Periodic review 2013
Consultation on financial issues for Network Rail in CP5

August 2012

OFFICE OF RAIL REGULATION

Contents

Abbreviations and acronyms

Abbreviation / acronym	Meaning
ACR2003	The 2003 access charges review (for CP3)
AICR	Adjusted interest cover ratio
ATOC	Association of Train Operating Companies
BIS	The Department for Business, Innovation and Skills
BT Police	British Transport Police
Capex	Capital expenditure
CLG	Company limited by guarantee
Command paper	Reforming our Railways: Putting the Customer First, Department for Transport, March 2012
COPI	COPI is the colloquial name for the Department for Business, Innovation and Skills (BIS) Output Price Index for New Construction: All New Construction
CP3	Control Period 3 (which ran from 1 April 2004 to 31 March 2009)
CP4	Control Period 4 (1 April 2009 – 31 March 2014)
CP5	Control Period 5 (expected to run from 1 April 2014 to 31 March 2019)
CP6 and CP7	These are control periods 6 and 7 (assuming five year control periods)
CPI	Consumer Price Index
December 2011 document	Our 'Periodic review 2013: consultation on incentives' document, published in December 2011
DfT	Department for Transport
ERTMS	European Rail Traffic Management System
FIM	Financial indemnity mechanism
HLOS	High-level output specification
HMT	HM Treasury
IIP	Initial industry plan (N.B. two documents were published – one for England & Wales and one for Scotland)

IOPI	Infrastructure output price index
KPI	Key performance indicator
May 2011 document	Our ‘2013 Periodic review: first consultation’ document, published in May 2011
May 2012 document	Our ‘Setting the financial and incentive framework in CP5’ document published in May 2012
ONS	Office for National Statistics
Opex	Operating expenditure
PEx	Public expenditure
PPM	Passenger Performance Measure
PR08	The 2008 periodic review (for CP4)
PR13	The 2013 periodic review (for CP5)
RAB	Regulatory asset base
RAGs	Regulatory accounting guidelines
REBS	Route-level efficiency benefit sharing mechanism
RPI	Retail prices index
RPIX	RPIX is RPI excluding mortgage interest payments
RSSB	Railway safety and standards board
RVfM	The McNulty Rail Value for Money study
SBP	Network Rail’s strategic business plan for CP5, due by 7 January 2013
SoFA	Statement of funds available
The Act	The Railways Act 1993
TOC	Train operating company
UK GAAP	UK generally accepted accounting principles
VOA	Valuation Office Agency
WACC	Weighted average cost of capital

Executive summary

Background

1. In March 2012, we formally began our 2013 periodic review of Network Rail's access charges (PR13). As part of PR13 we will determine Network Rail's access charges, what it must deliver in return for those charges and for the money it receives from the Secretary of State (in respect of England & Wales) and Scottish Ministers (for Scotland). We will also set out the wider incentive framework for the next control period (CP5)[1].

2. PR13 takes place at a pivotal time for the rail industry. The Rail Value for Money (RVfM) study led by Sir Roy McNulty[2], which we commissioned jointly with the Department for Transport (DfT), has highlighted the value for money challenge facing the rail industry. This challenge is felt more keenly today given the economic climate and the financial pressures on train operators, passengers, freight customers, funders (taxpayers and governments) and suppliers.

3. In our periodic review we decide what outputs Network Rail should deliver and how much revenue it needs to efficiently deliver them. This includes estimating Network Rail's income[3] from stations, property and other sources and expenditure on support, operations, industry costs and rates, renewals, enhancements and financial costs. The allowance for financial costs includes allowances for the allowed return, corporation tax and amortisation.

4. In order to recover its costs, as part of our review, we will decide what access charges we allow Network Rail to levy and how much funding it will receive directly from the governments in England & Wales and Scotland through network grants. In doing this, we will set Network Rail a challenging but achievable target for improvements in its efficiency. We will also take account of the priorities for railways and the public financial support they make available, set out by the governments in England & Wales and Scotland[4].

5. PR13 also establishes the wider 'regulatory framework', including the financial framework for Network Rail and the incentives acting on it and train operators (and through them on suppliers and rolling stock companies) to encourage them to deliver and outperform our determination, including targets for performance and assumptions for efficiency. A periodic review is one of our core functions and is a major programme of work for the whole industry. The decisions taken in a periodic review have significant implications for a wide range of stakeholders including Network Rail, train operators, passengers, freight customers, funders (taxpayers and governments) and suppliers.

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[1] Control Period 5 (CP5), which will run from 1 April 2014 to 31 March 2019.

[2] *Realising the Potential of GB Rail - Detailed Report*, Final Independent Report of the Rail Value for Money Study, May 2011, available at http://www.rail-reg.gov.uk/server/show/ConWebDoc.10401.

[3] This is called other single-till income.

[4] The 'high level output specifications' (HLOSs) set out the outputs the governments in England & Wales and Scotland want to see delivered in CP5 and the 'statements of funds available' (SoFAs) set out the funding available to deliver the HLOSs.

6. We have already set out our high-level decisions on financial framework issues in our May 2012 document - setting the financial and incentive framework in CP5[5]. These decisions covered: our approach to the cost of capital; the approach to price control separation/disaggregation we are taking in CP5; the duration of the price control; the early start mechanism[6]; whether we should use a single-till or dual till approach[7]; the high-level approach to re-openers; and our approach to opex and capex financial incentives, e.g. the strength of the incentives.

7. In this document we consult on some of the more detailed issues relating to Network Rail's financial framework, e.g. our approach to inflation risk. The issues raised in this document are important as they can have a significant impact on Network Rail, e.g. on the level of its revenue requirement and how we compensate it for risk. After taking into account consultees' views, we will set out our decisions on these issues by the end of 2012. The financial consequences of the decisions will be included in our draft determinations in June 2013 and final determinations in October 2013.

8. The proposals we set out in this document will help us to deliver our key transformational goals, especially:

(a) having a clear focus on what matters to passengers, freight customers and taxpayers – particularly improving value for money;

(b) a more disaggregated approach – increasing transparency and access to information, facilitating greater localism, and supporting more disaggregation in the industry (for example through Network Rail devolution) that will provide for a more comparative approach to regulation and a better understanding of costs, revenues and subsidy across the sector; and

(c) aligning incentives – improving the interfaces between the different players in the industry, for example, by facilitating alliances, efficiency benefit sharing at the route-level and bespoke arrangements where these improve whole sector working, will drive greater value for money for customers and taxpayers.

9. Reflecting the separate responsibilities for setting the strategy and funding the railway across Great Britain, we will determine separate outputs, access charges and regulatory frameworks for Network Rail in England & Wales and in Scotland, whilst taking account of the fact that Network Rail is a single company.

10. In this executive summary, we set out the key issues that this document raises, these include: indexation and input prices; in-year risk buffer; re-openers; level of financial indebtedness; treatment of embedded debt; and network grants.

11. Other issues covered in this document but not in this summary comprise: the treatment of traction electricity, industry costs and rates; the financial indemnity mechanism (FIM) fee; split cost of capital; amortisation and RAB[8] roll forward; corporation tax; financial ring-fence; and disaggregation of financial issues, e.g. indicative operating route RABs.

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[5] This document is available at: http://www.rail-reg.gov.uk/upload/pdf/financial-incentive-framework-cp5.pdf.

[6] The early start mechanism allows Network Rail, in certain circumstances, to request early notification in the periodic review process that we will allow activity and expenditure in the next control period to be funded through its access charges.

[7] In the single-till approach, the income that we forecast Network Rail will earn on activities such as commercial property is netted off against network costs in our price control settlement. In the dual till approach, the income from each market Network Rail operates in, would be determined through the price control settlement, as if they operated in each market as a separate company.

[8] The regulatory asset base (RAB) is our calculation of the regulatory value of Network Rail's assets.

Risk and uncertainty

12. All businesses face risk and uncertainty on their costs and revenues from the impact of external events. Regulated businesses such as Network Rail are no exception. In developing the regulatory framework for PR13 we need to decide how these risks, e.g. inflation, are allocated between the company, customers and funders.

13. In the current economic climate it is essential that customers and funders get the most value they can from the money they put into the industry. This highlights how important it is that our financial framework policies deliver an appropriate allocation of risks to Network Rail, i.e. those risks that it is best placed to manage, and then appropriately compensate it for those risks.

14. Allocating risks to Network Rail that it is best placed to manage should ensure that it is incentivised to secure continuous improvements in cost efficiency and provide value for money and operate commercially where appropriate, e.g. in managing financial risks. Given the changes since PR08[9], most notably that it is unlikely that Network Rail will issue unsupported debt in CP5, we are proposing to reduce the headroom (i.e. a buffer) available to Network Rail.

15. Our key proposals are set out below.

Indexation and input prices

16. Network Rail, like other businesses and households, faces the risk that prices may rise or fall. We call this inflation risk. In PR08, we provided an automatic adjustment of Network Rail's revenue to compensate Network Rail for inflation risk. Also in CP4, Network Rail's RAB is automatically adjusted each year for movements in the retail prices index (RPI), we adjust our assumption of Network Rail's renewals expenditure for movements in the infrastructure output price index (IOPI) and we included adjustments for our estimate of input price inflation in our efficiency assumptions.

17. We think that the key issue with the automatic adjustment approach to the indexation[10] of allowed revenues is the effect on incentives, as there are other ways that Network Rail can be appropriately compensated for inflation risk. In our view, the automatic adjustment approach may, in some circumstances, provide weaker incentives on Network Rail to efficiently manage the inflation risk that it faces.

18. It is important that Network Rail manages inflation risk as efficiently as possible and that the inflation risk that Network Rail faces and the extent to which that risk is controllable are identified. Given the issues referred to above, we are proposing to make, as part of PR13 (i.e. before CP5 starts), an upfront forward looking[11] assumption for both general inflation and input price inflation in our determination of access charges for CP5, e.g. say, 3% per annum[12]. We are also proposing that this assumption will not be adjusted if the actual inflation faced by Network Rail is different. However, we recognise some of the practical difficulties with this approach, e.g. it can be more complicated than an automatic adjustment approach.

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[9] The 2008 periodic review of Network Rail's access charges for control period 4 (CP4).

[10] Indexation is the adjustment we make to Network Rail's allowed revenue on a yearly basis, to reflect price inflation.

[11] This means that we will forecast our view of both general and input price inflation for CP5 and not just assume that the current level of general and input price inflation continues for CP5.

[12] Including input price inflation in our inflation assumption has a similar effect, in terms of efficiency, as adjusting our efficiency assumptions for an estimate of input price inflation.

19. We are aware that changing the way we index Network Rail's allowed revenues in this way will increase Network Rail's financial risk, so we need to take account of that change when we are determining our policies elsewhere in the financial framework, e.g. the restriction we place on its level of financial indebtedness. This is particularly important as the restriction we place on Network Rail's level of financial indebtedness determines the size of the balance sheet buffer[13] that is fully available for it to use to manage risk and hence fund unexpected increases in costs (including any effects of our proposal on indexation), which should allow it to deliver its required outputs.

20. We are not proposing that we adjust Network Rail's renewals expenditure for movements in IOPI (or another inflation measure) as we think we will improve incentives by including an upfront estimate of input price inflation in our inflation assumption and we are proposing to continue to uplift Network Rail's RAB by the actual movements in general inflation, as otherwise the real value of its asset base would be eroded.

In-year risk buffer

21. In PR08, we established an 'in-year risk buffer' for Network Rail. We did this by providing Network Rail with a cost of capital that allowed for a surplus over and above its expected financing costs. This compensated it for the risks we have allocated to it and enabled it to manage business risk and normal fluctuations in cash flow. In PR08, the in-year risk buffer was £219m for England & Wales and £27m for Scotland per annum (in 2011-12 prices)[14].

22. After reviewing this issue, we are proposing not to provide Network Rail with an in-year risk buffer in CP5. This is because we consider that there are a number of reasons why the benefits of an in-year risk buffer may not be achieved in practice and circumstances have changed since CP4, and Network Rail's balance sheet buffer (currently for Great Britain it is around £5bn in 2011-12 prices) can also be used to manage risk.

Re-openers

23. The revenue that we allow Network Rail in CP5 should be sufficient for it to deliver the required outputs on the basis that it operates economically and efficiently, taking into account normal fluctuations in costs and revenues. However, providing Network Rail with a surplus within allowed revenues, i.e. an in-year risk buffer or a balance sheet buffer that is sufficient to compensate it for all possible risk is unlikely to represent value for money as Network Rail is unlikely to be best placed to manage all risks. Therefore, we need to consider other ways of allowing risk to be managed.

24. Re-openers are mechanisms that can be used to re-open the price control in certain situations to allow changes to be made to the revenues that Network Rail is allowed to recover[15]. For example, where material events have happened that are beyond reasonable management control or could not have reasonably been foreseen. Hence, they are a form of compensation for risk for Network Rail as the financial consequences of the risk are transferred to Network Rail's funders and customers.

25. Our preference is to use a global re-opener (e.g. a material change in circumstances type of re-opener) and only include specific re-openers where we are satisfied that the risk would not be covered by the global

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[13] The balance sheet buffer is the difference, at a point in time, between Network Rail's actual level of debt and the level of debt allowed by its network licence. The network licence presents the restriction on its level of debt as a percentage (i.e. debt/RAB).

[14] This was £185m for England & Wales and £23m for Scotland in 2006-07 prices (2006-07 was the PR08 price base).

[15] In our May 2011 document, we asked whether we should continue to use re-openers to manage risk and uncertainty. Most respondents that commented on re-openers agreed that we should continue to use them and the approach is used by other regulators.

re-opener or there are other advantages of including a specific re-opener, e.g. it may improve transparency for Scotland.

26. Therefore, we are proposing to use the following re-openers in PR13:

(a) if there is a material change in the circumstances of Network Rail or in relevant financial markets; and

(b) for Scotland, if Network Rail's expenditure[16] in Scotland is forecast to be more than 15% higher than our determination for Scotland over a forward looking period of three years.

Level of financial indebtedness

27. The restriction on Network Rail's level of financial indebtedness has an important incentive effect as it incentivises Network Rail to control its costs. This is because, unless ORR has consented otherwise, if Network Rail does not use reasonable endeavours to ensure that its total financial indebtedness does not exceed limits specified in its network licence, then it could be in breach of that licence. Also, the difference between its limit on financial indebtedness and its actual debt/RAB ratio provides Network Rail with a balance sheet buffer that is fully available for it to use to manage risk and hence fund unexpected increases in costs (including any effects of our proposal on indexation), which should allow it to deliver its required outputs.

28. Given that Network Rail has not issued unsupported debt in CP4[17], we retained the licence condition that restricts the level of its financial indebtedness (although we did review the condition and made some changes to it, e.g. in particular we tightened the limits). This restriction is set as a limit on Network Rail's debt/RAB ratio, e.g. its actual debt/RAB ratio cannot exceed 75% in 2012-13[18].

29. Based on our indicative analysis, our current thinking is that the level of Network Rail's financial indebtedness in each year of CP5 should at no point exceed a limit set between 70-75%. We will continue to work on this analysis as it needs to reflect the entire PR13 package and we will provide an update in our draft determinations in June 2013 and final determinations in October 2013.

Cost of capital

30. In our May 2012 document, we set out that we will use the adjusted weighted average cost of capital (WACC) approach[19] to Network Rail's cost of capital for PR13. We have reviewed the other financial framework issues in light of this decision. The key issue for consideration as part of this consultation is outlined below.

Embedded debt

31. Network Rail is best placed to efficiently manage its financing costs, as it understands its risks and how to finance those risks better than its customers and funders. Network Rail's financing costs in CP5 will be partly based on financial instruments that it has already taken out, e.g. part of its interest costs in CP5 are already fixed. These costs are referred to as embedded debt costs.

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[16] Expenditure includes operating, maintenance, renewals and enhancement expenditure, and interest costs and corporation tax payable.

[17] In our PR08 determination, we assumed that Network Rail would start to issue unsupported debt from the beginning of CP4.

[18] For 2009-10 and 2010-11 the limit was 70.0%. For 2011-12 the limit was 72.5% and for 2012-13 and 2013-14 the limit is 75%.

[19] This approach identifies the theoretical full cost of capital for Network Rail but recognises that Network Rail's debt is government backed and it does not pay dividends. Therefore, we adjust the cost of capital by deducting the equity surplus (i.e. the potential dividend payment) and on a net basis we fund our forecast of Network Rail's efficient financing costs.

32. Given that we are using the adjusted WACC approach to determine Network Rail's cost of capital, which means that the net revenue requirement funds efficient financing costs (and we are minded not to provide Network Rail with an in-year risk buffer), we are proposing to take these embedded debt costs fully into account in CP5. However, it is important that Network Rail manages its financing costs efficiently, so we will only allow embedded debt costs to be included in our PR13 determination for CP5, where they can be shown to have been incurred efficiently. This should help to ensure that Network Rail faces the financial consequences of its actions in the run up to our final determinations, i.e. it cannot take out debt and just assume that we will allow the costs associated with it.

Network grants

33. Our preferred method of funding Network Rail is for all of its income to come from train operators and other customers. This is in line with our preference for cost-reflective charges, which will in turn send signals for the efficient usage of the network.

34. However, we recognise that the emergence of the new industry structure and procedures through the Railways Act 2005 clarify the roles and responsibilities of the governments and other parties. In particular, the HLOSs give a clear role for the governments in respect of their relationship to Network Rail. We also recognise that, at the moment, if we did not allow network grants to be paid in lieu of fixed track access charges, the funds available to the Secretary of State and Scottish Ministers could be affected due to the governments' accounting rules and the processes the governments use to record expenditure.

35. In determining our PR13 policies, we need to take into account all of our statutory duties. In relation to this issue we consider that our duty to have regard to the funds available to the Secretary of State and our duty that requires us, in summary, to have regard to the expenditure that is to be incurred by Scottish Ministers are particularly relevant. Taking this into account, we are proposing to allow part of Network Rail's income to be provided directly from the governments through network grants, which will be set ex-ante for each year of CP5.

36. It is particularly important to improve the transparency of industry cash flows. This is because there is a real focus on whole-industry performance, and one of the effects of paying network grants straight to Network Rail, is that it makes Network Rail appear to be the loss making part of the industry. However, the real issue is that, at the moment, the total costs of the industry cannot be recovered by charges and the whole industry needs to work together to reduce costs and increase income.

37. Therefore, for the purposes of transparency, we will also indicate what the appropriate level of fixed track access charges for each train operator would be in the absence of direct network grant payments. We will also show this by operating route.

Next steps

38. This document marks an important step in establishing the financial framework for CP5. We will set out our decisions on these issues by the end of 2012 and the financial consequences of the decisions will be included in our draft determinations in June 2013 and final determinations in October 2013.

1. Introduction

Purpose of the document

1.1 This document marks another important step in the 2013 periodic review of Network Rail's access charges (PR13), which will set Network Rail's outputs, access charges and the wider regulatory and incentive framework for control period 5 (CP5) – which will run from 1 April 2014 to 31 March 2019.

1.2 This document consults on the detailed issues relating to the financial framework that will apply to Network Rail in CP5. Our decisions on these issues will be published by the end of 2012.

1.3 We set out our high-level decisions on the financial framework and issues that it was useful for us to resolve for our advice to ministers[20] in our May 2012 document - setting the financial and incentive framework in CP5[21]. In our May 2012 document, we also provided further explanation for the approach to the financial framework that we took in our advice to ministers.

1.4 The May 2012 document gave clarity, as far as possible, to Network Rail, train operators (passengers and freight), government, taxpayers and other stakeholders involved in the periodic review so that they could take into account the decisions and approach we are taking on certain issues and note where we will be undertaking further work. It also assists Network Rail in planning for its strategic business plan[22] (SBP). The May 2012 document followed our advice to ministers, which was published in March 2012[23].

1.5 Department for Transport (DfT) and Transport Scotland have recently published their HLOSs and SoFAs[24]. This document does not address the issues contained in the HLOSs and SoFAs. We will provide our views, on the HLOSs and SoFAs and in particular whether the HLOSs can be delivered with the resources provided in the SoFAs, in our draft determinations, which will be published in June 2013 and in our final determinations, which will be published in October 2013. However, if at any time we are aware that

[20] In our advice to ministers documents, we provided our latest thinking on some of the key financial framework policies and then, where appropriate, we concluded on them in our May 2012 document.

[21] This document is available at: http://www.rail-reg.gov.uk/upload/pdf/financial-incentive-framework-cp5.pdf.

[22] Network Rail's strategic business plan for CP5.

[23] Our advice to ministers was published as separate documents for England & Wales and for Scotland and began the 'formal review' phase of PR13; provided advice to the Secretary of State for Transport and Scottish Ministers on the possible range for Network Rail's revenue requirement in England & Wales and Scotland for CP5, this was intended to assist the Secretary of State and Scottish Ministers in developing their HLOSs and SoFAs for CP5; and provided advice on how the outputs in the HLOSs could be structured. See chapter 4 of each of *Advice to the Secretary of State for Transport on Network Rail's costs and outputs in CP5*, March 2012, and *Advice to Scottish Ministers on Network Rail's costs and outputs in CP5*, March 2012, both available at http://www.rail-reg.gov.uk/pr13/publications/index.php.

[24] The 'high level output specifications' (HLOSs) set out the outputs the governments in England & Wales and Scotland want to see delivered in CP5 and the 'statements of funds available' (SoFAs) set out the funding available to deliver the HLOSs. These are available, for England & Wales, at http://www.dft.gov.uk/publications/hlos-2012/#railways-act and, for Scotland, at http://www.transportscotland.gov.uk/strategy-and-research/publications-and-consultations/j232012-00.htm.

it is likely that either of the HLOSs cannot be delivered by the resources provided in the SoFAs (i.e. there is a mismatch), we will say so.

1.6 Following the publication of the HLOSs and SoFAs, we have also published today (1 August 2012) our consultation on Network Rail's output framework for 2014-19, which considers the outputs that Network Rail should be required to deliver, the key performance indicators (KPIs) that we could use to monitor delivery of outcomes more widely, and how we should deal with the 'enablers' that Network Rail needs to put in place to deliver sustainable improvements over the long-term[25].

Structure of this document

1.7 This document is structured as follows:

(a) Chapter 2 sets out the background to this document and PR13;

(b) Chapter 3 sets out our consultation on risk and uncertainty issues;

(c) Chapter 4 sets out our consultation on cost of capital issues;

(d) Chapter 5 sets out our consultation on amortisation and RAB related issues;

(e) Chapter 6 sets out our consultation on corporation tax issues; and

(f) Chapter 7 sets out our consultation on other financial issues.

1.8 We welcome responses on any aspect of this consultation. In particular, we welcome responses to the questions we ask throughout this document (which are listed in full in Annex A). We will also post the full list of questions on our website in MS Word format to make it easier for you to respond to them.

1.9 This is an eight week consultation. This period takes account of the valuable engagement we have already had with stakeholders following our May 2011 document. In particular, in relation to the indexation of Network Rail's allowed revenues and that some of the issues were discussed in our advice to minsters documents published in March 2012. We recognise that some of the issues raised in this document are technical and quite complex, so we are proposing to hold a workshop on the key issues in September 2012 and, in addition, will meet any stakeholders that want to discuss the issues.

1.10 Please send your responses in electronic (or if not possible, in hard-copy format) by close of business on Wednesday 26 September 2012 to:

Richard Fitter
Office of Rail Regulation
One Kemble Street
London
WC2B 4AN
Email: richard.fitter@orr.gsi.gov.uk
Tel: 020 7282 3851

1.11 Please note, when sending documents to us in electronic format that will be published on our website, we would prefer that you email us your correspondence in Microsoft Word format. This is so that we are

[25] This document is available at http://www.rail-reg.gov.uk/pr13/consultations/outputs.php.

able to apply web standards to content on our website. If you do email us a PDF document, where possible please:

(a) create it from the electronic Microsoft Word file (preferably using Adobe Acrobat), as opposed to sending us a scanned copy of your response; and

(b) ensure that the PDF's security method is set to ‘no security’ in the document properties.

1.12 If you send a written response, you should indicate clearly if you wish all or part of your response to remain confidential to ORR. Otherwise, we would expect to make it available on our website and potentially to quote from it. Where your response is made in confidence please can you provide a statement summarising it, excluding the confidential information, which can be treated as a non-confidential response. We may also publish the names of respondents in future documents or on our website, unless you indicate that you wish your name to be withheld.

2. Background

Purpose

2.1 The purpose of this chapter is to set out some background to this document, including:

(a) an overview of PR13;

(b) our objective for PR13; and

(c) a description of the building block approach to setting a financial determination.

PR13 – overview

2.2 In March 2012, we formally began PR13. Through the review we will determine Network Rail's access charges, what it must deliver in return for those charges and for the money it receives from the Secretary of State (in respect of England & Wales) and Scottish Ministers (for Scotland). We will also set out the wider incentive framework for CP5.

2.3 PR13 takes place at a pivotal time for the rail industry. The Rail Value for Money (RVfM) study led by Sir Roy McNulty[26], which we commissioned jointly with DfT, has highlighted the value for money challenge facing the rail industry. This challenge is felt more keenly today given the economic climate and the financial pressures on train operators, passengers, freight customers, funders (taxpayers and governments) and suppliers.

2.4 In our periodic review we decide what outputs Network Rail should deliver and how much revenue it needs to efficiently deliver them. This includes estimating Network Rail's income[27] from property, stations and other sources and expenditure on support, operations, industry costs and rates, renewals, enhancements and financial costs. The allowance for financial costs includes allowances for the allowed return, corporation tax and amortisation.

2.5 In order to recover its costs, as part of our review, we will decide what access charges we allow Network Rail to levy and how much funding it will receive directly from the governments in England & Wales and Scotland through network grants. In doing this, we will set Network Rail a challenging but achievable target for improvements in its efficiency. We will also take account of the priorities for railways and the public financial support they make available, set out by the governments in England & Wales and Scotland.

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[26] *Realising the Potential of GB Rail - Detailed Report*, Final Independent Report of the Rail Value for Money Study, May 2011, available at http://www.rail-reg.gov.uk/server/show/ConWebDoc.10401.

[27] This is called other single-till income.

2.6 PR13 also establishes the wider 'regulatory framework', including the financial framework for Network Rail and the incentives acting on it and train operators (passenger and freight), and through them on suppliers and rolling stock companies, to encourage them to deliver and outperform our determination, including targets for performance and assumptions for efficiency. A periodic review is one of our core functions and is a major programme of work for the whole industry. The decisions taken in a periodic review have significant implications for Network Rail, train operators, passengers, freight customers, funders (taxpayers and governments) and suppliers.

2.7 We have already set out our high-level decisions on financial framework issues in our May 2012 document. These decisions were:

(a) our approach to the cost of capital;

(b) the approach to price control separation/disaggregation we are taking in CP5;

(c) the duration of the price control;

(d) the early start mechanism[28];

(e) whether we should use a single-till or dual till approach[29];

(f) the high-level approach to re-openers; and

(g) our approach to opex and capex financial incentives, e.g. the strength of the incentives.

2.8 In this document we consult on some of the more detailed issues relating to Network Rail's financial framework, e.g. our approach to inflation risk. The issues raised in this document are important as they can have a significant impact on Network Rail, e.g. on the level of its revenue requirement and how we compensate it for risk. After taking into account consultees views, we will set out our decisions on these issues by the end of 2012. The financial consequences of the decisions will be included in our draft determinations in June 2013 and final determinations in October 2013.

2.9 Reflecting the separate responsibilities for setting the strategy and funding the railway across Great Britain, we will determine separate outputs, access charges and regulatory frameworks for Network Rail in England & Wales and in Scotland, whilst taking account of the fact that Network Rail is a single company.

Our objective for PR13

2.10 Our objective for PR13, as set out in our May 2012 document is – **to protect the interests of customers and taxpayers by**:

> *ensuring our determination enables Network Rail and its industry partners to deliver or exceed all the specified outcome and output requirements safely and sustainably at the most efficient levels possible comparable with the best railways in the world by the end of the control period.*

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[28] The early start mechanism allows Network Rail, in certain circumstances, to request early notification in the periodic review process that we will allow activity and expenditure in the next control period to be funded through its access charges.

[29] In the single-till approach, the income that we forecast Network Rail will earn on activities such as commercial property is netted off against network costs in our price control settlement. In the dual till approach, the income from each market Network Rail operates in, would be determined through the price control settlement, as if they operated in each market as a separate company.

2.11 A key aim of any regulatory price control is to ensure that the regulated company (in this case, Network Rail) is as efficient as possible given the obligations on the company and the wider circumstances. In the context of the railway, this means maximising value for passengers, taxpayers, customers and society. To achieve this, industry reform will be crucial. In our advice to ministers documents[30] we said that we saw PR13 as an important facilitator and driver of industry reform – in particular through our key transformational goals:

(a) a clear **focus on what matters to passengers, freight customers and taxpayers** – particularly improving value for money;

(b) **a more disaggregated approach** – increasing transparency and access to information, facilitating greater localism[31], and supporting more disaggregation in the industry (for example through Network Rail devolution) will provide for a more comparative approach to regulation and a better understanding of costs, revenues and subsidy across the sector;

(c) **alignment of incentives** – improving the interfaces between the different players in the industry, for example, by facilitating alliances, efficiency benefit sharing at the route-level and bespoke arrangements where these improve whole sector working, will drive greater value for money for customers and taxpayers; and

(d) **greater contestability** – ensuring that there is more effective use of market mechanisms through the value chain, including in the provision of infrastructure services where appropriate, delivering further efficiencies.

The framework – building block approach

2.12 Our approach to establishing the regulatory framework is based on the standard 'building block' methodology widely used by economic regulators. This provides the basis for us to determine how much funding Network Rail will require during the control period to deliver its obligations and also the sources of this funding.

2.13 The periodic reviews/access charges reviews undertaken for Railtrack in 2000, and for Network Rail in 2003 and 2008 have broadly followed this building block approach. The key features of this approach are:

(a) we assess what Network Rail needs to spend on operating and maintaining the railway for each year of the control period. Network Rail receives income for this on a 'pay-as-you-go' basis. This means that for each pound it needs to spend each year it receives a pound in income. Operating the network includes support costs, operations costs, traction electricity and industry costs and rates;

(b) we assess what capital expenditure on renewals and enhancements Network Rail needs to undertake in the control period. This expenditure is added to the regulatory asset base (RAB[32]) in the year in which it is incurred[33]. But the income Network Rail receives is not on a 'pay-as-you-go' basis.

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[30] Advice to Secretary of State for Transport on Network Rail's costs and outputs in CP5, March 2012, available at http://www.rail-reg.gov.uk/pr13/PDF/pr13-advice-to-ministers-ew.pdf. Advice to Scottish Ministers on Network Rail's costs and outputs in CP5, available at http://www.rail-reg.gov.uk/pr13/pdf/pr13-advice-to-ministers-scotland.pdf.

[31] The Localism Act 2011 covers local authorities in England only and places a duty on ORR to cooperate with Local Authority's in development of local authority plans. The Act effectively recognises that Scotland and Wales have devolved responsibility already in this area and both have published their own guidance / approach on localism.

[32] The regulatory asset base (RAB) is our calculation of the regulatory value of Network Rail's assets.

[33] The exception to this in CP4 is capex funded through the ring-fenced fund, which is not added to the RAB but paid for on a 'pay-as-you-go' basis.

Instead Network Rail receives, through its charges, a return on the RAB and an amortisation allowance (which covers the depreciation of its assets);

(c) the return on the RAB covers, amongst other things, the interest payments that the company needs to pay on its debt[34]; and

(d) adding up all the income needed by Network Rail produces what we term the ‘gross revenue requirement‘. This is funded by track access charges, other single-till income[35] and network grants[36].

2.14 Track and station access charges are payable by train operators to Network Rail for the use of its infrastructure. Some of Network Rail’s costs vary depending on the amount of traffic on the network and the access charges to pay for these costs are called variable access charges. Network Rail receives ‘other single-till income’ which is mainly income from stations and property. Some of Network Rail’s costs are ‘fixed’ – they do not vary with use and in principle these should be paid for by the operators in the form of fixed access charges, although the governments currently pay network grants directly to Network Rail in lieu of a significant proportion of access charges.

2.15 In addition to the normal building block approach. We have decided to use the adjusted weighted average cost of capital (WACC) approach[37] for CP5, so we also need to adjust the calculation of Network Rail’s revenue requirement for the following two issues:

(a) recognising that Network Rail’s efficient financing costs are lower than Network Rail’s cost of capital, due to the existence and use by Network Rail of the financial indemnity mechanism[38] (FIM). We adjust the revenue requirement for the difference between Network Rail’s cost of capital and our forecast of its efficient financing costs. This is called the equity surplus adjustment; and

(b) we then recognise that the adjusted WACC approach, everything else being equal, significantly reduces Network Rail’s revenue requirement. This reduction in revenue could cause financial sustainability issues because it reduces Network Rail’s revenue. So we address this issue by increasing the amortisation charge and in our advice to ministers, we made amortisation in CP5 equal to our forecast of Network Rail’s renewals expenditure in CP5.

2.16 Figure 2.1 illustrates the overall regulatory framework and the building block model and table 2.1 analyses the sources of Network Rail’s income in CP4.

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[34] In CP4, the return on the RAB also included a payment to government for the financial guarantee it receives of its debts, an ‘in-year risk buffer’ to deal with cost and revenue shocks during the control period, and a ring-fenced fund which in normal circumstances is reinvested in capital expenditure schemes. This approach to the return on the RAB, including the ring-fenced fund, is not going to be used in PR13. Instead the adjusted WACC approach will be used as described in chapter 4.

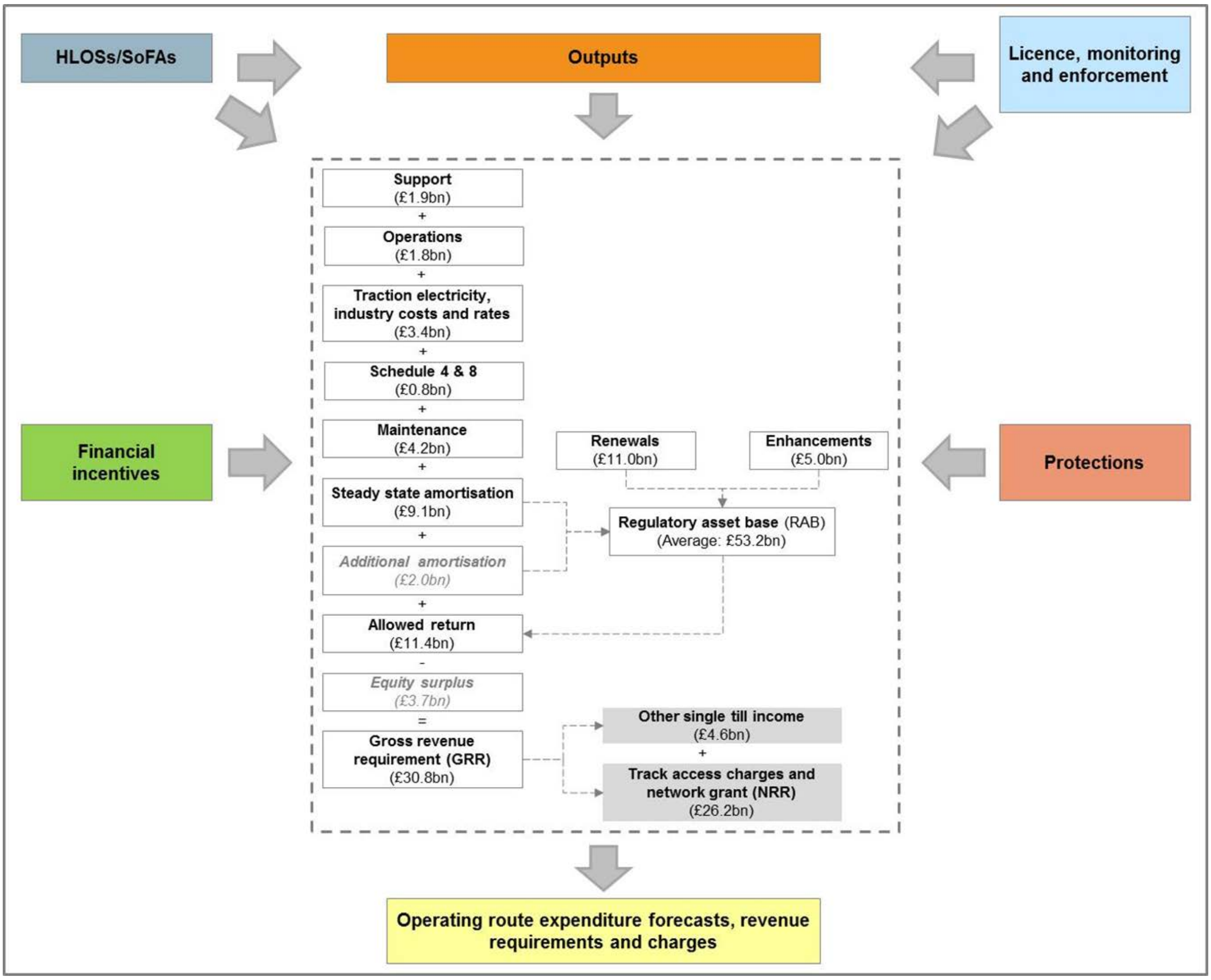
[35] Other single-till income is mainly income from stations and property.

[36] Network grant is the proportion of Network Rail’s revenue requirement that we have allowed to be paid directly by DfT and Transport Scotland to Network Rail in the form of network grants, in lieu of fixed track access charges on a pound-for-pound basis.

[37] This approach identifies the theoretical full cost of capital for Network Rail but recognises that Network Rail’s debt is government backed and it does not pay dividends. Therefore, we adjust the cost of capital by deducting the equity surplus (i.e. the potential dividend payment) and on a net basis we fund our forecast of Network Rail’s efficient financing costs.

[38] The financial indemnity mechanism (FIM) is a full faith and credit guarantee of Network Rail’s debt from the Secretary of State for Transport.

Figure 2.1: Overview of the regulatory framework and the building blocks of Network Rail's revenue requirement for Great Britain



Note: The numbers in the above figure are based on our indicative spot assumptions for our advice to ministers for CP5 (2011-12 prices), so enhancements are the enhancement schemes that were included in the initial industry plans[39] (i.e. at that time they were the committed schemes). We have not included corporation tax in the above figure, because in CP5 it is likely we will not be funding Network Rail's corporation tax payments as explained in chapter 6.

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[39] In September 2011, Network Rail with its industry partners published two 'Initial Industry Plans' – one for England & Wales and one for Scotland. These documents set out the industry's strategies in England & Wales and Scotland for the long-term, with a focus on what could be delivered in CP5. Our analysis of the IIPs was a key component of our advice to ministers which we issued in March 2012 (see below). The IIPs are available at http://www.networkrail.co.uk/iip.aspx.

Table 2.1: Sources of Network Rail's income for CP4 (as per our PR08 determination)

£billions (2011-12 prices)	Total
Franchised passenger train operators – total variable charges	2.7
Franchised passenger train operators – fixed charges	5.2
Income from freight operators	0.4
Income from open access operators	0.1
Station long-term charge income	0.8
Schedule 4 and 8 income	0.8
Other income (including property rental, property sales and depots income)	2.1
Network grants	19.6
Total income	**31.7**

3. Risk and uncertainty

Key messages from this chapter

- Our proposals are consistent with our key transformational goals, especially aligning incentives and having a clear focus on what matters to passengers, freight customers and taxpayers – particularly improving value for money.
- By allocating risks to Network Rail we give it an incentive to efficiently manage those risks. If we allocate to Network Rail the risks that it is best placed to efficiently manage, this will help us incentivise improvements in efficiency and value for money.
- Given the changes since PR08, most notably that it is unlikely that Network Rail will issue unsupported debt in CP5, we are proposing to reduce the headroom available to Network Rail.
- We are proposing to set an ex-ante assumption for both general inflation and input price inflation in our determination of access charges for CP5.
- We are proposing not to provide Network Rail with an in-year risk buffer.
- We are proposing to simplify the mechanism to re-open Network Rail's access charges review.
- We are proposing to compensate Network Rail for changes to our assumptions on the licence fee and safety levy and business rates (if Network Rail has negotiated business rates efficiently).
- Our current thinking is that the level of financial indebtedness in each year of CP5 should at no point exceed a limit set between 70-75%. This will have the effect of incentivising Network Rail to control its costs.

Introduction and context

3.1 All businesses face risk and uncertainty on their costs and revenues from the effect of exogenous (external) events. Regulated businesses such as Network Rail are no exception. In developing the regulatory framework for PR13 we need to decide how these risks, e.g. inflation, are allocated between the company, customers and funders.

3.2 In the current economic climate it is essential that customers and funders get the most value they can from the money they put into the industry. This highlights how important it is that our financial framework policies deliver an appropriate allocation of risks to Network Rail, i.e. those risks that it is best placed to manage, and then appropriately compensate it for those risks.

3.3 Allocating risks to Network Rail that it is best placed to efficiently manage should ensure that it is incentivised to secure continuous improvements in cost efficiency and provide value for money and operate commercially where appropriate, e.g. in managing financial risks. Given the changes since PR08[40], most notably that it is unlikely that Network Rail will issue unsupported debt in CP5, we are proposing to reduce the headroom (i.e. a buffer) available to Network Rail.

3.4 The ways in which we treat risk and uncertainty in our periodic review affect a number of issues, including the:

(a) incentives on Network Rail to behave efficiently and innovate;

(b) rate of return that the company requires to accommodate fluctuations in cash flow; and

(c) balance sheet buffer[41].

3.5 Our objectives in designing our approach to risk and uncertainty include the need to:

(a) allocate risks to Network Rail where it is best placed to manage them and provide appropriate compensation and, where relevant, have regard to any cash flow implications;

(b) incentivise Network Rail to secure continuous improvements in cost efficiency and value for money; and

(c) enable Network Rail to accommodate fluctuations in cash flow.

3.6 Network Rail faces relatively little revenue risk. Of the revenues Network Rail presently receives from track access charges, station charges and direct network grants, some 90% is fixed, i.e. it is independent of cost and volume changes during the control period. The remainder is variable, e.g. varies with respect to the volume of traffic carried by Network Rail's network. In CP4, all income from network grants and charges is protected from general inflation by the indexation of access charges.

3.7 The relative certainty of revenues and the way in which the variable charge is calculated mean that Network Rail's financial position is relatively unaffected by changes in either the number of:

(a) vehicles running over the network; or

(b) passengers/volume of freight transported.

3.8 The majority of exogenous risks faced by Network Rail are on the cost side. Much of the exogenous risk is, at least to some extent, controllable by the company, for example through good planning and procurement or the use of hedging or insurance. However, there is likely always to be an element of risk that is uncontrollable (before any protections provided by the regulatory regime).

3.9 Network Rail also faces a number of different management risks and uncertainties, such as the risk that it makes poor investment decisions or fails to improve efficiency as rapidly as expected. However, these are endogenous (internal) to Network Rail, being a function of management effectiveness. We, therefore, think that it is appropriate for Network Rail to bear such risks.

3.10 There are a number of mechanisms that can be or are specifically aimed at sharing risks and uncertainties appropriately between the parties. In particular:

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[40] The 2008 periodic review of Network Rail's access charges for control period 4 (CP4). This is available at http://www.rail-reg.gov.uk/upload/pdf/383.pdf.

[41] The balance sheet buffer is the difference, at a point in time, between Network Rail's actual level of debt and the level of debt allowed by its network licence. The network licence presents the restriction on its level of debt as a percentage (i.e. debt/RAB).

(a) allowed revenues can be indexed to a general level of inflation in the UK economy, e.g. as measured by the retail prices index[42] (RPI), or we can include an ex-ante estimate of inflation in our determination of charges;

(b) Network Rail is insulated from volume risk as of the revenues it presently receives from track access charges, station charges and direct network grants, some 90% is fixed. In other words, as Network Rail's charges should be cost reflective, the revenue from variable access charges should rise with the volume of traffic[43]. Also, the capacity charge compensates Network Rail for changes in schedule 8 payments due to increased reactive delay;

(c) Network Rail could also be provided with a cost of capital that allows for a surplus over and above its expected financing costs. This is called the in-year risk buffer and compensates Network Rail for the risks we have allocated to it and could enable it to manage business risk and normal fluctuations in cash flow. In PR08, the risk buffer was £219m for England & Wales and £27m for Scotland per annum (in 2011-12 prices)[44];

(d) re-opener provisions can be used to enable an interim review to be triggered in certain circumstances;

(e) we can compensate Network Rail for changes in some costs that we decide are not as controllable as the rest of Network Rail's cost base, e.g. changes in the licence fee and safety levy [45;]

(f) the RAB roll forward process, which means that Network Rail is largely protected from unanticipated shifts in demand for new capacity or improvements to services from customers, as efficient investment would be logged up to the RAB; and

(g) Network Rail has the ability to increase borrowings up to its net debt/RAB limit (the balance sheet buffer) that we included in its network licence.

3.11 This chapter sets out the issues we are consulting on relating to our treatment of risk and uncertainty. This includes:

(a) the approach to indexation and input prices;

(b) the in-year risk buffer that we could provide;

(c) the re-openers that we intend to use;

(d) which cost changes we will compensate Network Rail for, e.g. changes in the licence fee and safety levy; and

(e) the maximum level of financial indebtedness that Network Rail can incur.

High-level approach to the treatment of risk and uncertainty and context

3.12 In determining Network Rail's outputs and access charges for CP5, there are risks that the company's actual costs of delivering the required outputs (or revenues it will earn) will be different to those we assume

[42] The all items retail prices index (RPI), shows the changes in a weighted average of prices in a range of goods and services used regularly, such as food, heating, housing, household goods, bus fares and petrol. The RPI also includes VAT, and other taxes.

[43] We will provide an update of our charges policy in November 2012.

[44] This was £185m for England & Wales and £23m for Scotland in 2006-07 prices (2006-07 was the PR08 price base).

[45] The licence fee and safety levy was previously called the regulators fee.

in making our determination. We need to take account of these risks and uncertainties in establishing the overall package for CP5 and consider the balance of risk exposure between Network Rail and its customers and funders. The specific level of risk protection and the balance between risk and reward will be decided when we make our draft and final determinations.

3.13 We consulted on our high level approach to risk and uncertainty in our May 2011 document, e.g. whether we should continue to use ‘re-openers’. Generally, the majority of respondents agreed that the high-level approach to risk and uncertainty used in PR08 was appropriate, e.g. that we should use re-openers to assist in allocating the financial consequences of risk to whoever is best placed to manage that risk.

Indexation and input prices

3.14 Network Rail, like other businesses and households, faces the risk that prices may rise or fall. We call this inflation risk. For CP4, we continued to compensate Network Rail for general inflation risk, by establishing the determination in real terms and indexing the access charges each year based on the November value of the retail prices index (RPI[46]). This means that each of the individual elements of revenue are first calculated in a real price base (e.g. 2011-12 prices) and then indexed to reflect the actual inflation figure each November as expressed by RPI.

3.15 Also for CP4, Network Rail’s RAB is adjusted each year for movements in RPI, we adjust our assumption of Network Rail’s renewals expenditure for movements in the infrastructure output price index (IOPI) and we included adjustments for our estimate of input price inflation in our efficiency assumptions.

3.16 Indexing Network Rail’s allowed revenue in this way does compensate Network Rail for inflation risk. However, there are two key potential issues with that approach. These issues are:

(a) DfT and Transport Scotland have issued their SoFAs in nominal terms as they budget in nominal terms. This means that if we automatically update Network Rail’s allowed revenue for actual inflation on a yearly basis, we will increase DfT and Transport Scotland’s budgetary uncertainty, i.e. they will not know in advance how their cash flows will change; and

(b) it is important that Network Rail manages inflation as efficiently as possible. By compensating Network Rail for inflation risk in this way, an automatic adjustment of Network Rail’s revenue may, in some circumstances, provide weaker incentives on Network Rail to manage the effects of inflation where it can. Some respondents to our May 2011 document suggested that this issue encourages Network Rail to be less focused on controlling its costs. Other people, including Network Rail, do not think that it would be useful to incentivise Network Rail in this way. In particular, Network Rail thinks that taking an ex-ante approach to the indexation of allowed revenue does not necessarily improve the incentive to manage inflation efficiently, e.g. once the control period starts if actual inflation is lower than we forecast then the incentive to manage inflation efficiently may be reduced.

3.17 In our May 2011 document, we consulted on an alternative to an automatic adjustment of Network Rail’s revenue, where we would fix ex-ante in our calculation of Network Rail’s revenue requirement, the

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[46] This was also our approach in CP3.

assumption for inflation in each year of CP5. We have considered the responses to the May 2011 document and further discussed this issue with stakeholders[47].

3.18 We think that the key issue with the automatic adjustment approach to the indexation of allowed revenues is the effect on incentives, as there are other ways that Network Rail can be appropriately compensated for inflation risk. In our view, the automatic adjustment approach as described above may, in some circumstances, provide weaker incentives on Network Rail to efficiently manage the inflation risk that it faces. However we recognise some of the practical difficulties with an ex-ante (upfront) approach. In particular, we recognise that it is more complicated than an automatic adjustment approach and that the incentive effects of an ex-ante approach are difficult to evaluate once there is a difference between actual inflation and our forecast of inflation.

3.19 It is important that Network Rail manages inflation as efficiently as possible. Given the issues referred to above, we are now proposing the following approach (which is very similar to the approach that we consulted on in May 2011):

(a) we determine an ex-ante forward looking[48] assumption of inflation for PR13 (i.e. before CP5 starts), e.g. say, 3% per annum. This estimate would include both general inflation, e.g. RPI, and the effect of specific inflation faced by Network Rail (input price inflation)[49]. We are proposing to include the effect of specific inflation in our inflation assumption because we are focusing on incentivising Network Rail to manage inflation efficiently, which means that we need to assess the inflation risk that it is likely to experience. In practice, it is hard to split the inflation that Network Rail faces into general and input price inflation. Therefore, the important issue is to identify the total inflation risk that Network Rail faces and the extent that risk is controllable. We will commission a study to consider the inflation risk that is controllable by Network Rail and assess how it manages inflation risk;

(b) we would continue to adjust Network Rail's RAB by the actual movements in general inflation as otherwise the real value of its asset base would be eroded but we would hard wire our inflation assumption into the determination of allowed revenue, e.g. if we assumed that inflation (including input price inflation) was going to be 3% per annum in CP5, allowed revenue would increase by 3% each year;

(c) we could then place a deadband round our forecast inflation assumption of, say, plus two percentage points and minus two percentage points for each year of CP5, i.e. the deadband would be from 1% to 5% (it is also possible to make the deadband asymmetric around our assumed level of inflation, e.g. the deadband could go from 2% to 5%). Within this band we would not adjust Network Rail's revenue in the year concerned and we would not re-open the price control. Any difference between our assumed level of inflation (including input price inflation) and actual inflation (including input price inflation), that we think is efficient, could be logged up to CP6. This will mean that there would be no yearly adjustment in CP5 but we will adjust Network Rail's revenue in CP6 for the difference in CP5. For example, if Network Rail was worse off by, say, £500m in CP5, we would

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[47] The majority of respondents, that commented on the indexation of allowed revenue, raised issues with our current approach to general inflation risk and input price risk. These responses are available at: http://www.rail-reg.gov.uk/pr13/consultations/orr013.php.

[48] This means that we will forecast our view of both general and input price inflation for CP5 and not just assume that the current level of general and input price inflation continues for CP5.

[49] Including input price inflation in our inflation assumption has a similar effect, in terms of efficiency, as adjusting our efficiency assumptions for an estimate of input price inflation.

increase its revenue in CP6 by £500m (if we thought that it had managed inflation efficiently)[50]. If we put this mechanism in place, we need to avoid introducing a process that is overly complex and not transparent while ensuring that the incentives on Network Rail are appropriate; and

(d) if actual inflation was outside of the deadband, e.g. lower than 1% or higher than 5%, then in CP5 we would assess if the variances were material enough for us to re-open Network Rail's price control through the material change in circumstances re-opener.

3.20 An alternative to this approach would be to continue to index allowed revenue each year for movements in RPI and if our study on Network Rail's management of the inflation risk that it faces determines that there is an issue, then we could adjust our efficiency assumptions, e.g. increase or decrease them.

3.21 We will update our assumptions for inflation in CP5 in our draft determinations in June 2013 and in the final determinations in October 2013.

3.22 We are aware that changing the way we index Network Rail's allowed revenues in this way will increase Network Rail's financial risk, so we need to take account of that change when we are determining our policies elsewhere in the financial framework, e.g. the restriction we place on its level of financial indebtedness. This is particularly important as the restriction we place on Network Rail's level of financial indebtedness determines the size of the balance sheet buffer that is fully available for it to use to manage risk and hence fund unexpected increases in costs (including any effects of our proposal on indexation), which should allow it to deliver its required outputs.

3.23 Also, our proposed policy should change the way Network Rail interacts with the supply market. We think that the benefits of this policy in improving the incentives that Network Rail faces outweigh the cost of increasing Network Rail's potential exposure to inflation risk in PR13. However, this may not be the case in future control periods, particularly if Network Rail issues risk capital in the future.

3.24 We are not proposing that we adjust Network Rail's renewals expenditure for movements in IOPI (or another inflation measure) as we think we will improve incentives by including an ex-ante estimate of input price inflation in our inflation assumption. Also, as we set out above, we are proposing to index Network Rail's RAB by a general inflation index as otherwise the real value of its asset base would be eroded.

3.25 In our May 2011 document, we said that we currently use RPI as the measure of general inflation to index charges and the RAB. However, there are other general inflation measures[51] that could be used instead of RPI, for example, RPIX[52], the consumer price index[53] (CPI) and the GDP deflator[54], and we could use specific indices that include the effect of input price inflation such as IOPI or COPI[55]. These other

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[50] An alternative to this approach would be to fully expose Network Rail to the differences between our inflation forecast (general and input inflation) and the outturn. However, given the difficulty of forecasting inflation accurately, this could produce material windfalls or losses that could unduly distort incentives.

[51] Further information can be found at http://www.ons.gov.uk/ons/rel/cpi/consumer-price-indices/may-2012/stb---consumer-price-indices---may-2012.html#tab-background-notes.

[52] RPIX is RPI excluding mortgage interest payments.

[53] The Consumer Prices Index (CPI measure the prices of goods and services purchased for the purpose of consumption by households in the UK and is similar to RPI but excludes mortgage interest payments and other costs and is calculated differently.

[54] The GDP deflator is a much broader price index than RPI, RPIX or CPI (which only measure consumer prices) as it reflects the prices of all domestically produced goods and services in the economy. Hence, the GDP deflator also includes the prices of investment goods, government services and exports, and subtracts the price of UK imports.

[55] COPI is the colloquial name for the Department for Business, Innovation and Skills (BIS) Output Price Index for New Construction: All New Construction and is derived from the relationship of current price and constant price construction output

measures of inflation may or may not provide a more accurate index for measuring the effect of inflation on Network Rail but we also need to consider how inflation can affect Network Rail's financing costs.

3.26 Financial instruments are indexed in the markets by RPI and approximately 50% of Network Rail's debt (£13bn) is index-linked[56] and the index used to adjust the value of that debt for inflation is RPI. Also, the inflation element of nominal interest costs is likely to be based on RPI.

3.27 Materially, the biggest effect of inflation on Network Rail is the effect on its financing costs as illustrated in table 3.1.

Table 3.1: Materiality of inflation on Network Rail (based on 2011-12 expenditure)

In £millions	2011-12	Impact of higher inflation (3%)	% of total expenditure
Controllable opex	906	27	13%
Non-controllable opex	420	13	6%
Maintenance	968	29	14%
Schedule 4 & 8	172	5	2%
Renewals	2,455	74	35%
Enhancements	2,077	62	30%
Total	**6,998**	**210**	**100%**
Allowed return/financing costs	1,470	44	21%
Net debt	26,489	795	379%
RAB	42,371	1,271	605%

Note: Approximately 50% of Network Rail's debt is index-linked and its value changes each year for inflation. The interest payments in relation to nominal debt will also include the estimate of inflation assumed when the debt was issued.

3.28 Respondents to our May 2011 document generally favoured retaining RPI for indexation of the RAB, and the use of RPI to index Network Rail's RAB would be consistent with regulatory precedent.

3.29 Given the above factors and in particular that financial instruments are indexed in the markets by RPI and approximately 50% of Network Rail's debt is indexed by RPI, we are proposing to use RPI to index Network Rail's RAB for inflation in CP5.

In-year risk buffer

3.30 In PR08, we established an 'in-year risk buffer' for Network Rail. We did this by providing Network Rail with a cost of capital that allowed for a surplus over and above its expected financing costs. This compensated it for the risks we allocated to it, and enabled it to manage business risk and normal fluctuations in cash flow. In CP4, the risk buffer is £219m for England & Wales and £27m for Scotland per annum (in 2011-12 prices)[57].

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volume figures produced by the office of national statistics. In other words, it represents the movement in the cost to clients of work carried out on new construction in a period.

[56] This is debt where the value of the debt is adjusted for movements in inflation, instead of the assumed level of inflation being included in an interest payment.

[57] This is £185m per annum for England & Wales and £23m for Scotland in 2006-07 prices.

3.31 In PR08, we thought that the main advantage of an in-year risk buffer is that it enables Network Rail to manage business risk and normal fluctuations in cash flow, i.e. we provided it with headroom. Arguably, it may also allow Network Rail to be more innovative and to take some risks when developing ways of improving efficiency. This could allow Network Rail to undertake an initiative and if it went wrong it would still have sufficient resources to continue to deliver the determination. It may also help reputational incentives for it still be able to, overall, present a positive picture, i.e. it would still make a profit.

3.32 After reviewing this issue, we are proposing not to provide Network Rail with an in-year risk buffer in CP5. This is because we consider that there are a number of reasons why the benefits of an in-year risk buffer may not be achieved in practice and circumstances have changed since CP4. These include:

(a) given Network Rail has not issued unsupported debt and it has the FIM it will be able to continue to deliver the determination irrespective of whether an efficiency initiative has gone wrong;

(b) not issuing unsupported debt in CP5 will, everything else being equal, mean that we expect the consequences of Network Rail experiencing unexpected increases in costs will be less severe than we thought in PR08 as given Network Rail has the FIM it should still be able to access financial markets on reasonable terms. Therefore, the benefit an in-year risk buffer provides in relation to this issue is not significant;

(c) in a determination, our base case assumption is that Network Rail performs in line with our determination and does not require the use of the risk buffer. Therefore, in PR08 we assumed that the annual risk buffer in CP4 is used to reduce debt and if we provide Network Rail with an in-year risk buffer for CP5, it is likely that we would take the same approach. Therefore, this money in practice just increases the balance sheet buffer, which means that the real issue is whether the size of the balance sheet buffer is appropriate;

(d) in PR08, when we assessed Network Rail's financial sustainability, the adjusted interest cover ratio (AICR) was a very important financial indicator for us to consider. This was because of its use by credit rating agencies. Given the way the AICR is calculated by the credit rating agencies, without an in-year risk buffer, Network Rail's AICR would have been significantly lower than the level we thought appropriate for CP4. This could have made it more difficult for Network Rail to issue unsupported debt. However, in CP5 we do not expect Network Rail to issue unsupported debt. Therefore, it is not necessary to provide Network Rail with an in-year risk buffer for financial sustainability reasons;

(e) providing funding for Network Rail in advance of it being needed could be perceived of as being an unnecessary cost at a time of constrained funding and could weaken incentives. This is particularly the case now that we have confirmed in our May 2012 document that we will be using the adjusted WACC approach to set Network Rail's cost of capital and that we do not expect Network Rail to issue unsupported debt in CP5; and

(f) in our efficiency reporting the overspend (everything else being equal) caused by an efficiency initiative going wrong would still be included in our efficiency monitoring. Therefore, the financial consequences of an efficiency initiative going wrong would still be clear.

3.33 In terms of how Network Rail manages risk, Network Rail's balance sheet buffer (currently for Great Britain it is around £5bn in 2011-12 prices[58]) is more important than its in-year risk buffer (currently for

[58] For presentational purposes, Network Rail's profit buffer is also more important than its in-year risk buffer. The profit buffer is the amount of profit that Network Rail earns each year, this can be considered as a buffer because if Network Rail develops a scheme to reduce costs but the scheme goes wrong, as long as the cost of the scheme is below the level of the profits on Network Rail's

Great Britain it is £250m per annum in 2011-12 prices[59]). Network Rail's balance sheet buffer is fully available for it to use to manage risk and hence fund unexpected increases in costs (including any effects of our proposal on indexation), which should allow it to deliver its required outputs and will also allow Network Rail to be more innovative and to take some risks when developing ways of improving efficiency.

3.34 Not providing Network Rail with an in-year risk buffer, everything else being equal, could affect the financial sustainability of Network Rail and this would be a factor we would take account of when we consider financial sustainability in our draft determinations and final determinations.

3.35 In PR08, in addition to the risk buffer we included an allowance for contingency in our estimates of the cost of enhancements. As we develop our cost estimates for our draft and final determinations we will review the appropriate amount of contingency that we may include in our estimates of enhancement costs and we are investigating the extent to which Network Rail includes contingency in maintenance and renewals unit costs in its business planning.

3.36 We will ensure that if we do make an allowance for contingency it is transparent and consistent with our overall approach to risk and uncertainty and we are not double-counting. We intend to discuss these issues in our October 2012 efficiency and expenditure workshop and we will also consider how the risk of renewals projects should be treated. Our thinking in this area will also be informed by our cost of capital study that will consider the risks that Network Rail faces (this is discussed further in chapter 4).

Re-openers

Background

3.37 The revenue that we allow Network Rail in CP5 should be sufficient for it to deliver the required outputs on the basis that it operates economically and efficiently, taking into account normal fluctuations in costs and revenues. However, providing Network Rail with a surplus within allowed revenues, i.e. an in-year risk buffer or a balance sheet buffer that is sufficient to compensate it for all possible risk is unlikely to represent value for money as Network Rail is unlikely to be best placed to manage all risks. Therefore, we need to consider other ways of allowing risk to be managed.

3.38 Re-openers are mechanisms that can be used to re-open the price control in certain situations to allow changes to be made to the revenues that Network Rail is allowed to recover. For example, where material events have occurred that are beyond reasonable management control or could not have reasonably been foreseen. Hence, they are a form of compensation for risk for Network Rail as the financial consequences of the risk are transferred to Network Rail's funders and customers.

3.39 Re-openers are just one of the tools that we use to allocate the financial consequences of risk to whoever is best placed to efficiently manage that risk and in doing so provide the basis for the cost of managing that risk to be efficient. In choosing whether to use a re-opener we must balance this benefit with the uncertainty that re-openers can create for Network Rail's customers and funders.

3.40 In PR08, we included the following re-openers in passenger access contracts:

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other activities, then Network Rail would still make a profit. This should allow Network Rail the opportunity to be innovative and take some risk when developing ways of improving efficiency and is more understandable to stakeholders than the concept of an in-year risk buffer. Network Rail's statutory accounts include different measures of profit and they fluctuate from year to year, e.g. profit before tax in 2011-12 was £1,038m before debt and derivative revaluations.

[59] This is £208m per annum for Great Britain in 2006-07 prices.

(a) if there is a material change in the circumstances of Network Rail or in relevant financial markets;

(b) if Network Rail's AICR is forecast to be equal to, or below, the value of 1.4 on average over a forward looking period of three years;

(c) if Network Rail is forecasting that within the next 18 months it cannot finance itself efficiently; and

(d) for Scotland, if Network Rail's expenditure[60] in Scotland is forecast to be more than 15% higher than our determination for Scotland over a forward looking period of three years.

High-level approach

3.41 In our May 2012 document, we said that providing Network Rail with a surplus within its allowed revenue that is sufficient to compensate it for all possible risk is unlikely to represent value for money as Network Rail is unlikely to be best placed to manage all risks[61].

3.42 We also said that we will use re-openers as part of the package of measures to efficiently manage risk and that we will use them where they represent value for money. That is, we will consider the use of a re-opener where Network Rail is unlikely to be best placed to manage the relevant risks. In choosing to use a re-opener, we will balance this benefit with the uncertainty that re-openers can create for Network Rail's customers and funders.

3.43 An enduring settlement across the control period is very important both for the incentives the company faces and to provide certainty to the industry and its investors. So, in our view, it is likely that re-openers will only be sparingly used as they are generally intended to cover exceptional events that have a material effect on Network Rail.

Proposed re-openers

3.44 When deciding on our approach to re-openers in PR13, we need to consider the total package as each element of it can impact risk. We also need to consider the potentially changed circumstances that could apply in CP5, e.g. potentially a more disaggregated approach to the assessment of efficient expenditure and the effects of industry reform.

3.45 When developing an approach to re-openers we need to consider whether a global re-opener (e.g. a material change in circumstances type of re-opener) is best (as by definition a global re-opener covers all potential risks) or whether additionally including more specific re-openers can add value by providing additional clarity about the treatment of some risks. Our preference is to use a global re-opener, and only include specific re-openers where we are satisfied that the risk is not one that Network Rail would be well-placed to efficiently manage and would not be covered by the global re-opener or there are other advantages of including a specific re-opener, e.g. it may improve transparency.

3.46 For PR13, given that we are not assuming that Network Rail will issue unsupported debt in CP5 we do not think that it is necessary to retain the AICR re-opener as that was introduced to facilitate the issuance of unsupported debt. For similar reasons, we also do not think it is necessary to retain the re-opener based on Network Rail forecasting its financial position over the next 18 months.

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[60] Expenditure includes operating, maintenance, renewals and enhancement expenditure, and interest costs and corporation tax payable.

[61] In our May 2011 document, we asked whether we should continue to use re-openers to manage risk and uncertainty. Most respondents that commented on re-openers agreed that we should continue to use them and the approach is used by other regulators.

3.47 However, given that Network Rail is funded separately for its activities in England & Wales and Scotland and its activities in Scotland are approximately 10% of its total activities in Great Britain, an issue that might be material in Scotland may not be material in England & Wales or for Network Rail as a whole[62]. We are therefore proposing that it is appropriate to retain a specific re-opener for expenditure in Scotland. In PR08, it was thought that having a quantified re-opener for Scotland was more transparent for stakeholders and funders in Scotland and in our view this reasoning still applies today.

3.48 However, given that Network Rail's activities in England & Wales are approximately 90% of its total activities in Great Britain, then the materiality and transparency issues that are relevant for Scotland are not relevant for England & Wales, so we are not proposing to have a specific re-opener for England & Wales.

3.49 Therefore, we are proposing to use the following re-openers in PR13:

(a) if there is a material change in the circumstances of Network Rail or in relevant financial markets; and

(b) for Scotland, if Network Rail's expenditure[63] in Scotland is forecast to be more than 15% higher than our determination for Scotland over a forward looking period of three years.

3.50 We are also considering whether the potential changes that could arise from the industry structural reform review would need a specific re-opener, e.g. a concession. It may also be the case that in PR13, an issue arises that leads us to consider that another specific re-opener might be necessary.

Traction electricity, industry costs and rates

3.51 The key issue for us in determining the treatment of traction electricity costs, industry costs and rates is ensuring that these costs are efficiently managed but also that Network Rail is appropriately compensated for the risk it takes, where the uncertainty surrounding these costs is material.

3.52 Industry costs and rates includes: British Transport Police (BT Police) costs[64] (£72m in 2011-12[65]), the Rail Safety and Standards Board (RSSB) levy (£9m in 2011-12[65]), the ORR's licence fee and the safety levy (£20m in 2011-12) and business rates[66] (£108m in 2011-12).

3.53 In our May 2012 document, we confirmed that for support costs Network Rail will continue to be wholly exposed to the difference between the assumption in our determination and the outturn cost. However, some traction electricity, industry costs and rates are not as subject to Network Rail's control as support costs, so that Network Rail may not be as well placed to manage risks around those costs. So, for some of those costs we are proposing to use a different approach that compensates Network Rail for

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[62] It is unlikely, but an issue that leads to the re-opening of the price control in England & Wales may not lead to a re-opening of the price control in Scotland.

[63] Expenditure includes operating, maintenance, renewals and enhancement expenditure, and interest costs and corporation tax payable.

[64] British Transport Police is the police force for the GB railways tasked with policing the track and providing services to rail operators, staff and passengers. It is an executive non-departmental public body of the Department for Transport and, split into 7 geographical regions, the force is comprised of 2,835 police officers and 1,455 support staff.

[65] Network Rail's share of these costs.

[66] When we say business rates, we are referring to cumulo rates.

differences between our determination and the outturn. We set out below our proposed treatment of traction electricity, industry costs and rates[67].

Traction electricity

3.54 In our May 2012 document, we decided on the framework of incentives for traction electricity charges in CP5, which should drive the efficient management of these costs by both Network Rail and operators. As part of that framework, we have decided to expose Network Rail to some of the costs associated with transmission losses, reflecting their ability to control these costs.

3.55 Therefore, we will assess traction electricity costs and determine an efficient level of costs and set an ex-ante allowance with the risk of the outturn, on those aspects of the cost such as transmission losses that are controllable by Network Rail, being different, taken by Network Rail. Metered train operators will be billed on the basis of consumption, with a mark-up based on a challenging but achievable level of losses and the year-end volume wash-up will be allocated between unmetered services and Network Rail, to reflect its respective ability to manage the risk.

3.56 Network Rail will therefore be increasingly exposed to the risk of underperformance (downside) and outperformance (upside) in electricity supply tariff areas where there is a greater percentage of metered services. We are proposing that Network Rail's own use of traction electricity (such as power supplies for signals and stations) is treated as a controllable cost, as it has control over these costs.

3.57 The elements of traction electricity costs that we deem not to be sufficiently controllable by Network Rail, will be passed through to train operators through the four-weekly billing process and their allocation of the yearly volume wash-up. We are also proposing to include the costs that we think are sufficiently controllable by Network Rail in any efficiency or performance assessment in CP5.

BT Police and RSSB costs

3.58 Network Rail is a member of BT Police and one of its directors is also on the BT Police Board, so it has sufficient influence over these costs for us to treat them in the same way as support costs. We are therefore proposing to determine an efficient level for Network Rail's share of these costs and set an ex-ante allowance with the risk of the outturn being different taken by Network Rail. This treatment is exactly the same treatment as for support costs, so we are proposing to include these costs in any efficiency or performance assessment in CP5.

3.59 Network Rail is a member of the RSSB[68], and one of its directors is also on the RSSB Board, so it has sufficient influence over these costs for us to treat them in the same way as support costs. We are therefore proposing to determine an efficient level for Network Rail's share of these costs and set an ex-ante allowance with the risk of the outturn being different taken by Network Rail. This treatment is exactly the same treatment as for support costs, so we are proposing to include these costs in any efficiency or performance assessment in CP5.

3.60 The total costs in 2011-12 of BT Police (£265m) and RSSB (£31m) are c£300m[69]. This is significant in terms of the industry's overall costs. Therefore, from a whole industry perspective it is important that these

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[67] In PR08, even though we treated some of these costs in a similar way to support costs we continued to call this group of costs "non-controllable" to be transparent, as at the start of PR08 they were called "non-controllable costs".

[68] The RSSB has undertaken a strategic review as a result of findings in the McNulty Report, which recommended an increase in RSSB's size, to incorporate a system agency function. This may increase RSSB's costs, so we will consider these issues for our draft determination.

[69] Network Rail pays 28% of BT Police (£72m) and RSSB (£9m) costs.

costs are efficiently managed. We recognise that Network Rail is only one of the directors on these boards but not all of the directors represent active participants in the UK rail industry. This reinforces the point that it is important that Network Rail is incentivised to manage these costs efficiently and Network Rail's role on these boards is crucial, as it can exercise industry leadership[70].

3.61 Given the importance of ensuring that these costs are efficiently managed, one way of increasing the incentive on Network Rail would be to expose them to the whole of the costs of BT Police and RSSB. For example, we could calibrate our incentives, so that it was based on the total cost rather than Network Rail's share of the cost[71].

Licence fee and safety levy

3.62 We do not think that the licence fee and safety levy is sufficiently controllable by Network Rail for us to expose them to variances in the cost, as we control it and ensure it is at an efficient level. Therefore, we are proposing to log up/down any variances in this cost between the assumption in our determination and the outturn. As this cost is not sufficiently controllable by Network Rail, we are minded to exclude this cost from any efficiency or performance assessment in CP5.

Business rates

3.63 Business rates are controllable when Network Rail is negotiating the valuation of its network with the Valuation Office Agency (VOA). The next valuation of Network Rail's network will be completed in 2014, which means that when we make our final determination we will not know the cost of Network Rail's business rates in CP5.

3.64 Therefore, we are proposing to assume an ex-ante forecast in Network Rail's CP5 allowed revenue and as long as Network Rail can show that it has negotiated efficiently with the VOA, e.g. it has raised the right issues, we will log up/down any variations from the level we assumed in our determination and adjust Network Rail's allowed revenues in CP6. This is the same approach as in PR08. If we determine that it has negotiated these costs efficiently, then we are proposing to exclude these costs from any efficiency or performance assessment in CP5, otherwise we will include them.

Level of financial indebtedness

3.65 The restriction on Network Rail's level of financial indebtedness has an important incentive effect as it incentivises Network Rail to control its costs. This is because, unless ORR has consented otherwise, if Network Rail does not use reasonable endeavours to ensure that its total financial indebtedness does not exceed limits specified in its network licence, then it could be in breach of that licence. Also, the difference between its limit on financial indebtedness and its actual debt/RAB ratio provides Network Rail with a balance sheet buffer that is fully available for it to use to manage risk and hence fund unexpected increases in costs (including any effects of our proposal on indexation), which should allow it to deliver its required outputs.

3.66 Given that Network Rail has not issued unsupported debt in CP4[72], we retained the licence condition that restricts the level of Network Rail's financial indebtedness (although we did review the condition and

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[70] It should also be remembered that if Network Rail is incentivised to manage costs, that means they will retain the benefit of an outperformance as well bear the cost of an underperformance and we will report on this in our annual efficiency assessments.

[71] For example, if the total cost was £100 and Network Rail's share of that cost was £28. Then if costs are 10% lower, we could calibrate the incentive, so that Network Rail benefits by £10 and not £2.80 and vice versa if the costs are higher.

[72] In our PR08 determination, we assumed that Network Rail would start to issue unsupported debt from the beginning of CP4.

made some changes to it, e.g. in particular we tightened the limits)[73]. This restriction is set as a limit on Network Rail's debt/RAB ratio, i.e. the debt/RAB ratio cannot exceed 75% in 2012-13[74].

3.67 In order to calculate our proposed levels for the restriction of Network Rail's financial indebtedness, we have tested the robustness of Network Rail's financial position in the face of cost and revenue uncertainty. We have done this by assessing the sensitivity of certain financial indicators, e.g. the debt/RAB ratio to changes in our regulatory assumptions. In particular, we have used Monte Carlo analysis to generate a large number of possible outcomes for CP5 and calculate how likely it is that Network Rail will breach the guideline levels of those financial indicators.

3.68 To reflect plausible fluctuations that may be expected in Network Rail's costs and revenues during the control period, we developed a range of probability distributions for each of the key income and expenditure categories by looking at the difference between actual expenditure and the determination for CP3 and CP4[75], considered the effect of inflation (as we are proposing to set an ex-ante inflation assumption) and the possibility of Network Rail under/over achieving the efficiency assumptions in CP5.

3.69 Based on this indicative analysis our current thinking is that the level of financial indebtedness in each year of CP5 should at no point exceed a limit set between 70-75%. We will continue to work on this analysis as it needs to reflect the entire PR13 package and we will provide an update in our draft determinations and final determinations.

[73] If Network Rail issues unsupported debt in CP4, as part of the changes we would make to its price control we would have removed this licence condition.

[74] At 31 March 2014 this limit is 75%.

[75] We considered variances between the actual expenditure and the determination in order to avoid the effect of planned re-phasing of work from year to year.

Questions

3.70 We would like to know your views on all of the issues raised in this chapter, in particular the questions summarised in the box below.

Chapter 3: Questions for stakeholders
Q3.1: What are your views on our proposed approach to indexing Network Rail's allowed revenue and RAB for inflation. In particular, that we are proposing to set an ex-ante assumption for both general inflation and input price inflation in our determination of access charges for CP5?
Q3.2: What are your views on our proposal not to provide Network Rail with an in-year risk buffer?
Q3.3: What are your views on our proposal to simplify the mechanism to re-open Network Rail's access charges review by removing some of the specific re-openers?
Q3.4: What are your views on our proposed treatment of traction electricity, industry costs and rates, e.g. BT police costs?
Q3.5: What are your views on our current thinking that the maximum level of financial indebtedness that Network Rail can incur should at no point exceed a limit set between 70-75% in CP5?

4. Cost of capital issues

Key messages from this chapter

- Our proposals will help to deliver our key transformational goals, especially having a clear focus on what matters to passengers, freight customers and taxpayers – particularly improving value for money and improving transparency.
- We decided in our May 2012 document, that the cost of capital that we allow Network Rail will reflect the risk profile of the company. However, we have decided that we will only allow the company to recover our forecast of its efficient financing costs in charges levied reflecting that it does not pay dividends and is financed by government backed debt.
- If there were a significant change in the industry affecting Network Rail e.g. if the company were to let a concession, we would evaluate the consequences with Network Rail, DfT, Transport Scotland and other stakeholders and if the changes are not material we could log up/down the effect of the initiative on Network Rail and adjust Network Rail's allowed revenue, and if appropriate, its RAB for CP6. If the initiative has a material effect on Network Rail then we could re-open the price control as discussed in Chapter 3.
- We are proposing to set the FIM fee reflecting a long-run view of the credit enhancement that Network Rail benefits from.
- We are proposing to take account of the impact of embedded debt in our forecast of efficient financing costs.
- We will identify the risks that Network Rail faces as part of our report on Network Rail's cost of capital for our draft determinations.
- We intend to roll forward the debt assumption used in CP4 for efficient movements in debt.
- We will assess financial sustainability 'in-the-round' and have set out our initial view of the financial indicators that we will use in PR13.

Introduction and background

4.1 This chapter sets out the issues we are consulting on in relation to our approach to Network Rail's cost of capital. This includes our approach to:

(a) how we could handle an industry reform initiative, e.g. a concession;

(b) the calculation of the FIM fee;

(c) the treatment of financing costs;

(d) the possible use of a split cost of capital;

(e) how we will calculate the full cost of capital;

(f) the roll forward of Network Rail's debt into CP5;

(g) calculation of financing costs in the adjusted WACC approach; and

(h) our approach to financial sustainability.

4.2 Network Rail's ultimate parent company is a not for dividend company limited by guarantee (CLG[76]) and has members instead of shareholders. As a CLG, Network Rail's ultimate parent company is a private organisation operating a commercial business owned by its members.

4.3 Although members are appointed largely to perform the role of shareholders in general meetings (e.g. approve/reject major transactions and vote on remuneration arrangements), there are crucial differences. In particular, members have virtually no capital at risk[77], whereas shareholders who provide equity for a business would take significant risk. The owners of Network Rail do not therefore bear the risks or realise the rewards of Network Rail's activities, and therefore the company does not pay them the dividends that shareholders would expect as a return on their risk capital.

4.4 Network Rail is solely financed by debt, therefore all of the profits left after interest has been paid on its debts are retained within Network Rail rather than being distributed to members or, if it had shareholders, as dividends[78]. As members have virtually no capital at risk they are not directly incentivised to seek to drive the company to improve its financial performance.

4.5 In addition, Network Rail currently benefits from the FIM provided by the UK Government for the company's debt (which currently stands at around £26bn). So, although Network Rail raises debt like a normal company (from private sector investors who choose to put money into Network Rail rather than into other companies or investments) the debt is government guaranteed[79]. This guarantee enhances Network Rail's credit, allowing it to raise debt at gilt rates (i.e. UK Government interest rates) plus a relatively small margin. Network Rail pays a fee to DfT for the credit enhancement[80] it gains from the FIM (the FIM fee).

4.6 In our May 2012 document - setting the financial and incentive framework in CP5, we confirmed that we will use the adjusted WACC approach to determine Network Rail's allowed revenue in CP5. Using the adjusted WACC approach is consistent with Network Rail not issuing unsupported debt in CP5. Also, given that Network Rail is financed entirely by debt, and its debt is indemnified by the UK Government through the FIM, i.e. the UK Government takes the risk of default, the adjusted WACC approach is consistent with Network Rail's efficient financing costs being significantly lower than its cost of capital.

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[76] A company limited by guarantee is one not limited by shares (i.e. with no share capital), whose members undertake to contribute to the assets of the company in the event of its being wound up. This is in distinction to a company limited by shares whose liabilities on winding it up are limited to the amount unpaid on the company's shares.

[77] Network Rail's members have £1 of capital at risk.

[78] Network Rail has used its profits to pay a rebate to DfT and Transport Scotland, invest in the network and pay down debt.

[79] The amount of debt that can be raised under the FIM is currently capped at 108% of the RAB, which is well above Network Rail's current level of gearing (62.5% at 31 March 2012). Network Rail's estimated value of the RAB at 31 March 2012 was approximately £42bn, so the FIM cap was around £46bn at 31 March 2012.

[80] By credit enhancement we mean that effectively Network Rail can borrow at cheaper rates than if it did not have the FIM. This is equivalent to having a higher credit rating.

4.7 The adjusted WACC approach:

(a) first, identifies the theoretical full cost of capital of Network Rail (reflecting all the risks that it faces before some of them are ultimately transferred to funders) and hence its full funding requirement. Therefore, the theoretical full cost of capital would still be visible. It will still be the basis of the cost of capital that will be used in the investment framework for calculating the financing costs of non-HLOS investment schemes as it is important that investment decisions are made using Network Rail's full cost of capital. In the interests of transparency, the cost of capital will still provide the basis for a calculation of what Network Rail's charges would have been if we allowed it to recover the full cost of capital rather than our forecast of its efficient financing costs;

(b) secondly, identifies Network Rail's efficient financing costs (including an in-year risk buffer if necessary);

(c) thirdly, recognises that Network Rail's efficient financing costs are lower than its full cost of capital, due to the existence and use by Network Rail of the FIM. The difference between Network Rail's full cost of capital and its efficient financing costs is called the equity surplus;

(d) then, the equity surplus is recycled before the revenue requirement is determined, i.e. the equity surplus is netted off Network Rail's bottom-line revenue requirement. We do this by including in the calculation of Network Rail's revenue requirement Network Rail's full cost of capital in the calculation of the allowed return, then we deduct the equity surplus; and

(e) we then recognise that this approach, everything else being equal, significantly reduces Network Rail's revenue. This reduction in revenue could cause financial sustainability issues. So, we address this issue by increasing the amortisation charge, and in our advice to ministers, we made amortisation in CP5 equal to our forecast of renewals expenditure in CP5.

4.8 As a general principle, we support preserving the option of introducing risk capital and unsupported debt into Network Rail because of the incentives this would bring to bear on management and because, more generally, it should establish Network Rail as a more conventional company. The introduction of risk capital and unsupported debt directly into Network Rail is not being considered at the moment but the adoption of the adjusted WACC approach does not preclude the introduction of unsupported debt in later control periods.

Industry reform

4.9 In our May 2012 document, we recognised that the introduction of risk capital and unsupported debt directly into Network Rail was not, at that time, being considered and this is still the case. However, as we mention above, the adoption of the adjusted WACC approach does not preclude the introduction of unsupported debt in future control periods and unsupported debt could also be introduced in CP5 if the circumstances were appropriate. Also, other industry reform initiatives could happen, such as further alliances or a concession.

4.10 We also said in the May 2012 document, that in order to enable the introduction of unsupported debt in CP5, we could put in place a mechanism that could allow adjustments to be made to the price control, access contracts and the licence that would allow unsupported debt to be introduced, e.g. one possibility would be to include a switch in access contracts to turn off the equity surplus adjustment. Also, as we discuss in chapter 7, we will show what the charges would be if the equity surplus and additional amortisation adjustments had not been made (i.e. the full cost of capital was included in the net revenue requirement and total amortisation was just average steady state long-run renewals plus the amortisation of the non-capex RAB).

4.11 However, we also want to avoid unnecessarily complicating the PR13 financial framework, especially when it is not clear what the effect of some aspects of industry reform could be on Network Rail. Therefore, we will review, as part of our work on the financial ring-fence, how we would handle some possible industry reforms such as further alliancing or concessions, from an access contract and network licence angle.

4.12 Financially, if there is a change to industry structure there are broadly two issues that could need handling in respect of Network Rail:

(a) how we would unwind the effects of the adjusted WACC approach, e.g. by turning off the equity surplus adjustment; and

(b) how do we adjust for the other issues, e.g. adjusting for the funding that Network Rail has received for outputs/work in the geographical area concerned, for which it is no longer responsible.

4.13 A policy of turning off the equity surplus adjustment is difficult to put in place ex-ante, as we do not know with enough clarity which industry reform initiatives could happen and how material they could be. Therefore, it would not be clear whether all of the equity surplus adjustment should be turned off. There are also other financial effects of the adjusted WACC approach, such as the indexation of the RAB and additional amortisation, which need to be considered. In an extreme case, where all of Network Rail’s business was sold to another party that is conventionally funded by unsupported debt and equity, then we would unwind the effects of the adjusted WACC approach. Different industry reforms, such as alliances or operating concessions, may not raise the same issues and may not therefore require an unwinding of the adjusted WACC approach.

4.14 As an alternative, if one of these changes does happen, we could evaluate the consequences with Network Rail, DfT, Transport Scotland and other stakeholders and if the changes are not material, and do not require an unwinding of the adjusted WACC approach, we could log up/down the effect of the change on Network Rail and adjust Network Rail’s allowed revenue, and if appropriate, its RAB for CP6. This would include amending the equity surplus adjustment and adjusting for the other issues, e.g. the funding that Network Rail has received for outputs/work in the geographical area concerned, for which it is no longer responsible. If the initiative has a material effect on Network Rail, then we could re-open the price control as discussed in Chapter 3.

4.15 We will work through these issues with stakeholders and conclude on this issue in our draft determinations. In particular, we would need to consider the most transparent way of addressing this issue.

FIM fee

4.16 The FIM fee is a fee payable by Network Rail to DfT for the provision of the FIM. For PR08, this was set at 80 basis points (that is, 0.8%) on the actual amount of outstanding FIM-backed debt in CP4 and broadly reflected the long-run value of the credit enhancement that Network Rail benefits from as a result of the FIM.

4.17 In our advice to ministers, we assumed a range of 78 to 129 basis points (that is, 0.78% to 1.29%) for CP5. We were also aware that the current short-run credit enhancement that the FIM could provide is significantly more than 80 basis points, reflecting the turbulence in financial markets in recent times.

4.18 We consider that it is still appropriate to calculate the FIM fee for CP5 by reference to the long-run value of the credit enhancement because it is consistent with the way that the full cost of capital is calculated, is cost reflective and sends the right price signals. We also recognise that if we did adjust the calculation of the FIM fee, given the way the adjusted WACC approach determines Network Rail’s allowed revenue, it would have no overall effect on Network Rail's or funders' financial position. This is because an increase in the FIM fee increases the efficient financing costs that we would assume that Network Rail pays, which would then increase the allowed return that it receives.

4.19 We will determine the value of the FIM fee for our draft and final determinations. To assist us, our consultants will carry out a cost of capital study[81].

Financing costs

4.20 Network Rail is best placed to efficiently manage its financing costs, as it understands its risks and how to finance those risks better than its customers and funders. In setting Network Rail's allowed revenue, we estimate Network Rail's cost of capital for the control period and forecast Network Rail's financing costs on the basis it operates economically and efficiently. This places on Network Rail the risk of movements in the underlying financial markets, i.e. that its cost of capital changes. Market conditions are an important driver of Network Rail's financing costs and are largely beyond Network Rail's control, although they can be efficiently managed through the use of financial instruments, which can provide insurance against these risks, e.g. hedging.

4.21 Network Rail's interest costs in CP5 will also be partly based on financial instruments that it has already taken out, e.g. part of its financing costs in CP5 are already fixed. These costs are referred to as embedded debt costs. We are considering the most appropriate way of treating these embedded debt costs in CP5, especially given that:

(a) we are using the adjusted WACC approach to determine Network Rail's cost of capital, which after the equity surplus adjustment only funds Network Rail's efficient financing costs; and

(b) that we are proposing not to provide Network Rail with an in-year risk buffer (as discussed in chapter 3), which means that it is more exposed to variances in financing costs between our PR13 assumptions and its actual financing costs in CP5.

4.22 The three main ways of considering how we should take account of embedded debt costs are:

(a) do not take account of embedded costs, i.e. just take account of forward looking interest rates;

(b) fully include all embedded debt costs; or

(c) partly include embedded debt costs.

4.23 Given that we are using the adjusted WACC approach to determine Network Rail's cost of capital (which means that the net revenue requirement funds efficient financing costs) and we are minded not to provide Network Rail with an in-year risk buffer, we are proposing to take these embedded debt costs fully into account in CP5 (i.e. option b). However, it is important that Network Rail efficiently manages its financing costs, so we will only allow embedded debt costs to be included in our PR13 determination where they can be shown to have been incurred efficiently. This should help to ensure that Network Rail faces the financial consequences of its actions in the run up to our PR13 final determinations, i.e. it cannot take out debt and just assume that we will allow the costs associated with it.

4.24 Although we think that interest rate risk should remain with Network Rail as it is best placed to efficiently manage it, we could consider whether we should compensate Network Rail for the financial

[81] We expect this study will be published alongside our draft determinations.

consequences of the risk that it takes by, for example, indexing a part of the allowed return to a pre-determined benchmark or the cost of debt assumption could be based on historic interest costs as well forward looking interest rates.

4.25 We do not think it is necessary to consider other ways that we could reduce the interest rate risk that Network Rail takes such as indexing movements in the risk free rate. This is because these mechanisms would add complexity to our determination and it is unlikely that the potential benefit of these mechanisms, in reducing Network Rail's exposure to movements in interest rates, would outweigh the added complexity they would bring to the determination. This is especially the case given that Network Rail's financing costs are close to the rates at which the UK Government borrows, Network Rail has already fixed a significant part of its financing costs in CP5 and we are proposing to take account of embedded debt costs in our forecast of efficient financing costs.

Cost of capital

Split cost of capital

4.26 As we said in our May 2012 document, for our draft determinations in June 2013 and our final determinations in October 2013, we will include our assumptions on Network Rail's full cost of capital. These assumptions will be informed by a study by our consultants.

4.27 We have considered whether we should use a split cost of capital approach, in line with that set out by Professor Dieter Helm[82]. We think that the most significant issue highlighted by the split cost of capital concept is the importance of understanding the risks that Network Rail faces. In order to understand those risks, the split cost of capital structure does not need to be put in place. Furthermore any advantage that a split cost of capital could offer in terms of preventing companies from arbitraging the WACC (effectively by increasing gearing while continuing to earn a cost of capital that reflects a split between debt and equity) is not relevant at the moment for Network Rail, which is 100% financed by debt, for which it pays interest rates close to the rates at which the UK Government borrows.

4.28 In PR08, we looked at the risks that Network Rail faces in two reports by our consultants[83]. For PR13, we will build on this work, and our consultants study on cost of capital will consider these issues.

4.29 Network Rail's enhancement activities and some of its renewal activities are probably one of the more risky parts of Network Rail's activities and so it could be argued that they should have a higher cost of capital than the rest of Network Rail's activities. We recognise this issue but ultimately in terms of setting Network Rail's revenue requirement, this issue is not relevant to Network Rail as it is 100% financed by debt, for which it pays interest rates close to the rates at which the UK Government borrows.

[82] Professor Dieter Helm advocates an approach that would see regulators no longer set a single WACC for a regulated utility but instead establish two separate WACCs. One would apply to the riskier elements of the business, for example construction of new assets, reflecting substantial equity risk. The other would apply to the lower risk elements of the business, such as operating existing assets. Professor Dieter Helm suggests that a RAB-based approach could provide the basis for cost recovery in the lower risk portion of the business, and that the higher risk part of the business could sell assets on completion into the RAB at the efficient cost of construction. In rail, Professor Dieter Helm has suggested that this approach could allow the RAB to be held in a form of public trust, reflecting its national importance, while allowing the transfer of equity-type risk (e.g. as associated with construction) to the private sector.

[83] These reports are available at http://www.rail-reg.gov.uk/upload/pdf/pr08-cepacoc-010408.pdf and http://www.rail-reg.gov.uk/upload/pdf/pr08-fecon-010608.pdf.

4.30 However, it is important to identify the risks that Network Rail faces and that it takes accounts of those risks when it evaluates its capital projects. This issue is further discussed in the financial ring-fence section of chapter 7.

Cost of capital calculation

4.31 The cost of capital is one component of the regulatory determination and is dependent on the risk profile of the business. The appropriate cost of capital will therefore depend on how risks are allocated between the company, customers and funders. The greater the extent to which Network Rail is protected against risk, the lower the rate of return required to accommodate fluctuations in cash flow[84]. We can therefore only take a final view on the cost of capital as part of the determination of the overall PR13 framework for Network Rail.

4.32 We will assess Network Rail's full cost of capital by estimating the cost of debt, cost of equity and gearing that an efficient, conventionally financed business with comparable assets and risks to those of Network Rail would face. This approach is a conventional regulatory approach. For example, the calculation is unaffected by a company's actual capital structure.

4.33 For the cost of debt, we will consider market evidence, e.g. long-term average interest rates and regulatory precedent. We will also consider how an efficiently financed Network Rail might finance itself in terms of debt maturities, the mix of index-linked and nominal debt, and hedging. We will also assess Network Rail's forecast of the cost of debt that it will include in its SBP.

4.34 For the cost of equity, the key issue is that there is no direct evidence available on Network Rail's cost of equity as it does not have any equity that is traded on financial markets and there are no direct comparators. However, we can consider:

(a) evidence of the returns actually required by equity investors in a range of market acquisitions of regulated utility businesses;

(b) recent evidence on other similar regulators' determinations of the cost of equity; and

(c) market evidence of other similar regulated utility businesses.

4.35 For gearing, we can consider recent regulatory precedent and market evidence of other similar regulated utilities.

4.36 In calculating Network Rail's allowed revenue, we convert our full cost of capital, which is normally presented on an annual basis (i.e. 4.75% in PR08[85]), into a semi-annual rate (i.e. 4.64% in PR08) because we assume that Network Rail's cash flows are spread evenly through the year.

4.37 Some other regulators have considered this issue and addressed it in a way that has a similar effect as our approach. For example, the Civil Aviation Authority (CAA) also take a similar approach to us[86] and in 2010 for the NATS (En route) price control there was some discussion about their approach and whether a regulated utility can only re-invest cash on a short-term basis at the amount it would earn on a short-term

[84] Although this means customers and funders may, everything else being equal, need to pay Network Rail less for the same outputs in CP5, those customers and funders will be bearing more risk and may pay more in the future.

[85] This is on a real vanilla basis. A 'vanilla' return is based on a pre-tax cost of debt and post-tax cost of equity.

[86] Although they call their approach an accounting rate of return approach.

deposit rather than its cost of capital. The CAA considered these issues and thought that their policy was still appropriate, so they confirmed in December 2010 that they are continuing to use it[87].

4.38 We also think that it is appropriate to use a semi-annual rate because a regulated utility should be able to re-invest any cash surplus that it has during the year at its cost of capital, as that is the discount rate that the regulated utility will use to assess investment opportunities.

4.39 Given that we are using the adjusted WACC approach, another issue is whether we should use a semi-annual rate for calculating efficient financing costs. This is a less material debate than for the full cost of capital because the difference between Network Rail's efficient financing costs and the amount it would earn on a short-term deposit is lower. We think that we should continue using the semi-annual approach to calculate our forecast of efficient financing costs, as it appropriately adjusts for the timing of cash flows. The key issue is whether an efficient company should hold a cash balance. We will address this issue together with our analysis of the phasing of its cash flows that we discuss below, for our draft and final determinations.

4.40 Given that we are using the adjusted WACC approach and we are minded not to provide Network Rail with an in-year risk buffer it is important that our forecast of financing costs is as accurate as possible. Therefore, for our draft and final determinations we will look closely at Network Rail's phasing of its cash flows in its PR13 SBP and we will not simply assume that Network Rail's cash flows should be spread evenly through the five year control period or spread evenly during a year. We are therefore proposing to keep the semi-annual approach but we may amend the calculation if we think that the phasing of cash flows materially affects our forecast of efficient financing costs.

Roll forward of debt into CP5

4.41 In our PR08 determination, we said that in CP5, for the purpose of sizing the ring-fenced fund, calculating the interest cost assumption used in the calculation of the corporation tax allowance, forecasting corporation tax payments and considering financeability issues, we intend to roll forward the debt assumption used in CP4 for efficient movements in debt. This assumed that we would continue to use the PR08 approach to cost of capital (i.e. the unsupported debt-gradualist approach).

4.42 However, this policy is still relevant to determine the CP5 opening balance as we need to maintain appropriate incentives on Network Rail to manage expenditure efficiently. This issue is also relevant to the adjusted WACC approach for CP5, as we also need to maintain appropriate incentives on Network Rail to manage expenditure efficiently in CP5 and roll forward the debt assumption to CP6.

Calculation of financing costs in the adjusted WACC approach

4.43 When developing our financial framework policies we need to take account of how each policy affects the overall financial framework and how the policies interact with each other.

4.44 By indexing the RAB for actual inflation, we are compensating Network Rail for inflation on its whole asset base and hence its debt. Debt includes both nominal and index-linked debt. We index the RAB in this way to maintain the value of the past investment that has been made by Network Rail. Therefore, indexing the RAB for actual inflation does not have the same incentive issues as indexing allowed revenue. This is because indexing allowed revenue is directly related to the management of income and costs that Network Rail is currently receiving/incurring.

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[87] 'NATS (En Route) plc CP3 Price Control Review (2011-2014) - CAA decision' is available at http://www.caa.co.uk/docs/5/ergdocs/20101210NERLDecision.pdf.

4.45 When we calculate Network Rail's efficient financing costs for the allowed revenue requirement we do not include inflation accretion[88] on index-linked debt but we do include the inflation element[89] of nominal financing costs as that is a cash cost and the adjusted WACC approach funds cash financing costs.

4.46 Both of these policies on a stand-alone basis are appropriate, given our adjusted WACC approach. However, the combined effect of both of these policies is that Network Rail would be compensated twice for inflation risk on its nominal debt, i.e. through the indexing of the RAB and the funding of the inflation element of nominal debt[90]. This also means that Network Rail, in theory using the above approach, could have a perverse incentive to increase its levels of nominal debt as a proportion of total debt that is nominal (instead of index-linked) before our determination, and then after the determination, increase the proportion of index-linked debt[91].

4.47 There are two ways of directly adjusting for this effect:

(a) adjust the indexation of the RAB, so that we only index the part of the RAB that is not related to nominal debt; or

(b) only fund cash interest costs excluding the inflation component of financing costs (i.e. fund real financing costs, which is the methodology we used to calculate allowed revenue in PR13).

4.48 However, directly adjusting for this issue would complicate the calculation of the revenue requirement in PR13, given that lower allowed revenue in CP5 than we assumed in our advice to ministers or a reduction in the value of the RAB at the end of CP5 would mean that we could potentially need to make a further financial sustainability adjustment.

4.49 We have tried to keep the introduction of the adjusted WACC approach as simple and transparent as possible by funding efficient financing costs on a cash basis and indexing the whole of the RAB using the normal regulatory approach, even though this has financial implications for the treatment of inflation. If we had not taken this approach there could have been further significant financial sustainability issues to address.

4.50 In principle, there could be a perverse incentive on Network Rail to potentially adjust the proportions of nominal and index-linked debt. But in practice this is not likely to be an issue, as we will take it into account in our assessment of Network Rail's financial performance in CP5. We would also adjust the RAB and/or allowed revenue in CP6, if we did think that Network Rail had acted inappropriately.

4.51 After considering these issues, we are proposing to keep the introduction of the adjusted WACC approach as simple and transparent as possible by calculating efficient financing costs on a cash basis and by taking the normal regulatory approach to indexing the whole of the RAB, as set out above.

[88] The amount of inflation added to the value of index-linked debt.

[89] The interest rate on nominal debt includes compensation for the use of the money that has been borrowed for the life of the debt, e.g. if the real interest rate was 2% and the expected inflation rate was 3%, then the nominal rate would be approximately 5%.

[90] Our estimate of this effect is £2.3bn in 2011-12 prices.

[91] This is because, our determination would fund Network Rail for cash financing costs based on an assumed level of nominal debt. However, if Network Rail was to take out a higher proportion of index-linked debt than we had assumed, its cash financing costs would be lower as it would only pay, in the short-term, for the lower index-linked financing costs, which reflect the real interest rate.

Financial sustainability

Introduction

4.52 We have a statutory duty to act in a manner which we consider will not render it unduly difficult for persons who are holders of network licences to finance any activities or proposed activities of theirs in relation to which we have functions under the Railways Act[92]. This means that besides making decisions on each of the separate building blocks that make up our determination, we need to satisfy ourselves that the overall package (which includes protections to deal with risk and uncertainty), and the level of access charges and income we assume Network Rail (as a holder of a network licence) will earn, will enable it to finance itself in CP5 on reasonable terms, provided it acts efficiently.

4.53 Considering the long-term financial sustainability of Network Rail, when deciding on our approach to Network Rail's cost of capital, is a key issue. Financial sustainability can mean a number of things, some of which are interconnected (e.g. the level of the revenue requirement is partly dependent on the level of debt). In particular, it includes the following questions:

(a) is the level of debt appropriate for a company such as Network Rail; and

(b) can the debt be re-financed when appropriate and serviced efficiently.

4.54 When considering whether the level of debt in Network Rail is appropriate, it is useful to compare Network Rail's debt to its asset base, and to debt levels in other comparable companies. The financial indicator that we use to compare debt to an asset base is the net debt/RAB ratio.

4.55 When considering financial sustainability issues, the absolute level of Network Rail's debt is also an issue as ultimately it is that debt which needs to be serviced. The level of debt is also an issue because ORR, funders, customers and other stakeholders may not be comfortable with certain levels of debt for other reasons. For example, funders will ultimately have to finance that debt in the future or they may have concerns about the inter-generational effects of high levels of debt and the associated interest payments.

4.56 In common with other regulators, we will assess financial sustainability 'in the round' by looking at the level and trend of certain financial indicators. In other words, in our assessment, we will take into account a suite of financial indicators, e.g. the debt/RAB ratio, consistent, where appropriate, with those used by the ratings agencies, and the business risks and regulatory protections provided to Network Rail in our determination.

4.57 Following discussion with the ratings agencies in PR08, the financial indicators we used to assess financeability in PR08 are set out in table 4.1 below. We are also including the definitions we have used to calculate these indicators, since different definitions are available. This range of financial indicators allows us to consider both long-term solvency and shorter-term cash flow in CP4.

4.58 We have seen no evidence to suggest that these financial indicators are no longer appropriate. Our initial view is therefore that they are also suitable for PR13. We will discuss with the credit rating agencies their current approach to financial sustainability and financial indicators. We will take account of the effect of the adjusted WACC approach on the financial indicators, e.g. by definition under the adjusted WACC

[92] Our interpretation of this duty is that we should act in a manner which we consider will not render it unduly difficult for persons who are holders of network licences, acting efficiently, to finance any activities or proposed activities of theirs in relation to which we have functions under the Railways Act. Condition 12 of Network Rail's network licence also requires the company to use all reasonable endeavours to ensure that it maintains an investment grade credit rating. Investment grade ratings from the three main ratings agencies (Standard & Poors, Moody's Investors Services and Fitch Ratings) mean that the issuer is unlikely to default on its debt repayments. Given Network Rail has not issued unsupported debt it does not have a credit rating.

approach, the AICR is close to one (depending on the value of the risk buffer) and amortisation does not directly affect the AICR.

Table 4.1: Financial indicators

Indicator	Definition
Adjusted interest cover ratio (AICR)	FFO* *less* capital expenditure to maintain the network in steady state *divided by* net interest**
FFO / Interest	FFO *divided by* net interest
Debt*** /RAB (Gearing)	Net debt *divided* by RAB
FFO / Debt	FFO *divided* by net debt
RCF**** / Debt	FFO less net interest *divided by* net debt

Notes: * Funds from operations (FFO) is defined as gross revenue requirement less opex less maintenance, less schedule 4 & 8 costs less cash taxes paid. ** Net interest is the total interest cost including the FIM fee, but excluding the principal accretion on index linked debt. *** Debt is as defined in the Regulatory Accounting Guidelines[93]. **** Retained cash flow (RCF) is defined as FFO minus net interest.

Sensitivity testing

4.59 As we discuss in chapter 3, we will test the sensitivity of the financial indicators to changes in our regulatory assumptions and use Monte Carlo analysis to help identify the robustness of Network Rail's financial position in the face of cost and revenue uncertainty.

4.60 We will do this by assessing the sensitivity of certain financial indicators, e.g. the debt/RAB ratio to changes in our regulatory assumptions. In particular, we will use Monte Carlo analysis to generate a large number of possible outcomes for CP5 and calculate how likely it is that Network Rail will breach the guideline levels of those financial indicators.

4.61 To reflect plausible fluctuations that may be expected in Network Rail's costs and revenues during the control period, we will continue to develop a range of probability distributions for each of the key income and expenditure categories by looking at the difference between actual expenditure determination for CP3 and CP4[94], considered the effect of inflation (as we are proposing to set an ex-ante inflation assumption) and the possibility of Network Rail under or over achieving the efficiency assumptions in CP5.

[93] This document is available at http://www.rail-reg.gov.uk/upload/pdf/regulatory-accounting-guidelines-2012.pdf.

[94] We considered variances between the actual expenditure and the determination in order to avoid the effect of planned re-phasing of work from year to year.

Questions

4.62 We would like to know your views on all of the issues raised in this chapter, in particular the questions summarised in the box below.

Chapter 4: Questions for stakeholders
Q4.1: What are your views on how we could handle an industry reform initiative, e.g. further alliances or a concession? Q4.2: What are your views on our proposal to set the FIM fee reflecting a long-run view of the credit enhancement that Network Rail is provided with? Q4.3: What are your views on our proposal to take account of the cost of embedded debt in our forecast of efficient financing costs? Q4.4 What are your views on how we are proposing to assess financial sustainability? Q4.5 What are your views on our proposal to keep the introduction of the adjusted WACC approach as simple and transparent as possible by calculating efficient financing costs on a cash basis and by taking the normal regulatory approach to indexing the whole of the RAB?

5. Amortisation and RAB related issues

Key messages from this chapter

- Our proposals will help to deliver our key transformational goals, especially aligning incentives and having a clear focus on what matters to passengers, freight customers and taxpayers – particularly improving value for money.
- We are consulting on the treatment of reactive maintenance and how to calculate average long-run steady state renewals for the amortisation calculation.
- We are proposing to largely keep the overall approach to the RAB roll forward as we used in PR08 but there are some issues that we need to consider such as: we are minded not to index renewals for changes in input prices and we are considering how to take account of the difficulty that we have experienced in CP4 in confirming that renewals underspends have been efficient.
- The investment framework will continue to fund investments that customers and funders want Network Rail to undertake outside of the periodic review process.
- As we decided in PR08, we will only allow capex to be added to the RAB and we are proposing to keep using the opex memorandum account.

Introduction

5.1 This chapter covers the following amortisation and RAB related financial issues:

(a) amortisation;

(b) RAB roll forward;

(c) non-capex additions to the RAB and the opex memorandum account;

(d) legacy debt and RAB issues; and

(e) the treatment of incremental investment.

Amortisation

5.2 Amortisation is the remuneration of past investment that has been previously added to the RAB. It forms a major part of Network Rail's revenue requirement as Network Rail is a capex intensive business.

5.3 As we confirmed in our advice to ministers, our high-level approach to amortisation in CP5 is that it will be based on long-run efficient annual average capital expenditure required to maintain the network in steady state (i.e. average long-run steady state renewals) subject to financial sustainability considerations. This means that the total allowance for amortisation in any year should be broadly equivalent to the long-run annual average investment expenditure that is required in order to maintain the overall capability, age, condition, and serviceability of the network in steady state (i.e. the network would be neither getting better or worse if that level of capital expenditure is sustained over the long-run).

5.4 In addition, as we decided in PR08, we will be amortising the non-capex RAB (just over £4bn in 2011-12 prices) on a straight-line basis over 30 years.

5.5 In our May 2012 document, we confirmed that we would use the adjusted WACC approach[95] to calculate Network Rail's cost of capital. In order to address the financial sustainability issues that the adjusted WACC approach may cause, we also said that we would increase amortisation. We estimated the additional amortisation as being around £2bn (for Great Britain, in 2011-12 prices) in our advice to ministers.

5.6 This estimate was based on our forecast of Network Rail's renewals spend in CP5. When considering financial sustainability issues we need to look at all the aspects of our determination. Therefore, we need to update our views on financial sustainability when we make our draft and final determinations. In particular, our advice to ministers was based on Network Rail's committed enhancement expenditure of around £5bn (for Great Britain, in 2011-12 prices) in CP5.

5.7 DfT and Transport Scotland have recently published their HLOSs and it is clear that enhancement expenditure will be significantly higher than £5bn (for Great Britain, in 2011-12 prices) in CP5. Therefore, although it is likely that we will adopt the same general approach to financial sustainability issues in our draft and final determinations as in our advice to ministers, we will need to consider the issues 'in the round' and will therefore revisit this issue in our draft and final determinations.

5.8 In our May 2012 document, we said we would consult further on our approach to amortisation in this document. In particular, we said we would consider whether enhancements should be amortised immediately after they come into use. We raised this issue because amortisation based on long-run renewals does not fund the original construction cost of the enhancement, just the renewals needed to maintain the asset in a suitable condition[96]. This is appropriate for an enhancement that adds long-term economic value to the network, e.g. some rail bridges are over 100 years old and are still in regular use.

5.9 If there are significant levels of enhancements proposed in the HLOSs that do not add to the economic value of the network in the long-term, we need to consider how they should be funded. One way of addressing this issue is through amortisation, as our amortisation policy takes into consideration long-term financial sustainability issues, i.e. if we thought that the increase in debt as a result of these enhancements would not be sustainable, we could increase amortisation to reduce Network Rail's debt.

5.10 Another option would be to fund the enhancements that do not add to the economic value of the network in the long-term on a pay-as-you-go basis, i.e. they are remunerated like maintenance, or to amortise them over a fixed period of time reflecting their useful economic life.

5.11 Both of these options can resolve the funding issue and it is more transparent to fund the enhancements that do not add to the economic value of the network in the long-term, on a pay-as-you-go basis, or amortise them over a fixed period of time, reflecting their useful economic life instead of increasing amortisation for financial sustainability reasons.

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[95] The adjusted WACC approach is described in chapter 4.

[96] The operating, maintenance and financing costs of the asset would be funded in future periodic reviews.

5.12 Overall, given the additional amortisation we are including in Network Rail's revenue requirement, we do not think that there is an issue with the funding of enhancements in PR13. However, at a high-level we think that enhancements that can be added to Network Rail's RAB should be projects that are broadly consistent with our investment framework criteria for a RAB addition[97]. However, we recognise that the investment framework is addressing different issues to the periodic review/HLOS process.

5.13 The investment framework RAB additions criteria are:

(a) the expenditure must be incurred as a result of a reasonable requirement of government (or another funder directly supported by government), and government must therefore be content to support the financial commitment arising from the associated RAB addition;

(b) the expenditure must add to the economic value of the rail network. In cases where the expenditure does not add to the economic value of Network Rail's assets, the scheme funder or promoter and Network Rail should explain, with reference to Network Rail's appraisal criteria:

(i) why the proposed RAB addition represents an efficient whole industry solution, including why it is more efficient for Network Rail to finance the scheme; and

(ii) how the proposal will add economic value for the rail industry as a whole.

(c) we need to be satisfied that Network Rail can afford to finance the planned expenditure, and has the capability to deliver;

(d) the expenditure must be incurred efficiently; and

(e) the outputs of the scheme must have been delivered and Network Rail must own the enhanced asset.

5.14 The other amortisation issues that we need to consider are the:

(a) treatment of reactive maintenance; and

(b) calculation of average long-run steady state renewals.

Reactive maintenance

5.15 Network Rail, before 2003-04, accounted for certain reactive maintenance costs in civils and operational property, of approximately £140m per annum in 2011-12, as capital expenditure (renewals). However, since 2003-04, Network Rail has accounted for these costs in its statutory accounts as an operating cost following a change to UK GAAP (generally accepted accounting principles).

5.16 To maintain consistency with previous price controls, the calculation of the revenue requirement in ACR03 and PR08 treated reactive maintenance costs as renewals.

5.17 We are considering whether these reactive maintenance costs should be remunerated in the year concerned, (i.e. for the purpose of calculating the revenue requirement, treat them in the same way as operating and other maintenance costs). This would improve transparency as Network Rail currently accounts for reactive maintenance costs as operating costs in its statutory accounts and capital expenditure (renewals) in its regulatory accounts (to be consistent with our PR08 determination), which

[97] The criteria are included in our investment framework consolidated policy and guidelines document, which is available at: http://www.rail-reg.gov.uk/server/show/ConWebDoc.10081.

means that at the moment Network Rail needs to provide a reconciliation of maintenance and renewals costs between its statutory accounts and its regulatory accounts.

5.18 Everything else being equal, the increase in maintenance costs (and hence the revenue requirement) would largely be offset by a reduction in amortisation (and hence the revenue requirement), as we would expect the average long-run steady state renewals to be lower by an equivalent amount. This means that a change in this policy should not have a material impact on the revenue requirement.

Calculation of long-run renewals

5.19 Given the adjusted WACC approach and the associated financial sustainability adjustment, Network Rail's revenue requirement is unlikely to be affected by the way we calculate average long-run renewals. However, it is still important to make an appropriate calculation of long-run renewals as we want to present charges both before and after the adjusted WACC adjustments.

5.20 The main issues that we need to consider in order to calculate average long-run steady state renewals are:

(a) whether the amortisation charge should take account of the scope for future efficiency improvement after CP5 (the control period we are assessing in PR13); and

(b) the period of time that should be used as a proxy for the long-run period.

5.21 In PR08, our assessment of long-run renewals for CP4 was based on the total efficiency gap that we identified in PR08, even though we did not think Network Rail would close all of the gap in CP4, i.e. it included the scope for further efficiency improvement after CP4 (the control period we were assessing in PR08). This meant that both current and future customers and funders would be sharing the cost burden of Network Rail's inefficiency.

5.22 We are also proposing to take account of the scope for future efficiency improvement after CP5 (the control period we are assessing in PR13) and we are considering for PR13 whether we should also include an estimate of frontier shift over our 30 year assessment period in the efficiency gap. This is because both current and future customers and funders would be sharing the cost burden of Network Rail's inefficiency.

5.23 Network Rail's SBP and our strategic direction statement[98] will cover a period of at least 30 years. We decided that this is an appropriate period of time for its plan because railway infrastructure assets are long-life assets. In order to properly consider what expenditure is necessary in CP5 to maintain the capability, age, condition, and serviceability of the network we need to evaluate Network Rail's plan over the long-term. For these reasons we are also proposing to use the 30-year period from 2014-15 as the period for our assessment of Network Rail's long-run renewals.

RAB roll forward

5.24 The RAB is a key building block in our methodology for determining access charges as it forms the basis for calculating the level of allowed return and impacts on the allowance for amortisation within Network Rail's revenue requirement. This is because the RAB is reduced by the amortisation charge including a financial sustainability adjustment if necessary (although average long-run steady state renewals are calculated independently of the RAB). Also, the non-capex part of the RAB is amortised over

[98] At the same time as we publish our draft and final determinations, we will issue a draft and final strategic direction statement. The statement will set out how we see our PR13 determination linking to the long-term future of economic regulation in the rail industry.

a period of 30 years[99]. It also acts as a store of value that is released to Network Rail over time through the amortisation charge.

5.25 This section of the document describes our approach to the roll forward of the RAB in CP4 and CP5.

5.26 In our 2003 access charges review (ACR2003), we established a set of high-level principles for valuing the RAB which were also used in PR08. These principles are:

(a) transparency: we will publish our assumptions and calculations in full. Network Rail's current and future lenders will have a clear and transparent basis on which to value the company. Looking ahead to the future, this should assist Network Rail if it raises additional debt without a government guarantee;

(b) consistency: our methodology must be consistent with the policy statements made previously. This is because predictability and consistency over time in our approach serves to improve confidence in the regulatory regime and will enhance Network Rail's ability to finance its business in future; and

(c) simplicity: we will strive, where possible, to ensure that the calculation of the RAB remains as straightforward as possible.

5.27 We are proposing to retain these principles for CP5.

RAB roll forward in CP4

5.28 In summary, the process for rolling forward the RAB in each year of CP4 is:

(a) adjust the CP4 opening RAB per our PR08 determination into the price base of the relevant year;

(b) adjust the value of the CP4 opening RAB per our PR08 determination for agreed changes[100];

(c) add the renewals and enhancements RAB additions (after adjusting for the effect of the RAB roll forward policy as described below);

(d) deduct the element of renewals and enhancements that are funded by the ring-fenced fund[101];

(e) adjust our renewals assumptions for movements in the IOPI index;

(f) adjust for non-delivery of outputs or a failure to maintain the serviceability and sustainability of the network in the short, medium or long-term; and

(g) deduct our PR08 amortisation assumption.

5.29 This methodology differs from that adopted in our ACR2003 in two main ways. First, actual expenditure is added to the RAB (after adjusting for the effect of the RAB roll forward policy as described below) instead of the determination assumption being added to the RAB. Secondly, there is a deduction for

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[99] The non-capex part of the RAB consists of RAB additions in relation to revenue re-profiling, which was a one-off adjustment reflecting an issue with government finances following ACR2003, and incentive payments relating to the company's performance in respect of the volume and asset stewardship incentives in CP3. The non-capex part of the RAB does not include all non-capex expenditure that has been added to the RAB, e.g. the expenditure in relation to the Hatfield derailment in 2000 is not included in the non-capex part of the RAB as we only started treating non-capex expenditure in this way in CP3.

[100] These changes were set out in a letter that determined the final value of the CP4 opening RAB. This is available at http://www.rail-reg.gov.uk/upload/pdf/pr08_ORRlet2NR_clarific_iss.pdf. Network Rail's RAB has also been adjusted for other agreed changes to the PR08 determination (e.g. seven day railway funding in renewals).

[101] In PR08, the ring-fenced fund is the amount of allowed return left after deducting our forecast of Network Rail's efficient financing costs, the FIM fee and the risk buffer from the total allowed return. The ring-fenced fund is then used to re-invest in the rail network, i.e. it funds some renewals and enhancement expenditure on a pay-as-you-go basis.

the element of renewals and enhancements that are funded by the ring-fenced fund. These changes are explained in detail in Chapter 15 of our PR08 determination[102].

5.30 Under our PR08 approach, generally, deviations from the capital expenditure allowance are retained/borne by the company as out/under-performance for a period of five years, provided Network Rail has delivered the required outputs and maintained the serviceability and sustainability of the network in the short, medium or long-term. This general approach is used widely in other regulated industries and represents a key feature of the incentive framework established by our PR08 determination and, as we set out in our May 2012 document, we have decided to retain this approach.

5.31 The main features of our RAB roll forward policy in CP4 are:

(a) as the determination in England & Wales is separate to the determination for Scotland, renewals and enhancements will be rolled forward separately for England & Wales and Scotland in accordance with our PR08 determination;

(b) to provide an appropriate balance of incentives and protections for Network Rail by adding actual efficient capex to the RAB in CP4 (subject to the RAB roll forward policy). This means that Network Rail is protected from some risks but will bear the effects of some underperformance and will benefit from outperformance (see the discussion on opex and capex incentives in the May 2012 document for further details);

(c) to encourage Network Rail to improve efficiency throughout CP4, the incentives the company faces are equalised across the five years of the control period. For example, Network Rail faces the same incentive to outperform in the last year of CP4 as it does in the first year of CP4 and will bear the same cost of efficient overspend in year 5 of CP4 as in year 1 of CP4;

(d) in order to simplify the calculations of the financial effect of a five year retention in our PR08 determination we set the incentive rate at 25%, which is approximately the same as five years allowed return at 4.75% (the PR08 full cost of capital). This is also called the 25% pain/gain sharing mechanism. Also, in order to simplify the calculation we make the relevant RAB additions/deductions in the year when they occur;

(e) if an efficient overspend is added to the RAB, Network Rail will generally bear 25% of the overspend. If the overspend is not eligible for a RAB addition or is not offset against an efficient underspend, Network Rail will bear the cost of 100% of the overspend;

(f) Network Rail will retain 25% of an efficient underspend (irrespective of whether the underspend is due to a variance in volumes or unit costs);

(g) Network Rail will not be penalised for, or benefit from, rescheduling its capex programme (deferring work or bringing work forward) within CP4 where outputs are met[103]. By not penalising or rewarding Network Rail we mean that we will not treat the expenditure variance as an efficiency or inefficiency (subject to Network Rail showing that the required outputs in CP4 have been delivered and there is no adverse effect on the serviceability and sustainability of the network in the short, medium or long-term). This means that we will adjust the RAB for the financial effect of rescheduling activity, so that Network Rail does not retain/bear the financing benefit/cost of the rescheduling, i.e. if there is a deferral of work from year 1 to year 2, in our PR08 determination Network Rail will have received an allowed return on

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[102] Periodic review *2008: Determination of Network Rail's outputs and funding for 2009-14*, Office of Rail Regulation, October 2008. This may be accessed at www.rail-reg.gov.uk/upload/pdf/383.pdf.

[103] This should help to smooth the investment cycle – providing greater certainly and predictability for the supply chain. Also, it avoids incentivising Network Rail to inappropriately defer work or bring work forward,

that work for year 1. In order to make the effect of rescheduling within CP4 neutral, we will deduct from the RAB the amount of financing that Network Rail received for that work for the period until the work is completed in year 2. For the avoidance of doubt, these adjustments are not subject to the 25% pain/gain sharing mechanism; and

(h) as part of our on-going regulation of Network Rail, we will ensure that if it fails to either deliver any required outputs in CP4 or maintain the serviceability and sustainability of the network in the short, medium or long-term, then it will not retain the associated financial benefit. We will do this by either making an appropriate deduction from the RAB or not funding the company for any deferred work that it will be doing in CP5 as appropriate. We will make this adjustment regardless of whether there is an underspend or overspend. We will also make an adjustment for capitalised financing on the logged down amount and Network Rail will not retain 25% of an underspend.

5.32 The other main features of our RAB roll forward policy in CP4 are:

(a) to ensure that our RAB roll forward policy is complied with, the audit of the regulatory accounts will confirm that the boundary between renewals and enhancements, and between maintenance and renewals/enhancements is the same as we used in our PR08 determination and the capitalisation of overheads is on the same basis as in our PR08 determination;

(b) in CP4, with the exception of reactive maintenance that we discuss below, we largely used Network Rail's statutory accounting policies as the basis for defining what can be added to the RAB as renewals and enhancements. This was because it was a transparent and easy to understand approach;

(c) all RAB adjustments for the non-delivery of outputs or failure to maintain the serviceability and sustainability of the network in the short, medium or long-term, deferrals within CP4, underspend and efficient overspend, will be calculated with reference to our PR08 determination, as that is how we set Network Rail's allowed revenue, RAB and debt assumptions for CP4;

(d) as PR08 was an output based determination, Network Rail should not benefit from a failure to deliver its required outputs. Therefore, the adjustments for the non-delivery of outputs will be based on the amounts of money saved by not delivering the outputs or failing to maintain the serviceability and sustainability of the network in the short, medium or long-term. This would include any savings in opex, maintenance and income;

(e) given the information asymmetry between Network Rail and us, it is for Network Rail to show that a reduction in work volumes is efficient and does not inappropriately affect the serviceability and sustainability of the network in the short, medium or long-term. Where Network Rail cannot show that a reduction in volumes is efficient, any cost savings related to the deviation from the current agreed asset policies will be deemed inefficient and the related cost savings will be deducted from the RAB without Network Rail retaining 25% of the benefit;

(f) any overspend relating to unit costs will be disallowed. This is because unit costs should be controllable by Network Rail and the company is provided with protections elsewhere in the PR08 determination;

(g) overspend relating to additional volumes of work for renewals will only be added to the RAB if Network Rail can justify that the increase in volumes is efficient and could not have reasonably been foreseen at the time of PR08;

(h) given CP4 is a five year price control, the assessment of the RAB is a cumulative assessment for CP4, i.e. an overspend in year 1 would be offset by underspend in year 2. This means that it will only be possible to finalise the value of the RAB once CP4 is completed. All annual calculations of the RAB during CP4 in the regulatory accounts will therefore be provisional;

(i) in order to ensure the price control is sufficiently flexible to cope with planning uncertainty, where the governments or other funders request Network Rail to deliver additional outputs during the control period, we will log up the efficient cost (including capitalised financing costs) of delivering the outputs for inclusion in the RAB at the beginning of the next control period; and

(j) to avoid undue complexity, agreed deferrals of expenditure from CP3 to CP4 (e.g. for the West Coast project) will be treated under the CP4 RAB roll forward policy (e.g. if Network Rail delivers these outputs and spends below our determination assumption then Network Rail will retain 25% of the underspend), unless agreed otherwise.

5.33 The actual outturn figures for renewals and enhancements expenditure in 2013-14 will not be available until the publication of the 2013-14 regulatory accounts in July 2014. We therefore intend, where appropriate (e.g. in relation to emerging cost enhancements), to make an adjustment as part of the next access charges review, to the CP6 opening RAB at 1 April 2019. The adjustment (including where relevant the associated capitalised financing) will take account, where appropriate, of the difference between the final outturn figures for CP4 shown in the 2013-14 regulatory accounts and the forecast 2013-14 RAB movements included in our PR13 final determinations.

RAB roll forward in CP5

5.34 In our May 2012 document, we said that we will keep the current opex and capex incentive strengths for CP5 but will review the more detailed elements of our approach, e.g. the deadband for enhancements overspend, in this document.

5.35 Given that we are retaining the same incentive strengths for capex, i.e. renewals and enhancements, we are also proposing to keep the overall approach to the RAB roll forward as outlined above as we think it provides an appropriate policy for rolling forward the RAB, e.g. it has appropriate incentive properties. But there are some issues in relation to which we need to consider where we may be able to improve our approach, such as:

(a) as discussed in chapter 3, we are proposing not to index our renewals assumptions for changes in input prices;

(b) in PR08, the treatment of renewals and enhancements in the RAB roll forward was largely consistent but there were some important differences. For example, as we allowed contingency to be included in the cost of the enhancements, we introduced an enhancements deadband, i.e. we do not allow an enhancements overspend to be added to the RAB if it is less than £59m per annum (2011-12 prices)[104]. This is because it is important that the treatment of renewals and enhancements in the RAB roll forward is consistent with how expenditure is determined. For CP5, we are proposing that where possible we will try to be consistent between the treatment of renewals and enhancements to minimise any perverse incentives for Network Rail to favour one form of expenditure over the other;

(c) ideally our treatment of an overspend on enhancements in England & Wales should be the same as for enhancements in Scotland but we need to take account of the two price controls being separate;

(d) we will consider where our policies should distinguish between volume and unit cost based variances and we will also consider how net underspend/overspends should be treated, e.g. if there is an overspend offsetting an underspend;

[104] This is £50m per annum in 2006-07 prices.

(e) to aid transparency, we will set out in our PR13 determination our criteria for determining when a failure to deliver outputs or maintain the serviceability and sustainability of the network in the short, medium or long-term, would require a RAB adjustment and possibly an adjustment to efficiency;

(f) we are considering whether it would be useful to set out in our PR13 determination, some guidance on how we would adjust for a failure to deliver outputs or maintain the serviceability and sustainability of the network in the short, medium or long-term, given the subjective nature of the calculation. We are working on this issue at the moment for 2011-12 and our conclusions on this should inform our thinking;

(g) in PR08, it has been difficult to confirm that renewals underspends have been efficient. This has been an issue where there is no volume related information available. It has also been an issue where there is volume information available but there is not a clear link between inputs, outputs and the serviceability and sustainability of the network in the short, medium or long-term. Even with unit cost savings, given the lack of coverage of Network Rail's unit cost framework and the accuracy and confidence of its calculation of unit costs, it has not been easy in CP4 to confidently identify unit cost underspends that are clearly due to efficiency. This situation should be better in CP5 as Network Rail is improving its unit cost reporting. Therefore, the key issue for us is whether we should treat all renewals underspends in the same way, given the difficulty we have in confirming that some types of renewals underspends are efficient, e.g. volume related underspends. We will also discuss these issues in our October 2012 efficiency and expenditure workshop, where we will be discussing our approach to CP5 efficiency reporting; and

(h) we are taking an output based approach to regulation but the links between inputs, outputs and the serviceability and sustainability of the network in the short, medium or long-term are not clear. Therefore, we need to consider how this lack of clarity could affect our RAB roll forward policy.

Non-capex additions to the RAB and opex memorandum account

5.36 In PR08, we said that in line with regulatory good practice, only capex will be added to the RAB from the start of CP4. Incentive payments, which we have historically added to the RAB at the start of the next control period, will instead be remunerated via an opex style memorandum account. This would work by 'logging up' the payment to the account during the control period. Monies could then be released from this account over an appropriate period, which will generally be across the subsequent control period.

5.37 After we published our PR08 determination, we also published a clarification letter[105] that identified issues that needed clarification or correction. Some of the adjustments that might be made as a result of these issues will be made through the opex memorandum account, e.g. adjustments for the costs of the seven day railway and capacity charges. Some of these adjustments relate to monies that Network Rail should have received in CP4. Therefore where appropriate, we need to reimburse Network Rail with that money.

5.38 We are proposing to release our forecast of the monies in the opex memorandum account at 31 March 2014, evenly over CP5, in order to smooth the effect on charges, i.e. the increase in the charges would be the same for each year. We also think that any difference between the forecast position at 31 March 2014 and the outturn on this account should be adjusted for in CP6, in the same way that other variances between the outturn position in 2013-14 and our PR13 assumption will be adjusted for as discussed above.

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[105] This is available at: http://www.rail-reg.gov.uk/upload/pdf/pr08_ORRlet2NR_clarific_iss.pdf.

5.39 The use of the opex memorandum account avoids distorting the RAB. Therefore, we are proposing to keep using it for CP5, as the use of this account has the advantage of formalising the way these issues are resolved and allows us to smooth the effect on charges. An alternative would be to have an informal approach, which would not be as transparent or either adjust revenues immediately an issue arises or have an adjustment in the first year of the next control period for all issues relating to the current control period, which could unduly affect charges in that year.

Legacy debt and RAB issues

5.40 As we highlight above, for the start of CP4 onwards, we have been clear that non-capex additions should not be added to the RAB[106]. However, before CP4 there were a number of additions to Network Rail's debt and RAB that were not related to capex (i.e. did not improve the network), e.g. opex and maintenance overspends after the Hatfield derailment in 2000 and a CP3 deferral of revenue due from government[107]. This amounted to around £15bn at the end of CP4 (at 2011-12 prices). This is an initial estimate and we are working on identifying a more precise number.

5.41 The financing of these legacy issues by Network Rail could distort the future funding of the railway industry by making it more expensive, as Network Rail's debt and hence financing costs are higher than they otherwise would be.

5.42 If an adjustment for these legacy issues was made, we would need to consider the effect on debt and RAB. Most of the adjustments would in theory equally affect both debt and RAB. If we made an adjustment to debt and RAB on that basis, Network Rail's debt and RAB would reduce by around £15bn and its debt/RAB ratio would be reduced to an average of approximately 54%[108].

5.43 If instead we looked at how the financial markets and potential investors would appraise Network Rail if, for example, a concession was being considered, then it may be appropriate to reduce debt by less than the reduction in the RAB, to maintain the current gearing ratio (64%). This would reduce debt by £10.7bn (assuming the RAB adjustment is £15bn). If we took this approach and used the adjusted WACC approach, Network Rail's revenue requirement would go down by approximately £2bn (8% in CP5).

5.44 An adjustment for these legacy issues could be made by the UK Government paying down part of Network Rail's debt and the ORR adjusting Network Rail's RAB to be consistent. In our view, there could be a value for money case for this because Network Rail finances these legacy issues at interest rates higher than the UK Government. The UK Government paying down this debt would contribute to the long-term financial sustainability of the company. But we recognise that there would be an impact on government borrowing and therefore the availability of public funds, at a time when there is considerable pressure on the public purse.

5.45 Ultimately this is a decision for the governments. Reducing Network Rail's debt and RAB would require the UK Government to pay down some of Network Rail's capital. We think that its willingness to do this would depend on affordability and how any pay down of debt by the UK Government might fit with changes in industry structure.

[106] For further detail see paragraph 15.74 of our PR08 determination. This is available at http://www.rail-reg.gov.uk/upload/pdf/383.pdf.

[107] The non-capex part of the RAB referred to in the RAB roll forward section of this document only includes a part of all non-capex related expenditure that has been added to the RAB (approximately £4bn at 2011-12 prices).

[108] If this adjustment was made, we would have to reconsider the limits on Network Rail's financial indebtedness in its network licence.

The treatment of incremental investment

5.46 Requests for incremental investment, i.e. investment outside of the HLOS and SoFA process are dealt with through our investment framework[109]. In October 2010, we consolidated our investment framework policies into one document[110].

5.47 The investment framework sets out mechanisms for the treatment and funding of incremental investments that arise between periodic reviews. In general, Network Rail should log up investments (which satisfy our published criteria[111]) that generate economic value for the rail industry, but which were not funded at the previous relevant price control review. Network Rail bears the financing costs of such schemes until the next periodic review when the efficient cost of the schemes (including financing costs) are added to the RAB, and therefore paid for through access charges.

Questions

5.48 We would like to know your views on all of the issues raised in this chapter, in particular the questions summarised in the box below.

Chapter 5: Questions for stakeholders
Q5.1: What are your views on the treatment of reactive maintenance and how to calculate average long-run steady state renewals for the amortisation calculation? Q5.2: What are your views on our proposal not to index renewals for changes in input prices and how should we take account of the difficulty that we have experienced in CP4 in confirming that renewals underspends have been efficient? Q5.3: What are your views about legacy debt and RAB? Q5.4: What are your views on our proposal to keep using the opex memorandum account?

[109] The investment framework facilitates the efficient delivery of value for money improvements to the railway, by addressing barriers to efficient development and delivery of schemes. The framework should also ensure that Network Rail takes a consistent approach to investment proposals: this is important for potential investors so that they can be certain about what they can expect from Network Rail and are clear about the terms on which they can expect to do business with Network Rail.

[110] The investment framework consolidated policy and guidelines document can be accessed at: http://www.rail-reg.gov.uk/upload/pdf/investment_framework_guidelines_october_2010.pdf.

[111] See Chapter 4 of our investment framework consolidated policy and guidelines document, which was published in October 2010.

6. Corporation tax

Key messages from this chapter

- Our decision on the treatment of Network Rail's corporation tax costs is unlikely to have significant financial implications for Network Rail in CP5 (as a result of its brought forward corporation tax losses and the effect of the adjusted WACC approach). But it is still important that we set out clearly our approach to corporation tax as the effect on corporation tax of income and expenditure decisions in CP5 will affect future control periods and can be material.
- In PR08, we determined the overall incentive strengths on income and expenditure on a net of tax basis and we are now consulting on whether we should retain that approach or whether another approach would be more appropriate.

Introduction

6.1 Corporation tax is a normal business cost and as such is one of the building blocks of the revenue requirement. In PR08, we changed our approach to corporation tax following a review of the incentives on Network Rail and also that it was planning to issue unsupported debt in CP4. The main change that we made was that we allowed a specific corporation tax allowance instead of providing a tax wedge[112] in the cost of capital. This approach better matches the allowed revenue with expected corporation tax liabilities during a control period and we are proposing to retain this approach for CP5.

6.2 Also, we decided that Network Rail had been overfunded for corporation tax in CP3 and decided that we would adjust for this overfunding. We called this adjustment the corporation tax double-count adjustment. The adjustment is made by holding the amount of the double-count (£1.3bn) on account and we are reducing it every year by the amount of corporation tax that we estimated would be payable by Network Rail, until the balance on the account reaches zero[113]. After that, we will fund Network Rail's efficient corporation tax payments through the regulatory corporation tax allowance[114].

6.3 For PR13 the main issues are:

(a) our approach to corporation tax incentives;

(b) roll forward of corporation tax balances from CP4 into CP5; and

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[112] The tax wedge is a name for the grossing up of the cost of equity for corporation tax.

[113] This is a regulatory balance that we use to adjust Network Rail's revenue requirement for this overfunding. Network Rail's debt is lower as a result of this overfunding.

[114] Network Rail has recently sent us a paper about the corporation tax double-count, which we are reviewing.

(c) roll forward of corporation tax balances from CP5 into CP6.

Corporation tax incentives

6.4 Network Rail, given its forecast brought forward corporation tax losses at the start of CP5, is unlikely to make significant corporation tax payments until CP7[115], therefore given the impact of our policy on the CP3 corporation tax double-count (discussed above) it is unlikely that we will provide any funding for Network Rail's corporation tax payments in CP5. Therefore, the incentive effect on Network Rail of our corporation tax policy could be significantly diluted as the effects of our incentives on corporation tax are largely realised in later control periods. However, it is still important that we clearly set out our approach to corporation tax in CP5 as income and expenditure decisions in CP5 will affect corporation tax payments in future control periods.

6.5 In PR08, when we determined our overall approach to the financial incentives on Network Rail, we determined the overall incentive strengths on income and expenditure on a net of tax basis, i.e. if the company outperforms by, say, £100 then the company will retain an overall net benefit of £74 (this assumes a corporation tax rate of 26%)[116].

6.6 As we set out in our May 2012 document, we decided to retain the incentive strengths on income and expenditure. Therefore, as part of our PR13 determination we now need to determine whether we want to retain the net of tax basis to incentive strengths.

6.7 The way that the incentive strengths on income and expenditure are given effect is through the way we roll forward corporation tax balances. This is discussed further below.

6.8 In PR08, when we decided how to roll forward corporation tax balances into CP5 we considered the effect on Network Rail's incentives and in particular the balance between risk and incentives and decided that we would not adjust the corporation tax balances for CP5, if Network Rail's actual position during CP4 was different to our forecast. By taking this approach, the incentive on Network Rail to make savings in expenditure and to increase other single-till income is lower but the financial consequences of underperforming (e.g. costs increasing) are reduced.

6.9 Given investment framework capital expenditure in CP4 is funded outside of PR08 and where appropriate is added to the RAB for CP5, we will include the effects of the investment framework schemes on Network Rail's corporation tax balances for CP5.

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[115] If we continue to use the adjusted WACC approach, the date we forecast Network Rail will start to make significant corporation tax payments will be significantly pushed back.

[116] A more detailed example of this, is if the company outperforms by, say, £100 and an ex-ante approach has been adopted to the opening corporation tax CP5 balances, then the corporation tax the company will pay on the outperformance will not be reimbursed by us so the net benefit is £74 (this assumes a corporation tax rate of 26%). If the company underperforms by £100 and an ex-ante approach has been adopted then the reduction in corporation tax, as a result of the underperformance, will not be captured by us so the net cost is say £74. Using an ex-ante approach therefore reduces the net incentive to outperform as the financial consequences of outperforming (e.g. costs being lower than expected) are reduced. If we adjusted the corporation tax opening balances at the next control period for actual income and expenditure, then in the above example the taxation effects of the outperformance or underperformance would be adjusted for, so the company would retain £100 of the outperformance and bear £100 because of the underperformance. Therefore, the incentive is increased but the financial consequences of underperforming (e.g. costs being higher than expected) are also increased.

Roll forward of corporation tax balances from CP4 into CP5

6.10 The CP4 allowances for income, support costs, operations costs, BT Police costs, RSSB costs, maintenance costs, financing costs and corporation tax[117] were set on an ex-ante basis so Network Rail will bear the cost of an overspend and benefit from an underspend. Given our overall approach to risk and incentives in PR08, we think it is appropriate that Network Rail is exposed to the net effect of an underspend/overspend in income, support costs, operations costs, BT Police costs, RSSB costs, maintenance costs, financing costs and corporation tax[118]. Therefore, we will not adjust the roll forward of corporation tax balances from CP4 into CP5 for variances in these income and cost categories.

6.11 For some elements of renewals and enhancements, our PR08 determination outlined the various protections we introduced to compensate Network Rail from risk, e.g. if there is a change in outputs there would be an effect on income and costs and hence potentially capital allowances. We will take account of the changes in future income, costs and hence potentially capital allowances as a result of our policies on rolling forward the RAB, when rolling forward the corporation tax balances for variances in these elements of renewals and enhancements spend.

6.12 Some costs in CP4 were also protected from risk, e.g. traction electricity, and there is a pass through of the licence fee and safety levy. We will take account of the changes in future revenue as a result of our policies on these costs, when rolling forward the corporation tax balances for variances in those costs, to ensure that Network Rail is appropriately compensated for changes in these costs on a net of tax basis, i.e. if it overspends on one of these costs by £100 and we reimburse them for £100, we should take account of that increased cost and the increased revenue when we assess Network Rail's corporation tax position.

6.13 Therefore, although the approach taken in rolling forward the corporation tax balances from CP4 to CP5 is different for variances in income, support costs, operations costs, BT Police costs, RSSB costs, maintenance costs, financing costs and corporation tax compared to that for variances in traction electricity, the licence fee and safety levy and some elements of renewals and enhancements spend, the approach is consistent with our general treatment of these costs in our PR08 determination.

6.14 This is because we will ensure that Network Rail will retain/bear the variances in income, support costs, operations costs, BT Police costs, RSSB costs, maintenance costs, financing costs and corporation tax but it will not keep/pay the related corporation tax effects because our policy is that Network Rail should be incentivised on a net of tax basis. We implement this policy by not adjusting the roll forward of corporation tax balances for these issues. However, we will compensate Network Rail for variances in the costs of traction electricity and the licence fee and safety levy and variances in some elements of renewals and enhancements spend including the related corporation tax impact. We do this by adjusting the roll forward of corporation tax balances for these issues.

6.15 In PR08, some aspects of the calculation of Network Rail's corporation tax payments where Network Rail could possibly claim enhanced allowances (e.g. for research and development expenditure or expenditure on energy saving or environmentally beneficial equipment) were uncertain and Network Rail did not provide an estimate of the impact of these issues. Given this uncertainty, we assumed that Network Rail would not receive any benefit from these schemes. However, we said in the PR08 determination that we would adjust the roll forward of corporation tax balances in CP5 for any additional allowances that

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[117] This means changes in corporation tax excluding the underlying differences in income, expenditure and financing costs, e.g. if a capital allowance rate changed.

[118] The treatment of business rates will follow our decision on whether Network Rail should be compensated for changes in these costs in CP4.

Network Rail has gained. Therefore, we have asked Network Rail to forecast the effects of these issues for CP5 and we will make the adjustment in our PR13 determination. Also, Network Rail has changed the treatment of some of its costs, so we will consider whether these changes should affect the CP5 opening corporation tax balances.

Roll forward of corporation tax balances from CP5 into CP6

6.16 The CP5 allowances for income, support costs, operations costs, BT Police costs, RSSB costs, maintenance costs, financing costs and corporation tax are likely to be set on an ex-ante basis, so Network Risk will bear the cost of an overspend and benefit from an underspend.

6.17 There are two main options for how we roll forward corporation tax balances from CP5 into CP6. We can either:

(a) take the PR08 approach as set out above, which is the same approach as we used to roll forward corporation tax balances from CP4 to CP5 and is consistent with our overall approach to risk and incentives, as we think it is appropriate that Network Rail is exposed to the net of tax effect of an underspend/overspend in income and expenditure; or

(b) take a simpler approach to the roll forward of corporation tax balances and just use our forecast of Network Rail's efficient CP5 opening balances as the basis of our calculation of Network Rail's efficient corporation tax payments in CP5, given that Network Rail is not forecasting to make significant corporation tax payments in CP5 and may not be affected by corporation tax incentives.

6.18 We are seeking views on these options as option (a) is more consistent with our PR08 approach and our approach to incentives, whereas option (b) is arguably simpler.

Questions

6.19 We would like to know your views on all of the issues raised in this chapter, in particular the questions summarised in the box below.

Chapter 6: Questions for stakeholders
Q6.1: What are your views on the options we set out for our approach to corporation tax in CP5?

7. Other financial issues

Key messages from this chapter

- We are proposing to allow part of Network Rail's income to be provided directly by the governments through network grants, which will be set ex-ante for each year of CP5, as we did in CP4.
- We will review the activities that Network Rail may be allowed to carry out in addition to its core business and consult on the options for its financial ring-fence in our draft determinations and conclude in our final determinations. This will help us to deliver our key transformational goals, especially aligning incentives and having a clear focus on what matters to passengers, freight customers and taxpayers – particularly improving value for money.
- In our May 2012 document, we proposed that we will disaggregate the effect of the PR13 financial framework, e.g. we will set out indicative interest costs for the operating routes. This is consistent with our key transformational goals, especially a more disaggregated approach – increasing transparency and access to information, facilitating greater localism, and supporting more disaggregation in the industry (for example through Network Rail devolution) will provide for a more comparative approach to regulation and a better understanding of costs, revenues and subsidy across the sector.

Introduction

7.1 This chapter covers the following other financial issues:

(a) network grants;

(b) financial ring-fence; and

(c) disaggregation of the financial framework.

Network grants

Introduction and background

7.2 A proportion of Network Rail's revenue requirement has in the past been paid directly by DfT and Transport Scotland to Network Rail in the form of network grants, in lieu of fixed track access charges on a pound-for-pound basis. The level of the network grants is similar to our forecast of Network Rail's capital expenditure and the DfT and Transport Scotland want to account for it as capital expenditure under their accounting rules.

7.3 The governments' accounting rules say that direct grants paid to Network Rail are accounted for as capital expenditure in the governments' accounts, whereas the equivalent money paid as government subsidies to franchised train operators (who in turn pay track access charges to Network Rail) are accounted for as resource (current) expenditure.

7.4 In PR08, DfT and Transport Scotland requested, and ORR approved, the payment of network grants as a substitute for access charges in order to meet the governments' accounting rules set by two financial tests[119]. This resulted in around two-thirds of Network Rail's income in CP4 being forecast to come from network grants. These rules mean that money paid as government subsidies to franchised train operators (who in turn pay track access charges to Network Rail) is booked as resource expenditure in national accounts but payments to Network Rail are booked as capital expenditure.

7.5 The RVfM study recommended stopping the payment of network grants to Network Rail to ensure that it receives all its funding through train operators and property income – in order to improve Network Rail's customer focus, and help drive better value for money.

Governments' views

7.6 The governments in England & Wales and Scotland have made the following arguments to us in support of the continuation of network grants to Network Rail:

(a) industry structure. The emergence of the new industry structure and procedures through the Railways Act 2005 clarify the roles and responsibilities of the governments and other parties;

(b) the governments' accounting rules. The accounting rules that governments throughout the European Union must adhere to do not allow grants to the private sector to be accounted for as capital formation, unless paid directly to the private sector entity undertaking the capital formation. Therefore, such grants cannot be routed through the franchised train operators and be accounted for as capital expenditure and the governments have told us that it is not possible to make changes to government accounting rules; and

(c) process issues. It is not a realistic long-term structure for providing funding to Network Rail (that is to be accounted for as capital for public expenditure (PEx) control purposes) for it to be based on a chain of transactions involving third parties such as the franchised train operators. This is because it would involve changing the way in which the governments – and bodies which are independent of the governments like the Office for National Statistics (ONS) – compile complex financial and fiscal information. In particular:

(i) the treatment for PEx control of spending by the governments' departments follows rules set out by the Treasury (HMT). This is aimed at ensuring that data on PEx provided by HMT to the ONS is readily and accurately compiled by ONS into the necessary structure and rules for national accounts[120]. Changing the accounting treatment of network grants in the governments' accounts would therefore need the agreement of the independent ONS and would have complex accounting implications across the governments; and

(ii) there is a need to ensure that data can be consolidated on a consistent basis across the governments. Due to the scale and frequency of the exercise of consolidating data for national accounts, the process needs to be carried out on the basis of straightforward "systems" rules governing the interface between particular data sets, rather than the direct consideration of individual transactions.

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[119] These tests are the investment test and the market body test, which are defined later.

[120] National accounts data is used for analysing the economy as a whole, e.g. providing data on GDP, and also for recording key fiscal aggregates on government financial activities, e.g. the "deficit" and public sector net debt.

Our view

7.7 The main issues with allowing a proportion of Network Rail's revenue requirement to be paid directly by DfT and Transport Scotland in the form of network grants are that it can, or at least appear to, blur the accountabilities of Network Rail, and the accountability of it to train operators. Direct payments to Network Rail can also worsen the incentives on Network Rail as it could make it appear like it is less of a commercial business, which could reduce its focus, e.g. on cost control. It also worsens the transparency of the whole industry reporting of financial performance[121].

7.8 This is particularly important at the moment as there is a real focus on whole-industry performance. One of the effects of paying the network grants straight to Network Rail is that it makes Network Rail appear to be the loss making part of the industry. However, the real issue is that, at the moment, the total costs of the industry cannot be recovered by charges and the whole industry needs to work together to reduce costs and increase income.

7.9 Therefore, our preferred method of funding Network Rail is for all of its income to come from franchised train operators and other customers. This is in line with our preference for cost-reflective charges, which will in turn send signals for the efficient usage of the network.

7.10 However, we recognise that the emergence of the new industry structure and procedures through the Railways Act 2005 clarify the roles and responsibilities of the governments and other parties. In particular, the HLOSs give a clear role for the governments in respect of their relationship to Network Rail. We also recognise that, at the moment, if we did not allow network grants to be paid in lieu of fixed track access charges, the funds available to the Secretary of State and Scottish Ministers could be affected due to the governments' accounting rules and the processes the governments use to record expenditure.

7.11 In determining our PR13 policies, we need to take into account all of our statutory duties. In relation to this issue we consider that our duty to have regard to the funds available to the Secretary of State and our duty that requires us, in summary, to have regard to the expenditure that is to be incurred by Scottish Ministers are particularly relevant.

7.12 Taking all these factors into account, we are proposing to allow part of Network Rail's income to be provided directly from the governments through network grants, which will be set ex-ante for each year of CP5. Following consideration of any responses we receive to this document, we intend to confirm our approach in our draft determinations.

Calculation of the level of network grants

7.13 Although the governments' accounting rules are a matter for the governments, we consider that, if we do allow network grants to be paid then it is appropriate to be consistent and retain the approach used in CP3 and CP4, where both the investment and the market body tests were used to determine the ex-ante level of network grants.

7.14 The two financial tests that have to be met are:

(a) **investment test:** this states that network grants that are accounted for as capital expenditure in the governments' accounts, cannot exceed Network Rail's capital investment (i.e. renewals and enhancements). Any network grants paid in excess of capital investment are accounted for as

[121] Our report on whole-industry financial performance for 2010-11 is available at: http://www.rail-reg.gov.uk/server/show/ConWebDoc.10814.

resource expenditure. This test applies in respect of the governments in England & Wales and Scotland separately; and

(b) **market body test:** this test requires that Network Rail's annual income from sales (equal to access charges plus other single-till income) covers at least half of the company's production costs (equal to operating and maintenance expenditure and statutory depreciation). This test applies to Network Rail as a whole and separate calculations do not need to be made for England & Wales and Scotland.

7.15 We recognise the need to allow sufficient headroom above the level of network grants to accommodate variances in income and costs between our assumptions and the outturns and we are considering the appropriate level of headroom[122]. We will discuss this further in our draft determinations. These fluctuations could include changes to the level of variable charges, changes to planned expenditure due to out/underperformance of our determination or re-phasing of engineering work, and also for any 'fine-tuning' in the delivery of outputs set out in the HLOSs, e.g. if Network Rail and the franchised train operators make adjustments to the outputs each is undertaking in CP5 to achieve the HLOSs.

7.16 Any change to output requirements between Network Rail and the franchised train operators would result in financial transfers between Network Rail and franchised train operators, which could have an effect on either the investment or market body tests. Similarly, passenger transport executives (or other local rail funding bodies) may make increments/decrements to the level of train service provision with impacts on Network Rail's income and expenditure levels that would affect the two tests. We would also need to consider the effect of the government's proposals on decentralisation of funding and specification responsibility (i.e. localism) on the tests.

7.17 We consider that the governments should be able to know their ex-ante position on the levels of CP5 network grant payments, in the context of a reasonably firm understanding of Network Rail's CP5 expenditure and income forecasts determined through PR13 (taking into account a prudent level of headroom). Also, changing network grant payments creates an administrative burden and presentational/accountability issues.

7.18 We will discuss with the governments whether the above advantages of setting out an ex-ante schedule of network grant payments in CP5 outweigh the benefits to the governments of having the facility to make adjustments to the payments. In PR08, we thought that the benefits of setting out an ex-ante schedule of network grant payments did outweigh the advantages to the governments of not having a fixed schedule of network grant payments.

7.19 Therefore, once we have set out the schedule of network grant payments for CP5 as part of PR13, we are proposing that it is not appropriate or necessary to allow adjustments during CP5, for the following reasons:

(a) accountability issues. Allowing a proportion of Network Rail's revenue requirement to be paid directly by DfT and Transport Scotland in the form of network grants can, or at least appear to, blur the accountabilities and status of Network Rail, and the accountability of it to train operators. Setting out an ex-ante schedule of network grants for each year of CP5, should help to minimise concerns about accountability compared to a situation where there are regular changes as there is less involvement by the governments in the price control process within the control period; and

(b) clarity and stability. We, and we think the industry, prefer stability, without adjustments to network grants being made from year to year. Following from the previous point, continual adjustments could

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[122] For PR08, the headroom we included was 5% for the market body test and there was no headroom for the investment test.

call into question the accountability of Network Rail. In addition to this, the administrative work required to make the changes to network grants and track access charges creates an additional administrative burden for all parties.

7.20 In determining our PR13 policies, we need to take into account all of our statutory duties. In relation to this issue we consider that our duty to have regard to the funds available to the Secretary of State and our duty that requires us, in summary, to have regard to the expenditure that is to be incurred by Scottish Ministers are particularly relevant and support our proposal to allow part of Network Rail's income to be provided directly from the governments through network grants, which will be set ex-ante for each year of CP5.

Grant dilution

7.21 Current track access contracts include a provision that automatically increases track access charges, if the governments do not pay network grants according to a pre-determined schedule, to ensure that Network Rail recovers the revenue that it is due[123].

7.22 In order to ensure that Network Rail can finance its activities in the unlikely situation where the governments were not meeting their funding obligations, our intention is to include the same, or a similar, provision in track access contracts for CP5.

Transparency

7.23 It is particularly important to improve the transparency of industry cash flows, so we will include an ex-ante schedule of network grants for each year of CP5 in our draft and final determinations. This should reduce concerns about accountability compared to an alternative situation where there are regular changes (as there is less involvement by the governments in the price control process within the control period).

7.24 This schedule will show the direct network grant payments for England & Wales and Scotland separately for each year of CP5 and we will, for the purposes of transparency, indicate what the appropriate level of fixed track access charges for each train operator would be in the absence of direct network grant payments. Our indicative charges by operating route[124] will also be shown both with and without direct network grant payments. This will allow us to show the forecast subsidy for each operating route. We will report on the actual position each year in our whole industry financial reporting.

7.25 This will include showing what the charges would be if the equity surplus and additional amortisation adjustments had not been made (i.e. the full cost of capital was included in the net revenue requirement and total amortisation was just average long-run steady state renewals plus the amortisation of the non-capex RAB). If these charges were faced by train operators, they would be reflected in franchise bids, thereby increasing the subsidy requirements or reducing premium payments[125].

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[123] Part 3A of Schedule 7 of the track access contracts also includes provisions that automatically increase track access charges, when conditions are placed on the payment of network grants.

[124] Network Rail's operating routes are: Kent & HS1, Sussex, Wessex, Western, Anglia, East Midlands, Wales, London North Western, London North Eastern and Scotland.

[125] If there were no direct network grants, and if access charges were based on a fair allocation of fixed and common costs, we estimate that at present, all franchised train operators would be receiving government subsidy (there would be no premium paying franchised train operators).

Financial ring-fence

Introduction and background

7.26 The financial ring-fence protects Network Rail's funders and customers from the company being exposed to financial risks, e.g. it limits Network Rail from taking part in activities that are not part of its core business as the operator of the majority of Great Britain's rail infrastructure.

7.27 As part of PR08, we reviewed some aspects of the financial ring-fence but deferred a review of other financial ring-fence issues. The work we deferred included a review of the activities that Network Rail is permitted to carry out under the provisions of its network licence. We did consult on this issue in March 2010[126] but deferred reaching a conclusion as the structure of the industry was being reviewed, which could have impacted on our conclusions. Although there is still some uncertainty about the future structure of the industry there is more clarity in some areas. Therefore, we will start to discuss with Network Rail, DfT and Transport Scotland and other stakeholders their views of the activities that Network Rail should be permitted to carry out under the provisions of its network licence. To aid these discussions, Network Rail is going to send us a paper setting out its views on these issues, e.g. how it thinks that income from its investment projects business unit should be treated.

7.28 Network Rail has said in the past that it would like a simpler financial ring-fence and in its response to our May 2011 document said that it is keen to pursue new value-enhancing revenue opportunities, which should reduce its dependence on government subsidy. An important enabler for this is that the regulatory regime/financial ring-fence needs to be flexible to support such opportunities.

7.29 In principle, we would agree that the financial ring-fence should be as simple as possible. But given that it has legal consequences, the licence needs to be drafted in a way that precisely implements our policies. Therefore, making the financial ring-fence simple is not easy but we will consider simplifying it where possible. Network Rail's paper on the financial ring-fence will provide more clarity about its views on these issues.

7.30 We will consult on the options for Network Rail's financial ring-fence in our draft determinations and conclude in our final determinations.

Issues

7.31 Our proposals on Network Rail's financial framework as part of PR13 can affect the financial conditions of Network Rail's network licence. In particular, the high-level issues include:

(a) any appropriate changes required as a result of industry reform initiatives;

(b) our review of the appropriate level to use for the restriction on Network Rail's level of financial indebtedness; and

(c) updating the financial ring-fence to reflect best practice.

7.32 Network Rail has recently announced that it will open the investment projects part of its business to competition and carry out more railway consultancy. In order to ensure a level playing field between Network Rail and potential competitors, we will need to consider how the financial ring-fence will operate for these activities. In particular, we need to understand the risks of these activities and who should bear them, consider how these activities are financed and ensure that the transactions between Network Rail's

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[126] Our consultation is available at: http://www.rail-reg.gov.uk/upload/pdf/ring-fence-consultation-310310.pdf.

core business and its other activities are as transparent as possible and take place on an arm's length basis.

7.33 In addition to licence changes, we also need to consider whether we need to further change Network Rail's regulatory accounts to make sure that, for example, Network Rail's alliancing activities are sufficiently transparent. This could also apply to other industry reform initiatives.

Disaggregation of financial issues

7.34 In PR08, we established separate price controls for CP4 for Network Rail's activities in both England & Wales and Scotland. This was in response to the devolution of responsibility for rail strategy and funding to the Scottish Government which followed from the Railways Act 2005.

7.35 Although in PR08 we established separate price controls for Network Rail's activities in England & Wales and Scotland, we recognised that Network Rail is a GB wide company and finances itself on that basis. We did not require Network Rail to establish separate finance companies for England & Wales and Scotland. In PR13, we see benefits in further disaggregating the price control between England & Wales and Scotland, where this is feasible.

7.36 In PR08 there was no further separation (e.g. to operating routes) below the England & Wales and Scotland level, apart from the partial disaggregation of some outputs such as the passenger performance measure (PPM).

7.37 In our May 2012 document, we said that we will do as much as we can to disaggregate Network Rail's price control and prepare the way, without fettering our discretion and subject to further consultation, potentially to financially separate operating route price controls in the future. This is because of the benefits that further disaggregation would bring in terms of:

(a) the greater scope for comparative regulation;

(b) better understanding of Network Rail's income and costs;

(c) increased transparency of costs and revenues, which is essential for the route-level efficiency benefit sharing mechanism (REBS);

(d) better whole-industry incentives;

(e) better local decision making (localism); and

(f) enabling change in the railway industry.

7.38 We currently, subject to further consultation, envisage being in a position to undertake financially separate price controls for CP6. Therefore, in order to facilitate this in CP5 we will:

(a) improve transparency by providing information on revenues and costs at the operating route level;

(b) make our assessments that underpin our calculation of Network Rail's revenue requirement, e.g. expenditure assessments at the operating route level where possible; and

(c) when we are confident that our operating route assessments are robust, we can consider making operating route determinations of revenues, charges and outputs, e.g. operating route variable charges.

7.39 Given that Network Rail has devolved responsibility for its operations to an operating route level we will focus our disaggregation in England & Wales on the operating route level, instead of other levels of geographical separation.

7.40 As a first step, we already require Network Rail to disaggregate its regulatory accounts between its operating routes. This disaggregated information will be audited and included in Network Rail's regulatory accounts for the year 2011-12 onwards, which were published in July 2012. Also we have worked with the railway industry to produce annual whole industry financial information, which was published for the first time in January 2012 and we will be working with the industry to refine this reporting over time.

7.41 As we set out in our May 2012 document, our proposals for a more disaggregated approach to the England & Wales price control at an operating level in relation to financial issues for CP5 are:

(a) amortisation. We will make our assessment by operating route and publish our assumptions;

(b) provisions for dealing with risk and uncertainty. As we are not intending to separate the revenue requirement in CP5 and we will take a risk sharing approach to efficiency sharing, at the moment, we do not think separate risk and uncertainty provisions, such as re-openers by operating route, are needed; and

(c) other financial issues. Indicative estimates of RAB and debt (and hence financing costs) will be calculated by operating route to aid transparency and provide a basis for any further development. However, we will not make separate cost of capital assumptions and financeability adjustments by operating route as that would be premature because the revenue requirements and other key parts of our regulatory framework will not be separate, e.g. our approach to risk and uncertainty.

Outperformance

7.42 In our May 2012 document, we confirmed the incentive strengths for opex and capex. Since then we have considered whether that approach needs refining to encourage Network Rail to materially outperform our determination and to avoid materially failing to deliver our determination. Also, we are considering whether efficiency initiatives that are genuine 'game changers' should be more heavily incentivised than normal efficiency savings as they are important in identifying ways to meet the long-term efficiency challenge.

7.43 This raises a number of issues, including:

(a) how do we distinguish between normal efficiency savings and outperformance, i.e. which efficiency initiative takes Network Rail beyond the target level and into the outperformance area;

(b) should any changes to incentives be symmetrical, i.e. should the financial consequences (how much money Network Rail keeps/pays out) of a material outperformance be the same as for a material underperformance;

(c) while we want our incentives to encourage appropriate management actions, we also need to keep the calculation of efficiency as simple as possible. These two objectives can conflict with each other, so we need to consider ways to improve incentives without overly complicating the reporting process. We will report on this further in our October 2012 efficiency and expenditure workshop, where we will consider CP5 efficiency reporting; and

(d) how do we distinguish between a 'game changer' and a normal efficiency initiative.

Questions

7.44 We would like to know your views on all of the issues raised in this chapter, in particular the questions summarised in the box below.

Chapter 7: Questions for stakeholders
Q7.1: What are your views on our proposal to allow part of Network Rail's income to be provided directly by the governments through a network grant, which will be set ex-ante for each year of CP5? Q7.2: What are your views on the activities that Network Rail should be allowed to carry out? Q7.3: What are your views on increasing the strengths of the incentives on Network Rail to materially outperform our determination and to avoid materially failing to deliver our determination and should we consider more heavily incentivising genuine 'game changing' initiatives?

Annex A: List of consultation questions

Introduction

This annex includes all the consultation questions from the rest of the document.

Questions

Q3.1: What are your views on our proposed approach to indexing Network Rail's allowed revenue and RAB for inflation. In particular, that we are proposing to set an ex-ante assumption for both general inflation and input price inflation in our determination of access charges for CP5?

Q3.2: What are your views on our proposal not to provide Network Rail with an in-year risk buffer?

Q3.3: What are your views on our proposal to simplify the mechanism to re-open Network Rail's access charges review by removing some of the specific re-openers?

Q3.4: What are your views on our proposed treatment of traction electricity, industry costs and rates, e.g. BT police costs?

Q3.5: What are your views on our current thinking that the maximum level of financial indebtedness that Network Rail can incur should at no point exceed a limit set between 70-75% in CP5?

Q4.1: What are your views on how we could handle an industry reform initiative, e.g. further alliances or a concession?

Q4.2: What are your views on our proposal to set the FIM fee reflecting a long-run view of the credit enhancement that Network Rail is provided with?

Q4.3: What are your views on our proposal to take account of the cost of embedded debt in our forecast of efficient financing costs?

Q4.4: What are your views on how we are proposing to assess financial sustainability?

Q4.5 What are your views on our proposal to keep the introduction of the adjusted WACC approach as simple and transparent as possible by calculating efficient financing costs on a cash basis and by taking the normal regulatory approach to indexing the whole of the RAB?

Q5.1: What are your views on the treatment of reactive maintenance and how to calculate average long-run steady state renewals for the amortisation calculation?

Q5.2: What are your views on our proposal not to index renewals for changes in input prices and how should we take account of the difficulty that we have experienced in CP4 in confirming that renewals underspends have been efficient?

Q5.3: What are your views about legacy debt and RAB?

Q5.4: What are your views on our proposal to keep using the opex memorandum account?

Q6.1: What are your views on the options we set out for our approach to corporation tax in CP5?

Q7.1: What are your views on our proposal to allow part of Network Rail's income to be provided directly by the governments through a network grant, which will be set ex-ante for each year of CP5?

Q7.2: What are your views on the activities that Network Rail should be allowed to carry out?

Q7.3: What are your views on increasing the strengths of the incentives on Network Rail to materially outperform our determination and to avoid materially failing to deliver our determination and should we consider more heavily incentivising genuine 'game changing' initiatives?