement our assessment, as part of our 2023 annual stakeholder engagement survey (an online survey of Network Rail's stakeholders), we asked stakeholders what they thought of Network Rail's engagement with them on its CP7 Strategic Business Planning. For Southern region, 35 stakeholders participated in the survey. Their responses revealed that 48% thought Southern region had engaged either well or very well, however 11% thought that Southern region's engagement was poor or very poor. 40% did not have a view.
- 2.31 It is important that Southern region continues to engage with its stakeholders in refining its plans – which extends to the annual updates that Network Rail will make to its delivery plan throughout CP7. In doing so, we expect Network Rail's engagement to meet the four overarching principles of good stakeholder engagement – which are inclusive, transparent, well-governed and effective.

Table 2.1 Draft ORR success measure baseline trajectories for Southern region

	2024-25 (year 1)	2025-26 (year 2)	2026-27 (year 3)	2027-28 (year 4)	2028-29 (year 5)
On Time	68.9%	68.9%	68.9%	68.9%	68.9%
Cancellations	2.3%	2.3%	2.3%	2.3%	2.3%
Freight cancellations	2.0%	2.0%	2.0%	2.0%	2.0%
Composite Sustainability Index (CSI)	Measured only at CP7 exit. CP7 Difference in CSI from CP6 exit to CP7 exit.				-2.7pp
Financial Performance Measure (FPM)	0	0	0	0	0
Efficiency (£ million, 2023-24 prices)	75	119	166	200	221
Carbon emissions scope 1 and 2	-4.0pp	-8.0pp	-12.0pp	-16.0pp	-20.0pp
Biodiversity units	0.0pp	1.0pp	2.0pp	3.0pp	4.0pp
Freight growth	0.6%	1.2%	1.7%	2.3%	2.9%

Table 2.2 Summary of success measure forecasts proposed by the region

	2024-25 (year 1)	2025-26 (year 2)	2026-27 (year 3)	2027-28 (year 4)	2028-29 (year 5)
On Time	66.5% to 68.9%	66.4% to 68.8%	66.2% to 68.8%	66.2% to 68.9%	66.0% to 68.9%
Cancellations	3.1% to 4.3%	3.1% to 4.3%	3.1% to 4.3%	3.1% to 4.3%	3.1% to 4.3%
Freight cancellations	2.2% to 4.0%	2.2% to 4.0%	2.2% to 4.0%	2.2% to 4.0%	2.2% to 4.0%
Composite Sustainability Index (CSI)	Measured only at CP7 exit. CP7 Difference in CSI from CP6 exit to CP7 exit.				-3.0pp
Financial Performance Measure (FPM)	0	0	0	0	0
Efficiency (£ million, 2023-24 prices)	75	119	166	200	221
Carbon emissions scope 1 and 2	-2.2pp	-4.4pp	-6.6pp	-8.8pp	-11.0pp
Biodiversity units	0.0pp	0.0pp	0.0pp	1.0pp	2.0pp
Freight growth	0.6%	1.2%	1.7%	2.3%	2.9%

Table 2.3 Southern region financial summary as proposed by region prior to ORR adjustments

£m (2023-24 prices)	CP6		CP7					% vs CP6	
	2023-24	CP6 total	2024-25	2025-26	2026-27	2027-28	2028-29		CP7 total
Operations	213	1,097	230	227	225	223	221	1,127	3%
Support	346	1,447	238	239	235	235	231	1,178	-19%
Maintenance	477	2,444	516	510	506	502	497	2,530	4%
Renewals	949	4,933	748	1,016	928	992	760	4,443	-10%
Industry costs, rates, & traction electricity	309	1,398	408	390	351	302	295	1,746	25%
Risk provisions	-	-	110	77	123	83	78	471	n/a
Gross Revenue requirement	2,294	11,319	2,251	2,458	2,367	2,337	2,083	11,495	2%
Other income	(257)	(1,283)	(265)	(272)	(272)	(274)	(275)	(1,357)	6%
Net revenue requirement	2,037	10,035	1,986	2,186	2,095	2,062	1,807	10,138	1%
Fixed Track Access Charge income	(364)	(1,836)	(377)	(377)	(377)	(377)	(377)	(1,886)	3%
Variable Charges	(157)	(759)	(159)	(159)	(159)	(159)	(159)	(793)	5%
Electricity for Traction (EC4T) income	(223)	(968)	(341)	(322)	(276)	(227)	(220)	(1,386)	43%
Schedule 4 and 8	86	239	125	171	161	159	126	741	210%
Schedule 4 access charge supplement	(96)	(537)	(123)	(169)	(159)	(157)	(124)	(731)	36%
Network grant	(1,283)	(6,175)	(1,112)	(1,330)	(1,286)	(1,302)	(1,054)	(6,083)	-1%

£m (2023-24 prices)	CP6		CP7						% vs CP6
	2023-24	CP6 total	2024-25	2025-26	2026-27	2027-28	2028-29	CP7 total	
Total SoFA related income	(2,037)	(10,035)	(1,986)	(2,186)	(2,095)	(2,062)	(1,807)	(10,138)	1%
Gross revenue requirement less EC4T	2,071	10,350	1,910	2,136	2,091	2,110	1,863	10,109	-2%



© Crown copyright 2023

This publication is licensed under the terms of the Open Government Licence v3.0 except where otherwise stated. To view this licence, visit nationalarchives.gov.uk/doc/open-government-licence/version/3

Where we have identified any third party copyright information you will need to obtain permission from the copyright holders concerned.

This publication is available at orr.gov.uk

Any enquiries regarding this publication should be sent to us at orr.gov.uk/contact-us

