

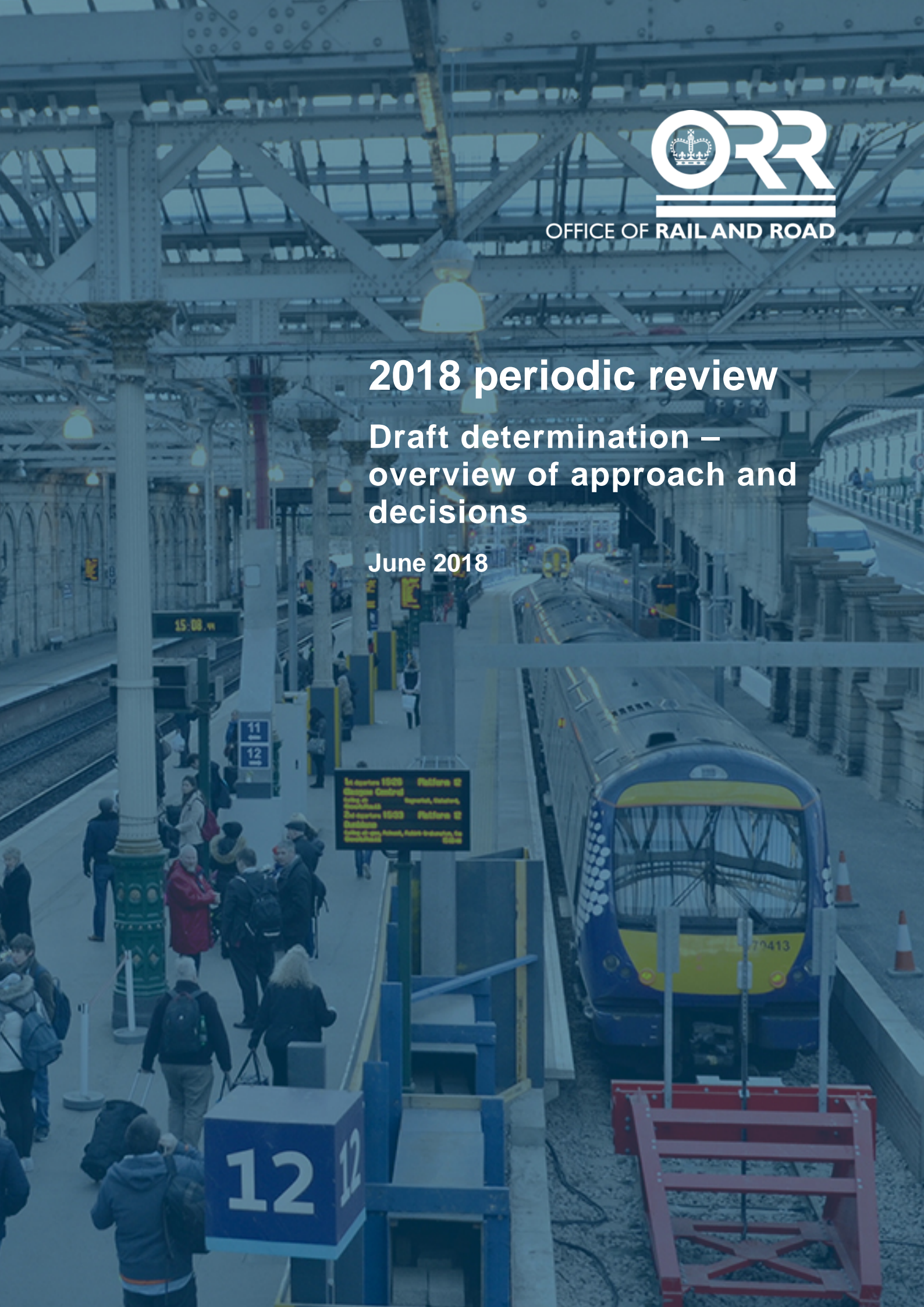


OFFICE OF RAIL AND ROAD

2018 periodic review

Draft determination – overview of approach and decisions

June 2018



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1. Introduction

Purpose of this document

- 1.1 The 2018 periodic review (PR18) is the process through which we determine **what Network Rail¹ should deliver** in respect of its role in operating, maintaining and renewing its network in control period 6 (CP6)² and how the funding available should be best used to support this. This feeds through into:
 - 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 will pay for access to its track and stations during CP6.
- 1.2 As part of PR18, **we have also developed our approach to how we will regulate Network Rail's delivery over CP6**, including the incentives to encourage it and train operators to perform well and the financial framework for Network Rail.
- 1.3 Our draft determination sets out, for consultation, our proposed overall decisions in both these areas. This document provides an overview of these. It also sets out a process for Network Rail to carry out some further work to reflect our proposed decisions for England & Wales, engaging with stakeholders as part of this.
- 1.4 Alongside this document, we have published separate high-level summaries of our main proposed decisions for each of [England & Wales](#) and [Scotland](#).
- 1.5 After taking account of consultation responses and the work referred to in paragraph 1.3, we will publish our final determination in October 2018.

Background and structure

- 1.6 We began PR18 in May 2016 with our [initial consultation document](#). Among other things, this set out our proposed aims and objectives for the review. These reflected where we thought PR18 could add most value, in terms of discharging our statutory duties and, in particular, supporting Network Rail's delivery for passengers and freight customers. We also sought views on our proposed high-level approach to delivering our PR18 aim and objectives and then confirmed these in our November 2016 [conclusions](#). Our PR18 aim and objectives are set out in Figure 1.1 below.

¹ All references to Network Rail in this document are to Network Rail Infrastructure Limited.

² CP6 will run from 1 April 2019 to 31 March 2024.

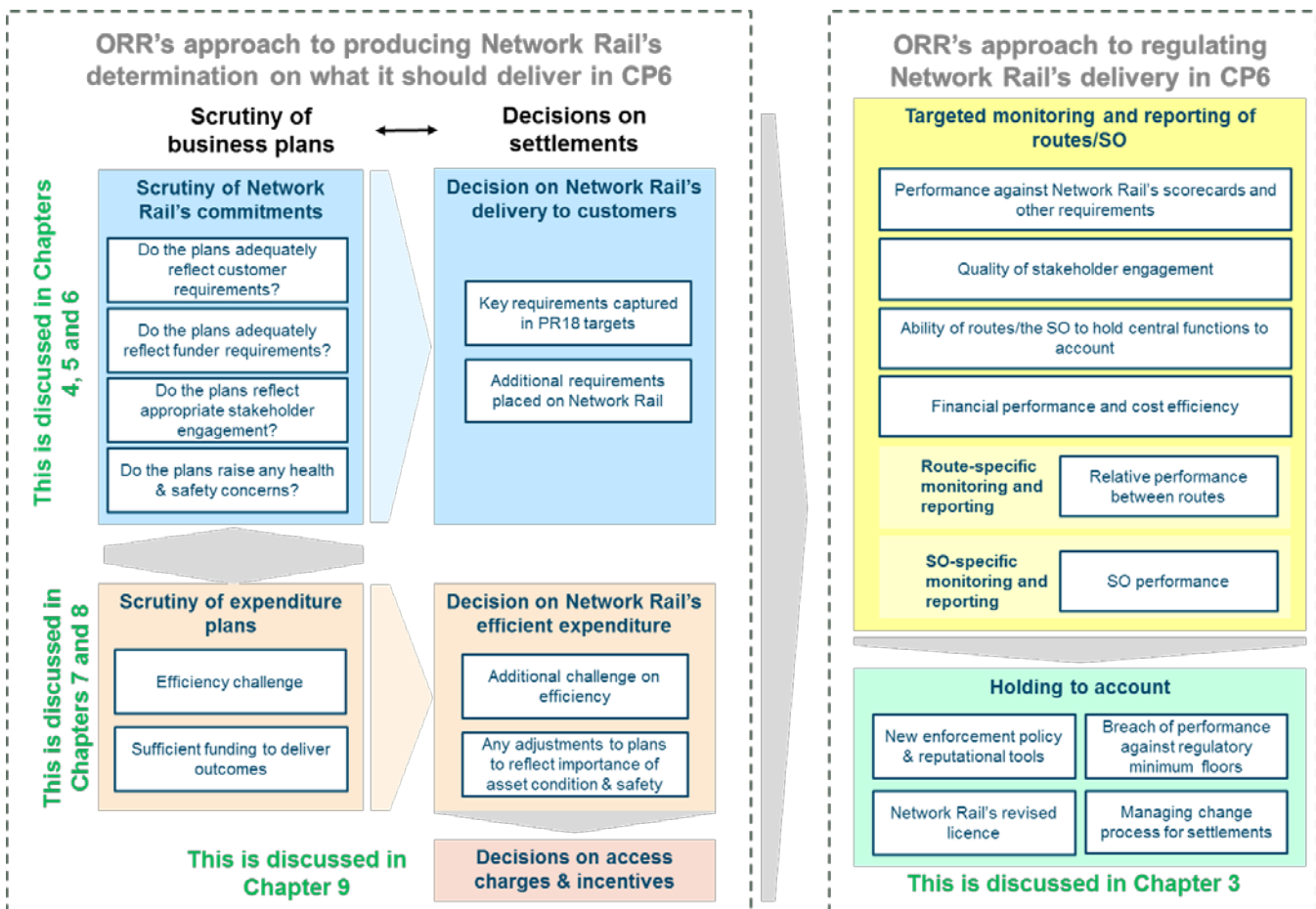
Figure 1.1: PR18 aim and objectives

Aim	A safer, more efficient and better used railway, delivering value for passengers, freight customers and taxpayers in control period 6 and beyond
Objectives	<p>To establish a framework that encourages Network Rail to:</p> <ul style="list-style-type: none"> (i) ensure the ongoing safety of the network; (ii) improve the efficiency of operating, maintaining, renewing and enhancing each of the routes in CP6 and beyond; and (iii) improve its understanding of the capacity and performance of the network. <p>To support government funders and operators to make better informed decisions about expansion and use of the network.</p>

1.7 As set out above and illustrated in Figure 1.2, our draft determination brings together two distinct strands of work which make up PR18:

- determining what Network Rail should deliver to customers for the funding available in CP6; and
- establishing the framework for regulating Network Rail's delivery in CP6.

Figure 1.2: The two key strands of the PR18 determination



1.8 This document is structured as follows.

- Chapter 2 discusses the approach to producing our draft determination on what Network Rail should deliver for its customers in CP6.
- Chapter 3 discusses our approach to regulating Network Rail's delivery in CP6, including how we will monitor its delivery and hold it to account in CP6.
- Chapters 4 to 7 summarise our review of Network Rail's strategic business plans (SBPs) for CP6 and decisions relating to what Network Rail should deliver with its available funding, including, in turn, our assessments of:
 - the stakeholder engagement undertaken by Network Rail's routes and the System Operator in developing their strategic plans (Chapter 4);
 - what Network Rail proposed to deliver in CP6, including whether this meets its customers' requirements and the requirements of the high-level output specifications (HLOSs) set by the Secretary of State and the Scottish Ministers (Chapter 5);
 - health and safety issues in the SBPs, and in particular, whether the SBPs could be delivered safely in CP6 (Chapter 6) and;
 - Network Rail's forecast costs and income in CP6 (Chapter 7).
- Chapter 8 summarises the financial framework for CP6, which will apply to Network Rail and its devolved routes and functions. It also includes our assessment of whether the HLOSs are affordable within the funding made available by the Secretary of State and the Scottish Ministers in their statements of funds available (SoFAs).
- Chapter 9 provides an overview of the process that we have followed to develop our decisions on access charges and contractual incentives for CP6, and summarises our proposals regarding infrastructure cost charges and capping/phasing-in increases to the variable usage charge.
- Chapter 10 summarises our overall decisions in this document and discusses the process that we have asked Network Rail to undertake up to mid-July 2018, to respond to our decisions and inform our final determination.
- Appendix A provides an overview of Network Rail's routes and key functions.
- Appendix B sets out how to respond to this consultation.

1.9 As well as this overview document, our draft determination is formed of a suite of **supporting documents**, including:

- **supplementary documents** that provide more detail on:
 - particular aspects of our review of Network Rail’s SBPs (such as our assessment of Network Rail’s scorecards and requirements); and
 - elements of the proposed policy framework for CP6, including documents setting out (for consultation):
 - proposed decisions on **infrastructure cost charges**;
 - our proposed approach to **capping/phasing-in increases in the variable usage charge**; and
 - proposals from our review of Network Rail’s network licence;

- **draft settlement documents** discussing the settlements we propose to set for the Freight & National Passenger Operator (FNPO) route and the System Operator (the SO). Our summary for Scotland includes a supporting annex providing further information on our proposed decisions for Scotland and the Scotland route, including in respect of the HLOS requirements of the Scottish Ministers. This reflects that the Scottish Government is a specifier and funder of rail services. When we publish our final determination, we will issue final versions of these documents;

- **route review summaries for the routes in England & Wales.** The nature of our draft determination decisions in England & Wales, which requires Network Rail to do further planning, means we are not setting out draft settlements for these routes at this point. We are, however, publishing an overview of our SBP engagement with each route, a summary of our overall decisions in England & Wales and our assessment of the stakeholder engagement that each route undertook to inform its strategic plan. We expect to publish settlement documents for these routes in October 2018; and

- ancillary documents, including impact assessments and a glossary.

1.10 The draft determination documentation suite is set out in Figure 1.3 below.

1.11 Shortly after the publication of this document, we will be publishing:

- a number of reports (or summaries of reports) by independent consultants and independent reporters, whose work has informed our decisions. A list of these is available [here](#);

- an updated version of our [design framework](#) for CP6. This sets out in summary form the key aspects of the framework for regulating Network Rail’s delivery; and

- a [document](#) setting out roles and responsibilities in respect of enhancements in CP6, reflecting the shift to a ‘pipeline’ approach to enhancements by the Department for Transport (DfT) and Transport Scotland.

1.12 A map of our earlier consultations and conclusions in PR18 is available [here](#). We have also published the [stakeholder comments](#) we received on the SBPs, which helped to inform our review.

Figure 1.3: The draft determination suite (includes weblinks)³

PR18 draft determination overview document		
England & Wales summary	Scotland summary (and supporting annex)	
Draft settlement documents	Supplementary documents	
FNPO route	SBP assessment	Scorecards and requirements
System Operator		Health & safety
		Review of NR’s proposed costs
		Other single till income
		Stakeholder engagement
Route review summaries	Policy	Financial framework
Anglia route		Review of network licence
LNE & EM route		Overview of charges & incentives decisions
LNW route		Infrastructure cost charges consultation
South East route		Variable usage charge consultation
Wales route		
Wessex route		
Western route		
Other documents	Conclusions to earlier consultations	
Glossary	Conclusions to working paper 8 on managing change	
Consultancy & reporter studies	Conclusions on our approach to assessing efficiency & wider financial performance	

³ Please note that some documents will be published after the publication of this document.

Price base

1.13 All prices in the draft determination document suite are in 2017-18 prices, unless otherwise stated. Also, totals may not sum due to rounding differences.

Responding to this consultation

1.14 We welcome views on this consultation **by Friday 31 August 2018**. Details of how to respond are set out in [Appendix B](#).

Implementation of PR18

1.15 After concluding our final determination in October 2018, we will begin the formal implementation process for PR18. This will involve publishing legal ‘review notices’ in December 2018 setting out the changes to relevant access contracts needed to give effect to the determination. We also expect to commence the statutory process to modify Network Rail’s network licence at this point.

1.16 In preparation for this, in July 2018 we will consult on proposed changes to access contracts and the network licence that would give effect to the decisions set out in the draft determination. Responses to this consultation will inform the final drafting that we will include in the review notices and statutory licence consultation later in the year.

1.17 More detail on the implementation process will be included in our July 2018 consultation.

1.18 Network Rail will publish its CP6 price lists for track access and station use in December 2018, setting out the specific amounts that train operators will pay. It will consult on draft price lists in July 2018.

Delivery plan notice

1.19 Around the time of our final determination in October 2018, we expect to publish a notice setting out our requirements for Network Rail’s delivery plans. To inform this, we will be engaging with Network Rail and stakeholders on the scope of the delivery plans following the publication of this draft determination.

Monitoring and enforcement policy

1.20 Following our final determination in the autumn, we will consult on changes to our enforcement policy to reflect the framework for regulating Network Rail’s delivery in CP6.

Next steps and process for the remainder of PR18

1.21 Following our draft determination, there are separate next steps for each of England & Wales and Scotland. These are discussed further in Chapter 10. In terms

of the PR18 programme overall, the remaining high-level milestones are set out in Table 1.1.

Table 1.1: Timetable for the remainder of PR18

Date	Milestone
12 June 2018	We consult on our draft determination for CP6
12 July 2018	We consult on changes to access contracts and the network licence to implement PR18. This will seek views on the changes we propose to make to track access contracts (mostly in Schedules 4, 7 and 8), station access agreements and network licence provisions to implement our determination.
13 July 2018	Network Rail submits information to us in respect of targeted updates to its CP6 plans.
31 August 2018	Deadline for responses to ORR's draft determination. Deadline for responses to our consultation on changes to access contracts and the network licence to implement PR18.
31 October 2018	We publish our final determination for CP6.
November 2018 to April 2019: Implementation	
November 2018	We publish a consultation on our enforcement policy for CP6.
December 2018	Network Rail consults on its draft delivery plans for CP6.
20 December 2018	We publish our review notices, setting out the changes to access contracts needed to implement our final determination. We begin a statutory consultation on modifications to Network Rail's network licence
20 December 2018	Network Rail publishes its price lists for CP6, setting out the specific access charge rates that would be payable by train operators.
Early February 2019	Network Rail decides whether to accept or reject our final determination. If it accepts, we will then give train operators 28 days in which to terminate their access contracts (should they wish to do so), as required by law.
Mid-March 2019	We issue our 'review implementation notices', confirming that the review will be implemented on 1 April 2019.
March 2019	Network Rail publishes its delivery plans, including its trajectories for all CP6 scorecard measures following our final determination.
March 2019	We publish Network Rail's revised network licence, following completion of the statutory consultation. We also confirm and publish our enforcement policy for CP6.
1 April 2019	CP6 begins. Changes to train operators' access contracts, including new access charges, and Network Rail's network licence, take effect.

2. Approach to producing Network Rail’s determination for CP6

Overview

This chapter discusses our approach to determining what Network Rail should deliver for its customers in CP6.

Introduction

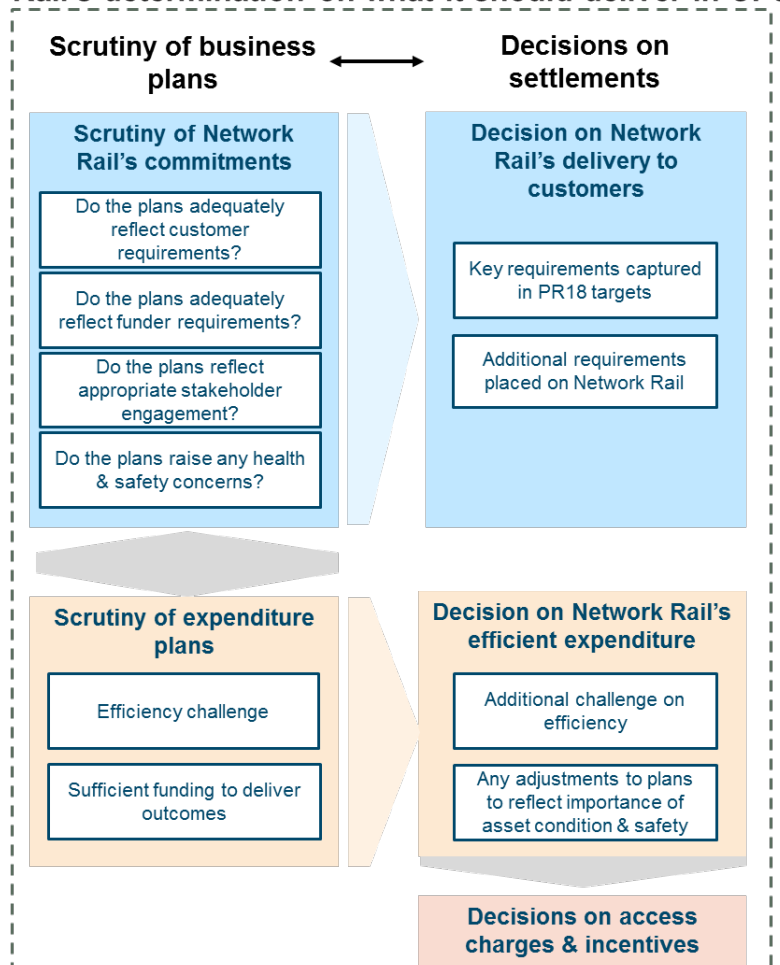
2.1 As discussed in Chapter 1, PR18 is the process through which we determine our expectations of what Network Rail will deliver in CP6, in compliance with its network licence. It is one part of our ongoing regulation of Network Rail, and provides valuable certainty to Network Rail, the wider rail industry, passengers and freight users about what the company will deliver and the funding available to it over the five-year control period from 1 April 2019.

2.2 This chapter explains our approach to **how** we have arrived at this determination. This is illustrated in Figure 2.1.

2.3 This draft determination is different from those in previous periodic reviews and reflects some wider changes to Network Rail, in particular:

- it is the first review to take place after Network Rail has been **reclassified as a public sector body**. This has led to it being subject to much closer control by governments on its spending, which has also meant that Network Rail is no longer able to raise new finance on its own account. As such, the funding available to it is effectively fixed; and
- it seeks to reflect and support the **devolution of responsibilities within**

Figure 2.1: Our approach to producing Network Rail’s determination on what it should deliver in CP6



Network Rail, which has led to the creation of more distinct route businesses (that are now responsible for more of the decisions that affect their local customers or funders) and the establishment of a distinct SO (whose functions centre around maintaining the benefits of having an integrated national network).

2.4 The rest of this chapter discusses:

- Network Rail's SBPs and the approach we took to scrutinising them; and
- an outline of the decisions arising from this scrutiny, including where references to these are discussed in the rest of this document.

Network Rail's plans and our approach to scrutinising them

2.5 A particular focus of periodic reviews is to scrutinise the SBPs prepared by Network Rail. For PR18, we have focused our review on the strategic plans prepared by each of the following business units:

- the eight geographic routes, which are responsible for maintaining, operating and renewing their respective areas of the network;
- the freight and national passenger operator (FNPO) route, which represents the interests of freight and national passenger operators that operate across a number of geographic routes; and
- the SO, which is responsible for working across the network in leading long term strategic planning, managing changes to the network and producing the timetable.

2.6 Appendix A provides an overview of Network Rail's structure.

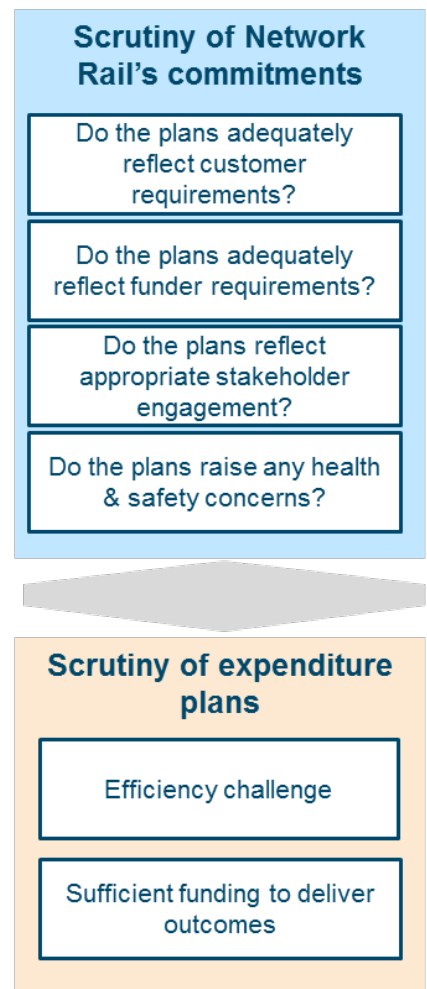
2.7 Reflecting the wider changes to Network Rail discussed above, our scrutiny sought to address two high-level aspects:

- **what Network Rail will deliver to its customers (principally passenger and freight train operators) in terms of outputs (e.g. levels of punctuality of passenger train services).** We looked at whether Network Rail's plans set out appropriate, credible and sufficiently challenging targets for what it will deliver through its routes/the SO over CP6. As part of this, we considered whether the plans adequately reflect the HLOSs for England & Wales and for Scotland, as well as the extent to which they meet the needs of train operators, passengers and freight customers. We also considered whether they support continued safe operation. Crucially, and given that Network Rail's overall funding is effectively

fixed, we considered whether the plans made appropriate trade-offs between often competing priorities, including between maintaining the network, renewing it to raise asset condition and spending to raise performance levels delivered to passengers and other end users in the near-term; and

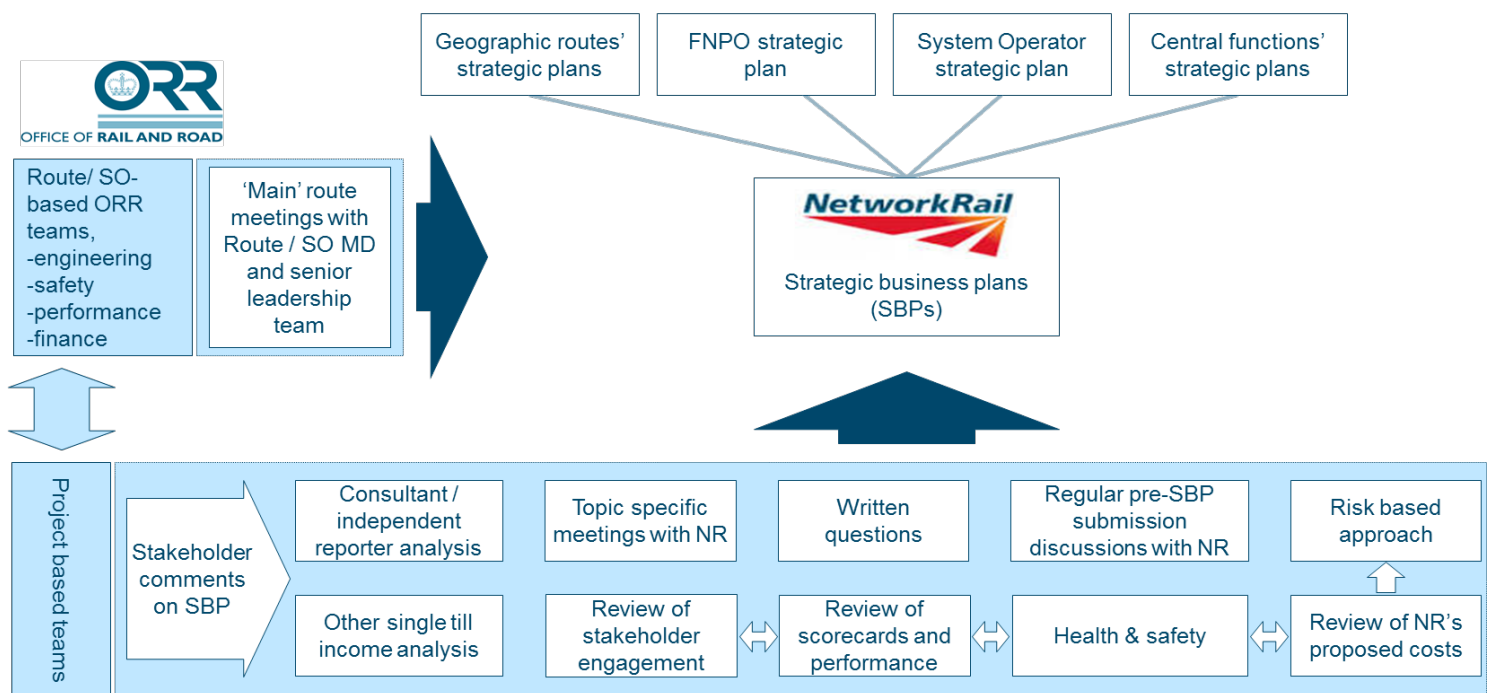
- **whether spending plans are realistic and justified** (i.e. whether its expenditure is efficient). We also considered whether the plans contain a sufficient degree of stretch in terms of improving efficiency and (as required by the Railways Act 1993) whether there are sufficient funds available (in the SoFAs) to deliver the requirements of the HLOSs (our 'affordability assessment').

Figure 2.2: Our approach to scrutiny of Network Rail's SBPs



2.8 Figure 2.2 below summarises our approach to **how** we scrutinised the business plans.

Figure 2.2: Our approach to producing Network Rail's determination on what it should deliver in CP6



An outline of our decisions on the route and SO settlements arising from this scrutiny

2.9 In PR13 we set a framework of regulated outputs, indicators and enablers for CP5⁴. In light of wider industry changes discussed above, we have adapted our approach in PR18 for CP6, the key aspects of which are discussed below and summarised in the figure below.

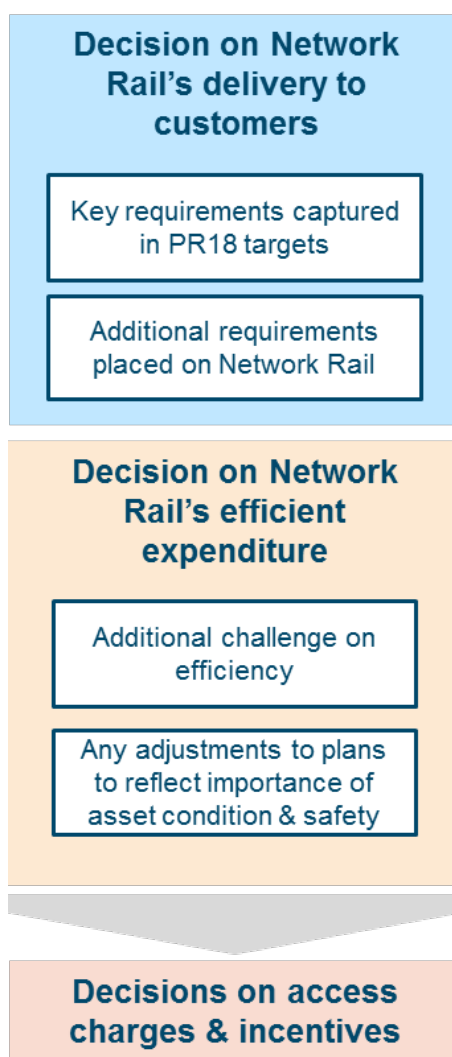
Our decisions on Network Rail's delivery to customers

2.10 During CP5, Network Rail introduced scorecards to align its priorities with those of its customers and help it incentivise its management to deliver these priorities. These scorecards set out what Network Rail is seeking to deliver for its customers and funders, and how it is performing against this.

2.11 We will use scorecards in how we regulate Network Rail in CP6 so that it is monitored and held to account for what it is delivering for its customers and funders as set out in scorecards. We discuss how we will use scorecards to monitor Network Rail over CP6 in Chapter 3.

2.12 As such, we have required routes to discuss and agree key performance targets included in scorecards for PR18. If agreed, these will provide important customer-led targets that also benefit from having buy-in from the route teams. In addition to the route scorecards, there will be a Scotland HLOS scorecard.

2.13 Unfortunately, to date, the majority of passenger train operators have not been able to reach agreement with Network Rail on train performance trajectories. There is work on-going between train operators and Network Rail to address this. We have agreed a process with Network Rail and the train operators through the National Task Force (the NTF)⁵ to take forward this work with the aim of reaching agreement. It remains the case that where the industry is unable to reach agreement we will take a view on performance as part of the final



⁴ See Chapter 3 of our PR13 [Final determination of Network Rail's outputs and funding for 2014-19](#).

⁵ The [National Task Force](#) is the body through which the industry cooperates to improve performance.

determination. Our review of Network Rail's scorecards and, in turn, our decisions on what we require of Network Rail is set out in Chapter 5. The process for making adjustments to the performance trajectories is discussed in Chapter 10.

2.14 We have also set additional requirements on Network Rail that relate to improved governance and increased transparency.

Our decisions on Network Rail's efficient expenditure

2.15 Broadly, we consider that the proposed expenditure set by each of the routes/the SO in their strategic plans was appropriate.

2.16 Through our assessment of Network Rail's plans for England & Wales, we have identified a number of opportunities (amounting to around £1bn in CP6) for Network Rail to increase its income or reduce its expenditure. However, Network Rail is not proposing to spend enough on the network to maintain asset sustainability at the CP4 exit level, and we think Network Rail can use the money we have identified to increase its spend in this area.

2.17 There is also an opportunity to consider whether existing methods to allocate central costs between England & Wales and Scotland remain suitable in a devolved funding environment, which is a particular concern of Transport Scotland. We are carrying out a limited but more detailed review of central costs before the final determination, working with Network Rail and Transport Scotland, which may help strengthen the accountability of centrally provided services to the Scotland route.

2.18 We have also set out changes to how Network Rail should manage its risk in CP6. These changes will move over £0.9bn from Network Rail's proposed central risk fund out into the routes. In England & Wales, the funding moved to routes will be held and, if not required to manage risk, will be used by routes to pay for additional renewals (we refer to these as 'contingent renewals'). In Scotland, we will continue to work with the Scotland route and Transport Scotland to confirm the appropriate treatment of risk funding there.

2.19 Our review of Network Rail's costs and income and, in turn, our decisions on Network Rail's efficient expenditure is set out in Chapter 7.

Our decisions on Network Rail's access charges and contractual incentives

2.20 A final element of our determination is to set out our decisions on the charges that train operators should pay for using the network and the contractual incentives that should apply to them and Network Rail. These decisions are set out (or referenced) in Chapter 9.

3. Our approach to regulating Network Rail in CP6

Overview

This chapter explains how we will monitor and report Network Rail’s delivery to its customers, and how we will hold it to account in CP6.

Introduction

3.1 This chapter explains how we will regulate Network Rail’s delivery to its customers in CP6, including by monitoring and reporting and holding it to account. It focuses on the areas set out in Figure 3.1. It should be considered alongside our updated [design framework](#), which provides a high level summary about how we will regulate Network Rail in CP6.

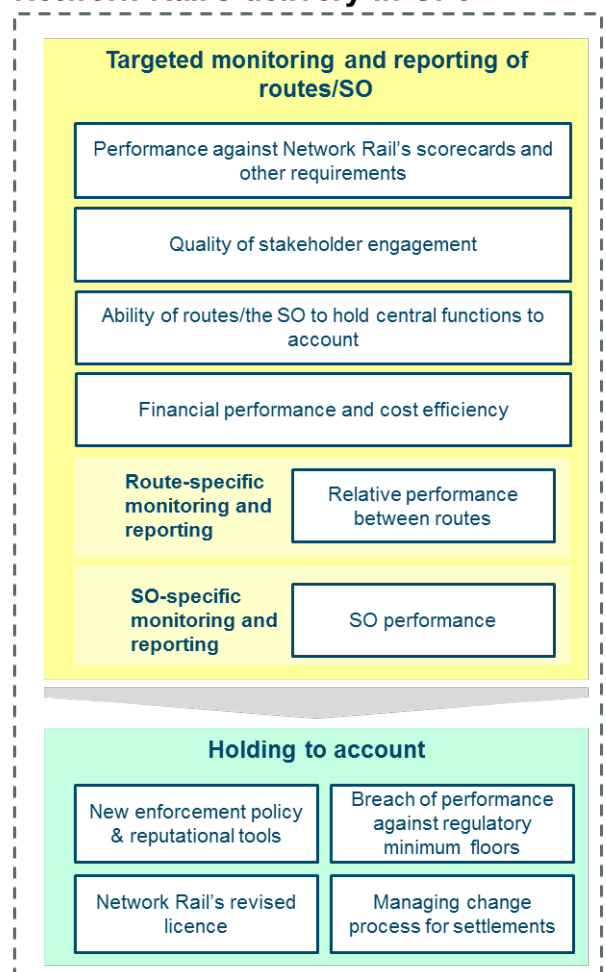
3.2 Our overall approach to regulating Network Rail in CP6 aims to support its transformation into an organisation that is more efficient, safer and has a better used network for passengers and freight customers.

3.3 How we will do this in CP6 reflects the wider changes to Network Rail:

- **The reclassification of Network Rail as a public sector body** has reduced the likely effectiveness of certain financial incentives on the company, including the imposition of financial penalties. As such, and in addition to using financial incentives and our existing licence enforcement powers, we will make better use of reputational incentives. This has implications for how we monitor and report Network Rail’s delivery to customers and how we hold it to account; and

- **Network Rail’s route devolution** will enable us to monitor Network Rail’s delivery to its customers at a route and an SO level, including through the use of routes’/the SO’s scorecards. However, reflecting the fact that Network Rail

Figure 3.1: Our approach to regulating Network Rail’s delivery in CP6



remains a single company with a single network licence, we will continue to monitor what the company as a whole delivers to its customers.

3.4 This chapter discusses, in turn, the two key elements of our approach to regulating Network Rail in CP6:

- **targeted monitoring and reporting of the routes’ and the SO’s delivery to its customers;** and
- **holding routes/the SO, and where appropriate Network Rail as a company, to account for their delivery to customers.**

Targeted monitoring and reporting of routes’/the SO’s delivery to customers

3.5 Our monitoring and reporting will provide transparency and an independent view of how the routes/the SO (and the wider company) are performing. It will also allow us to provide stronger reputational signals by reporting on relative performance and highlighting where there is evidence of out-performance or under-performance.

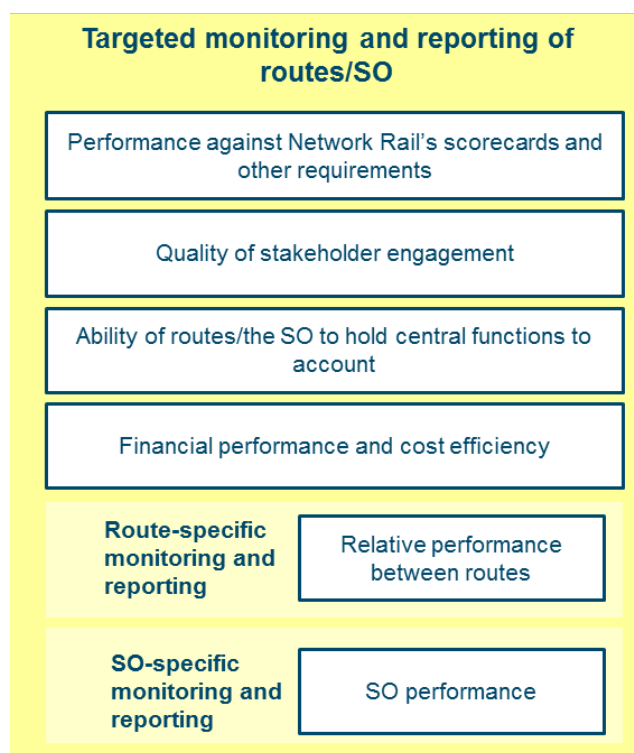
3.6 In doing this, we will particularly focus on a number of key elements. We discuss each of these in turn.

Performance against scorecards and other requirements

3.7 As discussed in Chapter 2, Network Rail’s scorecards set out what it is seeking to deliver for its customers and funders, and how it is performing against that. Performance against the scorecards also heavily influence Network Rail managers’ bonuses.

3.8 The development and use of scorecards has a number of advantages, including that they:

- **encourage routes and the SO to engage with their customers** and seek to agree appropriate measures and targets for delivery (rather than having these imposed on the industry by ORR). This should in turn benefit end users of the network by ensuring Network Rail is aligned to what its customers need to run their businesses (including to deliver to their own customers i.e. passengers and end-users); and



- **provide flexibility to adapt to changing circumstances**, recognising that:
 - the targets set at the periodic review may fail to provide reasonable stretch to management teams across the whole of CP6 (due to out- or under-performance relative to expectations, as the control period progresses); and
 - customers' views on what they want may change over time (including as franchises are renewed and/or there are changes in the freight market).

3.9 Our use of scorecards in how we monitor Network Rail and report on its performance represents a new approach that wraps around Network Rail's processes. In particular, we will make greater use of scorecards in monitoring Network Rail where they:

- **contain a balanced set of measures** across Network Rail's activities and to reflect the interests of both current and future users;
- **enable route comparison** by using a consistent set of measures between routes and over time; and
- **reflect the HLOS requirements** where appropriate.

3.10 We discuss the extent to which Network Rail met these requirements in Chapter 5.

3.11 Furthermore, we will place particular weight on how the routes/the SO performs against any targets that have been agreed with customers. Where there is clear customer agreement to updated targets, we would place more weight on performance relative to these targets in our monitoring. In such circumstances, and whilst we would continue to report performance relative to the expectations in our final determination, these would feature less prominently – reflecting that they have been somewhat superseded by a new statement of what customers want.

3.12 As such and in general terms:

- where a route/the SO out-performs against a customer-agreed target, we would be likely to recognise this in our monitoring and reporting; and
- where a route/SO under-performs against a customer-agreed target, we would be likely to consider what plans the customer and route/the SO have in place to address this underperformance, and whether there is a need for additional steps to support improved performance of that route/the SO.

3.13 With respect to Scotland, we will have particular regard to the requirements in the Scottish HLOS, some of which are reflected in the Scotland route, the FNPO and the SO scorecards. In addition, there will be a Scotland HLOS scorecard.

3.14 In assessing whether the routes/the SO (and Network Rail as a company) are delivering the obligations in the network licence, we will take into account a wider set of evidence, as necessary.

Quality of routes'/the SO's stakeholder engagement

3.15 For CP6, it is important that Network Rail's customers and other key stakeholders are able to engage with the routes/the SO to influence what they deliver, both in the short and long-term.

3.16 In general, we will not be prescriptive about how the routes/the SO (or other business units) do this. Rather, we will expect them to follow the broad principles of good stakeholder engagement, namely that the engagement should be:

- **effective**, in that it supports delivery of our overall PR18 aims (safer, more efficient and better used rail network) and, specifically, that it enables stakeholders to influence priorities and challenge performance (where necessary). The engagement should also be proportionate to what it is seeking to achieve (so that money on engagement is well spent);
- **inclusive**, in that the overall engagement seeks to involve all relevant stakeholders (without undue discrimination) and adopts different approaches to reflect differing stakeholder capabilities and interests;
- **well governed**, so that there are processes that encourage meaningful engagement and accountability, as well as providing mechanisms for challenge and escalation; and
- **transparent:**
 - On performance: There should be provision of appropriate and relevant information and data to enable stakeholders to influence and challenge in an effective and timely way; and
 - On engagement: It should be clear how engagement arrangements have been implemented and what impacts they have had on Network Rail's actions and delivery. For example, there should be a record of key points made by different stakeholders and how they have been acted on (or, if not, why not).

3.17 In following these principles, we expect routes/the SO to, at a minimum:

- **engage with stakeholders in the annual business planning process**, including by providing stakeholders with detail about what they are seeking to achieve and what they will deliver for those stakeholders and giving an

opportunity to influence the annual business plans as these are being developed;

- **develop and agree any scorecards with their passenger and freight train operator customers (and Transport Scotland in the case of the Scottish HLOS requirements)** as part of the annual business planning process over CP6. This should include the measures that should be contained in the scorecard(s) and the appropriate targets for delivery. How routes/the SO should engage with customers in agreeing scorecards (including in how the scorecards develop over CP6) is discussed in Chapter 5; and
- **ensure there is scope for bilateral and multilateral engagement**, building on existing relationships, groups (e.g. the NTF) and joint strategies (e.g. joint performance improvement plans (JPIPs) and performance strategies that provide a means for Network Rail and an operator to agree bilateral performance plans and targets).

3.18 We will take account of the quality of the routes'/the SO's stakeholder engagement in how we monitor the routes'/the SO's overall performance; for example, we are likely to focus more on the performance of those routes/the SO that are engaging less effectively with their stakeholders compared with those that are engaging well. We will also take account of the quality of the routes'/the SO's engagement in determining whether and how we take action against Network Rail in the event that we have concerns about its performance.

Routes' supervisory boards

3.19 As part of its transformation plan, Network Rail has been establishing supervisory boards that are intended to bring together (one or more) Network Rail routes and their customers to ensure that the route and train operators are working together effectively. Box 3.1 discusses the supervisory boards.

3.20 We welcome this development, and see value in ways that encourage discussion and closer working between routes, the SO and their customers. However, it is not yet clear that Network Rail's emerging approach to supervisory boards will enable us to take them into account when monitoring routes'/the SO's performance.

3.21 To enable us to rely on a forum where a route engages with its stakeholders, it would need to provide, as a minimum, a means to:

- **discuss performance and, where necessary, challenge it** (relative to scorecards and the expectations set out in the final determination);
- **identify causes** of any under-performance relative to targets and recognition of factors supporting out-performance;

- **agree practical action plans to remedy issues**, which could include actions on both the route/the SO and customers. Delivery against these actions could in turn be monitored and reported on;
- **provide an appropriate level of information in the public domain** (e.g. publishing notes and minutes of the meetings) to enable stakeholders who are not members of the relevant group to decide if/when they need to engage with the routes and/or the forum. Any public reporting would need to be subject to usual commercial and confidentiality interests; and
- **hold the route(s)/SO to account in an effective manner** (e.g. by way of escalating concerns within Network Rail and/or to ORR that may also require the forum to have a direct relationship with ORR).

3.22 In the absence of forums that meets these expectations, there is a risk that, when something goes wrong, all parties immediately look to the regulator to intervene. While we will do so, our intervention is likely to be more timely and effective if routes, the SO and customers continue to work together constructively. As such, we will consider how the supervisory boards, and other relevant Network Rail/industry groups, are being developed to determine whether we are able to rely on them in the way we monitor the routes' performance.

3.23 Separately from the routes, the SO is also developing new external governance arrangements that include the establishment of an SO advisory board. The SO advisory board will have a formal role in approving the SO's annual business plan and annual narrative report, and the SO has committed to publishing the papers and minutes of the meetings. This approach should enable us to draw on the role of the advisory board in the way we monitor the SO's performance.

Box 3.1: Routes' supervisory boards

As part of its route transformation plan, Network Rail is establishing supervisory boards which, it says, should enable senior 'train and track' colleagues to engage on specific opportunities and issues facing the railway.

Most routes have (or will have) their own single supervisory boards, though some routes will share a supervisory board (e.g. the LNW and LNE&EM route are represented through a Northern Supervisory Board).

While Network Rail expects the composition of each supervisory board to be different (reflecting the routes' different customers and funders), it has suggested that they should be attended by the route MD(s), the relevant train operator MDs and representatives from Transport Focus and the SO.

Network Rail says that the minutes and actions of each meeting will be shared with attendees after the meeting.

The supervisory boards have been established; however, Network Rail is continuing to engage with industry (as well as funders and ORR) about how they will work.

ORR's regular assessment of the routes'/the SO's stakeholder engagement

3.24 To incentivise the routes/the SO to improve the way they engage with stakeholders over CP6, we will undertake an assessment of the quality of the routes'/the SO's engagement on a regular basis over CP6. We will use our experience of assessing the quality of the routes'/SO's engagement in developing the SBP to develop our approach in CP6⁶.

Ability of routes/the SO to hold central functions to account

3.25 We have set out our proposals to focus much of our monitoring and reporting of Network Rail's performance on the routes and the SO. However, a significant proportion of the Network Rail's activity is undertaken by its central functions. The central functions are its business units outside of the routes and the SO, such as the Infrastructure Projects directorate (responsible for delivering enhancements and major renewals for the routes) and the Safety, Technical and Engineering directorate⁷ (STE, which, amongst others things, sets technical policies and standards for the routes, the SO and the wider rail industry).

⁶ Our assessment of the routes'/the SO's SBP stakeholder engagement is discussed in the route and SO settlement documents, as well as in our supporting document on Network Rail's SBP stakeholder engagement. Our assessment is also summarised in Chapter 4.

⁷ This is also known as the 'Technical Authority'.

- 3.26 Importantly, the central functions' primary customers are the routes and the SO. This means that there is significant potential for routes and the SO to exert pressure on these functions in ways that provide appropriate incentives on the central functions to deliver effectively. There are some instances where central functions' performance impacts operators directly (e.g. through STE's development of industry standards).
- 3.27 While our focus will be on the routes/SO, Network Rail remains a single company and all of its activities are subject to our regulation. As they are part of Network Rail, central functions will need to deliver in accordance with Network Rail's licence.
- 3.28 However, the precise way in which we will regulate central functions will depend on the extent to which the routes/the SO can exert commercial discipline on the central functions. Where Network Rail allows routes/the SO to act as informed customers, we will reflect this in the way we regulate the central functions by, for example, giving space to the routes/the SO to scrutinise the central function's performance and to challenge them, where necessary.
- 3.29 Where we have concerns about a central function's activities – and/or we are not confident that the governance arrangements provide sufficient assurances that routes/the SO can influence and exert pressure on the central functions – we will adapt our approach accordingly. This could involve focusing our monitoring and reporting activity on a central function's performance, and considering its performance against its scorecard and whether there is evidence to justify enforcement activity.
- 3.30 As part of its transformation plan, Network Rail has implemented some changes to its internal governance arrangements that determine how the routes, the SO and central functions work together. It is also considering how it undertakes enhancements and related capital work, including the role of the routes, the SO and Infrastructure Projects in delivering this.
- 3.31 For CP6, we would expect Network Rail's internal governance arrangements to meet the following principles:
- routes/the SO have the necessary information to understand the central functions' performance, including through central functions' scorecards;
 - routes/the SO have a choice as to whether they wish to undertake the service themselves, procure it from central function, or procure it from outside of Network Rail, where it is appropriate to do so; and
 - where routes/the SO are not free to choose how they are supplied, they are able to hold central functions to account by having the necessary processes, relationships and groups through which to discuss, influence and challenge

performance in line with what would be expected to happen under competitive market conditions.

3.32 Reflecting the fact that Network Rail is in the process of implementing its internal governance and reporting of central functions, we have not yet been able to sufficiently assure ourselves that they are consistent with the above principles.

3.33 We will continue to engage with Network Rail in the development of its internal governance arrangements, particularly with respect to the extent to which they meet our principles. To support our understanding of the effectiveness of Network Rail's internal governance, we may commission a review in CP6 to assess the extent to which the governance arrangements are meeting our principles for effective internal governance.

Financial performance and cost efficiency

3.34 We will monitor and report on each of the routes'/the SO's financial performance and cost efficiency. This will provide further incentives to the routes/the SO to improve their financial performance.

3.35 To do this, each of the route and SO settlements allocates the funding each of the routes and the SO will receive (the revenue requirement) in return for what they are expected to deliver for their customers⁸. It also includes provision of funds to manage risk, both within the route/the SO and across Network Rail.

3.36 The company will now account for income and expenditure in ways that maintain a clear picture of each route's/SO's performance. In particular, this means that⁹:

- charges income and funding from governments will be recognised at the route and SO level;
- expenditure will be recorded at route and SO level, including expenditure by the routes and SO on services procured from other parts of Network Rail (including from central functions); and
- the FNPO route will have a particular role to provide funding to geographic routes so that they have income from both passenger and freight operators (noting that a number of major freight market segments do not face charges to recover fixed costs).

⁸ The settlement for Scotland is ring-fenced, reflecting Scottish Ministers' responsibility for the strategy and funding of rail infrastructure in Scotland.

⁹ These money flows are explained further in chapter 2 of our second consultation on the PR18 financial framework. See [here](#).

3.37 Building on this approach, we will continue to measure Network Rail's efficiency and wider financial performance in CP6, and will make a number of incremental changes to our current approach (including putting more focus on the SO's financial performance)¹⁰. Different measures can be used to report on a company's financial performance and there is no single right or wrong measure. Indeed, different measures can be complementary to provide a more rounded assessment. However, we will focus on two measures in particular:

- **efficiency**: this compares expenditure on core business activities (operations, maintenance, renewals and supporting central functions) to the value of outputs on a like-for-like basis over time; and
- **financial performance measure (FPM)**: this compares income and expenditure to the financial assumptions underpinning routes'/the SO's CP6 funding. This will be the main measure for comparing routes'/SO's financial performance in CP6¹¹. The baseline financial assumptions underpinning FPM include efficiency improvements that the routes/the SO are expected to achieve in CP6. If a route/the SO has spent less and/or received more income than the baseline (for what it has delivered), it will report financial outperformance, and vice versa.

3.38 Our approach for assessing routes'/the SO's efficiency and financial performance in CP6 will:

- achieve a better understanding of the efficiency of Network Rail's routes by putting greater emphasis on reviewing and reporting on how routes have delivered efficiency improvements;
- include an assessment of cost drivers, unit costs and productivity measures over time and across routes;
- make greater use of information from our safety role, for example, drawing on insights from safety reports where relevant; and
- provide a forward-looking view of the efficiencies that Network Rail is likely to achieve across CP6 as part of our annual reporting. This will include assessing the quality and progress of routes' efficiency plans and monitoring the leading indicators of delivery.

¹⁰ This is discussed in our Conclusions to our January 2018 consultation on measuring on Network Rail's efficiency and wider financial performance in CP6. See [here](#).

¹¹ Providing that Network Rail can provide a clear reconciliation between the its routes' internal budgets and our PR18 financial assumptions, the company's internal budget should form the baseline for calculating and reporting financial performance and this will be shown on the route and SO scorecards. This should help to reduce some of the complexity of the CP5 measure but still allow reporting against the PR18 determination.

3.39 We will work with Network Rail and other stakeholders over the next few months to agree what specific information we should use to inform aspects of our assessments, in particular for cost drivers, unit costs, productivity measures and leading indicators of performance.

Relative performance between routes

3.40 We will monitor and report on how well each route is performing against the targets it sets itself, including by using Network Rail's scorecards and other management information. In doing this, we will make greater use of comparison between routes. This will sharpen the incentives on each route to perform and will provide a stimulus to sharing of best practice across Network Rail.

3.41 To support comparison between routes, we are requiring Network Rail to report on certain consistent route measures in CP6:

- for all the geographic route scorecards, the consistent route measures relate to the route's contribution to train performance for passenger and freight services¹² and to network sustainability; and
- for the route comparison scorecard, Network Rail has agreed to include a set of additional end-user focused measures which will be included in a new route comparison scorecard for CP6 (e.g. passenger satisfaction for the route).

3.42 We will also compare Network Rail's performance at route level against our expectations included in the final determination (and as set out in the delivery plans), and also against how well other routes have performed against these expectations.

The SO's performance

3.43 The SO's responsibilities include leading strategic planning, managing changes to what the network delivers and producing the timetable. As discussed above, the SO will have its own settlement in CP6 that will provide it with its own budget to fund its delivery to customers (namely, train operators and national and local funders).

3.44 In line with the routes, the SO will have its own set of scorecards (including a national Tier 1 scorecard, as well as geographically and functionally disaggregated Tier 2 and Tier 3 scorecards) that it will use to agree priorities with its customers and to report on its performance. We will monitor and report on the SO's performance using these scorecards.

3.45 However, for many of the SO's activities it is not possible or appropriate to capture the quality of the SO's performance using quantitative metrics such as what would be included on a scorecard. This relates to, for example, the quality of the SO's advice

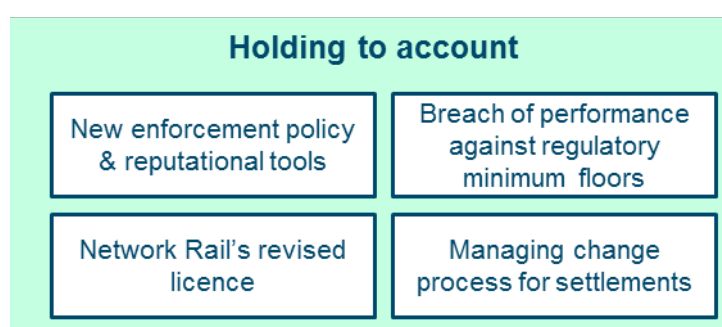
¹² We refer to these measures as the 'Consistent Route Measure – passenger performance (CRM-P)' and the 'Consistent route measure – freight performance (FDM-R)'. They are discussed in detail in Chapter 5.

in working with funders, franchising authorities and operators about how the network should be used or developed.

3.46 As such and reflecting the commitments made in the SO's strategic plan, we will require the SO to produce and publish an annual narrative report. This should explain those elements of its performance that do not lend themselves to scorecard reporting, and to reflect on the quality of its service and areas for improvement. To ensure the report is sufficiently comprehensive, we are also requiring that the SO formally agrees the content of its annual report through its SO's Advisory Board.

Holding Network Rail, the routes and SO to account for delivery to customers

3.47 Our determination sets expectations for Network Rail. How well it delivers these is ultimately determined by the decisions and actions of all those working at Network Rail.



3.48 Network Rail's reclassification as a public sector body has affected how we hold it to account, in particular by increasing the relative importance of reputational incentives.

3.49 As regulator, we set the regulatory framework, licence conditions and monitoring and enforcement policies that can create or reinforce many of these incentives. This is supported by our proposals on how change should be managed throughout CP6.

Enforcement policy and reputational tools

3.50 We have already made the case that, in the absence of private capital and incentives to maximise profits, it is important to understand what motivates Network Rail to deliver. One of the strongest incentives, corporately and individually, is to maximise reputation.

3.51 Reputation, in the widest sense, encompasses professional pride, individual recognition and belief in what an organisation is trying to achieve. Procedural incentives, whereby the level of scrutiny or process applied to an organisation or business unit is linked to performance – so that good performance is rewarded with greater freedom – can also be effective motivators. Such approaches can be effective in industries where there is a strong sense of affiliation and loyalty combined with a desire for operational freedom and earned autonomy. In rail, there is a particularly strong sense of pride exhibited by those working in the industry.

3.52 Reflecting this, we will be updating our monitoring and enforcement policies for CP6 to take account of this shift towards reputational incentives and also the increased focus on monitoring and reporting on the performance of routes and the SO.

3.53 We will continue our current approach in terms of acting in a way that is:

- **risk-based**: where there is reliable evidence that a route or the SO is lagging (including when compared with other routes/the SO), we would place more scrutiny on them; and
- **proportionate** to the scale of the issue: we will continue to use a range of tools when intervening, some of which will involve relatively moderate steps (e.g. additional reporting requirements), while others will carry more significant consequences (e.g. enforcement action targeting sanctions on the relevant parts of the business).

3.54 However, we have also identified a number of improvements to the ways in which we can hold the company to account, including:

- increasingly **focusing our engagement with the route and SO** management teams, where the issues being investigated relate to routes/the SO;
- **ORR hearings between the route/SO** and affected parties, in order to reinforce accountability at this level of management and provide an opportunity to better understand both parties' perspectives; and
- using **regulatory sanctions at the route- and SO-level**, which would have the effect of reducing the profit recorded in the relevant business unit (while not reducing the financial resources available to the route/SO). Where Network Rail reflected these sanctions in its management incentives schemes, this would provide a sharper incentive on the relevant management teams, and reduce the need to resort to financial penalties (which have the disadvantage of reducing the resources available to the company).

3.55 We will consult on these tools as part of updating our monitoring and enforcement policies for CP6.

Breach of performance against regulatory minimum floors

3.56 A regulatory minimum floor is the point at which we will be highly likely to consider a formal investigation into whether or not Network Rail has breached its licence (i.e. whether Network Rail is doing everything reasonably practicable to deliver the reasonable requirements of its customers and funders. The floor is set at a level at which we consider performance to be unacceptable.

3.57 We have set a regulatory minimum floor for three of the consistent route measures that we are requiring the geographic routes to include in their scorecards (relating to the route's contribution to train performance for passenger and freight services¹³, and to network sustainability).

3.58 We may choose to escalate our monitoring and enforcement before performance falls below the minimum floor, depending on the available evidence, including whether routes, the SO and customers are taking effective, agreed actions to remedy any under-performance.

Role for revised Network Rail licence

3.59 Network Rail operates under its network licence which requires it to comply with the conditions we set in the public interest. These licence conditions underpin our approach to holding Network Rail to account and in monitoring compliance. We have statutory powers to take enforcement action where Network Rail breaches its licence conditions.

3.60 Network Rail's core obligations within the licence relate to securing the operation, maintenance, renewal and enhancement of the network in order to satisfy the reasonable requirements of its customers and funders. There are additional requirements around information requirements, stakeholder engagement and corporate matters.

3.61 We are proposing to restructure the existing obligations within the network licence and to introduce a number of new obligations for the start of CP6. The reasons for these changes are to: support the devolution to routes and SO businesses within Network Rail; reflect what the routes/the SO are required to deliver for their customers and what they are funded for (route/SO settlements); and reflect other changes in circumstances since CP5.

3.62 The changes we propose to make will mean that:

- the licence will clearly identify those obligations which apply to route businesses and the SO. This will signal who is accountable and, in future, allow us to more clearly hold them to account when there is a breach;
- the company will be required to maintain the structure of its business and its governance arrangements in a manner which supports devolution including where there are changes to the business (discussed as part of managing changes within CP6, below);

¹³ We refer to this measure as the consistent route measure.

- the licence is aligned with our overall framework for PR18 in how we will regulate Network Rail (such as governance requirements); and
- the licence reflects reclassification of Network Rail as a central government body, the change in funding arrangements and the roles of DfT and Transport Scotland.

3.63 This is discussed further in our supporting document on the review of the Network Rail network licence.

Managing changes within CP6

3.64 Certain changes in CP6 may weaken the routes'/SO's ability to plan, as well as undermining our ability to compare them and hold them to account, thereby reducing the value of the PR18 settlements.

3.65 We have therefore developed a process to manage changes to the routes'/the SO's settlements over CP6. This is summarised below¹⁴. We will publish a standalone guidance document on managing change ahead of the final determination.

3.66 The objective of the managing change process is to achieve an appropriate balance between:

- the benefits of Network Rail as a whole being able to respond flexibly (for example, to changing circumstances or balancing risks across the route businesses in England & Wales); and
- the benefits of the settlements, in terms of:
 - providing assurance to the routes and the SO regarding their responsibilities and funding (allowing them to plan and manage their businesses); and
 - providing the framework for us to hold the routes and the SO to account, including through comparing performance across routes.

3.67 The managing change process will focus on changes that could have the greatest potential to undermine the PR18 settlements. We are therefore principally concerned with changes that originate outside of a route/the SO (which we have called 'extra-route changes'), rather than being initiated by the routes. Changes originating within the route/SO concerned are outside the scope of this process.

¹⁴ This is also discussed in more detail in 'Working paper 8: Managing change affecting the PR18 settlements', ORR, March 2018, available [here](#), and our conclusions to this, published alongside this document, available [here](#).

3.68 Changes within the scope of the process may include:

- substantial organisational changes, in particular in the form of a substantial shift of responsibilities of the routes or SO;
- route boundary changes (which will be more relevant to routes in England & Wales than in Scotland);
- reductions in funding for individual routes/the SO (which, due to ring-fenced funding, will not be relevant to the Scotland route); and/or
- changes to what a route is expected to deliver, for example, as a result of an enhancement decision.

3.69 To ensure our approach is proportionate, we distinguish levels of change depending on the size of the impact of the change on outputs, funding and/or organisational structure.

- Level I and above: a change relative to our PR18 settlements.
- Level II and above: a material change relative to our PR18 settlements.
- Level III: a fundamental change relative to our PR18 settlements.

3.70 The managing change process seeks to ensure that relevant changes are subject to transparent governance processes with ex-ante engagement of affected parties where appropriate. The category that a change falls into will inform the process that needs to be completed as part of the managing change process. This is summarised in Table 2.1.

Table 3.1: Our approach to managing change, by level of changes

Process requirements for levels of change	Level I	Level II	Level III
Structured reporting requirements	✓	✓	✓
Assurance and/or requirements regarding wider transparency and governance		✓	✓
Publishing our formal opinion on the proposed change			✓

3.71 In addition, we will amend Network Rail’s network licence to deal with certain level III changes that we would wish to prevent. This could apply to either: (i) a narrow set of level III changes where we have provided an opinion that we do not support the change (‘an exceptional change’); or (ii) cases where the necessary managing change process has not been appropriately completed.

3.72 We are likely to judge a change as ‘exceptional’ when there is no reasonable means available to us or Network Rail to mitigate the serious impact of the change on our ability to use comparisons between the performance of the routes and the SO in a way that provides incentives on the company to improve. In reaching our decision, we would take account of the benefits of the change, with reference to our statutory duties.

4. Review of Network Rail's stakeholder engagement

Overview

This chapter sets out our assessment of the stakeholder engagement undertaken by the routes and the SO in developing their strategic plans for CP6.

Introduction

- 4.1 In this periodic review, we have put a particular focus on the importance of Network Rail routes/the SO undertaking good stakeholder engagement to inform the SBPs. This should have helped the routes/the SO to engage with their stakeholders to identify and meet their stakeholders' requirements, and to allow them to use operators' railway expertise and understanding of operations, access and costs to make their plans more efficient, realistic and credible. More meaningful engagement with local customers and stakeholders reflects the recent transformation within Network Rail to devolve more responsibility from the centre to the routes/the SO.
- 4.2 In our February 2017 guidance to Network Rail on its SBP about how the routes/the SO should engage with stakeholders in developing the SBP, we set out some minimum expectations for what they should do and included some principles of good stakeholder engagement that we said they should follow (that broadly relate to the engagement being inclusive, effective, well-governed and transparent). We also said the routes/the SO should take account of stakeholder priorities (and if necessary balance these where there are trade-offs). However, we were generally not prescriptive in saying how the routes/the SO should engage; rather, this was for the routes and the SO to decide, reflecting that they are well-placed to know what approaches would work best for their own stakeholders.
- 4.3 Given its importance, we said that we would assess the quality of each of the routes'/the SO's SBP stakeholder engagement as part of our review. We have summarised the key points from our assessment below and in Table 4.1. This is set out in more detail in our [supplementary document on stakeholder engagement](#).

Our assessment

- 4.4 Our assessment considered the routes'/the SO's strategic plans and accompanying supporting information; our direct observations from the routes'/the SO's engagement; and feedback from Network Rail's stakeholders, including responses to our February 2018 Invitation to Comment on Network Rail's SBPs for CP6 and an independent survey of stakeholders undertaken by Steer Davies Gleave (SDG).

- 4.5 In assessing the quality of the SBP stakeholder engagement, we were mindful that this was the first time that routes/the SO needed to develop bottom-up plans that have been informed by engagement with stakeholders; there would be aspects of good practice and areas that could be improved.
- 4.6 This has indeed been the case. Overall, Network Rail's stakeholder engagement has received much greater focus and attention than before. Particular strengths were:
- **there was a clear recognition of the importance of stakeholder engagement.** In their strategic plans, the routes/the SO discussed their stakeholder engagement activities, and set out (to varying degrees) their approaches and how this influenced the plans;
 - **there was engagement with a good range of stakeholders**, including passenger and freight operators, national and local funders, passenger and freight end-user representative groups, local authorities and local enterprise partnerships (LEPs); and
 - **the routes/the SO employed a variety of engagement methods**, including at least one stakeholder workshop per route/SO (though in some cases these were not open to all stakeholders) and in some cases several. Other approaches used included regular and ad-hoc bilateral meetings, existing multi-lateral meetings (such as Route Investment Review Group meetings), 'drop in sessions', questionnaires and emails. Some routes/the SO provided good evidence of taking a proactive approach to tailoring their engagement methods to different stakeholder groups, including by asking their stakeholders how they could make the engagement work for them.
- 4.7 We also identified areas for improvement:
- **establishing more formally an engagement strategy and communicating this to stakeholders.** In some cases, engagement did not appear to stakeholders to proceed according to a clear plan and timetable, resulting in confusion about what would be shared when and how stakeholders could engage. This meant the engagement was less effective in delivering its objectives. However, there was some good practice among some routes/the SO (for example the South East route shared its stakeholder engagement strategy/plan with its stakeholders to explain how it would engage);
 - **making more use of draft scorecards to facilitate engagement.** As discussed, the routes'/SO's scorecards will set out what they are seeking to achieve for their customers and how they are performing against that. In engaging with stakeholders on their strategic plans (including in the early stages of discussion), there may have been greater scope for routes/the SO to use draft scorecards to illustrate their different spending options, including on the

merits of different spending options that involve trades-offs (e.g. nearer-term performance over longer-term network sustainability). This could have been particularly useful to demonstrate the impact of different spending options on train performance, which might also have facilitated agreement on specific performance trajectories as the plan developed. Similarly a clear timetable setting out how and when targets would be finalised might have helped this engagement process;

- **making more explicit trade-offs of competing stakeholder priorities.** For the most part, the routes/the SO could have better set out in their plans how they had decided which stakeholder needs to address, including how they had traded-off competing priorities (i.e. where these could not be met given resource constraints) and how this translated into scorecard targets. In some cases, the plans did not clearly acknowledge the fact that some stakeholder needs would not be fully met in CP6. In other cases, the route/the SO did acknowledge this but did not do enough to explain how it has decided to prioritise some needs over others. However, the London North East & East Midlands plan did explain what trades-offs the route was making, including the stakeholder priorities it would not pursue; and
- **giving stakeholders confidence that they can influence the plans.** Several stakeholders (including lead operators on routes) said that engagement activities were approached more as opportunities to communicate already established plans to stakeholders, rather than for stakeholders to substantively influence the content and approach. Clearly, it is important that the routes/SO are open to changing their emerging plans as a result of their stakeholder engagement. They also need to be transparent in how they have done this, so stakeholders understand how their input has been taken into account.

4.8 Good stakeholder engagement will not always lead to unqualified agreement between the routes/the SO and its customers about what should be delivered. This is particularly the case for measures relating to train performance, reflecting the fact that it is a key aspect of the service for passengers and other end-users. In the development of the CP6 SBPs, routes and customers in most cases did not agree performance trajectories. This reflected, in part, the slow start the routes made in engaging with customers on detailed performance discussions (which Network Rail said was a consequence of the SoFAs being published later than was originally planned). In addition, some operators were focused on the levels of performance that were underlying their franchise, rather than framing the conversation around what, in practice, could be delivered over CP6. This also serves to highlight a more general issue about the importance of the SO being actively involved in the franchising process, and the need for good quality advice on what levels of performance are likely to be achievable.

- 4.9 We have set out some key points from our review of the route and SO strategic plans in Table 4.1 below.
- 4.10 In addition to identifying different strengths and weaknesses of the routes'/the SO's approach, our assessment also identified the different approaches pursued. This reflects their different stakeholders, geography and/or activities. We would encourage the routes/the SO (and their stakeholders) to consider this in determining their approach to engaging with stakeholders over CP6. This is discussed in full in our supporting document¹⁵.

¹⁵ We also commissioned Steer Davies Gleave (SDG) to produce advice to the routes/the SO, which is intended to provide some practical suggestions on how they might derive most value from their engagement with stakeholders. See '*Running Stakeholder Engagement: Advice for Network Rail Routes and the System Operator*', Steer Davies Gleave, June 2018. This will be published after 12 June 2018 and be available [here](#).

Table 4.1: Summary of our findings on the quality of the SBP stakeholder engagement, by route/SO

Route / SO	Scope and methods of engagement	Recording and analysis of stakeholder priorities	Trade-offs of competing needs and line-of-sight to commitments in the plan
Anglia	<ul style="list-style-type: none"> • Showed a good understanding of its stakeholders • Tailored its approach 	<ul style="list-style-type: none"> • Recorded all feedback received • Could have explained more clearly how stakeholder feedback was analysed 	<ul style="list-style-type: none"> • Did not explain clearly how it traded-off competing stakeholder needs • Could have done more to demonstrate line-of-sight between stakeholder needs and its commitments
FNPO	<ul style="list-style-type: none"> • Engaged with wide range of stakeholders • Had well-managed approach, but did not communicate this well in plan 	<ul style="list-style-type: none"> • Presented research well • Could have explained more clearly how evidence informed understanding of stakeholders' needs 	<ul style="list-style-type: none"> • Did not explain clearly its trading-off of competing priorities • Could have done more to demonstrate line-of-sight
LNE&EM	<ul style="list-style-type: none"> • Showed a good understanding of its stakeholders • Explained well how/why it engaged • Could have set out a clearer strategy for engagement 	<ul style="list-style-type: none"> • Set out a good list of stakeholders' needs and its response to them • Could have explained more clearly how it analysed stakeholder feedback 	<ul style="list-style-type: none"> • Explained how it traded-off competing needs • Demonstrated a line-of-sight
LNW	<ul style="list-style-type: none"> • Engaged with a good range of stakeholders, including suppliers • Began engagement early and tailored its approach 	<ul style="list-style-type: none"> • Maintained a detailed record of stakeholder comments • Could have been clearer about how it analysed these 	<ul style="list-style-type: none"> • Used stakeholders' feedback to identify additional investment options beyond its base plan • Demonstrated some line-of-sight
Scotland	<ul style="list-style-type: none"> • Engaged with a wide range of stakeholders • Also participated in the Scottish Ministers' HLOS engagement 	<ul style="list-style-type: none"> • Set out a detailed list of prioritised stakeholders' needs • Could have been clearer about how its engagement led to this list 	<ul style="list-style-type: none"> • Could have explained more clearly its trade-off of competing priorities • Sets out a line-of-sight between HLOS requirements and the plan, but not against all stakeholder needs

Route / SO	Scope and methods of engagement	Recording and analysis of stakeholder priorities	Trade-offs of competing needs and line-of-sight to commitments in the plan
South East	<ul style="list-style-type: none"> Adopted a formal stakeholder management plan Hosted good quality workshops Commissioned research on passengers' views on asset sustainability 	<ul style="list-style-type: none"> Recorded stakeholder feedback fully Could have been clearer about how it analysed its stakeholder needs and how it presented this 	<ul style="list-style-type: none"> Demonstrated stakeholder input by setting out a 'vision' scheme and a constrained base plan. Could have done more to demonstrate the trade-offs and line-of-sight
SO	<ul style="list-style-type: none"> Engaged with a good range of stakeholders Tailored its approach Adopted open and transparent approach 	<ul style="list-style-type: none"> Recorded and reflected on individual stakeholder needs Some of the analysis of the stakeholder needs presented could have been clearer 	<ul style="list-style-type: none"> Explained how it intends to meet stakeholder needs Could have been clearer about which stakeholder needs it will not meet, and why
Wales	<ul style="list-style-type: none"> Showed a good understanding of its stakeholders Tailored its approach Could have ensured more consistent quality of engagement throughout the process 	<ul style="list-style-type: none"> Explained its process for analysing stakeholder needs well Presented prioritised needs at a reasonably high level 	<ul style="list-style-type: none"> Explained reasonably well how it traded-off competing needs Could have set out its reasoning in more detail in some places
Wessex	<ul style="list-style-type: none"> Engaged with wide range of stakeholders Tailored its approach Could have explained its engagement process more fully in its plan 	<ul style="list-style-type: none"> Adopted clear procedures for analysing stakeholder needs Could have explained its reasoning in more detail 	<ul style="list-style-type: none"> Presented a clear line-of-sight diagram Could have explained its reasoning in how it traded-off stakeholder needs
Western	<ul style="list-style-type: none"> Engaged with range of stakeholders Tailored its approach Explained its engagement activities well 	<ul style="list-style-type: none"> Adopted an explicit methodology to analyse stakeholder feedback Presented stakeholders' priorities clearly 	<ul style="list-style-type: none"> Addressed each stakeholder needs clearly Could have given more detail on rationale for prioritising some stakeholder needs

5. Review of scorecards and requirements

Overview

This chapter sets out our assessment of Network Rail's SBP submission in respect of what it proposed to deliver in CP6.

Introduction

5.1 This chapter summarises our assessment of what Network Rail's routes and the SO proposed to deliver in their strategic plans and whether overall these meet the requirements the high-level output specifications (HLOSs) of the [Secretary of State](#) and the [Scottish Ministers](#). It focuses in particular on the scorecards that Network Rail's routes and the SO included in their strategic plans.

5.2 It is structured as follows:

- our overall assessment of Network Rail's scorecards against our requirements;
- our assessment of what Network Rail plans to deliver, including in respect of:
 - train performance of passenger and freight services;
 - network capability, network availability and network sustainability; and
 - the FNPO and the SO.

Our overall assessment of Network Rail's scorecards against our requirements

5.3 In paragraph 3.9 above, we set out our three main requirements for making greater use of scorecards in how we hold Network Rail to account, namely that: they are balanced; enable comparison; and appropriately reflect the requirements set out in the Scotland and England & Wales HLOSs.

5.4 We have assessed Network Rail's scorecards in the SBPs against these, as set out below, and consider that the scorecards can be used as a key part of how we hold the company to account.

Balance of scorecard measures

5.5 Overall, we were satisfied that the measures in the route and SO scorecards were broadly balanced across the range of activities that Network Rail undertakes, and reflected the interests of both current and future users. This is important, because the

scorecards support the reputational incentives on the company and carry financial incentives for Network Rail’s staff if they achieve the scorecard targets.

Scope for comparison between routes

- 5.6 The scorecards that the geographic routes have produced include: (i) measures agreed with their customers; and (ii) a set of common ‘consistent route measures’ that enable comparison – including those required by us (to support comparison and reflect end-user outcomes) and those required by Network Rail itself.
- 5.7 Network Rail has committed to producing a ‘route comparison scorecard’. This is a single scorecard that will show how the routes are performing in relation to each other, in respect of all the consistent measures, along with four end-user measures which do not appear on all route scorecards. All these measures are set out in Table 5.1 below and are discussed in more detail in our [scorecards and requirements](#) document. Those highlighted in bold are measures we have required, and the rest are Network Rail’s own consistent measures.

Table 5.1: Network Rail and ORR’s consistent route measures¹⁶

Area	Measure
Financial performance	Financial performance measure (FPM) – gross excluding enhancements (£m)
	Financial performance measure (FPM) – gross enhancements only (£m)
	Cash compliance – income & expenditure
Performance	Consistent route measure – passenger performance (CRM-P)
	Consistent route measure – freight performance (FDM-R)
Safety	Lost time injury frequency rate (LTIFR)
	Train accident risk reduction measures
	Top 10 milestones to reduce level crossing risk
	Risk management maturity model (RM3) (in development)
Sustainability and asset management	Reduction in service affecting failures (SAF)
	Composite reliability index (CRI)
	7 key volumes of maintenance and renewals
	Top investment milestones
	Composite sustainability index (CSI)
End user measures ¹⁷	Passenger satisfaction for the route
	Passenger satisfaction with managed station(s)
	Use of the network – passenger
	Use of the network – freight

¹⁶ We also think it is important that routes report against third party investment, but recognise that the nature of this investment may vary from route to route. As such, a consistent measure may not be appropriate. We will continue to work with Network Rail to develop an approach on this for CP6.

¹⁷ These measures are not on all of the route scorecards, but they are included on the route comparison scorecard and reported consistently for all routes.

- 5.8 Network Rail has also committed to publish its SO, route and comparison scorecards on a quarterly basis, showing how the routes and the SO are performing against their targets and, for the geographic routes, against each other.
- 5.9 Our review found significant room for improvement in how routes define scorecard measures and Network Rail's overall governance of this. Routes did not always use the same definitions for some of the consistent route or industry measures. There were two instances of errors in setting targets due to lack of understanding of the correct calculation of a measure. Clearly, this risks undermining comparability and transparency and raises concerns about whether routes will be reporting accurately and consistently.
- 5.10 Given this, Network Rail must carry out further work to clearly define its scorecard measures ahead of our final determination. It must also ensure that its governance of scorecards ensures that this consistency continues throughout CP6. We will use independent reporters to provide assurance over this during CP6, should we consider this necessary.

Reflection of HLOS requirements on scorecards

England & Wales

- 5.11 The Secretary of State's HLOS focused on high-level outcomes, rather than prescribing detailed requirements. It highlighted the need for continued safe operation of the network, accepted our advice for increased volumes of renewals, and expected Network Rail to work with its stakeholders to "determine appropriate metrics and stretching yet realistic target levels" of performance.
- 5.12 As discussed below, we have emphasised the role of customer-route discussion and agreement in setting target levels of performance, which will then form part of the evidence we use when assessing whether Network Rail is complying with its licence obligations.

Scotland

- 5.13 The Scottish Ministers published a detailed HLOS for Scotland. As is the position for GB as a whole, the Scotland route will be agreeing a route scorecard with its customers and funders, setting out what it will deliver.
- 5.14 We have worked with Transport Scotland and Network Rail to ensure that the HLOS requirements are incorporated into the Network Rail scorecard approach as a Scotland HLOS scorecard, in addition to the route scorecard. These requirements include ScotRail, Caledonian Sleeper and freight train service performance, journey time improvements for ScotRail services, freight growth, delivering a Scottish gauge requirement and reducing carbon emissions.

5.15 The Scotland HLOS scorecard is set out in the supporting annex to our [Scotland summary](#), showing the specific obligations on Network Rail, individually enforceable against the licence. We will take into account where Network Rail is partly reliant on other parties to deliver the requirement and Network Rail will need to be clear on its own planned contribution. Each obligation will be subject to the reasonable practicability¹⁸ test in Network Rail's network licence. We have also highlighted the areas where Network Rail needs to do more work on developing how the obligations will be measured and we will monitor progress as these are finalised before the start of CP6.

Our assessment of what Network Rail plans to deliver

5.16 The remainder of this chapter provides a summary of our conclusions in respect of four of the key outcomes that Network Rail delivers, namely: passenger and freight performance; network sustainability; network capability; and network availability. It also provides a summary of the role of scorecards in supporting delivery by the System Operator and FNPO route.

5.17 Network Rail has also captured health & safety outcomes on its scorecards. While we welcome Network Rail's inclusion of these measures, which are a necessary feature of a balanced scorecard, our monitoring and enforcement will continue to be against Network Rail's legal health & safety obligations.

Assessment of passenger performance

5.18 For the performance plans included in the route strategic plans (RSPs), Network Rail's route-level performance analysis was carried out using the public performance measure (PPM)¹⁹. PPM captures both Network Rail and train operator performance, and so is a reflection of the overall performance experienced by passengers. Network Rail then translated this into different measures where appropriate to reflect each route's customers' requirements and into the consistent route measure of passenger performance: CRM-P. CRM-P is a measure of Network Rail's contribution to passenger performance and is based on delay minutes²⁰. It is relevant to note that, for the Schedule 8 performance regime in track access contracts, Network Rail's benchmarks will reflect its CRM-P targets²¹.

¹⁸ See licence condition 1 of Network Rail's current [network licence](#).

¹⁹ PPM is the proportion of trains that arrive at their final destination 'on time'. A train is defined as 'on time' if it arrives within five minutes of the planned destination arrival time for London & South East and regional services; or ten minutes for long distance services. PPM measures delays attributable to both Network Rail and train operators.

²⁰ CRM-P measures primary and reactionary delay minutes to passenger services caused by each Network Rail route, normalised per 100 train kilometres. It focuses on the delay that a route causes, rather than delay caused by train operators.

²¹ Train operators' performance targets in Schedule 8 will be based on past performance.

- 5.19 In our review of the plans, we assessed the robustness of each route's performance modelling approach and the level of challenge and stretch in the train operator and route CRM-P performance trajectories.
- 5.20 Our review was supported by the independent reporter, Arup (with Winder Phillips), who provided assurance to us on the operational deliverability of the plans and trajectories. We also carried out more in-depth scrutiny in respect of routes where our initial review identified specific issues that warranted further investigation.

England & Wales

Overall context

- 5.21 During CP5, overall train performance (measured in PPM) has been below the expectations that we set in PR13 and significantly below the levels that underpinned a number of passenger franchise agreements. In terms of Network Rail's own performance, the number of delay minutes attributed to it in the first four years of CP5 was seven percent higher in England & Wales compared with the last four years of CP4.

Extent of agreement on PPM and other customer measures

- 5.22 Routes and passenger train operators were generally able to agree how to measure punctuality, reliability and severe disruption in a way that is appropriate to their particular circumstances. However, we are aware that the measures CrossCountry agreed with the FNPO have not been reflected consistently in the scorecards of two routes used by the train operator (Anglia and LNE&EM), and that CrossCountry had concerns that a measure on the Wessex route scorecard was not what it had agreed to.
- 5.23 The scorecards included in the England & Wales routes' strategic plans contain trajectories for each of the agreed measures. However, with the exception of Merseyrail and (in respect of the FNPO's scorecard) Caledonian Sleeper, no train operator was able to agree these for the whole of CP6. In part, this reflects the slow start that Network Rail made on detailed performance discussions, which it said was compounded by the SoFAs arriving later than expected.
- 5.24 In addition, some operators stated that they were unwilling to agree to performance levels that were below those underpinning their equivalent franchise requirements. However, while it may not be desirable for performance levels to be below these requirements, the purpose of scorecard trajectories is to capture stretching but realistic target levels of performance. For the trajectories to provide effective incentives on Network Rail they need to reflect what can, in practice, be delivered.

- 5.25 After the Network Rail SBPs were published, train operators identified some opportunities and risks for performance in CP6 that they suggested had not been reflected in Network Rail's proposed trajectories²².
- 5.26 We continue to see significant value in Network Rail's scorecard trajectories being agreed by customers and routes, rather than being determined by ORR. We welcome the recent progress that has been made by all parties – including as facilitated by the NTF – to understand better the relevant factors affecting likely achievable CP6 performance levels.
- 5.27 Reflecting this, we consider that there remains a final opportunity for Network Rail and train operators to reach greater levels of agreement over this summer. We have agreed with Network Rail a process that allows further time to secure this. This means that we expect:
- (a) Network Rail and the routes to review whether performance opportunities and risks identified by train operators should be reflected in the trajectories. If routes consider that these factors would not provide a performance impact, they should provide evidence to us for this; and
 - (b) where a train operator remains unable to agree with a route's trajectory, and it can provide clear evidence that performance could be reasonably higher than what the route is willing to agree to, we will review this and decide whether to set a suitable target.
- 5.28 This process is discussed further in paragraphs 10.20-10.24.
- 5.29 As stated in Chapter 3, when monitoring Network Rail's performance during CP6, we will place less weight on performance trajectories that have not been agreed by both parties, and instead place greater weight on other sources of evidence.

Review of Network Rail's performance models and trajectories

- 5.30 As part of our assessment, we reviewed Network Rail's performance models, which informed both its train operator trajectories and the route-level CRM-P performance trajectories. We reviewed these to ensure that performance targets were stretching and realistic. In doing so, we sought assurance that each route would have a broadly equal likelihood of meeting its target as missing it.
- 5.31 In the majority of cases we have concluded that the performance trajectories proposed by Network Rail's routes were reasonable given the performance achieved

²² This was identified through a process led by the National Task Force (NTF) in April 2018, and discussed at its meeting on 11 April 2018.

in CP5, the significant impacts of major timetable changes, the introduction of additional services and new rolling stock by various operators.

5.32 However, we consider that the trajectories for the following routes need to be revised.

- South East: this route took a robust approach to producing its performance trajectories, using simulation modelling, but based this on an 80% confidence of achieving the targets. This is a much greater level of confidence than other routes have proposed. We have required that it revise its performance trajectories to be based on a 50% confidence rating.
- Wessex: this route's projections included an allowance for 'historical decline' which was not fully explained. This allowance was extrapolated through the control period. Unless the route can demonstrate what these unknown risks are, it should recalculate its performance trajectories to exclude this 'unknown' decline.
- Anglia: this route's performance model methodology gave rise to concern as each year was treated independently, which means performance improvements / deteriorations early in the control period were not carried through to later in the control period. We have required that the route consider our findings and amend this element of its modelling methodology. If Network Rail concludes this update is not required, it should explain why.

5.33 If Network Rail makes these adjustments, there will be a broadly consistent level of challenge across all England & Wales routes' performance projections in their performance trajectories as reflected in customer measures and CRM-P.

5.34 Network Rail should also ensure that appropriate performance targets for CrossCountry are reflected in the scorecards of the routes used by the train operator, reflecting the importance of maintaining sufficient focus across the routes, so that its passengers receive a comparable performance to operators largely based in a single route.

Regulatory minimum floor

5.35 As discussed in Chapter 3, a regulatory minimum floor marks the point at which we will be highly likely to undertake a formal investigation for licence breach. Network Rail proposed in its SBPs that the floor for the passenger operators market should be set at 30% below a route's CRM-P forecast moving annual average.

5.36 We considered this proposal by looking at levels of underperformance in previous control periods and the instances in which we considered it appropriate to investigate Network Rail's performance. We found that, had we applied Network Rail's proposal in CP4 and CP5, the 30% threshold would at no point have been breached, even though we launched several performance investigations in these periods. Further,

this threshold would also have been at a point beyond which we consider that significant passenger harm would be likely to have resulted.

5.37 We looked at alternative floor levels, including 15% and 20%. We considered 15% would imply numerous investigations, and so undermine one of the purposes of the floors (which is to support route-customer engagement, including in resolving performance issues), whereas 20% would be broadly consistent with the approaches we have taken in the past. Accordingly, we have concluded that the CRM-P regulatory floor should be set as a consistent margin below Network Rail's target for each year of CP6 (i.e. the floor reflects the trajectory). The size of this margin should reflect a performance level of 20% of the average performance for CP4 and CP5.

Scotland

Overall context

5.38 In CP5, the Scotland route's performance target has been for ScotRail's PPM to be 92% for the first four years of the control period, and 92.5% in 2018-19. In practice however, while the moving annual average for PPM briefly hit the 92% target in 2014-15, it has not been higher than 91.6% since then. However, it has been generally better than England & Wales, with Scottish train operators' overall PPM in the first four years of CP5 being 90.2% compared with 88.4% for England & Wales train operators.

5.39 We concluded in 2015 that Network Rail had not done everything reasonably practicable to achieve the target. In 2016, the Scotland route and ScotRail (through their ScotRail alliance) published an improvement plan. We have since been monitoring this closely to be assured that all aspects of that plan are being delivered.

HLOS requirements and the scorecard

5.40 In their HLOS, the Scottish Ministers set performance targets of 92.5% PPM for ScotRail services and 80% for right time arrivals²³ (RTA) of Caledonian Sleeper services. The HLOS also required that the outputs of the network be maintained "in such a way as to recognise the performance requirements of other operators on the Scottish network".

5.41 The Scotland route's strategic plan, published in February 2018, included the abovementioned HLOS requirements in its scorecard. It also included a CrossCountry right time departures target of 83.5% by the last year of CP6 and, in line with our requirements, a CRM-P trajectory. However, it made clear that it considered achieving the HLOS targets would be challenging – particularly in the early years of CP6.

²³ Right-time performance measures the percentage of trains arriving early or within 59 seconds of schedule.

- 5.42 Given this, the ScotRail alliance commissioned an independent review of performance in Scotland. This set out a number of [recommendations](#) to improve performance, which the Scotland route has accepted. However, the Scotland route does not consider that these will provide an immediate impact on performance. As such, it considers that it will achieve 91.5% PPM in the first year of CP6, one percentage point short of the target.
- 5.43 We have considered this, the data available to us, and the specification in the HLOS of a 92.5% target across CP6. We have concluded that the PPM target for ScotRail can be set equal to the HLOS requirement, at 92.5% across CP6.
- 5.44 If the Scotland route fails to deliver this target, when considering whether it has done everything reasonably practicable to achieve 92.5%, we will take into account its implementation against the independent review, along with the other steps it has said it will take to improve performance. Given that ScotRail's own performance also contributes to the PPM target, we will also take into account its contribution to achieving the target relative to that of Network Rail.

CRM-P trajectory and regulatory minimum floor

- 5.45 Reflecting that there are specific HLOS targets for passenger performance in Scotland (whereas there are none in the England & Wales HLOS), the role of the CRM-P trajectory will be different in Scotland. While we will hold the route to account against its PPM and RTA targets (as described above), in the event of performance being below expectations, we will use CRM-P to provide further insight on the route's contribution to overall performance (reflecting that CRM-P records Network Rail caused delay only).
- 5.46 Given the existence of specific HLOS train performance targets, the role of the CRM-P trajectory will be different in Scotland. Its primary purpose will be to facilitate comparison with other routes, thereby providing useful information about how routes are performing. Reflecting this, the CRM-P trajectory needs to be set on a consistent basis as in the England & Wales routes.

Regulatory minimum floor

- 5.47 We consider it appropriate to set a regulatory minimum floor in Scotland, even though there are specific PPM and RTA targets required by the HLOS that we will be holding the route accountable for. In particular, this will provide comparable protection for passenger operators running between England and Scotland (i.e. other than ScotRail).
- 5.48 Consistent with other routes, the Scotland route proposed a floor of 30% below its CRM-P forecast moving annual average. However, we have determined that, on the same basis as our decision for England & Wales, this should be a consistent margin

reflecting a performance level of 20% below the average performance of CP4 and CP5.

Network Rail's management of reactionary delay caused by train operators

- 5.49 CRM-P focuses on delay caused by Network Rail. It does not reflect reactionary delay from train operator-caused incidents. Network Rail, as infrastructure manager, is responsible for recording and managing delay from all incidents regardless of cause and culpability. There is a risk that our monitoring of CRM-P could make Network Rail less incentivised to manage reactionary delay caused by others – which would not be in the interests of passengers.
- 5.50 Network Rail reports reactionary delay to NTF (which reviews this delay) and other industry groups. It has said it intends to increase the visibility of this reporting within Network Rail and with train operators in CP6 (as set out on page 12 of its [SBP summary document](#)). Reflecting the importance of ensuring there is sufficient visibility of reactionary delays, we expect Network Rail to go further by reporting this publicly in CP6, including comparative information about reactionary delays by cause and operator type. Accountability for the reporting could sit with the SO (noting that while it only contributes to levels of reactionary delays, it could have a role in reporting across routes through its annual narrative report), or elsewhere in Network Rail.
- 5.51 In CP6, we will review levels of reactionary delay through our regular monitoring and may intervene if evidence emerges that Network Rail is not adhering to its commitments to manage reactionary delay effectively, regardless of cause.

Assessment of freight performance

CP5 context and HLOS requirements for CP6

- 5.52 The devolved structure of Network Rail gives the FNPO responsibility for overall freight performance across the network, and geographic routes responsibility for freight performance within their routes.
- 5.53 In CP5, we set Network Rail a network-wide target of 92.5% against the freight delivery metric²⁴ (FDM). Network Rail has consistently outperformed this throughout CP5, and the FNPO has forecast that Network Rail will end CP5 at 94.0%.
- 5.54 The Scottish Ministers' HLOS set a specific FDM target for freight services in Scotland of 93% from the start of CP6, increasing to 94.5% by the end of CP6. For England & Wales, the Secretary of State's HLOS expected 'stretching yet realistic' targets to be agreed (as discussed in paragraph 5.11 above).

²⁴ 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.

Network Rail's freight performance proposals

- 5.55 In terms of engagement to inform its proposals, the FNPO reached overall agreement with freight operators on how to measure the key aspects of freight performance on scorecards. It also discussed drafts of the CP6 scorecard with freight operators. While there was a lack of clarity about changes made to the FDM trajectory for CP6, there was broad agreement about the overall level of performance that should be delivered. More information on this engagement is set out in the FNPO's [draft settlement document](#).
- 5.56 Operators were supportive of using FDM as a network-wide metric on performance. Network Rail has developed a further metric, FDM-R, as a consistent route measure. This measures the number of FDM failures that each route has contributed to the GB-wide FDM figure²⁵.
- 5.57 In its strategic plan, the FNPO proposed to deliver a network-wide FDM of 94.0% throughout CP6. The geographic routes have each proposed a FDM-R figure, which collectively underpin the network wide figure. These are set out in Table 5.2 below.

Review of Network Rail's freight performance proposals

- 5.58 Given the Secretary of State's HLOS requirement that targets for England & Wales be "stretching yet realistic", we considered whether the 94.0% figure overall would be consistent with this and whether the FDM-R route targets in England & Wales would collectively support it.
- 5.59 We considered whether 94.0% FDM might appear somewhat conservative, given the current forecast for the end of CP5 mentioned above. We noted that there were various factors to suggest that it was not. In particular, forecast changes in the mix of freight traffic²⁶, and increases in volumes of passenger traffic and related congestion will put pressure on freight performance levels. Taking this into account, and the fact that we did not see material evidence to warrant us requiring a higher target, we have concluded that a national 94.0% FDM figure would be sufficiently stretching. We were also satisfied that the England & Wales route FDM-R targets would support the network-wide target.
- 5.60 The Scotland HLOS required an FDM for Scotland of 93% at the start of CP6 moving through staged improvements towards 94.5% at the end of CP6. We propose to reflect the HLOS requirement in the form of FDM-R. This is on the basis that FDM is

²⁵ 'FDM-R' is a measure of all Network Rail caused delay minutes contributing to FDM failures (delays greater than 15 minutes) on an individual route. An individual route's FDM-R is a proportional measure of the contribution of each route to national FDM failures, weighted by the proportion of freight services that have run on that route.

²⁶ That is, a further forecast reduction in coal traffic – a traditionally high performing flow – and higher volumes of other traffic that tends to have relatively poorer performance.

a GB-wide measure, whereas FDM-R reflects a route's impact on the GB-wide FDM measure. The Scotland route proposed to deliver an FDM-R of 94.5% in each year of CP6, which is somewhat higher than the HLOS requirement in the first year. Network Rail's obligation is to meet the HLOS requirement, although we recognise the aim to outperform.

Regulatory minimum floors

5.61 The FNPO proposed a regulatory minimum floor of 92.5% FDM (a level equivalent to the 92.5% CP5 target) and the geographic routes proposed floors for FDM-R at 30% below their trajectories.

5.62 We could not apply a similar test to the proposed freight floors as we did to the passenger floors (as there were no previous cases of us launching investigations into poor freight performance based on FDM and FDM-R).

5.63 However, we were satisfied that the proposals were reasonable, given that:

- (a) the GB-wide performance floor is set equal to the CP5 target, which implies that ORR would be likely to investigate freight performance if national average performance in CP6 was below the CP5 target level;
- (b) the number of freight services on the network means that a 20% floor may be triggered more frequently than for the passenger equivalent; and
- (c) while the route performance floors were arguably set at a lower level than for passenger services, the traffic mix and performance will likely vary more significantly at the route level. Further, the existence of an additional national performance floor provides additional comfort that there is a reasonable balance of incentives at national and route level.

Table 5.2: FDM and FDM-R targets and regulatory minimum floors

	FDM-R for geographic routes (for final year of CP6)								FDM (FNPO)
Location	Anglia	LNE	LNW	Scotland	South East	Wales	Wessex	Western	GB
Target	92.9%	95.3%	93.9%	94.5%	91.0%	94.4%	93.6%	94.0%	94.0%
Floor	90.8%	93.90%	92.0%	92.0%	88.2%	92.7%	91.7%	92.1%	92.5%

Performance innovation fund

5.64 We want to encourage new and innovative ways to improve performance on the network. We also want to ensure that our regulatory processes are able to adapt to support new approaches and circumstances. Reflecting this, in November 2017, we

published a working paper²⁷ setting out our initial thinking on what an industry-led collaborative approach could look like and seeking industry views.

5.65 Over the coming months we will be exploring with industry different ways that we can support innovation in this area in CP6. In particular, we will be considering:

- (a) establishing an innovation fund which could provide essential backing to innovative projects or ways of working that help improve the performance of the railway network. We are considering a fund of around £10million, which could be made available to projects that are anticipated to unlock benefits beyond CP6; and
- (b) a tailored approach to providing regulatory comfort for new approaches which do not fit neatly within the existing framework. We will explore, for example, the extent to which we could disapply certain aspects of the regulatory framework that might prohibit trialling a particular proposal. This would essentially allow innovative proposals to operate within a bespoke regulatory environment whilst longer term solutions are developed.

5.66 For example, such approaches might include proposals to: trial locating additional staff at particular high-impact locations; fund changes to rolling stock that deliver system-wide benefits but which have no commercial case for an individual operator (e.g. changes to freight operations that unlock significant passenger benefits, or vice versa); or try different approaches to communicating with passengers (e.g. in the event of disruption).

5.67 We will engage with industry over the coming months on these issues. We also invite comments on the issues discussed above including the potential size of any innovation fund. The fund would apply to England & Wales and Scotland.

5.68 At this stage, we have asked Network Rail to identify £10m of initial funding for this purpose.

Network capability

5.69 The capability of the network to accept particular types of rolling stock (operating in particular ways) is an important element of what Network Rail delivers to operators. It is a particular consideration for freight operators, who use a range of rolling stock, operate nationally and respond to changing patterns of demand. In CP5, we set a minimum baseline for network capability (covering track mileage and layout, line speed, gauge, route availability and electrification type).

²⁷ [Working paper 7: Collaborative working on the rail network](#), ORR, November 2017.

- 5.70 We have been concerned with how well Network Rail has been managing network capability in CP5 and are aware of concerns raised by stakeholders on this. Indeed, the Scottish Ministers included a specific HLOS requirement regarding gauging and in response to this the Scotland route has said it will have a gauging strategy in place for the start of CP6. This is discussed further in the annex to the [Scotland summary](#).
- 5.71 We are commissioning an independent reporter to review the current situation on network capability in England & Wales and Scotland, including whether Network Rail is on track to deliver the end of CP5 regulated output target. This work will inform our monitoring position and assessment of network capability in England & Wales and Scotland in CP6. The findings from this work will be published in autumn 2018 and we expect Network Rail to implement for CP6 any recommendations that the reporters make.
- 5.72 We expect Network Rail to protect and maintain the baseline capability of the network and for all changes to go through the recognised industry processes throughout CP6. Through the independent reporter work, we will continue to work with Network Rail to set the baseline for 1 April 2019 at route level. As part of this work we will consider whether the baseline requirement should be as we set out for CP5 (as above) or whether this should be amended.

Network availability

- 5.73 It is important that Network Rail has effective incentives to minimise disruption to the network (e.g. from engineering work), given the impact this has on passengers and freight customers. In CP5 we set output requirements relating to passenger and freight disruption. However, the metrics we used for this are no longer considered fit for purpose²⁸.
- 5.74 We commissioned consultants (SNC-Lavalin) to review the options for how we could monitor and assess Network Rail's performance in terms of network availability during CP6 and are considering their recommendations. These options included developing a new metric (which, in part, would capture the increase in journey time from possessions) and using this alongside other existing measures. SNC-Lavalin recommended the use of an 'extended journey time' metric as part of a suite of measures to monitor availability.
- 5.75 While we do not plan to set a specific delivery requirement for network availability, we will monitor Network Rail's performance in this area using a suite of measures and take action if we consider this to be necessary. We are discussing the development and implementation of a new journey time measure with Network Rail. In addition to this, the Schedule 4 regime in track access contracts will continue to provide financial

²⁸ Possession Disruption Index (PDI) for passenger (PDI-P) and freight (PDI-F).

incentives for Network Rail to plan efficient possessions. Similarly, part D of the Network Code sets out processes for the industry to agree planned possession windows (including a right of appeal), with the interests of end users represented by passenger and freight operators.

Network sustainability

Context

- 5.76 Maintaining a sustainable asset base is vital to the interests of users and funders. It ensures the safety, reliability and value for money of the network over the long-term.
- 5.77 In CP4, Network Rail deferred significant planned renewals, and did so again in CP5. We have previously raised concerns about this in our reporting and reflected this in the advice we gave to the DfT and Transport Scotland last year²⁹. Chapter 7 discusses the forecasts for asset sustainability during CP6.
- 5.78 Reflecting our concerns in this area, we said we would require Network Rail to include a network sustainability³⁰ measure on geographic route scorecards and that we would set a regulatory minimum floor for it.

Network sustainability measure

- 5.79 Network Rail has been developing a new methodology for measuring asset sustainability, but this needs more development and testing before it can be used. We therefore considered which of Network Rail's existing indicators would be most appropriate for use as the consistent route measure. We have concluded that the composite sustainability index (CSI) is currently the most practical option for this. Network Rail has included this on its scorecards in its SBPs. In simple terms, CSI measures the 'remaining asset value' on the network (with value reflecting the remaining useful life of the asset), weighted by the relative value of the asset.
- 5.80 CSI is an aggregate measure. It includes around 80% of asset types but excludes some important assets such as light maintenance depots. Because of this, routes should not seek to drive increases in the CSI score at the expense of those assets that do not contribute to the CSI calculation. As set out below, our monitoring will not focus solely on CSI.

²⁹ ORR's advice on the development of the England & Wales high-level output specification (HLOS) and statement of funds available (SoFA), February 2017, available [here](#). ORR's advice on maintenance and renewals expenditure (to Transport Scotland), April 2017, available [here](#).

³⁰ By sustainability, we mean delivering sufficient renewals to counter the on-going deterioration of network assets through ageing and wear-out in order to protect the interests of future users and funders.

Regulatory minimum floor

- 5.81 Network Rail proposed an approach to the regulatory minimum floor in its SBPs. This was based on measuring delivery of the routes' planned renewal volumes, with the threshold of the floor being set at 90% of a route's planned volumes over a control period. It also proposed that it would support this through its own annual floor of 85%.
- 5.82 While we broadly agreed with the floor levels it proposed, we are concerned that this approach would be input based, and could have unintended consequences by providing an incentive simply to undertake more work, rather than to focus resources on work that has the most impact on asset sustainability as an outcome. Reflecting this, the measure and the floor should both be output based.
- 5.83 In light of this, Network Rail provided us with revised regulatory floor proposals in May 2018, shown as a percentage change in CSI equivalent to its proposed 90% floor. We are content with this.
- 5.84 Consistent with our approach generally, we may take action even where the floor has not been breached. We will rely on a wider suite of indicators in our monitoring of network sustainability.

FNPO

Context and the FNPO's strategic plan

- 5.85 The FNPO differs from the geographic routes, as it is not responsible for managing any operational assets, nor does it control the movement of trains. Instead, its role is to represent the interests of a number of customer groups – including freight and national passenger operators (including charter train operators and operators with plans to run open access passenger services) – which operate a significant proportion of their services across a number (and, in some cases, the majority) of Network Rail's geographic routes.
- 5.86 Reflecting this, much of its role is focused on stakeholder engagement, advocacy and resolving issues as they arise. As such, many of its proposed commitments in CP6 are hard to quantify.
- 5.87 The FNPO's plan commits, among other things, to support freight growth, increase average freight train speed (to address a Scottish HLOS commitment) and develop the strategic freight corridors to boost performance. These are discussed more fully in the FNPO [draft settlement document](#).
- 5.88 In addition to this, the FNPO has committed to performance targets for:
- (a) freight (including national FDM, as discussed above); and

- (b) national passenger operators Caledonian Sleeper (a 80% right time arrivals measure – a Scottish HLOS requirement) and CrossCountry (a 90.3% PPM target³¹).

Our review

5.89 In terms of engagement, freight stakeholders have offered written support for the overall tone and intent behind the FNPO SBP. However, CrossCountry has raised concerns about the relative focus on freight issues. Freightliner also raised a concern with the process around changes made to the national FDM target. More detail is provided in the FNPO [draft settlement document](#).

5.90 Overall, we consider that the FNPO scorecards provide a good basis for monitoring and providing incentives on those aspects of performance that can be quantified. The FNPO is accountable for delivering some of the Scottish Ministers' HLOS requirements. The FNPO will provide more detail on the specific steps it will undertake to meet the specified requirements.

5.91 On those areas that cannot be quantified, we want the FNPO to take a number of steps to improve the extent to which it faces appropriate incentives to deliver against its plan (some of which reflect proposals that the FNPO made during our scrutiny process). We have discussed these with the FNPO and are seeking its firm commitments to deliver against them. The proposed steps are to:

- (a) publish and maintain its governance and reporting framework, so that its stakeholders understand the interfaces between the FNPO, geographic routes, the SO and other parts of Network Rail;
- (b) provide greater clarity on the role of the FNPO Supervisory Board and how this provides assurance to its customers around delivery;
- (c) publish a report annually on its activities and achievements, clearly setting out how these relate to each customer group (freight, national passenger operators, charter and aspirant open access);
- (d) continue with its annual stakeholder survey (and supporting 'pulse checks') to directly capture evidence on the quality of its stakeholder engagement;
- (e) roll-out its proposals for end-customer scorecards; and
- (f) identify and publish milestones on those aspects of the RSP that were not sufficiently well progressed to have clear milestones attached at the time of publication (and reflect these in the route's annual business plans).

³¹ This target will need to be revisited once the new CrossCountry franchise is awarded.

System Operator

Context and the SO's strategic plan

5.92 The SO was formally established as a specific business unit within Network Rail in 2017 (although the functions that comprise the SO were part of Network Rail before the SO was formally established). The SO has responsibility for overseeing the effective planning and coordination of the rail system – a particularly key role given the devolved framework within Network Rail. Since 2015, we have worked closely with it to develop our approach to regulating it in CP6. Our review of its strategic plan and its scorecard, set out in more detail in our [draft settlement document](#) for the SO, have built on this.

5.93 Our review has also been taking place in the context of recent problems with the late finalisation of the May 2018 timetable that has caused substantial disruption to passengers through cancelled and delayed services. We are investigating these issues and expect the SO to reflect the lessons learnt in its plans for CP6.

5.94 In strategic plan, the SO proposed:

- (a) to introduce a more iterative and modular form of strategic planning (that aligns with franchising and funder decisions) and to enhance the capability of its analytical teams to better support enhancement and franchise decisions;
- (b) to improve the process for the sale of access rights; and
- (c) to offer a more accurate and resilient timetable that is provided to industry in a more effective and timely manner. The SO proposes to strengthen its timetable planning teams and reduce the number of errors in the timetable (e.g. to reduce delay minutes caused by its timetable errors by 16% over the course of CP6).

5.95 It also proposed substantial capital investment (£55m) in its timetabling systems to automate more of its timetable processes and move towards 'per second' timetabling through increased investment in its technological capabilities. However, these plans are currently at a very early stage of development.

5.96 To enable stakeholders to hold the SO accountable for its delivery, the SO has proposed to report its performance by way of a three-tiered scorecard structure (that reflect different aspects of its performance in different parts of the network) and through an annual narrative report (that discusses the SO's performance in activities that do not lend themselves to quantified measurement, including discussions on the quality of the SO's work).

5.97 In addition, the SO is proposing a new external governance framework to enable stakeholders to influence the SO's priorities and, where necessary, to challenge its performance. This includes the establishment of an 'Advisory Board', which includes

industry and funder representation, to provide challenge and strategic steer on the SO's performance.

Our review

5.98 Having assessed the strategic plan and drawing on our wider work with industry on system operation in recent years, we require the SO to deliver the following commitments that it has made as part of its strategic plan, namely to:

- (a) **report on its performance through the (national) tier 1 scorecard, as well as the tier 2 (directorate level) and tier 3 (geographically disaggregated) SO scorecard structure.** The SO should also set out what each measure means (including what data it is based on) so that its stakeholders can interpret what the scorecards are saying about the SO's performance;
- (b) **produce and publish an annual narrative report** to explain those elements of its performance that do not lend themselves to scorecard reporting, and to reflect on the quality of its service and areas for improvement. To ensure the report is sufficiently comprehensive, we require that the SO agrees the content of its annual report with its governance bodies; and
- (c) **embed the external governance framework** as set out in its strategic plan to enable stakeholders to influence the SO's priorities and, where necessary, to challenge its performance. These governance arrangements should support the SO's objectives of being transparent, impartial and expert.

5.99 In addition, we are also requiring the SO to:

- **lead the development of a plan for journey time improvements**, working with other parts of Network Rail (including the Scotland route and the FNPO route) and with industry, which meets the requirements of the Scottish Ministers' HLOS³². In CP6, the SO must deliver the obligations in the plan that are assigned to it, where it is funded to do so;
- **implement the recommendations from the Nichols review³³ of the SO's capital expenditure controls and processes**, which we commissioned jointly with Network Rail to provide assurance that these controls and processes can enable the SO to deliver £61m of proposed investment in its systems. To support this, we also require the SO to produce an action plan of how it will implement each of these recommendations (and by when) by 31 August 2018,

³² Those requirements are to deliver a ScotRail minutes per mile target of 1.587 by December 2019 and 1.576 by December 2024 and a freight speed increase of 10%, by December 2024.

³³ [Review of Network Rail System Operator CP6 processes and controls for investment decisions relating to capex spend](#), Nichols, June 2018.

and provide a statement on its progress against this plan in the SO's first annual narrative report; and

- **take account of lessons learnt from the May 2018 timetable change,** including our ongoing investigation into Network Rail's role and our wider inquiry into why the system as a whole failed to produce and implement an effective timetable.

6. Health and safety

Overview

This chapter provides an overview of our assessment of health and safety issues in the SBPs.

Introduction

- 6.1 A key part of our assessment of the SBPs is considering whether – if implemented – they would allow Network Rail to continue to operate its network safely and in line with its legal requirements. This chapter summarises our health and safety assessment and sets out the key decisions we have made in this area.
- 6.2 Our more detailed assessment is set out in our draft determination supplementary document on [health and safety](#).

Context and legal framework

Health and safety legislation

- 6.3 Network Rail has legal duties³⁴ to ensure the safety of employees and others affected by its undertaking. It must assess the risks arising from its activities, and identify and implement controls to eliminate or prevent them.
- 6.4 Most health and safety legal duties are required to be carried out ‘so far as is reasonably practicable’. This test requires a control measure to be implemented unless an employer can demonstrate that the cost and effort required to do so is grossly disproportionate to the risk being addressed. This test is sometimes referred to as ‘ALARP’, meaning the risks have been reduced to ‘as low as reasonably practicable’. Affordability is not part of the test of reasonable practicability; it is whether the amount of trouble, cost and physical effort to mitigate a risk is proportionate.

The Secretary of State’s HLOS

- 6.5 Within the devolved legal framework for periodic reviews, the Secretary of State retains responsibility for safety for Great Britain as a whole. His HLOS, which set out his overall requirements for the railway in CP6, said:

“The Secretary of State considers the continued safe operation of the railway to be vital. He recognises the good standard of safety achieved by the control of

³⁴ Under the Health and Safety at Work Act etc. 1974 (and subsequent regulations). Its general duties under this are made specific to the railway environment in the Railways and Other Guided Transport Systems (Safety) Regulations 2006 (ROGS).

risk across the rail industry and seeks for this to continue...He is not specifying any particular safety initiatives and would expect risk control to be attained through existing processes and funding.”

- 6.6 So, while for CP5 there were specific requirements and ring-fenced funding relating to safety that we had to take account of in our PR13 determination (such as in respect of level crossings), in PR18 our review of the SBPs has focused on whether they were legally compliant. That is, delivering what is reasonably practicable.

Our expectations for health and safety in CP6

- 6.7 In our SBP guidance to Network Rail³⁵, we set out our expectations regarding health and safety management in the SBPs. This included the requirement for it to set out how it would implement its health and safety strategy, which it established during PR13. This strategy spans both CP5 and CP6.

Our assessment of Network Rail’s plans for CP6

Our approach to the assessment

- 6.8 Our assessment of the SBPs built on the work of our safety inspectors during CP5. Our review itself included a range of meetings with Network Rail, including those on specific assets, which ORR safety and engineering staff attended together as part of a joined up safety and economic regulatory approach.

Our main findings

- 6.9 Overall, our scrutiny of the SBPs found evidence of growing maturity in Network Rail’s management of health and safety. It has matured in its vision to deliver its health and safety strategy, with its ‘Home Safe’ plan well established as the means to do this. It has set itself a challenging overall Lost Time Injury Frequency Rate³⁶ target of 0.17 by 2023-24 to reduce workforce injuries in CP6 and it is promoting the use of the Risk Management Maturity Model (RM3)³⁷ across the routes as a tool for securing excellence.
- 6.10 Although it now has a devolved structure, Network Rail (at a corporate level) remains the single duty holder for legal safety obligations. In PR18, we have been challenging it on how it will balance its overall legal accountability with a structure that allows for the devolved management of risk at route level. We considered that the various

³⁵ Paragraphs 70-72, [Guidance on Network Rail’s strategic business plans](#), ORR, February 2017.

³⁶ LTIFR is the number of lost time injuries occurring in a workplace per one million hours worked. At period 1 in 2018-19, the LTIFR was 0.363 overall, but with substantial variations between routes and Infrastructure Projects. All routes have a target of 0.17 for end of CP6.

³⁷ RM3 describes what excellent management capability would look like for the key elements of an organisation’s health and safety management system as measured against five maturity levels.

business plans each described this matrix framework well. There are clear lines of accountability, and a distinction between mandatory company standards and areas where routes are free to innovate and decide their own approach.

- 6.11 Further, we found that Network Rail's own assurance activities across the business, led by its Safety, Technical and Engineering directorate (STE), have been robust, resulting in progressive challenge to route proposals and securing improved arrangements. This is a positive development, which we welcome.
- 6.12 That said, we found that there were varying levels of ambition, maturity and understanding of health and safety in the individual RSPs and those of the central functions. In particular, there needs to be an evolution in routes' understanding of what 'so far as is reasonably practicable' means for their investment decision-making.
- 6.13 Some routes appeared to rule out reasonably practicable spend based on affordability, without further explanation. While many of these issues were resolved in the February 2018 SBP submission following internal challenge by STE, not all questions of what might be reasonably practicable were resolved. Nonetheless, the matrix framework has the potential to drive improvements in maturity and understanding across Network Rail.
- 6.14 While we considered that the SBPs have the potential to deliver continued safety of the network, we had some particular concerns in respect of asset management, level crossings and depot walkways.

Asset management

- 6.15 Asset management is a key component of Network Rail's licence condition regarding stewardship of the network. Our broader findings and decisions on this are discussed in Chapter 7. Reflecting that effective asset management is key to controlling many of the precursors to catastrophic risk on infrastructure, it was a major focus of our review of health and safety in the SBPs.
- 6.16 In England & Wales, while the Secretary of State had provided additional funding for renewals in his SoFA, Network Rail's SBPs did not include the volumes of renewals that its modelling indicated would be needed to maintain asset condition. We challenged Network Rail on whether risk control could be maintained despite this.
- 6.17 It said that it had targeted its available funding at those assets prioritised by risk, so that renewal brings the greatest control benefit. However, Network Rail acknowledged it had residual concerns regarding structures and earthworks.
- 6.18 On earthworks, STE had advised Network Rail's Board that it considered that around £300m of targeted activity would be required in CP6 to resolve failures as they arise.

It planned to draw on the contingency in Network Rail's 'Group Portfolio Fund' for this.

- 6.19 On this, we recognise the need to have contingency available for extreme weather events (such as that at Dawlish in 2014), but consider it would be appropriate for funds to be directed more proactively at those renewals that Network Rail would have undertaken had it not had overall affordability constraints.
- 6.20 Network Rail's own assurance found that some routes (LNE&EM, LNW and Wales) would not be delivering the minimum benchmark earthworks renewal activities that its own modelling suggested were required. The planned volumes would be below the level considered necessary to maintain current levels of risk exposure.
- 6.21 We consider that alternative mitigations to renewals in this case, such as heavy maintenance or additional inspection activity, are not demonstrably effective in controlling risk in every case – especially the risk arising from sudden failure of assets during extreme weather. For this reason, when Network Rail considers which additional renewals it could include in its plans to achieve better sustainability (as part of the targeted adjustments we have asked it to propose this summer), we are asking it to prioritise geotechnical assets whose renewal was deferred and where the consequences of failure would be most serious. As well as having safety benefits, this will also reduce whole life asset costs.

Structures

- 6.22 We have identified that in some routes, overall affordability constraints have led to some major interventions being omitted from the CP6 plans. This is a particular issue in the Anglia and South East routes. While some safety mitigations are planned, we are concerned at the risk of failure and the related impacts on safety and performance. We are also concerned by the future bow wave of work implied for future control periods. Network Rail will need to pay close attention to this area.

Level crossings

- 6.23 Network Rail has revised its strategy on level crossings to reflect that there is currently no additional specific funding for reducing safety risk for CP6. It also provides a clear steer to routes on what they are expected to deliver in this context. As part of this, it notes that decisions to invest in level crossing safety must also be balanced against other safety risks the company faces.
- 6.24 We are aware from our STE challenge meeting that at least two routes, Wales and LNW, have been challenged by STE to show why level crossing spend listed as 'optional' in its plan is not reasonably practicable. From our assessment, we consider that this should be in the 'core' plan and, as such, that a further £25m should be spent in LNW and £8m in Wales.

6.25 Further, we are concerned that Network Rail's revised level crossing strategy has removed some of the stretching targets for routes to achieve improvements at passive crossings and those with the least reliable methods of warning those using the crossing. STE has been overseeing the development of value for money solutions at crossings that currently have the least reliable controls. We consider that this has made some technical improvements reasonably practicable, and that there should be a targeted application of them. That is why we also consider that £25m to upgrade the highest priority user-worked crossings with overlay warning systems³⁸, instead of relying on telephones, is a reasonably practicable measure and should be funded from the outset.

Depot walkways

6.26 During our assessment, we challenged Network Rail on issues relating to basic health and safety legal compliance. In its RSP, the FNPO assigned work relating to making depot walkways safe as 'optional' spend. This should be moved into the 'core' spend at a cost of £22m.

Our determination

6.27 It is not ORR's role to determine what is reasonably practicable or tell Network Rail how it should meet its legal obligations. It is, though, our role to judge whether the CP6 SBPs can deliver a safe, legally compliant railway. In doing this, we have challenged Network Rail where it appears to be ruling out safety related expenditure that might be reasonably practicable.

6.28 We consider that £80m of schemes relating to level crossings and depot walkways that were labelled as 'optional' in the RSPs should be included as 'core' spend on the basis of being 'so far as is reasonably practicable'. We have reflected this assumption in our draft determination.

6.29 We set out in Chapter 7 that, as a result of our decisions, around an extra £1bn of expenditure should be put into improving asset sustainability. We have asked Network Rail to adjust its plans over this summer to include additional renewals. It is doing this without prejudice to its right to object to our determination later. In the context of mitigating safety risks, we expect it to consider earthworks, drainage and structures (in particular, metallic structures) prominently as part of this process, given that these are assets where alternative mitigations are least effective in preventing failure.

³⁸ These systems provide a means of warning crossing users of approaching trains. They are in addition to the existing signalling system, rather than being integrated into it.

6.30 The routes identified particular work in these areas during the bottom-up planning process, but a number of routes did not include the work in their core plans on the grounds of affordability.

7. Cost and income assessment

Overview

This chapter sets out our assessment of Network Rail's forecast costs and income in CP6.

It is structured in four main sections, considering: geographic route costs and the overall level of efficiency challenge in these plans; the costs in the SO plan; the costs in the FNPO plan; and the scrutiny of Network Rail's income forecasts. This includes the support costs that are included in the route and SO plans.

Context

- 7.1 Network Rail has performed poorly over recent years in terms of delivering efficiently against its plans or ORR's determination. In important areas, it is now substantially less efficient than at the end of CP4.
- 7.2 Measuring the company's performance against our PR13 final determination, for the first three years of CP5 in Great Britain, for the work delivered, Network Rail underperformed by approximately £2.7bn on renewals and £0.3bn on maintenance (both in 2016-17 prices). For Scotland, it underperformed by around £153m on renewals and £5m on maintenance (likewise, in 2016-17 prices).
- 7.3 In 2017, we spent some time focusing on the underlying causes of the recent deterioration in renewals efficiency³⁹. In our view there was evidence that the following have been material factors in driving recent trends in efficiency: Network Rail was poorly prepared to deliver renewals at the start of CP5; its PR13 efficiency improvement plans were not well founded; the company reacted slowly to the problems on efficiency; and there was increased pressure on access to the railway to carry out work.
- 7.4 In addition, the reclassification of Network Rail into the public sector, with the introduction of fixed borrowing limits, meant that when problems arose this prompted repeated re-planning of work to stay within the new funding constraints. We also highlighted that devolution to routes had initially led to unaffordable increases in the scope of work in some areas, as route teams delivered additional work for their customers, which had the effect of compounding affordability constraints elsewhere.

³⁹ These figures are based on the Financial Performance Measure (FPM) which reports how well Network Rail is performing once we take account of whether the company has delivered the work that it planned to undertake. This ensures that a deferral of renewal work is not recorded as an 'efficiency'.

Efficiency of geographic route plans

- 7.5 When reviewing whether Network Rail's plans have identified an appropriate level of efficiency improvement, we have focused on whether the efficiency challenge is a reasonable one to set Network Rail's management, given where the company is in terms of its ongoing transformation.
- 7.6 Network Rail's general approach has been to base many of its forecasts on the cost levels it has incurred in recent years (and, in particular, costs from 2016-17). The timing of this review therefore means that the historical evidence on cost is taken from a period of particularly poor efficiency by Network Rail's own historical standards.
- 7.7 This makes it particularly important to understand these cost levels and to reverse out historical inefficiencies that we expect have, or will be, addressed by or within CP6. We have prioritised our work with this in mind, and have focused on two particular areas:
- (a) **evidence on current unit costs:** in many places, the company has used data from 2016-17 to inform the costing of its business plan. We have reviewed the process by which Network Rail has determined the appropriate adjustments to these numbers to identify a baseline level of costs, which are then used to understand the likely cost of delivering its plans in CP6; and
 - (b) **evidence on cost pressures and opportunities:** we have reviewed how, within the company's current operations, the unit costs are likely to change over time, in response to future cost pressures and opportunities for cost savings.
- 7.8 Our supplementary document on efficient costs focuses on these two aspects of efficiency. It looks at the evidence available about the current level of costs and where there is evidence to reach a view on how they might change over time.
- 7.9 However, there are two other areas where our review has been limited by the inevitable difficulty in quantifying efficiency adjustments and the time available to undertake our work, namely:
- (a) **the cost savings that have already been realised relative to 2016-17:** in CP5, Network Rail went through a very disruptive period, during which normal controls and incentives on efficiency were not working effectively. This prompted a number of changes that reinstated 'business as usual' processes, which are fit for its current public sector status. There was also a substantial internal reorganisation: notably, the increase in the role of route businesses and the creation of a distinct System Operator. This leads to a series of efficiency savings which Network Rail should already be realising by the start of CP6;

however, the unavailability of sufficient data prevents them from being properly estimated and ‘reversed-out’ of the unit costs underlying the route plans; and

- (b) **the cost savings that could be realised as the company continues its transformation:** the significant changes made to the company – and which continue to be made – have potential to unlock significant further efficiency savings. These further changes – when combined with the likelihood that the changes that have already taken place will continue to drive efficiency improvements over time – indicate the significant potential for further improvements to efficiency in CP6.

7.10 This means that while we have reviewed the degree of cost challenge included in route plans, we think that these plans are likely to underplay systematically the potential for efficiency savings in practice. For example, the plans are unlikely to reflect fully:

- (a) the gains to efficiency from a more stable ownership and funding structure, and the move to bottom-up route-based planning;
- (b) the benefits from the existing level of transformation that will be realised in CP6, including:
 - (i) the increased role of routes/the SO, leading to the central services changing their approach and becoming more effective suppliers to the route/SO businesses; and
 - (ii) that there will be more and better quality data to compare across the route businesses, to supplement the comparisons that can be made between the business plans and delivery, and provide a stimulus to the sharing of best practice; and
- (c) the gains from the latest and planned transformation. This is not surprising – the company moved to a new internal governance structure on 1 April 2018, while there are ongoing reviews of the relationship between routes and Infrastructure Projects (IP).

7.11 Network Rail has sought to make adjustments to reflect how costs evolve over time. However, it has focused on identifying ‘headwinds’ (where there are additional cost pressures expected in future). It has identified very limited ‘tailwinds’. This is consistent with our view that the plans do not fully reflect the savings that have been realised, and which are likely to be realised, from the company’s recent and ongoing transformation.

Our efficiency review: approach and scope

- 7.12 Earlier in PR18, we undertook a number of studies and other activities in preparation for the SBP submission, with a particular focus on reviewing the processes that support the production of the business plans. However, our detailed review of the business plans themselves took place between December 2017 (when Network Rail submitted a draft of its SBP) and the end of March 2018. Indeed, the bulk of this work was undertaken after Network Rail submitted its final SBP in early February 2018. Alongside our own work, we have been assisted by specialist consultancy support. The nature and extent of our scrutiny has been constrained by the time left available, which reflected earlier delays affecting the review timetable; notably the later than envisaged SoFAs and the later publication of Network Rail's SBPs.
- 7.13 We also undertook econometric benchmarking to support our understanding of costs and to identify where there might be evidence of particular issues. The direct use of this work for PR18 is limited by constraints on data quantity and quality but our work is indicative that there are inefficiencies within Network Rail's business processes. This supports our findings in other areas, notably the review of headwinds and efficiencies.
- 7.14 We have set out more detail about our conclusions in our [supplementary document](#) on our review of Network Rail's proposed costs, which included an explanation of the evidential basis for the key conclusions supporting our draft determinations.
- 7.15 Reflecting the size of Network Rail and its devolved structure, our review was risk-based. We developed a methodology for this, and took a sampling approach, to focus ORR's resources on areas where there was a significant perceived risk that costs were not reasonable, and where the magnitude of any errors would have a significant impact on the overall settlements. This approach also put appropriate weight on Network Rail's own internal assurance reviews.
- 7.16 Alongside the work we undertook in the run up to the SBP submission, our scrutiny has also been informed by the review of Network Rail's business planning process by Nichols, the independent reporter, in summer / autumn 2017⁴⁰.

Our efficiency review: findings

- 7.17 Our review of Network Rail's costs has been structured around the key costs included in Network Rail's SBP submission, which are discussed in turn below.

⁴⁰ [PR18 SBP Planning Assurance Mandate – Summary Report](#), Nichols, September 2017.

Maintenance and renewals costs

Asset management planning

This considers the processes by which Network Rail identifies how much and what work is needed on its assets (to establish its 'workbanks').

7.18 Overall, we consider that Network Rail has followed a reasonable approach to understanding its asset base and to allocating the resources available in a way which reflects the strategic objectives of each route, while at the same time giving reasonable weight to safety, performance and compliance with its own asset policies.

7.19 The reliability of infrastructure resulting from the proposed levels of work is broadly in line with expectations. However, Network Rail's plans are expected to lead to an overall deterioration of assets.

7.20 Network Rail used a high-level aggregate measure of asset sustainability (CSI)⁴¹ to predict the levels that would be achieved with the activity proposed. Analysis of the SBPs concluded that asset condition as measured by CSI will deteriorate by approximately 2% over CP6 compared with the predicted condition at the end of CP5. This predicted deterioration in average asset condition is not uniform across assets or routes. In particular, expenditure on track, structures (in particular metallic structures), earthworks and drainage have been specifically identified as areas of concern. The Scotland route plan delivers forecast asset condition that looks to be broadly acceptable, as the relatively moderate deterioration forecast in CP6 follows the improvement in condition over CP5.

7.21 We have estimated that approximately 11% of additional work activity (by volume) would need to be added to renewals plans to fully address the forecast fall in CSI across GB.

7.22 Our advice to governments (see paragraph 5.78 above) highlighted the importance of asset sustainability. This advice was accepted by both governments, and was one factor behind the significant increase in funding made available to Network Rail. This funding envelope is now effectively fixed and so this concern must be addressed by Network Rail in reprioritising and replanning its activities for CP6 in respect of England & Wales.

7.23 We have identified a number of areas where we consider that Network Rail should make different trade-offs when allocating expenditure (notably, by reducing initial research and development (R&D) funding), which allows more work to take place to raise average asset condition. The efficiency savings identified by other aspects of our review also provide additional funding for this work.

⁴¹ CSI, or the composite sustainability index, is equivalent to the change in the value of the infrastructure assets, based on their underlying condition, relative to their value at the end of 2013-14.

7.24 However, these changes to expenditure will not address the full shortfall in sustainability. Instead, we consider that Network Rail would have to identify around a further £1bn of work on top of the levels in its February 2018 SBPs, to ensure assets are sustainable in the longer term. As set out below, this additional expenditure of around £1bn would be dependent upon how risks outturn and the extent to which they are successfully mitigated and managed.

Estimating costs

This provides forecasts of the cost of delivering the workbanks.

7.25 Different estimating methods were used for maintenance and renewals work. The cost of maintenance work was estimated using Network Rail's Activity Based Planning (ABP) tool.

7.26 The use of ABP is a positive step forward and is a valid basis for estimation of these costs. However, we note that Network Rail's own assurance of the ABP-based estimates raises concerns about deliverability and strategic alignment of the plans, which means that there may be some risk to the efficient delivery of planned maintenance work volumes within the estimated cost of this activity.

7.27 The cost of renewals was estimated by the routes with support from IP. In general terms, the methodology used high-level unit rates to price the workbanks. As noted above, we focused on whether these renewals costs: were based on base rates that exclude historical inefficiencies and other one-off events associated with CP5; did not include inappropriate contingency; and indicated any general, systematic weaknesses in how routes have costed their work.

7.28 To investigate these areas of interest we appointed an independent cost consultant, Gleeds. Gleeds examined a representative sample of routes and considered the estimating approach which Network Rail has taken for a selection of work types. Its report concluded that there was not widespread or sufficient evidence to support adjustment of the overall renewals budgets, but identified a number of issues relating to renewals efficiency, notably:

- (a) inconsistencies in the way that individual routes have applied the guidance and national rates provided by the IP cost planning team; and
- (b) individual instances of risk and inefficiency being inappropriately included in estimating rates.

7.29 Gleeds' report highlighted a number of shortcomings in various aspects of Network Rail's approach, but then concluded in respect of each of these there was insufficient evidence to adjust the renewals budgets. Importantly, while there may be a lack of evidence to quantify individual adjustments, we consider that the report provides

evidence in support of the view that there remain significant further opportunities for Network Rail to deliver work below the cost included in its business plans.

7.30 Furthermore, Gleeds reviewed whether Network Rail had applied its process, and whether routes had justified the instances where they departed from these central unit rates. However, the process that Network Rail followed does not provide sufficient assurance that the original unit rates removed all of the CP5 inefficiencies. These have not, for example, been benchmarked against external comparators. Furthermore, we do not consider that the ability of routes to adopt different rates provides full assurance over the level of costs included in the business plans, as all parties have similar incentives in respect of not setting unduly stretching cost targets. During CP6, however, we would expect comparison between routes on efficient delivery to provide sharper incentives to improve, and provide better information for future business planning.

7.31 Reflecting this, we consider that this analysis forms part of the overall case for increasing the overall efficiency challenge on Network Rail.

Delivery planning

This covers the processes that control how projects are delivered, and which support efficient expenditure in practice.

7.32 A further element of overall efficiency is whether Network Rail is well-placed to deliver work efficiently in practice. There are a number of aspects of this:

- (a) whether there are **good quality plans** in place that describe with sufficient clarity the work that Network Rail expects to undertake to deliver the outcomes included in its business plans;
- (b) whether the **level and profile of expenditure** across the five years of CP6 are deliverable with the available resources, access and supply chain capacity (often referred to as the ‘deliverability’ of the plans) and provide an efficient transition into CP7; and
- (c) whether Network Rail has in place effective **processes to deliver planned work** efficiently.

Quality of business plans

7.33 The general quality of the business plans is a significant improvement on those prepared ahead of CP5. As noted above, we have reviewed the asset management and cost planning processes. A significant shift in this respect is the move to bottom-up planning. These improvements sit alongside the new process that Network Rail has followed to prepare its plans – not least the increased involvement of stakeholders and the ongoing comparison by Network Rail’s Business Review

team of the relative quality of the business plans. This has provided a further stimulus to improve the quality of business plans across the routes.

Deliverability of planned activity levels

- 7.34 Turning to the overall deliverability of these plans, Network Rail has reviewed the levels of activity implied by the totality of the route business plans. This led to the company making a number of adjustments to the initial plans to address concerns about whether the level and profile of work was capable of being delivered in an orderly and efficient way (and, for example, did not imply significant peaks and troughs in certain types of activity).
- 7.35 In summer 2017, we commissioned Nichols (as independent reporter) to review Network Rail's approach to assessing the deliverability of its plans. This study found that Network Rail had clear processes in place to compile its plans, which assessed whether they were deliverable. However, it also found that these processes were evolving and unproven. In light of these findings, we undertook additional work to review Network Rail's deliverability assessment.
- 7.36 The deliverability of Network Rail's maintenance and renewals activities needs to be assessed in conjunction with both enhancements to Network Rail's infrastructure and other national programmes like High Speed 2 (HS2), which potentially compete for the same resources. We have considered maintenance and renewals in the context of possible national programmes and, in general terms, we consider that the overall volume of work should be within the capability of the wider rail industry to deliver.
- 7.37 There are inevitable limitations in the analysis we undertook. In particular, while we reviewed historical evidence on volumes and compared this to forecast activity levels, we did not assess the likely future capability of each company in the supply chain.
- 7.38 There are also risks associated with deliverability. In particular, the overall level of supply chain activity will be affected by future decisions by governments on enhancements. Given that enhancements compete not just with supply chain resources but also with Network Rail's own internal resources and access to the network, we consider it important that the approval process for enhancements takes account of underlying delivery plans for maintenance and renewals and ensures that the cost and other effects of any disruption to these is taken into account.
- 7.39 Network Rail has constructed detailed, bottom-up delivery plans for its maintenance and renewals activities. These have been subject to a two-level assurance process: for level 1, routes undertook a self-assessment of deliverability, using the framework proposed by Nichols in their 2017 report; while level 2 involved central assurance of the plans by Network Rail.

7.40 This general approach looks to be appropriate – and is an improvement on the planning for CP5 – but Network Rail’s assurance over CP6 is primarily a review of volume and expenditure profiles against previously achieved levels. If the supply chain’s overall capability remains in line with previous levels, this indicates that the workload should be deliverable.

7.41 However, Network Rail has more to do, to provide robust assurance, in particular:

- (a) on signalling works, there remains a significant peak in activity in the third year of the control period, which then falls towards the end of the five-year period. Longer-term forecasts of signalling activity then suggest a step-up in activity. This raises questions about whether this profile fully supports efficient delivery over time;
- (b) more generally, overall activity levels peak in years three and four of the control period. We are not yet comfortable that Network Rail has sufficient assurance that this level of activity is deliverable, or that it would be the most efficient profile of work. In particular, there is little evidence that Network Rail has confirmed that the supply chain can deliver the planned work profile or that doing so would be an efficient use of available resources. This is relevant to the later discussion on overall efficiency; and
- (c) There are some issues with the quality of plans for maintenance, where the output of Network Rail’s delivery assurance shows scores for confidence in delivery ranging from 19% to 72% with an average of 54%.

It is important that these matters are addressed during Network Rail’s targeted updates to its strategic plans for CP6.

7.42 Network Rail’s further work should also consider whether there are opportunities to smooth the profile of expenditure in individual asset categories, including the likely transition between CP6 and CP7. In general terms, a smoother profile of activity should support cost reduction in the supply chain, improving Network Rail’s own efficiency levels.

7.43 In addition, with Network Rail now in the public sector, it is important for the governments that there will be appropriate governance of Network Rail’s budgets in the new control period. Public sector bodies generally have limits on what money they can transfer between years, and are (currently at least) not permitted to transfer capital expenditure to operating expenditure. This reflects the need for governments to manage their overall budgets. The rules on budgetary flexibility that will apply to Network Rail in CP6 are discussed in paragraphs 8.5-8.8.

7.44 As a result of these rules, Network Rail will have to exercise greater control over its expenditure profile than in the past. The limited assurance of current plans is a risk to

this, and Network Rail should ensure that the revised expenditure profiles which will support our final determination are fully assured.

The process of delivering planned work

- 7.45 We found that delivery planning for renewals follows a reasonably well-defined process which considers matters such as access, critical resources and supply chain capacity.
- 7.46 Network Rail's plans described a peak in signalling volumes in years three and four of CP6. There is a similar peak in the last year of CP5, which Network Rail is on course to deliver. This comparison has given assurance that a critical scarce resource (signalling testers) required for commissioning would be available in CP6 if resources are maintained at current levels.
- 7.47 We also found that routes had considered deliverability at several points in preparing their workbanks. Individual routes concentrated on different factors based on local priorities and stakeholder engagement. For example, Anglia focused on gaining high-level agreement with operators for engineering access. Whereas South East had broadly agreed access arrangements and so focused on ramping up delivery for the start of CP6 by setting-up a mobilisation team.
- 7.48 However, the current delivery planning processes generally have a limited time horizon, and currently only look with certainty two years ahead for access and resource planning. Acknowledging that there are limits to how far in advance this planning can in practice extend, this means that the process does not extend beyond the early years of CP6 for two critical components. We consider that this planning could have a time-horizon that extends over the next control period, albeit that later years would have a greater degree of uncertainty attached to them.
- 7.49 This means that there is limited assurance that the activity levels included in the plans can be delivered, and uncertainty over the implications for the levels of possessions needed to deliver the work. The pressure on the levels of access is likely to increase as traffic levels continue to grow and train operators seek to maximise income from discretionary travel. Network Rail has identified this as a key risk to delivery of its plans.
- 7.50 We highlighted the importance of access as a key determinant of the overall cost of Network Rail's renewals efficiency. However, due to the limited time horizon over which delivery planning takes place, we do not have assurance that Network Rail has in place access plans that appropriately support improvements in renewals efficiency. Reflecting this, Network Rail needs to undertake additional assurance that the proposed work volumes for CP6 can be accommodated within existing Operational Access Rules and that the feasibility of the broad level of access required has been confirmed by discussions with train operators and other stakeholders.

Support costs

This covers a wide range of activities that are needed to allow core operations, maintenance and renewals activity to take place (such as human resources, information technology, etc.).

7.51 Support costs are incurred both at route-level and at the centre. Our review of support costs was based on a sample of the main support functions and involved a series of deep dive meetings and desktop reviews of the business plans. Our sampling focused on support costs incurred at the centre, which account for 88% of the forecast support costs. We also reviewed how Network Rail had secured its own assurance over these costs. In this respect, Network Rail had commissioned a series of external consultancy reports which, after assessing them, we concluded that they provided us with reasonable assurance on these costs.

7.52 However, we identified a number of areas where Network Rail had included costs which we considered to be inefficient. We have concluded that, while this analysis does not provide specific quantification, it supports the overall case for increasing the overall efficiency challenge on Network Rail (see below).

Operations costs

This covers the cost of the day-to-day operation of the network, including the costs of signalling operations and reactive maintenance that keeps the network operating on a daily basis.

7.53 These costs are mainly determined by how train control, and other aspects of operations, are delivered. Within the current operating model, staff costs are largely determined by the company's decisions on pay. Further, where staffing levels are more discretionary (e.g. for performance support staff), there is often a significant trade-off between the cost of such staff and their benefits to operational performance, particularly train punctuality and reliability. In general, opportunities to change staffing levels only arise when technology or other similar changes to the operational environment are introduced.

7.54 To validate these findings, our review considered: the different roles undertaken within routes' operations teams: the factors which influenced staffing levels: and the impact of these roles on Network Rail and its customers. We have assessed how these factors apply in a sample of routes and confirmed these findings through two more detailed case studies.

7.55 Our overall determination is that Network Rail's planned staffing levels and associated costs for CP6 are appropriate.

Digital Railway costs

This relates to certain costs relating to the major programme of enhancements which is intended to upgrade capacity and performance of the network by introducing new train control technology and other related innovations.

- 7.56 The majority of the Digital Railway programme and deployment costs – consistent with other enhancement programmes – fall outside of the scope of PR18. However, the SBP includes two areas of expenditure associated with the Digital Railway Programme. These relate to:
- (a) Route Services Directorate £119m: Fitment of ETCS⁴² to 36 on-track machines, IT, training and support costs associated with the Digital Railway schemes planned for CP6; and
 - (b) Group Digital Railway £180m: Industry programme costs, system authority activities, national enabling and support programmes.
- 7.57 DfT has confirmed that it supports the England & Wales share of the GB Digital Railway spend being included in Network Rail's costs. These costs cover a programme team and fitment costs for Network Rail's own machines. Network Rail has said that operationally it needs the full programme team; it cannot scale this down to just England & Wales. Based on the SBPs, Transport Scotland's share of the GB costs would be £22m (relating to Group Digital Railway only). Network Rail's plans do not include deployment in Scotland in CP6, although Scotland services and passengers may still benefit.
- 7.58 This raises a question of whether Transport Scotland should pay for these costs if it has not specified that it wants the Digital Railway programme to go ahead in Scotland.
- 7.59 The GB system is an integrated system and there are ultimately a number of costs that individual funders could say they do not benefit from and vice versa, but they do benefit from the whole system. There is a balance between meeting a funder's requirements and avoiding what could be seen by other funders as adversely affecting the integrity of the railway as a system. This is particularly the case if funders could change their mind in the future.
- 7.60 Our view is that part of the cost of the GB Digital Railway programme team should be allocated to Scotland, as the rail network has to work as a GB system on a long term basis.

⁴² European Train Control System.

- 7.61 More generally, we reviewed the evidence submitted to support these items, established greater clarity about what the expenditure relates to, and have determined that they are justified to be included in the determination.
- 7.62 Consistent with the lessons learnt from CP5, for expenditure funded through the periodic review, we will need to establish: clear ring-fencing of this expenditure; clarity around the roles of governments and the ORR in respect of approving expenditure; and who is responsible for identifying an up-front estimate of the efficient costs of this work. In addition, ORR will routinely report on the efficiency of this expenditure, relative to the forecasts made when projects were approved.

Route efficiency plans

These are the routes' proposals to deliver efficiencies, which include external cost pressures identified by Network Rail (called headwinds) that act to increase the cost of work ahead of and within CP6, relative to historical cost levels.

- 7.63 Together with Network Rail, we commissioned Nichols, an independent reporter, to examine Network Rail's approach to estimating headwinds and efficiencies⁴³ in the SBPs and to confirm that these are reasonable.
- 7.64 In general terms, Nichols found clear evidence of well-structured efficiency plans that are owned by the route management teams.
- 7.65 However, the reporter also concluded that the headwinds included by Network Rail may have been over-estimated through the inclusion of matters which should be either covered by contingencies or in other elements of the SBPs. The reporter has provided a classification of the areas of potential concern and we have used these to assess the potential financial impact of these matters.
- 7.66 In addition, the reporter raised questions over the way in which efficiency targets have been set by routes and indicated that these may have been factored down, possibly to reflect experience in CP5. We are therefore concerned that the efficiency targets that the routes set themselves may not be sufficiently challenging in all areas.

Our efficiency review: overall view on forecast efficiency

- 7.67 Overall, we consider that the route-based strategic plans are a significant improvement on the SBPs submitted in CP5. They benefit from improved asset management, cost planning and delivery planning processes, and are based on bottom-up analysis of the work that individual route teams consider should take place over CP6.

⁴³ As defined by Network Rail, headwinds are external cost pressures and Efficiencies are initiatives by Network Rail to improve the efficiency of its work delivery.

7.68 These plans have also identified a range of efficiency savings, including route-led initiatives. We have reviewed these efficiency plans to identify whether there is reasonable evidence that the plans are credible.

7.69 However, there is a range of evidence that supports the view that further efficiency savings should be identified. This includes:

- (a) the long-term trends in Network Rail's efficiency, and the fact that the business plans have been prepared against a background of a period of unusually poor performance on efficiency. This will have affected the perceptions of what can be delivered and what can be committed to, due to the inevitable conservatism that would follow a period of sustained poor performance;
- (b) the likely benefits that will flow from the recent changes made to how Network Rail is organised – notably the increased role of routes – which have not been reflected in forecast cost levels;
- (c) the further benefits that will flow from changes that Network Rail has recently put in place, that provide routes with greater freedom to deliver work in the most efficient way and influence over those areas of costs where they do not enjoy this freedom (noting also the potential for further changes to deliver additional efficiency improvements); and
- (d) the period of stability provided by the terms of the funding settlement.

7.70 In this context, our analysis of the SBPs has identified that:

- (a) there may be areas where Network Rail has not consistently applied its own guidance in establishing CP6 core pricing for pre-efficient renewals costs. We are concerned that estimating processes do not provide full transparency over the removal of inappropriate inefficiencies which arose in CP5 from the rates used to establish the CP6 base price;
- (b) there are a range of examples where efficiency has not been fully factored into individual plans (but where there was not widespread or sufficient evidence to support adjustment across Network Rail's plans);
- (c) our review of support costs has identified a number of areas where inefficient costs have been included in the SBPs. We have concluded that this analysis supports the overall case for increasing the overall efficiency challenge on Network Rail; and
- (d) the headwinds have been over-estimated, and lack clear justification.

7.71 This presents an issue in terms of how to ensure that Network Rail is set a reasonable challenge in terms of efficiency. One option would be to make individual

estimates of the expected savings that might result from each of the above elements of efficiency and sum these to reach an overall estimate. However, many of the factors listed above cannot be readily quantified.

7.72 Instead, we have decided to use the headwinds estimate as an indication of the scale of these additional efficiency savings, while recognising that the company has the potential to realise further gains.

7.73 This has the effect of providing savings of £659m (of which the England & Wales share is £586m, and £73m for Scotland) that can reasonably be included back into the company's baseline plans. We estimate this will raise the company's efficiency forecast from 8% to about 10% in England & Wales and from 9% to about 11% for Scotland. In broad terms, this would return the company back to the efficiency levels seen in CP4.

7.74 However, this should not be viewed as removal of the headwinds, and further analysis of the headwinds would not necessarily change our view on the overall level of efficiency that Network Rail should include in its plans. Indeed, we are mindful of the potential magnitude of other efficiency savings that have not been quantified. We are considering what further work we now need to do to understand better the potential for savings in these areas.

FNPO

7.75 The FNPO sets out a relatively small funding requirement for its own support and operating costs of £28m for all of CP6. It includes a small staffing cost reduction. On the basis of our review of the plan and given the scale of the FNPO's proposed expenditure, we think this is reasonable.

7.76 However, the plan included an optional and unfunded £22m initiative to make certain safety improvements at depot facilities. We consider these improvements are necessary to achieve basic compliance with health & safety legislation. For this reason, we will include a further £22m in the FNPO settlement.

System Operator

7.77 The SO's strategic plan includes a substantial uplift in its forecast expenditure relative to CP5, from around £145m⁴⁴ to £272m. Of this, £211m is operational expenditure, largely explained by an increase in the number of staff working in the SO. We have reviewed these cost increases, and consider them reasonable in light of our expectation that the SO will be delivering a significant increase in its capability, and so be in a position to improve the quality of its analysis and advice. More

⁴⁴ This figure includes £29m of capital expenditure, and £116m of operational expenditure.

specifically, this increase in staff numbers should support improvements to the quality of timetables and its ability to manage changes to these timetables.

7.78 The SO is also proposing an ambitious capital investment programme in CP6 (£61m), most notably in capacity planning systems (£55m). These programmes are at a very early stage of development, and Network Rail does not have a good record of delivering large-scale technology and change programmes in them.

7.79 We therefore jointly commissioned (with Network Rail) the independent reporter Nichols to consider the SO's programme management processes, controls and capabilities. We require the SO to implement the recommendations from this review, and develop and report on an action plan for implementing those recommendations. This gives us sufficient confidence on the management of portfolio of the SO's proposed capital investment of £61m in its business plan.

Research and development

7.80 The SBPs included £440m for a central research and development (R&D) fund. We discussed this proposal with Network Rail, and considered the evidence it presented to support what would be a very substantial increase in R&D expenditure relative to CP5. Network Rail provided a summary of its funding of CP5 expenditure on R&D, which reported £34m of expenditure relating to HLOS requirements in CP5⁴⁵.

7.81 We strongly support the principle of R&D, and acknowledge the benefits that well-governed R&D spend can have in terms of supporting cost reduction, improved asset management and passenger and freight performance. However, the evidence presented by Network Rail to justify the £440m fund was relatively weak, drawing on comparisons with other sectors that – in our view – were not reasonably comparable to rail (such as defence and pharmaceuticals).

7.82 Following discussion with Network Rail, the company wrote to ORR and stated that it would "...perhaps be sensible to not allocate all the proposed R&D funding exclusively to R&D", and that changes should be made to introduce a "gateway process where funding can be 'won' for R&D if there is a clear track record on successful investment and delivery."⁴⁶ However, it also argued that R&D was needed to deliver additional efficiency savings in future control periods, citing the experience in CP5 where research into asset lives supported changes to asset management policies.

7.83 There is a strong case for supporting ongoing R&D in the determination. However, as is discussed elsewhere, Network Rail's plans support a significant investment in

⁴⁵ Other amounts were provided from outside of the periodic review process, including: £23m spend by Network Rail; and an additional £105m provided by DfT to RSSB.

⁴⁶ Letter from Mark Carne (CEO, Network Rail) to Joanna Whittington (CEO, ORR), 24 April 2018.

renewals activity, but are forecast to lead to a decline in asset sustainability over CP6. Against this background, it is hard to justify allocating £440m of expenditure to R&D. More needs to be done to address asset condition, and we consider that this is a greater priority and so a proportion of the proposed R&D expenditure should be reallocated to renewals activity.

7.84 We consider that an initial £100m should remain allocated to R&D in Network Rail's baseline plans for CP6. This allows £340m to be reallocated to improved asset condition. This remains a significant investment in R&D and allows a pipeline of R&D projects to be maintained. Furthermore, in the event that Network Rail manages risks effectively, this would allow central risk funding to be used to increase spending on R&D over CP6.

7.85 We also reviewed the governance arrangements that apply to R&D, and did not consider that the proposals shared with us for CP6 were sufficiently clear or likely to be effective. Network Rail should develop improved governance arrangements for R&D expenditure which:

- (a) involve customers, funders and other key stakeholders in decision-making;
- (b) deliver high levels of matched funding from outside of Network Rail;
- (c) include clear processes for the evaluation of previous expenditure, which then informs future decision-making; and
- (d) involves high levels of public transparency.

7.86 This governance framework should be agreed with us before any expenditure is committed within CP6.

Other single till income (OSTI)

7.87 Most of Network Rail's other single till income (i.e. income that is not from regulated charges) comes from either: property related items, such as property rental or property sales; or other charges or contracts that are already in place (and which in some cases are not regulated by us).

7.88 We focused our assessment on Network Rail's property income by commissioning Cushman & Wakefield to assess Network Rail's property income forecasts⁴⁷. It concluded that Network Rail's forecasts were based on assumptions that were broadly reasonable, but that Network Rail should be able to generate more property income than it assumed in its SBP submission. For the purposes of our draft

⁴⁷ [Network Rail Strategic Business Plan Property Income Forecast Review](#), Cushman & Wakefield, May 2018.

determination, we have used Cushman & Wakefield's base estimate, which is £67m (5%) higher than Network Rail's SBP.

7.89 The other main issue is that after Network Rail submitted its SBPs to us it noted that it had omitted the Crossrail supplemental access charge income⁴⁸ it anticipates receiving in CP6. Since then, it has forecast this charge at between £250m and £300m for CP6, depending upon the cost of debt assumption. This information was not available when the SoFA was set. Reflecting this, we have discussed the treatment of this additional income with the DfT. The DfT's provisional view is that this money should be available to Network Rail in CP6 to deliver HLOS outputs; it will finalise its position before the final determination is published at the end of October 2018. Consistent with our wider conclusions on priorities for expenditure, this income can be used to support further progress on improving asset sustainability.

Funding assumptions

7.90 This chapter has discussed our assessment of Network Rail's forecast costs and income in CP6. Following on from this, Chapter 10 summarises the overall financial changes we are proposing compared to Network Rail's SBP submission.

⁴⁸ The Crossrail track access option [deed](#) includes provision for payments by Crossrail, through supplementary access charges (SACs), to allow Network Rail to recover the costs relating to works for Crossrail that took place on its network. The costs will be recovered over the life of the assets concerned, and the SAC's include a finance cost component.

8. Financial framework and affordability

Overview

This chapter gives an overview of the key issues in the financial framework for CP6 and also our assessment of the affordability of the HLOSs against the SoFAs.

Introduction and background

- 8.1 The financial framework that we have set for Network Rail in CP6 reflects the significant changes that have happened since the company was reclassified as a public sector body in 2014. In particular, elements of the CP5 framework are now less relevant or redundant. Further, Network Rail's closer relationship to the governments means that certain decisions by the UK and Scottish Governments have a direct bearing on the framework.
- 8.2 We discussed these issues in our [January 2017](#) and [March 2018](#) consultations on the PR18 financial framework and our December 2017 [update letter](#). Our more detailed decisions on the financial framework following on from our March 2018 consultation are set out in our financial framework supplementary document. That document also summarises consultee' views and sets out our decisions on these issues in more detail.
- 8.3 In this chapter, we provide an overview of six key areas for the framework: budget flexibility; Network Rail's management of risk; central cost allocations; indexation of access charges; our affordability assessment; and how we will calculate the revenue requirements.
- 8.4 In our financial framework supplementary document, we have also set out draft decisions, and our reasons for them, on a number of other financial issues:
- setting and updating regulatory asset base (RAB) values for CP6;
 - determining cost of debt and weighted average cost of capital (WACC) values;
 - re-categorising other single till income for presentation purposes; and
 - discontinuing 'early start' provisions and corporation tax and VAT incentive mechanisms – we will not be using these policies in CP6. However, we will reconsider the position for future periodic reviews if the funding structure for Network Rail changes significantly.

Budgetary flexibility

- 8.5 When we made our PR13 determination for CP5, Network Rail was a private company limited by guarantee. As such, it had full budgetary flexibility, by which we mean the ability to move money between different years of the control period and to switch expenditure between operating expenditure and capital expenditure.
- 8.6 However, public sector bodies generally have limits on what money they can transfer between years, and are (currently at least) not permitted to transfer capital expenditure to operating expenditure. This reflects the need for governments to manage their overall budgets. With Network Rail now in the public sector, it is important for the governments that there will be appropriate governance of Network Rail's budgets in the new control period.
- 8.7 DfT has now set out (in its response to our [second consultation](#) on the PR18 financial framework) the budgetary flexibility that Network Rail can expect to be allowed during CP6 in respect of Great Britain (as it is the position for Great Britain that is consolidated into DfT's accounts). This gives Network Rail significantly more flexibility than most other arm's length public bodies. Our understanding is that the flexibilities will be the same for Scotland and for England & Wales. We are aware, however, that Transport Scotland is discussing budget flexibility arrangements for Scotland with the UK Government.
- 8.8 The flexibilities are set out more fully in the financial framework [supplementary document](#), but in summary they include the following:
- (a) Network Rail can defer up to 10% of capital expenditure budgeted for a particular year to a later year; and
 - (b) it can defer up to 0.75% of resource expenditure⁴⁹ for the year concerned to a later year.

Management of risk

Background

- 8.9 Like any company, Network Rail needs appropriate provisions in place to manage the risks it faces, such as inflation, cost shocks and adverse events, such as the storm damage at Dawlish. Up until CP5, Network Rail had been able to borrow money, should this have been required, to cover any such risks. However, since reclassification, this is no longer possible.

⁴⁹ For this purpose, resource expenditure means operating expenditure less income (except grant income).

8.10 DfT did not include any funding within its SoFA to cover financial risks in CP6. It considered that this would not be appropriate, given Network Rail's status as an arms-length public sector body.

8.11 Reflecting this, in its strategic business plans, Network Rail included a £2,595m (in 2017-18 prices) contingency fund to enable it to manage risk ('the group portfolio fund' – GPF). Of the £2,595m, £660m was allocated to the routes, and around £1,935m held corporately at a portfolio level⁵⁰. None of the fund was committed for use upfront; it would be used if risks materialised. If routes needed additional contingency, they could bid for funding from the corporately held part of the GPF.

8.12 Network Rail's confidence in delivering its plans, based on the proposed expenditure levels, was around:

- 50%, with no risk funding;
- 60%, with the provision of route-level GPF funds; and
- 80%, with the additional provision of the centrally held GPF funds.

8.13 If, as CP6 progressed, funds in the GPF were no longer needed to cover risk, Network Rail proposed to release money from it for network investment. There would be a competitive process for routes to bid to use the central portfolio fund for this.

Our view

8.14 We recognise that Network Rail needs appropriate risk provision, not least to avoid the problems that arose in CP5 from the re-planning that the company had to undertake to address cost overruns.

8.15 Our draft determination on risk funding levels is summarised in the financial framework supplementary document. We agree with Network Rail's total proposed funding of £2,595m. However, our draft determination is that the balance between risk funding held in the routes and the centre should be different. Deciding on the balance between the amount of risk funding to be held at route level and at the centre is, to some extent, a matter of judgement.

8.16 Therefore, we have taken a high-level approach and decided that, half of the balance that Network Rail proposed for England & Wales to be held in the centre, should be moved to the routes. This reflects our broad view that funding for risks such as those associated with severe weather events should be held by Network Rail at the centre,

⁵⁰ £60m was allocated to the Scotland route, with £224m held corporately at the centre but ring-fenced for Scotland, reflecting its separate funding arrangements to England & Wales.

while funding for expenditure level risks such as inflation, should be held at a route level. Accordingly, we have moved c£0.9bn from the centre to the routes.

- 8.17 Transport Scotland recognises that an efficient company needs to be able to manage financial risk. We are currently discussing the risk funding approach for the Scotland route with Network Rail and Transport Scotland in the context of the separate funding arrangements for Scotland. While we consider the total risk funding of £284m (in 2017-18 prices) proposed by Network Rail for Scotland to be appropriate, we have not yet decided whether this should be allocated to route/centrally controlled risk funds or contingent renewals. The risk funding amounts for the Scotland route are ring-fenced.
- 8.18 It is important that the governance arrangements that Network Rail puts in place for the management of financial risk are appropriate and support continued devolution of operational management to the routes. We note Network Rail's proposed approach and that it is reviewing its proposed governance arrangements. Our key issue is that route managing directors should be fully involved in the process.
- 8.19 Given our draft decision for England & Wales to move funding out of the centrally controlled GPF into contingent renewals at route level⁵¹ and the targeted adjustments to its England & Wales strategic plans that it will make over the summer, Network Rail is reviewing its proposed governance arrangements. We will work with Network Rail to develop these, and refer to them in our final determination.

Central cost allocations

- 8.20 We commissioned a report from the consultants CEPA on Network Rail's centrally incurred cost allocation process (see associated document 4 in Annex A of the financial framework document). We requested that CEPA pay particular attention to the basis on which costs are allocated to the Scotland route, because of the separate HLOS and SoFA for Scotland.
- 8.21 CEPA found that, overall, Network Rail's approach to cost allocations was reasonable and used well established methods. However, we think it is time to reconsider whether some of these traditional methods remain suitable when there are devolved funders. For the draft determination, we are not making any specific changes to Network Rail's cost allocation approach. However, we will carry out a limited but more detailed review of central cost allocations before the final determination, working with Network Rail as appropriate.

⁵¹ These are renewals that could be delivered if the money is not required to address risks that materialise.

Inflation indexation

- 8.22 In CP5, Network Rail's regulatory asset base (RAB), access charges, and payment rates in other mechanisms where we set the method of indexation, have been indexed using the retail prices index (RPI) measure of inflation. Following consultation, our draft decision is that in CP6, the consumer price index (CPI) should be used instead.
- 8.23 This change reflects recent trends by other regulators to move away from RPI, given that CPI is a more accurate and robust measure. Further, as Network Rail can no longer borrow money on the debt market, it will no longer be exposed to movements in RPI on index-linked debt.
- 8.24 As noted in paragraph 1.57 of our second financial framework consultation, there should be a limited direct impact on Network Rail of a switch from RPI to CPI indexation because in our determination:
- Network Rail's revenue requirements in cash prices should be the same (because we will increase the expenditure forecast to take account of lower expected indexation increases); and
 - we will adjust our determination of fixed track access charges and/or annual network grants⁵² to take account of lower levels of income from variable track access charges (as explained in the next paragraph).
- 8.25 In our second financial framework consultation, we commented that a switch to CPI would result in a relatively higher increase for access charges at the start of CP6, but relatively lower indexation increases during CP6.
- 8.26 However, as discussed in Chapter 9, we have separately announced proposals to cap the variable usage charge for freight and charter operators. Reflecting this, there is no upward adjustment to variable track access charges at the start of CP6 for these operators for the switch to CPI indexation.
- 8.27 The yearly variable track access charges (VTACs) for franchised and open access train operators will also be indexed by CPI. However, for these operators we are still considering whether to make an incremental upward adjustment to VTACs at the start of CP6 for the switch to CPI indexation.
- 8.28 If we do not make such an adjustment, all other things being equal, Network Rail's total income from VTACs, in cash terms, will be lower by the estimated annual VTAC income x 1.0 % in each year on a cumulative basis. However, ultimately, Network

⁵² These amounts are capped by the governments in cash prices.

Rail would receive the same amount of money in total, when fixed charges/network grant are included.

Affordability

8.29 As part of the periodic review, we must assess whether there are sufficient funds available in a SoFA to deliver the associated HLOS. If there are insufficient funds, we must notify the relevant government, which may then revise its HLOS and/or SoFA.

England & Wales

8.30 The Secretary of State's SoFA set out the funding for Network Rail in CP6.

8.31 Network Rail considers that its business plans for CP6 are affordable in the context of both governments' high level output specifications (HLOSs) and SoFAs.

8.32 We have discussed elsewhere in this document where we think Network Rail's plans need to be revised. However, we do not expect that Network Rail's total expenditure requirement would exceed the funding in the SoFA. As such, we consider that the Secretary of State's HLOS is affordable.

Scotland

8.33 While not an industry SoFA, the Scottish Ministers' SoFA covered not just Network Rail's OMR⁵³ but also included some funding during CP6 for railway improvements. These improvements are not restricted to enhancements on Network Rail's network but could also include improvements to non-Network Rail parts of the railway in Scotland. For example, service based and/or rolling stock solutions. The approach to investment will be governed by the Scottish Government's Rail Enhancement and Capital Investment Strategy, which was published recently⁵⁴.

8.34 In our affordability assessment, we only consider Network Rail's OMR plan. But to do this we required clarity from Transport Scotland about how much money in its SoFA was for Network Rail's OMR. Transport Scotland has since confirmed that the money available for non-Network Rail OMR costs will be the balance left after our assessment of the costs of Network Rail's OMR.

8.35 There is significantly more total funding available in the SoFA (£4.85bn in cash prices) plus £0.49bn (in cash prices) of variable track access charges than Network Rail's forecast OMR spend (net of other single till income) in Scotland (c£4.35bn, in cash prices) and we are proposing reductions in Network Rail's SBP costs. We are

⁵³ Operations, maintenance and renewals expenditure.

⁵⁴ This is available at: [here](#).

therefore clear that the outputs required by Transport Scotland's HLOS are affordable.

8.36 Transport Scotland included some output requirements, e.g. on gauging, that are not in Network Rail's SBP submission and have not yet been costed. As these project costs are not clear, we have excluded these items from our affordability analysis.

Calculation of revenue requirements

8.37 In our second financial framework consultation, we confirmed that we would use a 'building block' approach to calculate the revenue requirement, taking account of Network Rail's other single till income, and explained how we would present the FNPO and SO revenue requirements in the totals for England & Wales, Scotland and Great Britain.

8.38 As explained in that document, our determination of revenue requirements for OMR in CP6 will form part of a bigger funding picture for CP6, with some expenditure being separately funded by the governments, i.e. it is not included in the revenue requirements. This includes the non-SoFA expenditure that will be funded directly by the UK Government under separate arrangements in CP6, i.e. payments for legacy debt liabilities, British Transport Police (BTP) costs and corporation tax liabilities.

9. Charges and incentives

Overview

This chapter provides an overview of the process we have followed to develop our decisions on access charges and contractual incentives for CP6, and summarises two key proposals that we are now consulting on as part of this draft determination.

- 9.1 As part of PR18 we have reviewed the structure of the charges levied for use of the network and the incentives in place on Network Rail and train operators. This is important because charges and incentives affect the decisions that Network Rail, train operators and funders make, influencing both the cost of maintaining and renewing the network and how efficiently network capacity is used. They can therefore play an important role in improving outcomes for passengers, freight customers and taxpayers.
- 9.2 Charges also provide one of Network Rail's major sources of income, alongside the grants received from DfT and Transport Scotland. The Secretary of State's SoFA set out the maximum level of grant funding, and his assessment of Network Rail's income requirement from all other sources, including the maximum level of access charge payments for franchises in England & Wales.
- 9.3 This chapter includes:
- an overview of the process for the review of charges and incentives for PR18;
 - a summary of our proposals to cap / phase-in the variable usage charge (VUC); and
 - a summary of our proposals for infrastructure cost charges.

The review of charges and incentives for PR18

- 9.4 We have been working on the review of charges and incentives since 2015, and our first consultations on the regimes came at the end of that year. As this work progressed, we focused on three main changes: simplifying the regimes; improving the transparency of Network Rail's fixed costs; and working towards changes to how fixed costs are recovered to support competition on the network.
- 9.5 Our review covered the following policy areas.
- Charges recovering fixed network costs: the fixed track access charge, the freight specific charge and the freight only line charge in CP5. In CP6, these charges will be collectively known as infrastructure cost charges (ICCs).

- Stations charges: the station long term charge and the qualifying expenditure (QX) management fee at managed stations.
- Variable charges: the VUC, capacity charge, coal spillage charge, electrification asset usage charge (EAUC) and traction electricity charges (EC4T).
- The following financial incentives: the Schedule 4 possessions regime, the Schedule 8 performance regime and the route-level efficiency benefit sharing (REBS) mechanism in track access contracts, and the volume incentive.

9.6 Our review takes the same approach for all charges and incentives. It is divided into three phases:

- (a) the policy phase – establishing the intent and design of the policy;
- (b) the recalibration phase – updating contractual parameters to reflect policy changes, methodological improvements and/or the latest evidence; and
- (c) the implementation phase – implementing our decisions through changes to track and station access contracts.

9.7 Our [supplementary document on charges and incentives](#) sets out the formal decisions we have made to date in each of these phases for each charge and incentive. Annex A of that document provides a high-level overview of the proposed charging structure for CP6, for different types of operators. This is based on policy decisions we have already made (as set out in the supplementary document), as well as policy we are currently consulting on in relation to the VUC and ICCs.

9.8 Our draft determination decisions are consistent with the high-level decisions that we have already set out in respect of the charges that train operators will pay and the financial incentives in place to encourage improved performance on the network. This will lead to a major simplification to charges and incentives, with the removal of REBS, the volume incentive, capacity charge and coal spillage charge, and simplification of other freight charges.

9.9 Our [explanatory note](#) on the charges and incentives impacts model sets out how we have taken the impacts of our proposals on charges and incentives into account when proposing CP6 levels for the VUC and infrastructure cost charges. If any affected parties consider that we have omitted material financial impacts from the model that should have been factored into our decision making, we would welcome feedback on this.

9.10 The following sections provide more detail on the process we have followed, and continue to follow, in each phase.

Charges and incentives – policy phase

- 9.11 We have followed the same approach to policy making across all charges and incentives.
- 9.12 We started by consulting with stakeholders on the priority areas for improvement, and then we worked with industry to develop options that would deliver improvements in these priority areas. All the options that were developed were then assessed using a consistent framework of objectives and criteria, and we invited stakeholder input into our assessments before arriving at our final proposals. Across the different charges and incentives, our work at each of these stages was informed by the findings of the Rail Delivery Group’s review of charges and incentives.
- 9.13 The relevant consultations and stakeholder engagement on each charge and incentive are all available on our [website](#).
- 9.14 As part of the draft determination, we are consulting on outstanding policy issues in relation to the VUC and ICCs. We provide a summary of each of these consultations below. Policy decisions we have already taken in other areas of charges and incentives are summarised in the supplementary document on charges and incentives available [here](#).

Charges and incentives – recalibration phase

- 9.15 Recalibration work is ongoing across each of the charges and incentives. This involves updating the underlying parameters of the charges and incentives, for example, in the case of the VUC, to reflect factors such as changes to Network Rail’s costs and patterns of traffic on the network. It is being led, variously, by Network Rail, RDG, industry working groups or ORR.
- 9.16 The recalibration leads for each charge or incentive are following a common approach. A detailed description of this approach is available on our website ([here](#)), and has been agreed with the industry.

Charges and incentives – implementation phase

- 9.17 Earlier in the year, we sought views on areas where existing track access provisions (relating to charges, Schedule 4 and Schedule 8) could be improved. Having considered the responses, we will be reflecting the proposals (where appropriate) in the draft model contract provisions that would implement our PR18 decisions.
- 9.18 We will publish our consultation on implementing PR18 in July 2018.

VUC consultation

9.19 Our proposed policy position on the VUC is summarised below. For further detail on the background to the VUC and our capping/phasing proposal, please see our [supplementary document](#) on the VUC.

Background to the VUC

9.20 The VUC is a charge designed to recover the operating⁵⁵, maintenance and renewal costs that vary with marginal changes in traffic. It does not reflect the costs of providing or changing the capability or capacity of the network.

9.21 The charge is disaggregated by vehicle class and freight commodity to increase the cost reflectivity of the charge. Broadly, heavier and/or faster vehicles incur a higher VUC, reflecting the relatively higher levels of damage that they cause.

PR18 work on VUC

9.22 In June 2017, we [concluded](#) on our consultation on changes to charges and contractual incentives. These conclusions stated that there would not be a fundamental review of the VUC.

9.23 However, we concluded that the charge would be subject to recalibration by Network Rail as part of the PR18 process (in line with other charges).

9.24 Both our December 2016 [charges and contractual incentives](#) consultation, and Network Rail's July 2017 consultation on [variable and station charges in CP6](#) asked for, and/or proposed, minor methodological changes to the charging methodology. We are minded to approve the approach adopted by Network Rail pending final proposals.

Policy considerations

9.25 The cost of repairing the wear-and-tear that train operators cause to the network is now significantly higher than the charges levied to meet these costs. This is due primarily to a deterioration in Network Rail's efficiency and the capping of the VUC for certain operators in PR13. Without mitigation, the (uncapped) VUC would increase materially in CP6.

9.26 EU and UK legislative requirements mean that costs directly incurred have to be recovered from train operators, but there can be capping/phasing-in of any increase

⁵⁵ In practice, rail infrastructure operating costs are widely understood not to vary materially with traffic, and the charge was set in CP4 to recover variable maintenance and renewal costs only.

in charges on the basis that such capping/phasing-in must not be open-ended or indefinite; there must come a time when full costs are charged.

9.27 We have had regard to our statutory duties more broadly when considering our policy options. In particular, we are mindful of the benefits of keeping charges to certain train operators at a sustainable and predictable level.

Capping/phasing-in proposal

9.28 When considering the capping/phasing-in of charges, we have had particular regard to the impact on train operators' total variable charges. This is particularly important in CP6 as we have already announced some significant changes to variable charges, as part of our wider simplification of charges. In particular, we have decided to remove the capacity charge for CP6, which leads to a significant reduction in one element of total variable charges.

9.29 Against this background, our proposed approach to cap/phase-in the VUC for certain operators can be summarised as follows.

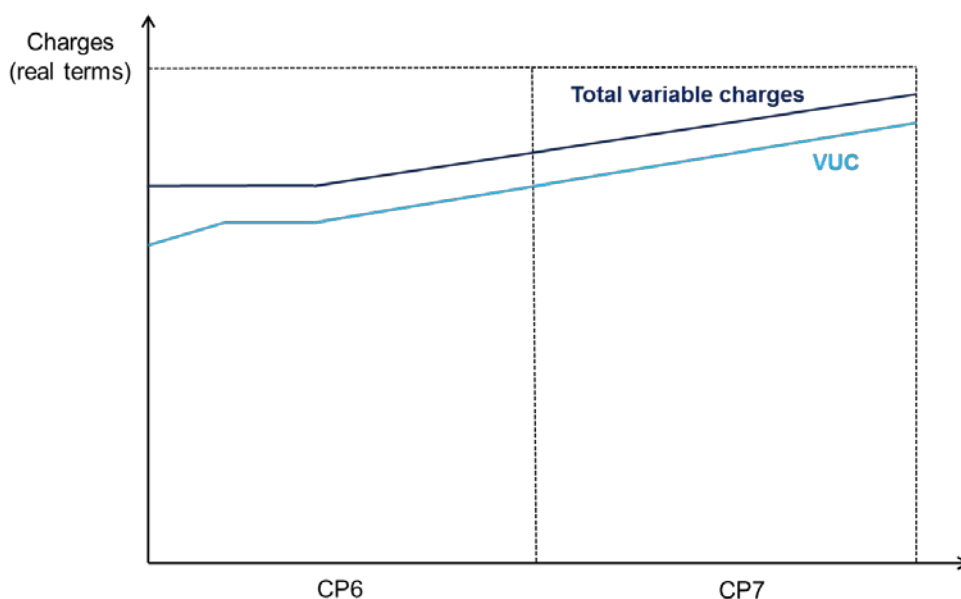
- The following policy will not apply to franchised operators nor to open access passenger operators. Franchised operators are 'held harmless' by their franchise agreements and open access passenger operators are not forecast to incur a material increase in their total variable charges in CP6.
- The capping/phasing-in policy will apply to freight and charter operators who are forecast to incur material increases in their (uncapped) total variable charges in CP6.
- The increase in costs will be reflected in the VUC for freight and charter operators in CP6 based on a transition to cost-reflectivity over a 10 year period (i.e. over CP6 and CP7).
- In years 1 and 2 of CP6, total variable charges (including forecast VUC, EUAC and EC4T, the capacity charge and the coal spillage charge⁵⁶) for freight and charter operators will be held constant in real terms (i.e. equal to the final year of CP5). This will necessitate an increase in the VUC charge in year 1 to offset the fall in total variable charges due to the removal of the capacity charge and the coal spillage charge in CP6.
- In the following three years of CP6, the VUC will be based on a straight-line transition to full cost reflectivity by the end of CP7 (i.e. reaching the current estimates of the uncapped charges level).

⁵⁶ The capacity charge and coal spillage charge are to be removed in CP6 but are included in the calculation of total variable charges in the final year of CP5.

- We have included Network Rail's efficiency assumptions for the last year of CP6 (from its February 2018 Strategic Business Plans) in the estimate of costs directly incurred. We have not anticipated any further efficiencies or inefficiencies from that point, over CP7. We expect to update the Network Rail efficiency assumption to reflect our final efficiency assumptions for CP6, which will be outlined in our final determination.
- In line with our decision to change our indexation approach, charges will be linked to CPI in CP6. This will provide greater stability over time and, by the final year of CP6, train operators are forecast (in nominal terms) to pay rates which will be approximately 5% lower under CPI than RPI.
- The capping/phasing-in profile described above will be used to determine the profile for each freight commodity segment (by applying it to the difference between each commodity's charges at the end of CP5 and the uncapped rates).
- North Yorkshire Moors Railway's services and West Coast Railway Company's Jacobite services will also be subject to this capped VUC transition profile.

9.30 This means that, as illustrated in Figure 9.1, freight and charter operators will benefit from a two-year 'adjustment period' during which there will be no increase in their total variable charges in real terms (shown in dark blue). The transition to uncapped levels is then based on a steady straight-line 'glide path' to the end of CP7. This means that the VUC for freight and charter operators will also include phasing-in, including to adjust for the changes to other variable charges (including the removal of the capacity charge).

Figure 9.1: The transition profile for capped operators⁵⁷



Indicative impact of our proposal

9.31 We present high level numbers below to illustrate the estimated impact of the proposed capping/phasing-in policy. It should be noted that these figures may be subject to change following the draft determination as a result of the ongoing VUC recalibration and quality assurance processes, including the application of our efficiency assumptions for CP6.

9.32 In addition, the move to CPI for the indexation of track access charges in CP6 is forecast to result in affected charges being inflated by c.1% less per annum than would have been the case under RPI. By the final year of CP6, train operators are forecast (in nominal terms) to pay rates which will be approximately 5% lower under CPI than RPI. This impact has not been incorporated into the below figures which are presented in 2017-18 prices.

9.33 Table 9.1 presents a summary of our current estimates of the overall impact of the above capping/phasing-in policy on total variable charges. It shows the increase in the charges from the last year of CP5 ('close CP5') to the levels that would apply in each year of CP6 if the VUC were not capped or subject to any phasing-in. The impact of capping/phasing-in can then be understood by considering: how average charges across CP6 relate to this 'close CP5' level; and how they compare to the charges in the final year of CP6.

⁵⁷ This diagram is not generated directly from the underlying data and is illustrative only.

Table 9.1: Forecast average increase in total variable charges⁵⁸ relative to the final year of CP5 for all freight operators and all charter operators

	Uncapped increase from close CP5 to CP6	Capped increase averaged across CP6	Capped increase from close CP5 to final year of CP6
Freight	29%	4%	11%
Charter	17%	3%	6%

Note: 2017-18 prices, constant traffic (2018-19), and uses Network Rail's SBP assumptions on efficiency. This provides an approximate indication of changes to average charges, before taking account of the change from RPI to CPI indexation.

9.34 As a result of the two-year adjustment period, there will initially be two years where total variable charges will increase by CPI, followed by an increase by an average of CPI plus 3.6% and 2.1% per annum over the last three years of CP6 for freight and charter operators respectively. As noted above, the switch to CPI will reduce annual charges increases by approximately one percentage point per annum, compared to the current approach of using RPI.

9.35 As explained above, the VUC is driven by the transition profile set out for total variable charges. There will be an increase in the VUC above CPI in the first year of CP6 (to offset the removal of the capacity charge and the coal spillage charge). The VUC will then increase by only CPI for one year (to deliver the two-year total variable charges adjustment period), and then increase at a rate above CPI to deliver the above increases in total variable charges.

9.36 Under the proposed policy, average increases in the VUC for freight and charter operators are set to increase to reflect the full costs of wear-and-tear on the network towards the end of CP7.

Next steps

9.37 The recalibration process is continuing for the VUC. As outlined in our April 2018 [letter](#), the price list⁵⁹ reflecting our proposed approach to capping/phasing-in the VUC (as detailed within this paper) will be published by Network Rail in July 2018 following the publication of this draft determination.

Consultation on infrastructure cost charges

9.38 A key area of reform of charges and incentives has been in relation to charges that recover Network Rail's fixed costs (i.e. those costs that do not vary with use in the

⁵⁸ Including the VUC, EUAC, EC4T, the capacity charge and the coal spillage charge as applicable.

⁵⁹ The price list will include prices by vehicle and commodity type (for freight).

short term). These charges, which we have called infrastructure cost charges (ICCs), are recovered as 'mark-ups' (i.e. charges above costs directly incurred) under the relevant European and domestic legislation.

- 9.39 In CP5, Network Rail's fixed costs have been met through a mix of direct grant from governments, mark-ups paid by freight services carrying specific commodities, and fixed charges paid by franchised passenger operators.
- 9.40 In our June 2017 charges and incentives conclusions document (available [here](#)), we confirmed we would continue to work to extend fixed cost recovery to all operators, subject to a market-can-bear (MCB) test.
- 9.41 Over the past year, we have been working with industry to develop our proposals in this area. We consulted on aspects of our ICC policy in September 2017 (available [here](#)). This consultation set out proposals in relation to the market segmentation for freight services and which freight market segments should be in scope for ICCs (or mark-ups) in CP6. We also set out a possible approach to segmentation for passenger services, and proposals around the design of charges for passenger services.
- 9.42 Following the close of our September 2017 consultation, we commissioned further analysis around the biomass market, which was undertaken by MDS Transmodal. We have also have been working with stakeholders to understand the impact of our proposals in more detail.
- 9.43 We are consulting on final proposals in relation to all aspects of our ICC policy (and levels) in our [supplementary document](#) on ICCs. The key proposals we are setting out are to:
- use Network Rail's new cost allocation methodology, excluding the elements of the methodology that allocate non-avoidable costs to services, to set ICCs for CP6;
 - continue to allow Network Rail to levy ICCs on freight services carrying electricity supply industry coal, iron ore and spent nuclear fuel in CP6. Charges for these market segments will be set to maintain the overall level of charges constant (per thousand gross tonne miles (kgtm)) between CP5 and CP6;
 - confirm electricity supply industry biomass as a market segment able to bear ICCs in CP6, given the limited impact an increase in rail charges would have on the volume of electricity generated from biomass, or on the volume of biomass transported by rail. ICCs for biomass in CP6 will be set at a conservative level of £1.3/thousand gross tonne mile;
 - not define any further segments for franchised passenger operators;

- define two market segments for open access operators (OAOs) services: interurban and other services. Interurban services would be defined as able to bear ICCs in CP6;
- not subject existing OAOs to ICCs in CP6, unless they apply for (and are granted) different access rights, based on an updated access policy;
- confirm that ICCs for new entrant OAOs will be phased in according to the profile set out in this consultation. The level of ICCs for interurban services will be set conservatively at £4/train mile; and
- vary ICCs (FTACs) for franchised passenger operators based on variations in timetabled train miles (on an annual basis, and adjusting them ex-post to reflect outturn). We are consulting on two approaches to limiting Network Rail's exposure on the downside.

9.44 Further information is set out in our [ICC supplementary document](#) and associated impact assessments (these will be available [here](#) shortly after publication of the draft determination).

Contingency for a delay to the implementation of PR18 and future periodic reviews

9.45 After we issue review notices in December 2018, Network Rail will have a period of time in which to decide whether to object to our decisions. If it does so, we may then make a reference to the Competition & Markets Authority (CMA) for it to determine the matter.

9.46 If Network Rail did object, it would not be possible to implement PR18 for the start of CP6. As the Railways Act 1993 does not include a contingency arrangement for this, it would mean that the CP5 charges would, in most cases, expire. In PR08 and PR13, we asked train operators to agree an amendment to their track access contracts with Network Rail to include a contingency arrangement. This essentially provided that, if there was a delay to implementation, the changes to access contracts that we set out in our review notice would be implemented on a temporary basis, until the periodic review could be finalised (i.e. once the CMA has made a decision). The access charges applied in the interim period would then have been subsequently be unwound, once the final charges were implemented (i.e. the permanent charges would have been applied retrospectively to the start of the control period).

9.47 We recognise that, in practice, Network Rail's status as a public sector arms-length body may make it less likely to consider itself able to object under the statutory process. Nonetheless, it is important that, if it were to do so, it would have sufficient funding to continue to operate.

9.48 We are therefore proposing that the same contingency arrangement used in previous reviews be used in PR18. We will consult on the contractual drafting for this in July 2018.

9.49 However, as this is the third periodic review where we have asked train operators to agree the same contingency arrangement, we will also be proposing that in the CP6 model terms that we implement in PR18, that we include the contingency provision as standard, so that it will be in place for future periodic reviews. This will reduce the administrative burden in PR23 and beyond, as we will not have to ask train operators and Network Rail to make the amendment.

10. Next steps and summary of decisions

Overview

This chapter brings together the financial changes we are making in this draft determination and sets out the process to be followed this summer.

Introduction

10.1 We have set out in previous chapters our assessment of the SBPs. Overall, while Network Rail's SBPs were a significant step towards securing improvements for passengers and freight customers in CP6, there are some changes that need to be made to ensure that the priorities and trade-offs better reflect the interests of passengers, freight customers and taxpayers. These changes principally relate to England & Wales, albeit that there are also some updates that will be needed to the Scotland plan. The timetable for these changes varies, as set out below.

England & Wales

10.2 Network Rail's February 2018 strategic business plans are a significant step towards securing improvements for passengers and freight customers in the next control period. However, we have asked Network Rail to make a small number of significant changes to its plans in England & Wales, which are summarised below.

Changes to performance trajectories

10.3 As set out in paragraph 5.27 above, we are providing a further opportunity for Network Rail and train operators to reach greater levels of agreement over the key passenger performance trajectories over CP6.

10.4 In addition, we have asked Anglia, South East and Wessex routes to update their CRM-P performance forecasts, so that these trajectories represent a consistent level of stretch across all routes.

10.5 Network Rail's Schedule 8 benchmarks will reflect its CRM-P targets (which in turn have been calculated from PPM trajectories). Given this, changes to performance trajectories – as a result of the further Network Rail-train operator engagement on performance or improvements in forecast asset condition from additional renewals – may also affect the CRM-P targets. Where the CRM-P targets are updated, they are likely to affect the Schedule 8 recalibration later this year.

Changes to funding assumptions (England & Wales)

10.6 We have identified a number of adjustments that increase Network Rail's forecasts of income or reduce its forecast expenditure, that when combined, comes to around £1bn, including:

- (a) additional efficiency savings of £586m;
- (b) lower initial levels of R&D expenditure of £299m;
- (c) higher property income of £64m; and
- (d) unrecognised income from Crossrail charges, that are forecast to be between £250m and £300m.

10.7 In respect of the Crossrail charges, we are separately discussing the treatment of this additional charges income with the DfT, which are forecast to be between £250m and £300m. Our view is that this amount can be used to support further progress on improving asset sustainability.

10.8 We have not sought to identify a precise value for the above adjustments, reflecting the inevitable uncertainty attached to calculation of each item.

10.9 Our review has also identified areas where Network Rail's plans did not contain sufficient levels of expenditure:

- (a) there are areas associated with health and safety⁶⁰ where Network Rail should increase its committed expenditure by £80m, relating to additional investment in level crossings and improvements to the safety of access walkways, which will raise standards affecting the safety of passenger and freight drivers and other railway staff; and
- (b) the plans do not include sufficient expenditure on the network to maintain sustainability at the CP4 exit level, and we think Network Rail can use the money we have identified to increase its spend in this area. This additional expenditure should prioritise work on earthworks, drainage, track and structures (in particular metallic structures), to address asset sustainability issues and mitigate safety risks.

10.10 We have also set out that around a further £1bn of renewals work should be included in route plans for CP6 – with the objective of delivering asset sustainability –

⁶⁰ Reflecting that health and safety is not a devolved matter, this change applies more broadly to Great Britain, rather than being limited to England & Wales.

with this expenditure being dependent upon how risks outturn and the extent to which they are successfully mitigated and managed.

10.11 Separately, we have decided that Network Rail should change its approach to managing risk. In particular, half of the proposed Group Portfolio Fund (£856m) should be reallocated to routes. This provides a proportion of the funding for the contingent route expenditure on renewals.

10.12 Finally, in addition to the performance benefits that flow from better asset quality, we see an opportunity to improve passenger performance levels by creating a performance innovation fund, initially of £10m, which would be used to support innovative approaches to improving collaboration between Network Rail and passenger train operators.

10.13 These items are summarised in Tables 10.1 and 10.2.

Table 10.1: Summary of ORR adjustments to Network Rail’s SBP – England & Wales

£m, 2017-18 prices	Additional income / reduced expenditure (£m)	Additional expenditure £m
Additional efficiency challenge	(586)	
Reduction in GB R&D funding to £100m	(309)	
Additional property income	(64)	
Additional safety compliance		80
Asset sustainability – increase in committed expenditure on renewals		circa £1,000
	(959)	circa £1,000
Other items:		
- performance innovation fund (initial GB funding of £10m); and		
- Crossrail charges income of between £250m and £300m.		

10.14 Table 10.2 below summarises our proposals on risk funding in CP6.

Table 10.2: Summary of risk funding (England & Wales, 2017-18 prices)

Proposed breakdown of risk funding	
Route-level risk fund	£600m
Contingent renewals, held at route level	£856m
Group portfolio fund	£856m
Total⁶¹	£2,311m

⁶¹ Total does not sum due to rounding differences.

Process over the summer (in England & Wales)

10.15 We are not imposing detailed top down decisions on Network Rail and the routes through this draft determination. Instead, we have agreed a process with Network Rail, under which – without prejudice to its right to object to our final determination at a later stage – it will undertake work that will allow it to make a set of targeted adjustments to its plans. The key aspects of this process are discussed below.

Asset sustainability – England & Wales

10.16 We have asked Network Rail to increase the level of funding for renewals included in its plans as committed expenditure by around £1bn, to improve asset sustainability. As part of this, Network Rail has agreed to undertake work that would allow the decisions in this draft determination to be implemented, if the company accepts them.

10.17 To do this, Network Rail has identified the money that would be made available to each route, based on the relative asset sustainability in each England & Wales route. The route teams will then produce a scenario that identifies additional renewals work, setting out the impact that this would have on outcomes (asset sustainability and performance). This would include an explanation of any consequential changes to its RSPs that would also arise, including any adjustments to performance trajectories.

10.18 Network Rail will provide us with an overall summary of this scenario by 13 July 2018, together with a description of the impacts on performance; with updated CSI trajectories to follow shortly afterwards. We will then review Network Rail's approach to allocating this additional expenditure and the outcomes that it secures, ahead of our final determination decisions.

10.19 The work to develop 'contingent renewals' is not something that needs to be completed ahead of our final determination decisions. Funding in the GPF will only be released for these if the money has not been required for managing risk. As such, we propose that these contingent renewals projects be considered as part of Network Rail's development of its delivery plan prior to 1 April 2019, rather than ahead of the final determination.

Performance – England & Wales

10.20 We have asked Network Rail to review its CRM-P and PPM performance trajectories for passenger services. In particular, we have asked it to:

- (a) address the route-specific CRM-P performance forecasting issues in the Anglia, South East, and Wessex routes (as discussed in paragraph 5.32);
- (b) engage with train operators with the aim of achieving greater agreement of route performance trajectories for CP6, including by considering the specific

issues / opportunities for improved industry performance identified by train operators through the NTF process in April 2018 (see paragraph 5.26 above); and

- (c) reflect consequential changes to performance trajectories arising from the potential additional renewals spend (as discussed above).

10.21 Network Rail and train operators have agreed to use NTF to provide a forum to address remaining issues in respect of (a) and (b) above, alongside route-train operator meetings.

10.22 Network Rail has agreed to provide us with its updated analysis by 13 July 2018. Its submission will need to include:

- (a) a report documenting by geographic route the agreed passenger performance trajectories. Where agreement has not been reached, the report should include the route's response to train operators' suggested opportunities and vice versa;
- (b) a written response from Anglia, South East, and Wessex routes to the issues raised by us in respect of the CRM-P trajectories and an estimate of the impact on CRM-P of making the proposed adjustments put forward by ORR; and
- (c) whether any of the changes to performance trajectories prompt other significant changes relative to the February 2018 RSPs, and if so to describe the nature of these changes.

10.23 To support this, routes will need to undertake appropriate engagement with relevant train operators by the end of June 2018⁶², with a final NTF meeting on 1 August 2018 to discuss any final issues around updated operator performance trajectories.

10.24 Network Rail's Schedule 8 benchmarks will reflect its CRM-P targets (which in turn have been calculated from PPM trajectories). Given this, changes to performance trajectories, as a result of the further Network Rail-train operator engagement on performance or improvements in asset condition from additional renewals, will likely change the CRM-P targets and so affect the Schedule 8 recalibration later this year.

Stakeholder engagement

10.25 For both of these processes, Network Rail needs to carry out appropriate engagement with train operators and key stakeholders. However, time is a key constraint and it will not be possible for it to undertake discrete formal consultation. We have outlined the engagement that will be required on performance above.

⁶² To support this, in May 2018 ORR shared the high-level conclusions of its review of route CRM-P trajectories with Network Rail, the relevant routes and NTF.

10.26 The work relating to asset sustainability means that routes will need to identify if any additional renewals work would involve a significant change in the nature or timing of any major renewals projects and whether this would have material operational or performance issues for train operators. If there are, we expect them to seek views from those operators on the impacts.⁶³

10.27 We will expect Network Rail to include in its submission to us details of the stakeholder engagement that each route has carried out.

10.28 Our draft determination consultation runs until 31 August 2018. So, where stakeholders have any particular issues arising from this process, these could be reflected within the responses. We will then be considering these along with our analysis of Network Rail's proposed changes ahead of publishing our final determination decisions in October 2018.

Scotland

10.29 In Scotland, the better position on asset sustainability compared to England & Wales means that there is not the same need to reprioritise expenditure to address asset sustainability, albeit that decisions on the use of available funding should continue to consider the case for additional renewals work.

10.30 Accordingly, and as discussed further in the [Scotland summary and annex](#), the next steps for the Scotland route are principally focused on ensuring that the HLOS requirements have been appropriately reflected in the scorecards and other requirements included in the Scotland route strategic plan. In this respect, there are a number of areas where further work is needed to establish clarity over the way that certain requirements will be measured and the cost of delivering others.

10.31 The savings from the greater stretch on efficiency that we are proposing and our decision on the R&D fund provide a potential source of funding to further support the delivery of the Scotland HLOS and the requirements that are currently not fully costed. Table 10.3 sets out a breakdown of these items.

⁶³ In light of the timing of the ongoing re-franchising in Wales, this would likely involve discussions with the Welsh Government and Transport for Wales in respect of the Wales route.

Table 10.3: Summary of ORR adjustments to Network Rail’s SBP – Scotland

£m, 2017-18 prices (rounded)	Adjustment (£m)
Reduction in R&D funding	32
Overstated costs	73
Additional income from property	3
BTP costs	40
Total	148

10.32 We are proposing that some further risk funding be reallocated from Network Rail centre to the Scotland route (consistent with the decision set out above in respect of England & Wales). However, recognising that the arrangements in Scotland are different, we will be engaging further with Transport Scotland and Network Rail over the summer to inform the level of this reallocation.

Appendix A: Network Rail structure

Figure A.1: Overview of Network Rail's routes and key central functions

The eight geographic routes

The geographic routes are responsible for operating, maintaining and renewing their respective areas of the network.

In CP6, each route will have its own regulatory settlement. This means that the routes will each have their own set of expectations for delivery in CP6, along with their own allocated funding. We will then hold the routes to account for delivering their settlements in CP6.

As set out below, the FNPO and the System Operator will also have their own regulatory settlements that we will hold them to account for delivering.



Freight & National Passenger Operator (FNPO)

The FNPO route does not directly manage assets or control train operations. As a 'virtual' route it delivers outputs for its customers by working with and through the geographic routes, the SO and other parts of Network Rail.

In CP6, the FNPO will have its own regulatory settlement.

Central functions

As well as the SO, Network Rail's central functions also include a number of directorates, including:

- **Safety, Technical & Engineering:** is the Technical Authority for Network Rail. It provides assurance and supports the safe, reliable and effective functioning of infrastructure assets by the routes.
- **Route Services Directorate:** provides services to the routes where there are benefits from optimising resources at a national level and economies of scale.
- **Infrastructure Projects:** is the national infrastructure delivery division of Network Rail and is currently responsible for the delivery of all major infrastructure delivery works.
- **Digital Railway:** is Network Rail's cross-industry programme to introduce new digital signalling and train control systems with fewer trackside assets.

Aside from the SO, the central functions do not have their own regulatory settlements. Their costs are ultimately paid by the routes and the SO.

System Operator (the SO)

The SO function leads strategic planning, manages changes to the network, produces the timetable and manages the sale of access rights process.

In CP6, the SO will have its own regulatory settlement.

Appendix B: Responding to this consultation

Responding to this consultation

1. This **consultation closes on 31 August 2018**. Please submit your responses, in electronic form, to our PR18 inbox (pr18@orr.gsi.gov.uk). You may find it useful to use this [pro forma](#). If you choose not to use the pro forma, we would be grateful if you could structure your response based on the headings in the pro forma, as this will help us to provide your comments to the relevant colleagues more quickly.
2. We plan to publish all responses to this consultation on our website. Accordingly, when sending documents to us, we would prefer that you send your correspondence to us in Microsoft Word format or Open Document Format. This allows us to apply web standards to content on our website. If you do email us a PDF document, where possible please:
 - create it from an electronic word processed file rather than sending us a scanned copy of your response; and
 - ensure that the PDF's security method is set to "no security" in the document properties.
3. Should you wish any information that you provide, including personal data, to be treated as confidential, please be aware that this may be subject to publication, or release to other parties or to disclosure, in accordance with the access to information regimes. These regimes are primarily the Freedom of Information Act 2000 (FOIA), the General Data Protection Regulation (GDPR,) the Data Protection Act 2018 (DPA) and the Environmental Information Regulations 2004.
4. Under the FOIA, there is a statutory code of practice with which public authorities must comply and which deals, amongst other things, with obligations of confidence. In view of this, if you are seeking confidentiality for information you are providing, please explain why. If we receive a request for disclosure of the information, we will take full account of your explanation, but we cannot give an assurance that confidentiality can be maintained in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded as binding on ORR.
5. If you are seeking to make a response in confidence, we would also be grateful if you would annex any confidential information, or provide a non-confidential summary, so that we can publish the non-confidential aspects of your response.

6. Any personal data you provide to us will be used for the purposes of this consultation and will be handled in accordance with our [privacy notice](#) which sets out how we comply with the General Data Protection Regulation and Data Protection Act 2018.

Consent

7. In responding to this consultation you consent to us:
 - handling your personal data for the purposes of this consultation;
 - publishing your response on our website (unless you have indicated to us that you wish for your response to be treated as confidential as set out above).
8. Your consent to either of the above can be withdrawn at any time. Further information about how we handle your personal data and your rights is set out in our [privacy notice](#).



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