OFFICE OF RAIL REGULATION

Annual efficiency and finance assessment of Network Rail 2010-11

September 2011

Contents

Executive summary

Introduction

1. Network Rail is the monopoly railway infrastructure manager in Great Britain. One of our key roles as a regulator is to limit the charges that Network Rail can levy for access to this infrastructure. We do this in periodic reviews of charges, the last of which we concluded in 2008 setting charges for the period 2009-10 to 2013-14. This review of charges (sometimes called a price control) was called the PR08 determination and covers the period from 1 April 2009 to 31 March 2014 (control period 4 (CP4)).

2. During a review we assess what activities Network Rail needs to undertake to efficiently operate, maintain, renew and enhance its infrastructure, and what the efficient cost of these activities are.

3. In doing this review, we challenge Network Rail to improve its efficiency. During the period until the next review we monitor Network Rail's expenditure and its progress in improving its efficiency.

4. This document provides our assessment of Network Rail's efficiency and financial performance for the year ending 31 March 2011[1] to Network Rail's customers, funders and other interested parties separately for Great Britain, England & Wales and Scotland. This includes an assessment of whether Network Rail is operating within the financial settlement we set out in our 2008 periodic review (PR08 determination).

5. We also monitor Network Rail's performance, including in respect of safety risk, train performance, asset performance and planning. These assessments are included in our Network Rail Monitor publication. The Monitor covering the 2010-11 financial year (the 2010-11 Q4 Monitor) was published on 14 June 2011.[2]

6. We assess Network Rail's efficiency in two ways. First, we monitor how Network Rail is progressing against the efficiency assumptions we set out in our PR08 determination. Second, we monitor how Network Rail is progressing against the trajectory it has set out for itself in order to achieve the efficiency assumptions we set for 2010-11. In making our assessment for

[1] The second year of control period 4 (CP4).

[2] The 2011 Q4 Network Rail monitor is available at http://www.rail-reg.gov.uk/upload/pdf/network_rail_monitor_1011q4.pdf.

2010-11 we have drawn on a report conducted jointly for us and Network Rail by Arup.

7. Our assessment covers Network Rail's expenditure on operating,[3] maintaining,[4] renewing[5] and enhancing[6] the network and the income it receives. In 2010-11, Network Rail spent 21% of its total expenditure on operating expenditure (14% on controllable expenditure and 7% on non-controllable expenditure), 17% on maintenance expenditure, 35% on renewals expenditure and 27% on enhancement expenditure.

8. In broad terms, our assessment reveals that Network Rail has:

   (a) spent less on operating expenditure than last year due to cost savings but the savings were lower than we expected;

   (b) spent less on maintenance expenditure than last year due to cost savings, which were higher than we expected;

   (c) spent less on renewals expenditure than last year, which was lower than we expected. Partly this is due to cost savings, which were higher than we expected, and partly because work has been deferred to the next three years;

   (d) spent more on enhancement expenditure than last year but less than we expected. This is due to work on projects funded by our PR08 determination being deferred to the next three years, partly offset by Network Rail doing more work on other projects;

   (e) received income largely in line with what we expected;

   (f) is operating within the financial limits we set out in our PR08 determination; and

   (g) has a growing challenge to deliver the work it has deferred to the next three years.

[3] Operating expenditure includes 'controllable' and 'non-controllable' costs. Controllable costs include operations & customer services, e.g. signallers and support costs, e.g. human resources. Non-controllable costs include traction electricity costs.

[4] Maintenance expenditure relates to activities that sustain the condition and capability of the existing infrastructure to the previously assessed standard of performance.

[5] Renewals expenditure consists of expenditure where the existing infrastructure is replaced with new assets. Such expenditure does not result in any change or enhancement of the performance of the original asset.

[6] Enhancement expenditure is defined as expenditure resulting in a change to network outputs, which improves network capacity or capability (e.g. enabling higher speeds).

Network Rail’s delivery of outputs and efficiency savings

9. In our 2010-11 Q4 Monitor we said that Network Rail had made progress over the past year in successfully delivering a number of major rail projects, however some performance setbacks mean that it has some big challenges ahead. In particular Network Rail needs to pick up momentum if it is to meet key performance targets for the period 2009-10 to 2013-14 as there were performance setbacks and failures. Although the exceptionally severe 2010-11 winter conditions were a major factor. Network Rail, in the circumstances, managed performance reasonably well.

10. We set out below an overview of our assessment of Network Rail’s efficiency reporting in 2010-11. In particular, we are concerned that Network Rail’s delivery challenge continues to grow and its efficiency reporting is not robust enough. The key points are:

    (a) Network Rail has reported that it has improved its controllable opex and maintenance efficiency in 2010-11. Arup’s review of the efficiency of controllable opex and maintenance was high-level and the focus of their report was on renewals. Arup did not identify any concerns with the level of efficiency Network Rail has reported, although they did say that Network Rail needs to improve its process for reporting maintenance efficiencies;[7]

    (b) Network Rail has spent less on renewals in 2010-11. This is in part due to having achieved cost savings, but is due in part to having deferred activity until 2011-12 to 2013-14. Sustainable reductions in renewal volumes which do not jeopardise the safe delivery of required outputs are a legitimate and important source of efficiency (‘scope efficiency’). However, deferral is not counted as efficiency and we take a very firm line on this, which means that where there are uncertainties in the reporting of efficiencies, we take a cautious view when we assess the efficiency that has been declared. Also, storing up activity for 2011-12 to 2013-14 could make it harder for Network Rail to deliver its CP4 outputs in a sustainable way. Overall, we think Network Rail is on course to deliver its planned CP4 volumes of work. However, we are concerned about the delivery challenge as discussed below. We also have serious concerns about Network Rail’s processes for reporting renewals efficiencies, which has in 2011-11 resulted in uncertainties in reported renewals efficiencies. This is discussed further below;

[7] The improvements required include proving the sustainability of reported efficiencies by assessing the impact on performance, condition, risk and capital expenditure.

(c) Network Rail has also spent less on enhancements during 2010-11 than we expected it to. This is largely due to work on projects funded by our PR08 determination being deferred to 2011-12 to 2013-14, partly offset by Network Rail doing more work on other projects. Overall, it has not reported any enhancement efficiencies in 2010-11. Although Network Rail has made steady progress and overall is on course to deliver its CP4 enhancement projects, we think several projects are at risk of being delivered late; and

(d) Network Rail's delivery challenge continues to grow as a result of scheme slippage due to planning uncertainties, e.g. rolling stock availability, additional projects being developed (such as electrification in England & Wales and the Edinburgh to Glasgow improvements in Scotland) and deferral of renewals. It is important that Network Rail delivers its CP4 outputs, so it is assessing its capability to deliver the required outputs and we will report on this shortly.

Network Rail's reporting of renewals efficiency

11. It is important that Network Rail can robustly report on its performance to stakeholders. We also hold Network Rail to account for delivering the outputs for which we agreed in our PR08 determination it could receive revenue from customers and taxpayers. Whilst efficiency is not an output in this sense, it is important in several ways. First, improving efficiency is essential if the railway is to provide value for money for customers and taxpayers. Second, Network Rail's reporting of efficiency also provides a key input into the calculation of Network Rail's management bonuses through its management incentive plan. Third, in our PR08 determination we introduced a mechanism that allows efficiency benefits to be shared between Network Rail and train operating companies and freight operating companies, in order to help align incentives through the industry. Finally, Network Rail's costs at the end of the period 2009-10 to 2013-14 are an important input into our determination of charges for 2011-12 to 2013-14.[8]

12. Arup has identified a number of important issues with Network Rail's processes for reporting renewals efficiencies.[9] We have worked closely with Arup to understand how these issues could affect Network Rail's reporting of efficiency in 2010-11 and for the future.

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[8] Our periodic review of charges for that period is called PR13.

[9] These issues include the lack of clear auditable evidence to justify efficiencies. Arup's report is available at http://www.rail-reg.gov.uk/upload/pdf/nr-regulatory-accounts-data-assurance-sep11.pdf.

13. Although it will always be difficult, and a degree of judgement will always be required, a clear distinction between efficiency and deferral can be made but the burden of proof is on Network Rail to show that a reduction in expenditure from the levels we assumed during the PR08 determination is efficient. In particular, the PR08 determination said that Network Rail will not benefit from an underspend unless it can show that it has met all its outputs and the serviceability and sustainability of the network has not been adversely affected.

14. If Network Rail cannot robustly show that the efficiency it is claiming is genuine and consistent with our PR08 determination, then we cannot accept that an underspend is efficient. Therefore, it is very important that Network Rail has robust systems and processes in place to identify efficiencies.

15. Network Rail has recognised that it has not yet met our expectations for efficiency reporting so far in 2009-10 and 2010-11 and is developing an improvement plan to ensure a more robust process for reporting efficiencies in 2011-12. As part of the improvement plan, Network Rail has committed to improve the documentation of its policies and processes for calculating efficiencies.

16. Network Rail’s improvement plan will be reviewed by Arup to assess whether it addresses the issues they raised in their report. We will also review whether Network Rail’s improvement plan meets our needs.

17. We will also commission Arup to undertake an interim audit of Network Rail’s period six (mid-year) efficiency calculations in November. In January we will then assess whether the current weaknesses have been addressed and if necessary identify the actions Network Rail may need to undertake to further improve the robustness of its 2011-12 efficiency reporting. If Network Rail’s renewals efficiency reporting processes do not improve we will consider whether Network Rail is in breach of condition 1 of its network licence (network management) and condition 11 of its network licence (regulatory accounts).

Key financial data

18. Network Rail is ahead of the overall efficiency assumptions we set out in our PR08 determination and is operating within the financial settlement[10] we have set for 2010-11. However, we have important concerns about Network Rail’s processes for reporting renewals efficiencies which has resulted in

[10] This financial settlement includes the adjusted interest cover ratio trigger level to re-open the access review and the net debt to RAB ratio limit.

uncertainty in the level of renewals efficiency that has been reported by Network Rail. This is a material issue as Network Rail is reporting cumulative renewals efficiencies of £432m, which represents over two-thirds of Network Rail's total reported efficiencies for 2010-11.

19. Based on these uncertainties, we consider that cumulative renewals efficiencies would be more prudently stated as being in a range from £342m to £432m (13.1% to 16.6% on a REEM and PR08 determination basis) and total efficiencies for operating, maintenance and renewals (OMR) on a REEM basis in a range from £539 to £629m (11.3% to 13.2%).

20. Table 1 provides a summary of Network Rail's key financial data. In the table the actual efficiency improvement on a REEM basis of 11.3% to 13.2% can be compared to Network Rail's REEM trajectory of 12.8%.

Table 1: Summary of key financial data for Great Britain

(£m, 2010-11 prices)	**Actual 2010-11**	**PR08 determination**
Expenditure		
Controllable opex	909	801
Non-controllable opex	419	395
Maintenance	1,068	1,172
Renewals	2,234	2,601
Total OMR expenditure	4,630	4,969
Efficiency improvement – REEM basis	11.3% - 13.2%	n/a
Efficiency improvement – PR08 basis	9.9% - 11.9%	8.1%
Total enhancements	1,730	2,281
Schedule 4 & 8	184	170
Finance		
RAB (estimated)	38,594	41,474
Net debt	24,476	26,893
Financing costs	1,539	1,379
Adjusted interest cover ratio	1.93	1.68
Gearing (net debt/RAB)	63.4%	63.5%
Income		
Franchised track access income	1,603	1,551
Grant income	3,779	3,825
Other single till income	638	616

Expenditure

21. Table 2 provides an analysis of Network Rail's expenditure in 2010-11.

Table 2: Analysis of expenditure

(£m, 2010-11 prices)	Actual	PR08 determination	Variance
Great Britain			
Controllable opex	909	801	-108
Non-controllable opex	419	395	-24
Maintenance	1,068	1,172	104
Renewals	2,234	2,601	367
Sub-total (OMR)	4,630	4,969	339
Enhancements (PR08 determination)	1,053	2,281	1,228
Enhancements (non- PR08 determination)	677	0	-677
Total enhancements	1,730	2,281	551
Schedule 4 & 8	184	170	-14
Total expenditure	**6,544**	**7,420**	**876**
England & Wales			
Controllable opex	826	727	-99
Non-controllable opex	391	361	-30
Maintenance	972	1,061	89
Renewals	1,970	2,266	296
Sub-total (OMR)	4,159	4,415	256
Enhancements (PR08 determination)	906	2,144	1,238
Enhancements (non- PR08 determination)	629	0	-629
Total enhancements	1,535	2,144	609
Schedule 4 & 8	173	160	-13
Total expenditure	**5,867**	**6,719**	**852**
Scotland			
Controllable opex	83	73	-10
Non-controllable opex	28	33	5
Maintenance	96	111	15
Renewals	264	335	71
Sub-total (OMR)	471	552	81
Enhancements (PR08 determination)	147	136	-11
Enhancements (non- PR08 determination)	48	0	-48
Total enhancements	195	136	-59
Schedule 4 & 8	11	10	-1
Total expenditure	**677**	**698**	**21**

22. OMR expenditure is £339m (6.8%) lower than we had expected it to be in our PR08 determination due to lower renewals and maintenance expenditure

being offset by higher operating expenditure. As shown in Table 2, the key variances in Network Rail's expenditure in 2010-11 compared to our PR08 determination were:

(a) controllable opex was £108m (13.5%) higher largely due to Network Rail starting CP4 in a worse position than we had expected in our PR08 expenditure assumption. On a like-for-like basis, controllable opex is £66m (6.7%) lower than in 2009-10 due to cost savings including reductions to staff incentives, expenses and headcount, particularly following the restructuring of the operations and customer services functions;

(b) maintenance expenditure was £104m (8.9%) lower largely due to the restructuring of the maintenance organisation with headcount decreasing by around 10% during 2010-11;

(c) renewals expenditure was £367m (14.1%) lower due to a combination of deferral of work (£265m) and efficiency outperformance (£102m).[11] As we discuss above we have serious concerns about Network Rail's processes for reporting renewals efficiencies, which may result in uncertainties in reported renewals efficiencies; and

(d) total enhancements expenditure was £551m (24.2%) lower largely due to underspend on specific projects including Thameslink[12] (£136m) and underspend on enhancement funds such as the Seven Day Railway[13] (£183m). There are several projects that we think are at risk of being delivered late. Some involve factors that are outside Network Rail's control, but for others Network Rail needs to recover any slippage. Network Rail has agreed to submit to us an assessment of its capability to deliver the enhancements it is committed to deliver in the period 2009-10 to 2013-14 taking account of its renewals programme.

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[11] Deferral and efficiency have been calculated based on Network Rail's reported renewals REEM efficiency adjusted for uncertainties which are explained in Chapter 3 (Efficiency).

[12] The Thameslink project will enable more trains to run through the route from St Pancras to Blackfriars.

[13] The purpose of the Seven Day Railway fund is to finance projects that will allow the railway to be available for use for longer periods of time.

Efficiency

23. Network Rail's OMR efficiencies are summarised in Table 3.[14] We have included a range for renewals efficiencies based on the uncertainties in Network Rail's reporting of renewals efficiencies as explained above.

Table 3: Analysis of efficiency

	Real economic efficiency measure		PR08 determination	
	Actual	**NR trajectory**	**Actual**	**Assumed**
Great Britain				
Controllable opex	3.5%	2.2%	-7.3%	5.5%
Maintenance	13.3%	12.6%	14.6%	6.3%
Renewals	13.1% - 16.6%	16.6%	13.1% - 16.6%	9.8%
Total OMR	**11.3% - 13.2%**	**12.8%**	**9.9% - 11.9%**	**8.1%**
England & Wales				
Controllable opex	3.0%	1.9%	-7.4%	5.5%
Maintenance	13.7%	12.5%	14.2%	6.3%
Renewals	13.6% - 17.2%	17.3%	13.6% - 17.2%	9.8%
Total OMR	**11.6% - 13.5%**	**13.1%**	**10.1% - 12.1%**	**8.1%**
Scotland				
Controllable opex	8.3%	5.6%	-6.7%	5.5%
Maintenance	8.6%	14.5%	18.9%	6.3%
Renewals	9.3% - 11.8%	11.9%	9.3% - 11.8%	9.8%
Total OMR	**9.0% - 10.5%**	**10.2%**	**9.0% - 10.4%**	**8.1%**

24. Network Rail's reported overall efficiency for Great Britain on a 'real economic efficiency measure' (REEM) basis was 13.2% which is 0.4% ahead of its own target trajectory for 2010-11. On a PR08 determination basis, reported efficiency was 11.9% which is 3.8% above our PR08 assumption.

25. REEM and PR08 determination efficiencies are not directly comparable largely due to the use of different baselines against which actual expenditure is compared. For REEM purposes, the baselines are mostly 2008-09 actual expenditure, whereas the PR08 determination baselines are the PR08 expenditure assumptions based on the level of Network Rail's efficiency at the start of 2009-10. The REEM methodology is explained Chapter 3 (Efficiency).

26. The difference in reported efficiency as measured on a REEM and a PR08 determination basis was largely due to controllable opex where our PR08

[14] These are the efficiencies for 2010-11 compared to the baselines at the start of 2009-10 and not just the improvement in efficiency from 2009-10.

determination assumed a lower baseline than the REEM, which is based on 2008-09 actual expenditure.

27. Efficiency in Scotland on a PR08 determination basis was 2.7% lower than for Great Britain overall. Network Rail has attributed the lower efficiency achieved in Scotland as primarily due to the impact of bad weather in the 2010-11 winter affecting scheduled maintenance and renewals work, and due to the different phasing of planned renewals in the period 2009-10 to 2013-14 for Scotland.

28. As explained above, there are uncertainties in Network Rail's reported renewals efficiencies. Based on these uncertainties, we consider that renewals efficiencies could be more prudently stated as being in a range from £342m to £432m (13.1% to 16.6%), and total efficiencies in a range from £539 to £629m (11.3% to 13.2%).

29. We established an efficiency benefit sharing mechanism (EBSM) in our PR08 determination to incentivise train and freight operating companies to support Network Rail's efforts to improve its efficiency. Under the mechanism, train and freight operators share 25% of Network Rail's cumulative outperformance[15] on a number of elements of expenditure and revenue.

30. If Network Rail's renewals efficiencies were included in the EBSM in full then Network Rail would have outperformed in 2010-11 (on a cumulative basis) and approximately £40m in total would be payable to train and freight operators this year.[16] However, if instead the EBSM is calculated using the bottom of our range for renewals efficiencies then there would be no outperformance and hence no payments. Given the uncertainties in Network Rail's reporting of renewals efficiencies, we do not think that it is appropriate now to sanction any EBSM payments until we have sufficient confidence in the efficiencies that Network Rail reports. The fact that we have not sanctioned the EBSM payments will result in train and freight operating companies not receiving payments this year that they might otherwise have received.

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[15] This means expenditure lower than or income higher than our PR08 determination assumption.

[16] Though payments to the majority of franchised operators would be clawed back by the Department for Transport and Transport Scotland under the "clause 18.1"/schedule 9 (no net loss, no net gain) provisions of the franchise agreements. No EBSM payments were made in 2009-10 as Network Rail had not outperformed the PR08 determination per the EBSM calculation.

31. As the EBSM mechanism is cumulative, if the reported efficiencies are confirmed then the outperformance that would have been paid out this year will be added to any outperformance in the future and paid out if there is a payment due in total.

32. In our PR08 determination, we said that after two years we would review the effectiveness of the EBSM mechanism and whether there is merit in altering its scope or detailed design. Given the changes to the way Network Rail reports on efficiency and the industry's discussions about better aligning industry incentives, we will commence this review shortly.

Finance

33. Key financial information is presented in Table 4. At 31 March 2011, Network Rail’s estimate of its overall regulatory asset base (RAB) was £38,594m. This was £2,880m lower than our PR08 assumption largely due to underspend on enhancements and renewals as discussed in Chapter 2 (Expenditure).

Table 4: Analysis of financial information

(£m, nominal prices)	**Actual 2010-11**	**PR08 determination**	**Variance**
Regulatory asset base (RAB)			
Great Britain	38,594	41,474	-2,880
England & Wales	34,563	37,278	-2,715
Scotland	4,031	4,194	-163
Regulatory net debt			
Great Britain	24,476	26,893	2,417
England & Wales	21,939	24,209	2,270
Scotland	2,537	2,683	146

34. At 31 March 2011, Network Rail’s net debt was £24,476m. This was £2,417m lower than our PR08 assumption largely due to the reduced borrowing requirement resulting from the underspend on enhancements and renewals projects.

35. Network Rail’s financing costs in Great Britain were £1,539m which is £160m higher than assumed in our PR08 determination. The increased costs were largely due to inflation being higher than we had assumed increasing accretion on index-linked debt, partly offset by lower financing costs as a result of lower debt largely due to underspend on renewals and enhancements.

36. Network Rail made rebate payments to its customers of £112m. These payments were made through reduced access charges to train operators,

which have been subsequently passed through to the DfT and Transport Scotland.

Income

37. Network Rail's income in 2010-11 is summarised in Table 5. The key variances compared to our PR08 determination were:

(a) franchised track access income[17] was £52m (3.4%) higher largely because of higher traction electricity charges (offsetting higher traction electricity costs, included in non-controllable opex, incurred due to increased electricity prices);

(b) grant income was £46m (1.2%) lower due to a difference between the inflation assumption in the deeds of grant with the Department for Transport and Transport Scotland and the inflation uplift of our PR08 determination from 2006-07 prices to 2010-11 prices, partly offset by a reprofiling of the grant in Scotland, which had the effect of bringing forward £25m into 2010-11 from 2011-12 to 2013-14; and

(c) other single till income was £22m (3.6%) higher largely due to stations and the property portfolio performing better than expected, partly offset by freight income where expectations of increased freight volumes did not materialise.

[17] Franchised track access income includes fixed and variable charges. Variable charges include the traction electricity charge, electrification asset usage charge, capacity charge, station usage charge and schedule 4 and 8 income.

Table 5: Analysis of income

(£m, 2010-11 prices)	Actual 2010-11	PR08 determination	Variance
Great Britain			
Franchised track access income	1,603	1,551	52
Grant income	3,779	3,825	-46
Other single till income	638	616	22
Total income	**6,020**	**5,992**	**28**
England & Wales			
Franchised track access income	1,446	1,395	51
Grant income	3,395	3,459	-64
Other single till income	590	565	25
Total income	**5,431**	**5,419**	**12**
Scotland			
Franchised track access income	157	156	1
Grant income	384	366	18
Other single till income	48	52	-4
Total income	**589**	**574**	**15**

1. Introduction

Purpose of the document

1.1 Network Rail is the monopoly railway infrastructure manager in Great Britain. One of our key roles as a regulator is to limit the charges that Network Rail can levy for access to this infrastructure. We do this in periodic reviews of charges, the last of which we concluded in 2008 setting charges for the period 2009-10 to 2013-14. This review of charges (sometimes called a price control) was called the PR08 determination and covers the period from 1 April 2009 to 31 March 2014 (control period 4 (CP4)).

1.2 During a review we assess what activities Network Rail needs to undertake to efficiently operate, maintain, renew and enhance its infrastructure, and what the efficient cost of these activities are.

1.3 In doing this review, we challenge Network Rail to improve its efficiency. During the period until the next review we monitor Network Rail's expenditure and its progress in improving its efficiency.

1.4 This document provides our assessment of Network Rail's efficiency and financial performance for the year ending 31 March 2011[18] to Network Rail's customers, funders and other interested parties separately for Great Britain, England & Wales and Scotland. This includes an assessment of whether Network Rail is operating within the financial settlement we set out in our 2008 periodic review (PR08 determination).

1.5 We also monitor Network Rail's performance, including in respect of safety risk, train performance, asset performance and planning. These assessments are included in our Network Rail Monitor publication. The Monitor covering the 2010-11 financial year (the 2010-11 Q4 Monitor) was published on 14 June 2011.[19]

1.6 We assess Network Rail's efficiency in two ways. First, we monitor how Network Rail is progressing against the efficiency assumptions we set out in our PR08 determination. Second, we monitor how Network Rail is progressing against the trajectory it has set out for itself in order to achieve the efficiency assumptions we set for 2010-11. In making our assessment for

[18] The second year of control period 4 (CP4).

[19] The 2011 Q4 Network Rail monitor is available at http://www.rail-reg.gov.uk/upload/pdf/network_rail_monitor_1011q4.pdf.

2010-11 we have drawn on a report conducted jointly for us and Network Rail by Arup.

1.7 Our assessment covers Network Rail's expenditure on operating,[20] maintaining,[21] renewing[22] and enhancing[23] the network and the income it receives. In 2010-11, Network Rail spent 21% of its total expenditure on operating expenditure (14% on controllable expenditure and 7% on non-controllable expenditure), 17% on maintenance expenditure, 35% on renewals expenditure and 27% on enhancement expenditure.

1.8 In our 2010-11 Q4 Monitor we said that Network Rail had made progress over the past year in successfully delivering a number of major rail projects, however some performance setbacks mean that it has some big challenges ahead. In particular Network Rail needs to pick up momentum if it is to meet key performance targets for the period 2009-10 to 2013-14 as there were performance setbacks and failures. Although the exceptionally severe 2010-11 winter conditions were a major factor, Network Rail in the circumstances, managed performance reasonably well.

1.9 We have used information received from Network Rail (and other sources) to monitor whether Network Rail is achieving the expected efficiencies in operating, maintenance, renewal and enhancement expenditure and whether it is operating within the financial boundaries set by our PR08 determination.

1.10 The information contained within this report has been compiled from Network Rail's 2010-11 regulatory and statutory accounts, Network Rail's delivery plan and updates to that plan, independent reporter reports, our PR08 determination and other sources as specified.

Structure of the document

1.11 This document presents information and analysis for Great Britain and separately for England & Wales and Scotland where appropriate.

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[20] Operating expenditure includes 'controllable' and 'non-controllable' costs. Controllable costs include operations & customer services, e.g. signallers and support costs, e.g. human resources. Non-controllable costs include traction electricity costs.

[21] Maintenance expenditure relates to activities that sustain the condition and capability of the existing infrastructure to the previously assessed standard of performance.

[22] Renewals expenditure consists of expenditure where the existing infrastructure is replaced with new assets. Such expenditure does not result in any change or enhancement of the performance of the original asset.

[23] Enhancement expenditure is defined as expenditure resulting in a change to network outputs, which improves network capacity or capability (e.g. enabling higher speeds).

1.12 Chapter 2 compares Network Rail's expenditure with the assumptions we made in our PR08 determination, Network Rail's own 2010 delivery plan update and expenditure in 2009-10.

1.13 Chapter 3 assesses Network Rail's efficiency and compares its efficiency with our PR08 determination efficiency assumptions.

1.14 Chapter 4 reviews Network Rail's regulatory asset base, net debt, financial costs, key financial indicators and rebates.

1.15 Chapter 5 compares Network Rail's income in 2010-11 to our PR08 determination assumption, Network Rail's own 2010 delivery plan update and income in 2009-10.

1.16 Annex A contains historic information on expenditure, income, efficiency and finance.

1.17 Annex B contains a reconciliation of our PR08 determination assumptions for controllable opex, maintenance and renewals to the adjusted PR08 determination assumptions for controllable opex, maintenance and renewals.

1.18 All numbers in this document are in 2010-11 prices, unless stated otherwise.

1.19 There might be some differences in numbers in the tables due to rounding.

Feedback

1.20 We welcome any comments on the content of our assessment. Any comments should be sent to:

Gordon Cole

Regulatory Finance
Office of Rail Regulation
One Kemble Street
London
WC2B 4AN

Email: gordon.cole@orr.gsi.gov.uk

Tel: 020 7282 2184

2. Expenditure

Introduction

2.1 This chapter summarises Network Rail's expenditure in comparison to our PR08 determination assumptions,[24] Network Rail's own 2010 delivery plan update and expenditure in 2009-10 (inflated into 2010-11 prices).

2.2 Expenditure includes operating, maintenance, renewals (OMR) and enhancements.[25] We have included explanatory tables in Annex B to provide clarification on how our PR08 determination assumptions were derived. Annex B also explains the post PR08 determination adjustments which have taken place, for example to reclassify some costs between operating and maintenance expenditure.

Great Britain

2.3 Network Rail's total expenditure (excluding non-PR08 funded enhancements) in Great Britain in 2010-11 was £5,867m.[26] This was:

(a) £1,553m (20.9%) lower than our PR08 determination assumption;

(b) £1,042m (15.1%) lower than its own 2010 delivery plan update; and

(c) £413m (6.6%) lower than in 2009-10.

2.4 The differences in expenditure by category are set out in Table 2.1.

[24] Our PR08 determination assumptions refers to the post efficient level of expenditure after it is has been adjusted for issues such as the reclassification of controllable opex and maintenance expenditure. Post PR08 determination adjustments are explained in Annex B.

[25] We assess controllable and non-controllable operating expenditure separately.

[26] This amount excludes non-PR08 funded enhancement expenditure, for example, projects which are funded through the investment framework.

Table 2.1: Comparison of expenditure in Great Britain

(£m, 2010-11 prices)	Actual 2010-11 (A)	PR08 determin-ation 2010-11 (B)	2010 delivery plan update (C)	Actual 2009-10 (D)	PR08 determin-ation variance (B-A)	Delivery plan update variance (C-A)	Prior year variance (D-A)
Controllable opex	909	801	971	975	-108	62	66
Non-controllable opex	419	395	421	454	-24	2	35
Maintenance	1,068	1,172	1,058	1,184	104	-10	116
Renewals	2,234	2,601	2,751	2,412	367	517	178
Enhancements[27]	1,053	2,281	1,555	1,099	1,228	502	46
Schedule 4 & 8	184	170	153	156	-14	-31	-28
Total expenditure	**5,867**	**7,420**	**6,909**	**6,282**	**1,553**	**1,042**	**413**

Source: Network Rail and our own calculations.

Controllable opex

2.5 Controllable operating expenditure (controllable opex) in Great Britain in 2010-11 was £909m. This was £108m (13.5%) higher than our PR08 determination largely due to Network Rail starting CP4 in a worse position than we had expected in our PR08 expenditure assumption. Cumulative controllable opex expenditure for the first two years of CP4 was £200m (11.9%) higher than our PR08 determination.

2.6 Although controllable operating expenditure is above our PR08 determination assumption, Network Rail has made controllable opex savings in 2010-11. On a like-for-like basis controllable opex is £66m (6.8%) lower than in 2009-10[28] and £62m (6.4%) lower than Network Rail's own 2010 delivery plan update. Cost savings include reductions to staff incentives, staff expenses and headcount, particularly following restructuring in operations and customer services. There were also one-off re-organisation payments to contractors made in 2009-10 that were not made in 2010-11. These savings were partly

27 This does not include non-PR08 enhancements expenditure.

28 In Network Rail's 2009-10 internal reporting it reclassified some costs from maintenance to operating costs. In its 2010-11 internal reporting it made a further reclassification of certain pension and staff incentives costs to maintenance costs. We have restated the 2009-10 comparatives to reflect this change. Adjustments to our PR08 determination are set out in Annex B.

offset by fines which included a £3m penalty imposed by the ORR for problems arising from the introduction of the integrated train planning system.

Non-controllable opex

2.7 Non-controllable opex in Great Britain in 2010-11 was £419m. This was £24m (6.1%) higher than our PR08 determination, £2m (0.5%) lower than Network Rail's 2010 delivery plan update and £35m (7.7%) lower than in 2009-10. Variances in non-controllable opex compared to last year are largely due to reduced traction electricity costs as a result of decreased market prices, partly offset by increased cumulo (i.e. business) rates payments.

2.8 Cumulative non-controllable opex expenditure for the first two years of CP4 was £107m (14.1%) higher than our PR08 determination.

Maintenance

2.9 Maintenance expenditure in Great Britain in 2010-11 was £1,068m. This was £104m (8.9%) lower than our PR08 determination, £10m (0.9%) higher than Network Rail's 2010 delivery plan update and £116m (9.8%) lower than in 2009-10. Cumulative maintenance expenditure for the first two years of CP4 is £83m (3.5%) lower than our PR08 determination.

2.10 The main driver of maintenance cost savings has been the restructuring of the maintenance organisation with headcount decreasing by around 10% during 2010-11. Other savings include the reduced use of contractors (particularly in telecoms), standardisation of delivery methods, the introduction of new plant, equipment and technologies, better stock utilisation and stricter overtime approval procedures. Offsetting these savings, Network Rail made a one-off incentive payment to maintenance staff to standardise contractual terms and conditions and has agreed to pay additional travel allowances to relocated staff.

Renewals

2.11 Renewals expenditure in Great Britain in 2010-11 was £2,234m. This was £367m (14.1%) lower than our PR08 determination. Cumulative renewals expenditure for the first two years of CP4 was £1,137m (19.7%) lower than our PR08 determination. These variances were due to a combination of deferral of work to later in CP4 (£265m in 2010-11 and £976m cumulative)[29] and efficiency improvements as explained in Chapter 3 (Efficiency).

[29] Deferral has been calculated based on Network Rail's reported renewals REEM efficiency adjusted for uncertainties which are explained in Chapter 3 (Efficiency).

2.12 Renewals expenditure was £517m (18.8%) lower than Network Rail's 2010 delivery plan update and £178m (7.4%) lower than in 2009-10.

2.13 The independent reporter, Arup, has identified important issues with Network Rail's processes for measuring renewals efficiencies. The resulting uncertainties in Network Rail's reported renewals efficiencies are explained in Chapter 3 (Efficiency).

Enhancements

2.14 Expenditure on enhancement projects in 2010-11 was £1,730m. This comprised £1,053m of expenditure on schemes funded through our PR08 determination and £677m of non-PR08 funded.[30] A detailed breakdown of PR08 funded enhancements expenditure by project can be found in Network Rail's 2010-11 regulatory financial statements and a full list of all enhancements projects is included in Network Rail's 2010 delivery plan update.

2.15 PR08 funded enhancements expenditure was £1,228m (53.8%) lower than our PR08 determination assumption, £502m (32.3%) lower than Network Rail's 2010 delivery plan update and £46m (4.2%) lower than in 2009-10. Cumulative enhancements expenditure for the first two years of CP4 is £1,992m (48.1%) lower than our PR08 determination.

2.16 The variance to our PR08 determination assumption was largely due to:

(a) firstly, Network Rail's 2010 delivery plan update forecast a £726m underspend in 2010-11 on enhancements compared to our PR08 determination assumption. This is due to a significantly different expenditure profile for the majority of schemes over the control period compared to the assumptions made during the PR08 process. In particular this applies to the major projects such as Thameslink and also the funds (such as the Seven Day Railway and Access for All) being less uniform than originally anticipated. In addition, some projects (such as the Northern Urban Centres) have been held up because of uncertainty relating to rolling stock availability; and

(b) there has also been an underspend of £502m on specific project costs that were included within Network Rail's 2010 delivery plan. This was largely due to the rescheduling of work on some of the projects, in particular Thameslink (£181m) and Birmingham New Street (£44m), a

[30] Non-PR08 funded schemes comprise £392m of third party funded schemes and £285m of investment framework projects which consist of government sponsored projects, Network Rail self-financing projects and third party sponsored projects.

reduction in expenditure as the Department of Transport (DfT) are funding certain schemes where expenditure has already been incurred on a pay-as-you-go basis instead of them being RAB funded (£111m), and a slow completion rate for works provided by the Access for All fund (£24m deferral). The most significant overspend was on the Airdrie to Bathgate project (£11m), which was completed this year.

2.17 Network Rail has made steady progress and overall is on course to deliver its CP4 enhancement projects and in particular it has caught up with its internal schedule for delivering project milestones and it is now slightly ahead of plan. However, Network Rail’s delivery challenge continues to grow as a result of scheme slippage due to planning uncertainties, e.g. rolling stock availability, additional projects being developed (such as electrification in England & Wales and the Edinburgh to Glasgow improvements in Scotland) and deferral of renewals.

2.18 Therefore, we think several projects are at risk of being delivered late. Some involve factors, e.g. planning uncertainties that are outside Network Rail’s control, but for others Network Rail needs to recover any slippage.

2.19 These issues mean there is pressure on the remainder of the control period (particularly towards the end) and Network Rail has agreed to submit to us an assessment of its capability to deliver the enhancements it is committed to deliver in the period 2009-10 to 2013-14 taking account of its renewals programme.

England & Wales

2.20 Network Rail’s total expenditure in England & Wales in 2010-11 was £5,238m. This was:

(a) £1,481m (22.0%) lower than our PR08 determination assumption;

(b) £983m (15.8%) lower than Network Rail’s own 2010 delivery plan update; and

(c) £384m (6.8%) lower than in 2009-10.The differences in expenditure by category are set out in Table 2.2.

Table 2.2: Comparison of expenditure in England & Wales

(£m, 2010-11 prices)	Actual 2010-11 (A)	PR08 determin-ation 2010-11 (B)	2010 delivery plan update (C)	Actual 2009-10 (D)	PR08 determin-ation variance (B-A)	Delivery plan update variance (C-A)	Prior year variance (D-A)
Controllable opex	826	727	877	881	-99	51	55
Non-controllable opex	391	361	388	421	-30	-3	30
Maintenance	972	1,061	963	1,082	89	-9	110
Renewals	1,970	2,266	2,424	2,176	296	454	206
Enhancements	906	2,144	1,424	918	1,238	518	12
Schedule 4 & 8	173	160	145	144	-13	-28	-29
Total expenditure	**5,238**	**6,719**	**6,221**	**5,623**	**1,481**	**983**	**384**

Source: Network Rail and our own calculations.

Controllable opex

2.21 Controllable opex in England & Wales in 2010-11 was £826m. This was £99m (13.6%) higher than our PR08 determination assumption; £51m (5.8%) lower than Network Rail's 2010 delivery plan update and £55m (6.2%) lower than in 2009-10. These variances are largely for the same reasons as discussed above for Great Britain.

2.22 Cumulative controllable opex expenditure for the first two years of CP4 was £177m (11.6%) higher than our PR08 determination.

Non-controllable opex

2.23 Non-controllable opex in England & Wales in 2010-11 was £391m. This was £30m (8.3%) higher than our PR08 determination; £3m (0.8%) higher than Network Rail's 2010 delivery plan update and £30m (7.1%) lower than in 2009-10. These variances are largely for the same reasons as discussed above for Great Britain.

2.24 Cumulative non-controllable opex expenditure for the first two years of CP4 was £110m (15.6%) higher than our PR08 determination.

Maintenance

2.25 Maintenance expenditure in England & Wales in 2010-11 was £972m. This was £89m (8.4%) lower than our PR08 determination assumption; £9m (0.9%) higher than Network Rail's 2010 delivery plan update and £110m (10.2%) lower than in 2009-10. These variances are largely for the same reasons as discussed above for Great Britain.

2.26 Cumulative maintenance expenditure for the first two years of CP4 was £59m (2.8%) lower than our PR08 determination.

Renewals

2.27 Renewals expenditure in England & Wales in 2010-11 was £1,970m. This was £296m (13.1%) lower than our PR08 determination. Cumulative renewals expenditure for the first two years of CP4 was £949m (18.6%) lower than our PR08 determination. The variance to our PR08 determination was due to a combination of deferral of work to later in CP4 (£194m in 2010-11, £784m cumulative in the first two years of CP4) and efficiency improvements as explained in Chapter 3 (Efficiency).

2.28 Renewals expenditure was £454m (18.7%) lower than Network Rail's 2010 delivery plan update and £206m (9.5%) lower than in 2009-10.

Enhancements

2.29 PR08 funded enhancements expenditure was £1,238m (57.7%) lower than our PR08 determination, £518m (36.4%) lower than Network Rail's 2010 delivery plan update and £12m (1.3%) lower than in 2009-10. The reasons for these variances are discussed in the Great Britain enhancements section above.

Scotland

2.30 Network Rail's total expenditure in Scotland in 2010-11 was £629m. This was:

(a) £69m (9.9%) lower than our PR08 determination assumption;

(b) £58m (8.4%) lower than its own 2010 delivery plan update; and

(c) £31m (4.5%) lower than in 2009-10.

2.31 The differences in expenditure by category are set out in Table 2.3.

Table 2.3: Comparison of expenditure in Scotland

(£m, 2010-11 prices)	Actual 2010-11	PR08 determination 2010-11	2010 delivery plan update	Actual 2009-10	PR08 determination variance	Delivery plan update variance	Prior year variance
	(A)	**(B)**	**(C)**	**(D)**	**(B-A)**	**(C-A)**	**(D-A)**
Controllable opex	83	73	94	93	-10	11	10
Non-controllable opex	28	33	32	34	5	4	6
Maintenance	96	111	95	103	15	-1	7
Renewals	264	335	328	237	71	64	-27
Enhancements	147	136	131	181	-11	-16	34
Schedule 4 & 8	11	10	7	12	-1	-4	1
Total expenditure	**629**	**698**	**687**	**659**	**69**	**58**	**31**

Source: Network Rail and our own calculations.

Controllable opex

2.32 Controllable opex in Scotland in 2010-11 was £83m. This was £10m (13.7%) higher than our PR08 determination assumption; £11m (11.7%) lower than Network Rail's 2010 delivery plan update and £10m (10.8%) lower than in 2009-10.

2.33 Cumulative controllable opex expenditure for the first two years of CP4 was £23m (15.4%) higher than our PR08 determination.

2.34 These variances are largely for the same reasons as discussed above for Great Britain. However, there has also been a more direct allocation of commercial property expenses between England & Wales and Scotland in 2010-11, which resulted in a reduction in the cost allocated to Scotland.

Non-controllable opex

2.35 Non-controllable opex in Scotland in 2010-11 was £28m. This was £5m (15.2%) lower than our PR08 determination; £4m (12.5%) lower than Network Rail's 2010 delivery plan update and £6m (17.6%) lower than in 2009-10.

2.36 Cumulative non-controllable opex expenditure for the first two years of CP4 was approximately equal to our PR08 determination.

2.37 These variances are largely for the same reasons as discussed above for Great Britain. There has also been a more direct allocation of cumulo (business) rates between England & Wales and Scotland in 2010-11, which has resulted in a reduction in the cost allocated to Scotland.

Maintenance

2.38 Maintenance expenditure in Scotland in 2010-11 was £96m. This was £15m (13.5%) lower than our PR08 determination assumption; £1m (1.1%) higher than Network Rail's 2010 delivery plan update and £7m (6.8%) lower than in 2009-10.

2.39 Cumulative maintenance expenditure for the first two years of CP4 was £23m (10.4%) lower than our PR08 determination.

2.40 These variances are largely for the same reasons as discussed above for Great Britain, although Scotland was also more affected by the bad weather during the 2010-11 winter than England & Wales.

Renewals

2.41 Renewals expenditure in Scotland in 2010-11 was £264m. This was £71m (21.2%) lower than our PR08 determination. Cumulative renewals expenditure for the first two years of CP4 was £187m (27.2%) lower than our PR08 determination. The variance was due to a combination of deferral of work to later in CP4 (£71m in 2010-11, £193m cumulative in the first two years of CP4) and efficiency improvements as explained in Chapter 3 (Efficiency).

2.42 Renewals expenditure was £64m (19.5%) lower than Network Rail's 2010 delivery plan update and £27m (11.4%) higher than in 2009-10.

2.43 Network Rail has stated that the lower level of renewals for Scotland compared to Great Britain overall was largely due to Scotland being more affected by the bad weather during the 2010-11 winter than England & Wales; also the phasing of renewals work over CP4 is different in Scotland.

Enhancements

2.44 PR08 funded enhancements expenditure was £11m (8.1%) higher than our PR08 determination, £16m (12.2%) higher than Network Rail's 2010 delivery plan update and £34m (18.8%) lower than in 2009-10. The variance to our PR08 determination assumption was largely due to overspend on the Airdrie to Bathgate project.

3. Efficiency

Introduction

3.1 Improving efficiency is essential if the railway is to provide value for money for customers and taxpayers, so the reporting of economic efficiencies fulfils an important function explaining Network Rail's performance to stakeholders and providing a key input into the calculation of Network Rail's management bonuses through its management incentive plan. It also provides a key input into the efficiency benefit sharing mechanism and assists in setting our PR13 determination.

3.2 In this chapter, we present our views on Network Rail's efficiency in Great Britain, England & Wales and Scotland in 2010-11 and in the first two years of CP4 on both a Real Economic Efficiency Measure (REEM) basis and a PR08 determination basis. This efficiency analysis covers controllable opex, maintenance, renewals and enhancements expenditure.

3.3 Our assessment also summarises Arup's report on Network Rail's regulatory accounts.[31] Arup's report is particularly important because they qualified their independent reporter opinion of Network Rail's regulatory accounts due to uncertainties in Network Rail's measurement of renewals efficiencies.

3.4 We agree with Arup that the amount of efficiency Network Rail has reported that it has delivered in the first two years of CP4 is uncertain, so in addition to reporting on Network Rail's view of its efficiency, we have also presented Network Rail's efficiencies as a range reflecting the uncertainties that we are aware of.

3.5 We also provide an update on the Efficiency Benefit Sharing Mechanism (EBSM).

Measuring efficiency

3.6 There are a number of ways of defining economic efficiency. For example, financial performance in a year can be compared to performance in the previous year or compared with a baseline target.

3.7 Network Rail established a five-year delivery plan in 2009 to achieve the efficiencies assumed in our PR08 determination and deliver the required outputs for CP4. Network Rail's delivery plan, which was subsequently

[31] This report is available at: http://www.rail-reg.gov.uk/upload/pdf/nr-regulatory-accounts-data-assurance-sep11.pdf.

updated in 2010 and again in 2011, had a different phasing of expenditure compared to our PR08 determination and consequently a different trajectory of efficiency savings across the five years of CP4.[32]

3.8 In last year's annual efficiency and finance assessment we recognised that in addition to measuring efficiency on a PR08 determination basis we could also use a REEM (or year-on-year measure) for reporting on efficiency in CP4.[33] This reflects Network Rail's re-profiling of expenditure in CP4 and that it is useful to measure efficiency against actual performance in previous years. Therefore, this chapter reports on both measures of efficiency.

3.9 REEM is calculated as follows:

(a) efficiency change is calculated using a baseline expenditure figure agreed with us;

(b) for controllable opex and maintenance the baseline is 2008-09 actual expenditure plus adjustments for inflation and other exogenous factors, e.g. changes in traffic and required outputs; and

(c) for renewals, the baseline is a combination of our PR08 determination pre-efficient[34] expenditure for some assets, and PR08 determination pre-efficient implied volumes multiplied by 2008-09 unit costs for other assets, such as track.

3.10 The main differences between the comparison to our PR08 determination measure and the 'real economic efficiency measure' are identified below:

(a) for operating and maintenance expenditure, the comparison to our PR08 determination compares actual expenditure in 2010-11 to our PR08 pre-efficient expenditure assumptions. Whereas the REEM compares actual expenditure in 2010-11 to actual expenditure in 2008-09 (adjusted for inflation and other exogenous factors e.g. changes in traffic and required outputs); and

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[32] Network Rail's REEM trajectory forecasts an overall 23.5% efficiency improvement, which is higher than our assumed 21.0% improvement largely because in order to meet our assumed levels of efficiency in CP4, Network Rail's needed to recover from a worse starting position than we had expected in our PR08 expenditure assumption. Network Rail's REEM trajectory is available at: http://www.rail-reg.gov.uk/upload/pdf/nr-cp4-success-010311.pdf.

[33] Network Rail also uses a cost efficiency measure (CEM) for its internal management purposes. Similar to REEM, the CEM makes adjustments for redundancy and severance costs. Also, there are some items that cannot be known until after the start of the financial year, such as inflation, and Network Rail's management wants fixed budgets to manage against from the start of each financial year.

[34] Pre-efficient means the level of Network Rail's efficiency at the start of 2009-10.

(b) for renewals, at present there is no difference between the two measures as both of them are based on our PR08 determination's pre-efficient baseline.[35] The REEM cannot use a previous year's expenditure as a baseline given that there are generally significant variations in the level and type of renewals activity between years. Instead, the actual expenditure in 2010-11 is compared with a baseline for 2010-11 developed by Network Rail. The deferral of expenditure is also taken into account in assessing the variance between actual and baseline expenditure.

3.11 Over two-thirds of Network Rail's reported cumulative efficiencies in 2010-11 are for renewals and as shown in Table 3.2 renewals volume savings are a significant part of these efficiencies.

3.12 Sustainable reductions in renewal volumes which do not jeopardise the safe delivery of required outputs are a legitimate and important source of efficiency ('scope efficiency'). However, deferral is not counted as efficiency and we take a very firm line on this, which means that where there are uncertainties in the reporting of efficiencies, we take a cautious view when we assess the efficiency that has been declared.

3.13 Also, storing up activity for the period from 2011-12 to 2013-14 could make it harder for Network Rail to deliver its CP4 outputs in a sustainable way. Overall, we think Network Rail is on course to deliver its planned CP4 volumes of work. However, we are concerned about the delivery challenge as discussed below. We also have serious concerns about Network Rail's processes for reporting renewals efficiencies, which has in 2011-11 resulted in uncertainties in reported renewals efficiencies.

Network Rail's efficiency in 2010-11

3.14 Tables 3.1, 3.3 and 3.4 analyse Network Rail's reported efficiencies for Great Britain, England & Wales and Scotland. However, the independent reporter, Arup has identified a number of uncertainties with Network Rail's reporting of renewals efficiencies which are examined later within this chapter.

3.15 Based on these uncertainties, as set out in Table 3.5 we consider that cumulative[36] renewals efficiencies in 2010-11 would be more prudently stated

[35] The unit costs that Network Rail used to calculate its REEM efficiency baseline are from 2008-09. These unit costs are not consistent with our PR08 determination and we are investigating the effect this difference could have on our calculation of efficiency on a PR08 determination basis and will report on this next year.

[36] These are the efficiencies for 2010-11 compared to the baselines at the start of 2009-10 and not just the improvement in efficiency from 2009-10.

as being in a range from £342m to £432m (13.1% to 16.6%) for Great Britain. These uncertainties are explained later within this chapter.

Great Britain efficiency

3.16 Table 3.1 analyses Network Rail's reported efficiencies for Great Britain.

Table 3.1: Analysis of reported efficiency for Great Britain in 2010-11

	Real economic efficiency measure		PR08 determination [37]	
	Actual	**NR trajectory**	**Actual**	**Assumed**
In-year				
Controllable opex	6.7%	6.3%	7.8%	2.8%
Maintenance	11.3%	10.1%	9.3%	3.2%
Renewals	9.9%	10.2%	9.9%	5.0%
Total	**9.7%**	**9.5%**	**9.4%**	**4.2%**
Cumulative				
Controllable opex	3.5%	2.2%	-7.3%	5.5%
Maintenance	13.3%	12.6%	14.6%	6.3%
Renewals	16.6%	16.6%	16.6%	9.8%
Total	**13.2%**	**12.8%**	**11.9%**	**8.1%**

Source: Network Rail's 2010-11 regulatory accounts and our own calculations.

3.17 Network Rail's total reported OMR efficiency in Great Britain on a REEM basis is 9.7% in year and 13.2% cumulatively. Explanations for these efficiencies are set out in Section 2 (Expenditure). Cumulatively, OMR efficiency in Great Britain on a REEM basis was 0.4% ahead of Network Rail's CP4 REEM trajectory.

3.18 On a PR08 determination basis, total OMR efficiency for Great Britain was 9.4% in year and 11.9% cumulatively. Cumulatively, OMR efficiency in Great Britain on a PR08 determination basis was 3.8% higher than the level of efficiency gains that we assumed in our PR08 determination.

Controllable opex efficiencies

3.19 Network Rail's reported controllable opex efficiency for Great Britain in 2010-11 on a REEM basis was 6.7% in year and 3.5% cumulatively. Explanations for these efficiencies are set out in Section 2 (Expenditure). Cumulatively, controllable opex efficiency on a REEM basis for Great Britain at the end of 2010-11 is 1.3% ahead of Network Rail's cumulative CP4 REEM trajectory.

[37] Comparison of actual expenditure against the level of pre-efficient expenditure within our PR08 determination (including adjustments as set out in Annex B).

3.20 Controllable opex efficiency on a PR08 determination basis was 7.8% in year and -7.3% cumulatively. The cumulative efficiency is 12.8% worse than our PR08 determination assumption of an improvement of 5.5%. Chapter 2 (Expenditure) contains more details of Network Rail's controllable opex performance.

Maintenance efficiencies

3.21 Network Rail's reported maintenance efficiency on a REEM basis was 11.3% in year, and 13.3% cumulatively. The reasons for these efficiencies are explained in Section 2 (Expenditure). Maintenance REEM at the end of 2010-11 is 0.7% ahead of Network Rail's CP4 REEM trajectory.

3.22 Maintenance efficiency on a PR08 determination basis was 9.3% in-year and 14.6% cumulatively. The cumulative efficiency is 8.3% above our PR08 determination assumption of 6.3%.

Renewals efficiencies

3.23 The independent reporter, Arup has identified a number of issues with Network Rail's reporting of renewals.[38] Whilst we recognise that measuring renewals efficiencies will always be difficult, and a degree of judgement will always be required, we agree with Arup that these issues are serious, particularly given that over two-thirds of Network Rail's reported efficiencies in 2010-11 are for renewals. We discuss the implications of Arup's report later in this chapter including possible uncertainties in reported efficiencies.

3.24 Network Rail's overall reported renewals efficiency on a REEM and PR08 determination basis was 9.9% in-year and 16.6% cumulatively.[39] The in-year saving is 4.9% ahead of our PR08 determination and the cumulative saving is 6.8% ahead. The cumulative efficiency is in line with Network Rail's own CP4 REEM trajectory.[40]

3.25 As shown in Table 3.2 Network Rail is reporting £108m of cumulative unit cost efficiencies.[41] Network Rail has stated that these have mostly been

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[38] Arup's report is available at: http://www.rail-reg.gov.uk/upload/pdf/nr-regulatory-accounts-data-assurance-sep11.pdf.

[39] As explained earlier, renewals REEM and PR08 determination efficiencies are the same.

[40] See http://www.rail-reg.gov.uk/upload/pdf/nr-cp4-success-010311.pdf.

[41] Network Rail has agreed to improve its unit cost reporting framework and we expect that this will give us more confidence in the unit cost efficiencies it reports. Our requirements for Network Rail's unit cost framework were set out in a letter to Network Rail on 9 May 2011, which is available at http://www.rail-reg.gov.uk/upload/pdf/unit_costs_letter-090511.pdf.

achieved through investment in new ‘high-output’ equipment that allows work to be undertaken more quickly, and employing smarter working practises, for example undertaking more pre-assembly of switches and crossing units in the factory prior to installation on the network. These changes also reduce the length of track possessions required by Network Rail.

3.26 Network Rail is reporting £114m of cumulative volume savings due to changes to its asset management policies in 2010 whereby Network Rail now prioritises renewals work on high usage sections of the network and makes greater use of refurbishment rather than full renewals, particularly in signalling where different components may have significantly different expected lives. These changes result in lower total volumes of renewals but this risk-based approach should lead to more targeted and efficient work being undertaken.

3.27 Network Rail’s is also reporting £210m of cumulative renewals efficiencies in relation to expenditure that is not readily supported by measurable unit cost or volume data.[42] These categories include telecoms, information management, operational property and plant & machinery.

Table 3.2: Analysis of cumulative renewals REEM efficiencies

(£m, 2010-11 prices)	**Unit cost efficiencies**	**Volume efficiencies**	**Other efficiencies**	**Total**
Track	40	113	0	153
Signalling	32	1	31	64
Civils	35	0	14	49
Telecoms	0	0	14	14
Information management	0	0	41	41
Operational property	0	0	11	11
Plant & machinery	0	0	22	22
Other	0	0	77	77
Total REEM	**108**	**114**	**210**	**432**
	24.9%	26.3%	48.8%	100.0%

Source: Network Rail’s 2010-11 regulatory accounts and our own calculations.

England & Wales

3.28 Table 3.3 analyses Network Rail’s reported efficiencies for England & Wales. The reasons for the variances are largely the same as for Great Britain. Chapter 2 (Expenditure) also contains more details of Network Rail’s OMR performance in England and Wales, and explains the reasons for the efficiency savings.

[42] Though as noted above Network Rail has committed to increasing its volume and unit cost coverage.

Table 3.3: Analysis of reported efficiency for England & Wales in 2010-11

	Real economic efficiency measure		PR08 determination [43]	
	Actual	**NR trajectory**	**Actual**	**Assumed**
In-year				
Controllable opex	6.1%	5.9%	7.2%	2.8%
Maintenance	11.7%	9.7%	9.7%	3.2%
Renewals	10.2%	10.3%	10.2%	5.0%
Total	**9.8%**	**9.4%**	**9.5%**	**4.2%**
Cumulative				
Controllable opex	3.0%	1.9%	-7.4%	5.5%
Maintenance	13.7%	12.5%	14.2%	6.3%
Renewals	17.2%	17.3%	17.2%	9.8%
Total	**13.5%**	**13.1%**	**12.1%**	**8.1%**

Source: Network Rail's 2010-11 regulatory accounts and our own calculations.

3.29 Network Rail's total reported efficiency in England & Wales on a REEM basis was 9.8% in-year and 13.5% cumulatively. Total efficiency on a PR08 determination basis was 9.5% in-year and 12.1% cumulatively. The reasons for these efficiencies are explained in Section 2 (Expenditure).

3.30 Network Rail's controllable opex efficiency in England & Wales on a REEM basis was 6.1% in-year and 3.0% cumulatively. Cumulative controllable opex efficiency in England & Wales on a PR08 determination basis was -7.4%. This is 12.9% below our PR08 determination assumption of 5.5%.

3.31 Network Rail's maintenance efficiency in England & Wales on a REEM basis was 11.7% in-year and 13.7% cumulatively. Maintenance efficiency in England & Wales on a PR08 determination basis was 9.7% in-year and 14.2% cumulatively. This is 7.9% above our PR08 determination assumption of 6.3%.

3.32 Network Rail's renewals efficiency in England & Wales on a REEM and PR08 determination basis was 10.2% in-year and 17.2% cumulatively. This is 7.4% above our cumulative PR08 determination assumption of 9.8% (but see our reservations discussed later within this chapter).

[43] Comparison of actual expenditure against the level of pre-efficient expenditure within our PR08 determination (including adjustments as set out in Annex B).

Scotland

3.33 Table 3.4 analyses Network Rail's reported efficiencies for Scotland.

Table 3.4: Analysis of reported efficiency for Scotland in 2010-11

	Real economic efficiency measure		PR08 determination[44]	
	Actual	**NR trajectory**	**Actual**	**Assumed**
In-year				
Controllable opex	12.4%	10.4%	13.1%	2.8%
Maintenance	7.2%	13.2%	5.6%	3.2%
Renewals	8.7%	9.2%	8.7%	5.0%
Total	**9.4%**	**9.4%**	**8.7%**	**4.2%**
Cumulative				
Controllable opex	8.3%	5.6%	-6.7%	5.5%
Maintenance	8.6%	14.5%	18.9%	6.3%
Renewals	11.8%	11.9%	11.8%	9.8%
Total	**10.5%**	**10.2%**	**10.4%**	**8.1%**

Source: Network Rail's 2010-11 regulatory accounts and our own calculations.

3.34 Network Rail's total reported efficiency in Scotland on a REEM basis was 9.4% in-year and 10.5% cumulatively. Total efficiency on a PR08 determination basis was 8.7% in-year and 10.4% cumulatively. The reasons for these efficiencies are explained in Section 2 (Expenditure).

3.35 Network Rail's controllable opex efficiency in Scotland on a REEM basis was 12.4% in-year and 8.3% cumulatively. As explained in Section 2 (Expenditure), the main reason for the better performance than in Great Britain overall was the more direct allocation of commercial property expenses in 2010-11, which resulted in a reduction in controllable opex costs allocated to Scotland.

3.36 Cumulative controllable opex efficiency on a PR08 determination basis was -6.7%. This is 12.2% below our PR08 determination assumption of a 5.5% reduction in costs. The main reasons for the significant difference compared with the REEM measure are the same as for Great Britain as a whole.

3.37 Network Rail's maintenance efficiency in Scotland on a REEM basis was 7.2% in-year and 8.6% cumulatively. Maintenance efficiency on a PR08

[44] Comparison of actual expenditure against the level of pre-efficient expenditure within our PR08 determination (including adjustments as set out in Annex B).

determination basis was 5.6% in-year and 18.9% cumulatively. This is 12.6% above our PR08 determination assumption of 6.3%.

3.38 Renewals efficiency in 2010-11 on a REEM basis and a PR08 determination basis was 8.7% in year and 11.8% cumulatively. This is 2.0% above our PR08 determination assumption of 9.8%. The reason for the difference compared to the efficiency in Great Britain is explained in Chapter 2 (Expenditure).

Arup's review of efficiencies

3.39 Arup's review of the efficiency of controllable opex and maintenance was high-level and the focus of their report was on renewals. Arup did not identify any concerns with the level of efficiency Network Rail has reported, although they did say that Network Rail needs to improve its process for reporting maintenance efficiencies;[45]

3.40 Arup has identified a number of important issues with Network Rail's processes for reporting renewals efficiencies.[46] We have worked closely with Arup to understand how these issues could affect Network Rail's reporting of efficiency in 2010-11 and the rest of CP4.

3.41 These issues include:

(a) calculations performed within a complex system of spreadsheets supported by limited commentaries and identifiers of source data and calculation methodology;

(b) lack of a clear 'bottom up' quantified base of auditable evidence to justify efficiencies;

(c) a general assumption that expenditure incurred is by its nature efficient; and

(d) significant levels of variability in projected renewals volumes and costs in delivery plans compared to actual volumes and costs, implying instability in the renewals delivery process.

3.42 We have worked closely with Arup to understand how these issues may result in uncertainty in Network Rail's reported renewals efficiencies for 2010-11. In particular:

[45] The improvements required include proving the sustainability of reported efficiencies by assessing the impact on performance, condition, risk and capital expenditure.

[46] These issues include the lack of clear auditable evidence to justify efficiencies.

(a) reported renewals volumes may be up to five per cent over or under stated for signalling work undertaken during 2010-11. As a result of this uncertainty, Arup has estimated that efficiencies may be up to £7m lower or higher for signalling;[47]

(b) there is a degree of uncertainty about civils efficiencies for which we have not agreed the volume reporting basis and have received only limited evidence that variances in expenditure are real efficiencies, rather than simply the deferral of work;[48] and

(c) there is a degree of uncertainty about efficiencies in some other renewals categories which are not supported by agreed volume measures where Network Rail has provided insufficient evidence that variances in expenditure are real efficiencies, rather than simply the deferral of work.

3.43 Based on these uncertainties, as set out in Table 3.5 we consider that cumulative renewals efficiencies for Great Britain could, until Network Rail can provide better evidence of genuine efficiencies, be in a range from £342m to £432m (13.1% to 16.6%). This would also mean that actual cumulative renewals efficiency for England & Wales could be 13.6% to 17.2% and for Scotland could be 9.3% to 11.8%.

3.44 Total cumulative efficiency for Great Britain could be 11.3% to 13.2%, for England & Wales could be 11.6% to 13.5% and for Scotland could be 9.0% to 10.5%.

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[47] We note that Arup has included uncertainty on track volumes and civils volumes in its report. We have not included track volume uncertainty in this table as the table only identifies additional uncertainty beyond the normal uncertainty involved in calculating renewals efficiency. We have not included civils as we have not yet agreed the reporting basis for civils renewals volumes.

[48] However, we note that Network Rail considers that civils efficiencies are already prudently stated as it has not claimed some civils efficiencies.

Table 3.5: Assessment of uncertainties in renewals efficiencies

Reported renewals cumulative REEM (£m)	**432**	**16.6%**
Adjust for:		
(a) Volume uncertainty	+/-7	
(b) Lack of supporting evidence relating to civils	-49	
(c) Lack of supporting evidence relating to other non-volume renewals	-34	
Adjusted renewals cumulative REEM	**342 – 356**	**13.1% - 13.7%**

Source: Arup and our own analysis.

3.45 Network Rail has deferred significant volumes of work which it now intends to complete later within CP4. Whilst recognising that there is a degree of uncertainty in the accuracy of future plans and any assessment requires judgment, there is also a risk that Network Rail may not be able to deliver this work and/or only be able to deliver this work at a higher cost than currently planned. Whilst this would not affect efficiencies achieved on work undertaken to date, the consequence of not delivering work that has been deferred from the first two years to the remainder of CP4 could be lower efficiencies in later years of CP4 than Network Rail is expecting.

Addressing the issues identified by Arup

3.46 It is important that Network Rail can robustly report on its performance to stakeholders. We also hold Network Rail to account for delivering the outputs for which we agreed in our PR08 determination it could receive revenue from customers and taxpayers. Whilst efficiency is not an output in this sense, it is important in several ways. First, improving efficiency is essential if the railway is to provide value for money for customers and taxpayers. Second, Network Rail's reporting of efficiency also provides a key input into the calculation of Network Rail's management bonuses through its management incentive plan. Third, in our PR08 determination we introduced a mechanism that allows efficiency benefits to be shared between Network Rail and train operating companies and freight operating companies, in order to help align incentives through the industry. Finally, Network Rail's costs at the end of the period 2009-10 to 2013-14 are an important input into our PR08 determination of charges for the next control period.[49]

3.47 Although it will always be difficult, and a degree of judgement will always be required, a clear distinction between efficiency and deferral can be made but

[49] Our periodic review of charges for that period is called PR13.

the burden of proof is on Network Rail to show that a reduction in expenditure from the levels we assumed during the PR08 determination is efficient. In particular, the PR08 determination said that Network Rail will not benefit from an underspend unless it can show that it has met all its outputs and the serviceability and sustainability of the network has not been adversely affected.

3.48 If Network Rail cannot robustly show that the efficiency it is claiming is genuine and consistent with our PR08 determination, then we cannot accept that an underspend is efficient. Therefore, it is very important that Network Rail has robust systems and processes in place to identify efficiencies.

3.49 Network Rail has recognised that it has not yet met our expectations for efficiency reporting in 2009-10 and 2010-11 and is developing an improvement plan to ensure a more robust process for reporting efficiencies in 2011-12. As part of the improvement plan, Network Rail has committed to improve the documentation of its policies and processes for calculating efficiencies.

3.50 Network Rail's improvement plan will be reviewed by Arup to assess whether it addresses the issues Arup raised in their report. We will also review whether Network Rail's improvement plan meets our needs.

3.51 We will also commission Arup to undertake an interim audit of Network Rail's period six (mid-year) efficiency calculations in November. In January we will then assess whether the current weaknesses have been addressed and if necessary identify the actions Network Rail may need to undertake to further improve the robustness of its 2011-12 efficiency reporting. If Network Rail's renewals efficiency reporting processes do not improve we will consider whether Network Rail is in breach of condition 1 of its network licence (network management) and condition 11 of its network licence (regulatory accounts).

Effect of input price inflation

3.52 In our PR08 determination we reviewed the potential effect of input price inflation on Network Rail in CP4 and concluded that during CP4 it was likely to experience input price inflation on its OMR expenditure. As a result we reached our decisions on Network Rail's efficiency after taking account of input price inflation. Our PR08 efficiency assumptions are shown in Table 3.6.

Table 3.6: PR08 CP4 efficiency assumptions

	2009-10	2010-11	2011-12	2012-13	2013-14
Controllable opex					
- Gross efficiency	5.1%	5.1%	5.1%	5.1%	5.1%
- Input price adjustment	-2.3%	-2.3%	-1.1%	-1.1%	-1.1%
- Net efficiency	2.8%	2.8%	4.0%	4.0%	4.0%
Maintenance					
- Gross efficiency	5.2%	5.3%	5.3%	5.0%	5.0%
- Input price adjustment	-2.0%	-2.1%	-1.3%	-0.5%	-0.5%
- Net efficiency	3.2%	3.2%	4.0%	4.5%	4.5%
Renewals					
- Gross efficiency	5.9%	6.4%	6.3%	5.6%	5.7%
- Input price adjustment	-0.9%	-1.4%	-0.8%	-0.1%	-0.2%
- Net efficiency	5.0%	5.0%	5.5%	5.5%	5.5%

Source: Our PR08 determination.

3.53 Network Rail is working on identifying the effect of input price inflation on its OMR expenditure for the first two years of CP4 and we expect to report on this in December.

Enhancements efficiency

3.54 Enhancement projects often have bespoke solutions and include significant development and delivery costs spread over several years. Assessing the efficiency of enhancements projects needs to reflect these issues.

3.55 We determine efficient project costs either through our periodic review determinations or through the investment framework. This involves examining project scope, project costs and future efficient costs. For PR08 funded schemes allowance for efficiency was made on a project by project basis in our PR08 determination. For non-PR08 funded schemes an efficient cost is determined when we approve RAB additions.

3.56 Overall, Network Rail has not reported any enhancement efficiencies in 2010-11. For the purpose of rolling forward the regulatory asset base (RAB) into CP5, Network Rail recognised £5m of efficient underspend on enhancements in 2009-2010. These efficiencies, which were in relation to the level of forecast central contingencies at the end of CP4 rather than one specific project, have been reversed in 2010-11 based on the updated projections within Network Rail's latest delivery plan update. See Chapter 4 (Finance) for further explanations about adjustments to the RAB.

Efficiency benefit sharing mechanism

3.57 We established the EBSM in our PR08 determination to incentivise train and freight operating companies to support Network Rail's efforts to improve its efficiency. The EBSM is designed to operate at the national level with separate schemes for England & Wales and Scotland. Under the mechanism, train and freight operators share 25% of cumulative outperformance[50] on a number of elements of expenditure and revenue with each operator receiving a payout in proportion to their variable track access charges.[51]

3.58 In our PR08 determination, we asked the industry to set out in more detail the procedures it will adopt to ensure commitment and minimise the risk of free-riding. The Association of Train Operating Companies and the Rail Freight Operators' Association have written to the ORR explaining the actions that they have taken, including specific examples of where these actions have resulted in efficiency savings for Network Rail.

3.59 If Network Rail's renewals efficiencies were included in the EBSM in full then Network Rail would have outperformed in 2010-11 (on a cumulative basis) and approximately £40m in total would be payable to train and freight operators this year.[52] However, if instead the EBSM is calculated using the bottom of our range for renewals efficiencies then there would be no outperformance and hence no payments. Given the uncertainties in Network Rail's reporting of renewals efficiencies, we do not think that it is appropriate now to sanction any EBSM payments until we have sufficient confidence in

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50 This means expenditure lower or income higher than our PR08 determination assumption.

51 The efficiency benefit sharing mechanism is explained in Chapter 27 of our PR08 determination.

52 Though payments to the majority of franchised operators would be clawed back by the Department for Transport and Transport Scotland under the "clause 18.1"/schedule 9 (no net loss, no net gain) provisions of the franchise agreements. No EBSM payments were made in 2009-10 as Network Rail had not outperformed the PR08 determination per the EBSM calculation.

the efficiencies that Network Rail reports. The fact that we have not sanctioned the EBSM payments will result in train and freight operating companies not receiving payments this year that they might otherwise have received.

3.60 As the EBSM mechanism is cumulative, if the reported efficiencies are confirmed then the outperformance that would have been paid out this year will be added to any outperformance in the future and paid out if there is a payment due in total.

3.61 In our PR08 determination, we said that after two years we would review the effectiveness of the EBSM mechanism and whether there is merit in altering its scope or detailed design. Given the changes to the way Network Rail reports on efficiency and the industry's discussions about better aligning industry incentives, we will commence this review shortly.

4. Finance

Introduction

4.1 This chapter reviews Network Rail's financial performance in 2010-11. It covers the Regulatory Asset Base (RAB), net debt, financing costs and key financial indicators.

Regulatory asset base (RAB)

Background

4.2 The RAB roll forward mechanism was revised for CP4 whereby actual efficient capex is added to the RAB subject to the rules set out in our RAB roll forward policy. These rules adjust for issues such as the deferral of expenditure. Our RAB roll forward policy is set out in our PR08 determination[53] and also in our regulatory accounting guidelines.[54]

4.3 In estimating the value of the RAB each year, a provisional assessment of the non-delivery of outputs and the efficiency of renewals and enhancements expenditure is made. The RAB therefore remains provisional until the end of the control period when these elements will be finally assessed.

4.4 The amounts for the ring-fenced fund and amortisation are effectively fixed for the five years of the control period as set out in our PR08 determination due to the way in which they are calculated.[55]

4.5 Enhancements that have been added to the RAB include non-PR08 investment framework enhancements.[56]

Movements in the RAB – Great Britain

4.6 This section summarises the movement in the RAB in 2010-11 and its value as at 31 March 2011.[57] The opening RAB at 1 April 2010 was £35,729m. At

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[53] For further details see: Chapter 15 Periodic Review 2008 - Determination of Network Rail's outputs and funding for 2009-14, available at http://www.rail-reg.gov.uk/upload/pdf/383.pdf.

[54] Regulatory Accounting Guidelines January 2011 are available at: http://www.rail-reg.gov.uk/upload/pdf/regulatory-accounting-guidelines-2011.pdf

[55] In certain circumstances the ring-fenced fund adjustment can be altered and both of the adjustments are uplifted for inflation each year.

[56] A more detailed analysis of enhancement expenditure is provided in Chapter 2 (Expenditure).

[57] A reconciliation of the RAB to the value of Network Rail's assets in Network Rail's statutory accounts is shown in Appendix A of Network Rail's Regulatory Financial Statements for the year ended 31 March 2011.

31 March 2011, Network Rail's RAB had risen to £38,594. This increase is largely due to renewals (£2,115m) and enhancement expenditure (£1,224m), and indexation (£1,683m). Amortisation (£1,664m) [58] and capital expenditure paid through the ring-fenced fund (RFF) [59] (£513m) have been deducted from the RAB.

4.7 Table 4.1 compares the movements in the RAB for Great Britain with our PR08 determination and Network Rail's own 2010 delivery plan update.

Table 4.1: Comparison of movements in the RAB for Great Britain

(£m, nominal prices)	**Actual 2010-11 (A)**	**PR08 determination 2010-11 (B)**	**Delivery plan update 2010 (C)**	**PR08 determin-ation variance (A-B)**	**Delivery plan update variance (A-C)**
Opening RAB at 1 April 2010 (2009-10 prices)	**35,729**	**37,006**	**35,729**	**-1,277**	**0**
Indexation for the year	1,683	1,743	1,072	-60	611
Renewals additions	2,115	2,601	2,779	-486	-664
Enhancements additions:			0		
PR08 determination projects	988	2,281	1,516	-1,293	-528
Non-PR08 projects[60]	236	0	605	236	-369
Ring-fenced fund	-513	-513	-505	0	-8
Amortisation	-1,644	-1,644	-1,617	0	-27
Closing RAB at 31 March 2011 (2010-11 prices)	**38,594**	**41,474**	**39,579**	**-2,880**	**-985**

Source: Network Rail's 2010-11 regulatory accounts, Network Rail submissions to us and our own calculations.

4.8 The closing value of the RAB at 31 March 2011 was £38,594m,[61] which was £2,880m lower than our PR08 determination. This is mostly due to

58 Amortisation in CP4 is based on average annual long-run steady-state capital expenditure (i.e. renewals) as set out in the document: *Approach to the amortisation of Network Rail's regulatory asset base*, Office of Rail Regulation, September 2006. This can be accessed at: www.rail-reg.gov.uk/upload/pdf/pr08-amortisation-let-290906.pdf.

59 The ring-fenced fund (RFF) is part of Network Rail's allowed return. It is a 'virtual fund' which is used to fund a proportion of the capital expenditure that is required to deliver the HLOS on a pay-as-you-go basis. RFF related expenditure is therefore not added to the RAB. It is calculated as the residual from the allowed return once expected debt service costs, the FIM fee and the risk buffer have been deducted. More background information on the ring-fenced fund can be found in Chapter 14 of our Periodic Review 2008 determination.

60 This excludes capital projects paid for by third parties, where the initial capital cost is not added to the RAB.

61 As a comparison, the unimpaired depreciated replacement cost of Network Rail's network (after excluding the replacement costs of embankments, cuttings and tunnels) is estimated at £75bn (2010: £75bn) as stated in note 12 to Network Rail Infrastructure Limited's Annual Report and Accounts 2011.

underspend on PR08 funded enhancements (£1,293m), renewals (£486m) and a lower opening balance largely due to underspend in 2009-10 (£1,277m)[62], offset by non-PR08 determination enhancement expenditure (£236m).

4.9 The closing value of the RAB is also £985m lower than Network Rail's own 2010 delivery plan update. This is largely due to underspend on renewals (£664m) and PR08 enhancement expenditure (£528m), offset by a difference on indexation (£611m) due to Network Rail using a lower rate of inflation in its delivery plan update than actual RPI.

4.10 The reasons for the underlying renewals and enhancement expenditure variances are examined in Chapter 2 (Expenditure). Adjustments to renewals and enhancements expenditure for RAB additions are set out later within this chapter.

Movements in the RAB – England & Wales

4.11 Table 4.2 compares the movements in the RAB for England & Wales to our PR08 determination and Network Rail's own 2010 delivery plan update.

Table 4.2: Comparison of movements in the RAB for England & Wales

	Actual 2010-11	**PR08 determination 2010-11**	**Delivery plan update 2010**	**PR08 determination variance**	**Delivery plan update variance**
(£m, nominal prices)	**(A)**	**(B)**	**(C)**	**(A-B)**	**(A-C)**
Opening RAB at 1 April 2010 (2009-10 prices)	**32,057**	**33,212**	**32,057**	**-1,155**	**0**
Indexation for the year	1,510	1,564	962	-54	548
Renewals additions	1,864	2,266	2,455	-402	-591
Enhancements additions:					
PR08 determination projects	846	2,144	1,380	-1,298	-534
Non-PR08 projects[63]	193	0	531	193	-338
Ring-fenced fund	-459	-460	-452	1	-7
Amortisation	-1,448	-1,448	-1,425	0	-23
Closing RAB at 31 March 2011 (2010-11 prices)	**34,563**	**37,278**	**35,508**	**-2,715**	**-945**

Source: Network Rail's 2010-11 regulatory accounts, Network Rail submissions to us and our own calculations.

[62] See our Annual Efficiency and Finance Assessment 2010 for further details.

[63] This excludes capital projects paid for by certain third parties, where the initial capital cost is not added to the RAB.

4.12 The closing value of the England & Wales RAB at 31 March 2011 of £34,563m was £2,715m lower than our PR08 determination. This was mostly due to underspend on PR08 funded enhancements (£1,298m), renewals (£402m) and a lower opening balance largely due to underspend in 2009-10 (£1,155m), offset by non-PR08 funded enhancements expenditure (£193m).

4.13 The closing value of the RAB was also £945m lower than Network Rail's own 2010 delivery plan update. This was due to the underspend in renewals (£591m), PR08 enhancement expenditure (£534m) and non-PR08 enhancement expenditure (£338m), offset by a difference on indexation (£548m).

Movements in the RAB – Scotland

4.14 Table 4.3 compares the movements in the RAB for Scotland to our PR08 determination and Network Rail's own 2010 delivery plan update.

Table 4.3: Comparison of movements in the RAB for Scotland

	Actual 2010-11	PR08 determination 2010-11	Delivery plan update 2010	PR08 determination variance	Delivery plan update variance
(£m, nominal prices)	(A)	(B)	(C)	(A-B)	(A-C)
Opening RAB at 1 April 2010 (2009-10 prices)	**3,672**	**3,794**	**3,672**	**-122**	**0**
Indexation for the year	173	179	110	-6	63
Renewals additions	251	335	324	-84	-73
Enhancements additions:					
PR08 determination projects	142	136	136	6	6
Non-PR08 projects[64]	43	0	73	43	-30
Ring-fenced fund	-54	-54	-53	0	-1
Amortisation	-196	-196	-193	0	-3
Closing RAB at 31 March 2011 (2010-11 prices)	**4,031**	**4,194**	**4,069**	**-163**	**-38**

Source: Network Rail's 2010-11 regulatory accounts, Network Rail submissions to us and our own calculations.

4.15 The closing value of the Scotland RAB at 31 March 2011 of £4,031m was £163m lower than our PR08 determination. This was largely due to underspend on renewals (£84m) and a lower opening balance largely due to underspend in 2009-10 (£122m), offset by non-PR08 funded enhancement expenditure (£43m).

[64] This excludes capital projects paid for by certain third parties, where the initial capital cost is not added to the RAB.

4.16 The closing value of the RAB was also £38m lower than Network Rail's own 2010 delivery plan update. This was largely due to the deferral of renewals expenditure (£73m) and non-PR08 funded enhancement expenditure (£30m), offset by a difference on indexation (£63m).

Adjustments to renewals and enhancements RAB additions

4.17 This section reconciles the assumptions we made in our PR08 determination for renewals and enhancement expenditure to RAB additions for renewals and enhancement.[65]

4.18 The adjustments that have been made are:

(a) the carry forward of deferred expenditure from CP3 to CP4;

(b) delivery plan additions/reductions representing changes to Network Rail's delivery plan that have been agreed through change control;

(c) re-classifications that we have agreed to where delivery plan projects include both elements of renewal expenditure and elements of enhancement expenditure (known as 'mixed' projects). These projects will either be categorised as renewals or enhancements projects depending on where the greater amount of expenditure was originally classified;

(d) an adjustment to reflect the uncertainties of renewals input prices. This adjustment is based on the movement in the Infrastructure Output Price Index (IOPI).[66] In the current year, this index is lower than the retail price index, so the adjustment is a deduction from the RAB; [67]

(e) deferrals to later in CP4 represent renewals and enhancements work that has been deferred to later in CP4; and

(f) an adjustment for efficient overspend where Network Rail has identified renewals overspend which it has assumed is efficient.[68] Whilst Network Rail has recognised renewals efficiencies in 2010-11,[69] no adjustment

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65 A more detailed reconciliation of expenditure on the RAB is given in Statement 2b to Network Rail's Regulatory Financial statements for the year ended 31 March 2011.

66 The Infrastructure Output Price Index is available from the Building Cost Information Service, which is part of the Royal Institute of Chartered Surveyors.

67 The provisional Quarter 4 index has been used as the index is not finalised until September 2011. Any difference between the IOPI adjustment using the provisional index and the IOPI adjustment using the final index will be made in Network Rail's 2011-12 regulatory accounts.

68 We have not yet verified whether this expenditure is efficient.

69 See Chapter 3 (Efficiency) for further details.

has been made to the RAB for efficient underspend as Network Rail's assessment for RAB additions is based upon its view of CP4 as a whole for which it considers that adjustments for input prices will offset any efficiency gains. We will keep this under review as the RAB is provisional until the end of CP4.

Renewals

4.19 Table 4.4 reconciles our PR08 determination assumed renewals RAB addition to the provisional actual RAB addition.

Table 4.4: Reconciliation of renewals RAB additions

(£m, nominal prices)	**Movements in 2010-11**			**Cumulative**		
	GB	**England & Wales**	**Scotland**	**GB**	**England & Wales**	**Scotland**
PR08 determination	**2,658**	**2,323**	**335**	**5,694**	**5,011**	**683**
Deferrals from CP3[70]	24	24	0	235	231	4
Delivery plan additions/reductions	31	31	0	33	33	0
Delivery plan re-classifications	-69	-70	1	-133	-135	2
Adjusted PR08 determination	**2,644**	**2,308**	**336**	**5,829**	**5,140**	**689**
Deferrals to later in CP4	-507	-430	-77	-1,215	-1,030	-185
IOPI index adjustment	-41	-35	-6	-122	-108	-14
Other adjustments	-3	0	-3	-3	1	-4
Adjustments for non-delivery of outputs	0	0	0	0	0	0
Adjustments for efficient over/under spend	22	21	1	23	23	0
Total additions to RAB in 2010-11	**2,115**	**1,864**	**251**	**4,512**	**4,026**	**486**

Source: Network Rail's 2010-11 regulatory accounts and own calculations.

Enhancements

4.20 Table 4.5 reconciles our PR08 determination enhancements assumption to the enhancements expenditure provisionally added to the RAB.

70 The deferrals from CP3 relate to the carry forward of renewal expenditure from CP3 to CP4 in relation to west coast mainline (£14m) and capitalised financing. Delivery plan additions include a £4m adjustment for the Seven Day Railway which was inadvertently omitted from our PR08 determination.

Table 4.5: Reconciliation of enhancements RAB additions

(£m, nominal prices)	Movements in 2010-11			Cumulative		
	GB	**England & Wales**	**Scotland**	**GB**	**England & Wales**	**Scotland**
PR08 determination	**2,232**	**2,096**	**136**	**3,963**	**3,641**	**322**
Deferrals from CP3	0	0	0	79	75	4
Delivery plan additions/reductions	-114	-114	0	-114	-114	0
Delivery plan re-classifications	70	70	0	134	135	-1
Other adjustments	15	1	14	8	-6	14
Adjusted PR08 determination	**2,203**	**2,053**	**150**	**4,070**	**3,731**	**339**
Deferrals to later in CP4	-1,219	-1,211	-8	-1,992	-1,970	-22
Adjustments for non-delivery of outputs	0	0	0	0	0	0
Adjustments for efficient over/under spend	4	4	0	0	0	0
PR08 determination additions	988	846	142	2,078	1,761	317
Non-PR08 determination enhancements additions	236	193	43	459	416	43
Total additions to RAB in 2010-11	**1,224**	**1,039**	**185**	**2,537**	**2,177**	**360**

Source: Network Rail's 2010-11 regulatory accounts and our own calculations.

4.21 Within the control period to date, Network Rail has included £9m of RAB additions for enhancements expenditure that has not been approved by the ORR. This expenditure mostly relates to one investment framework project (Enterprise House) which we do not think meets the criteria to be added to the RAB under the investment framework. Network Rail's estimate of the RAB includes this expenditure. However, if it cannot be justified next year, Network Rail's estimate of its RAB will be adjusted.

4.22 Network Rail's estimate of its RAB at 31 March 2011 also includes expenditure of approximately £30m in 2010-11 on Network Rail income generating schemes. These schemes are regulated under the investment framework. As part of our normal review of these schemes, Halcrow one of the independent reporters for enhancements, has reviewed whether these schemes meet the investment framework criteria for addition to the RAB.

4.23 Halcrow's review concluded that the majority of the schemes they reviewed did meet our investment framework criteria. However, one scheme which was at an early stage of development may not meet the investment framework criteria, we will keep this scheme under review and may adjust Network

Rail's RAB in the future if it does not meet the investment framework criteria. Network Rail is reviewing this scheme and may decide not to proceed with it, if the expected returns are insufficient.[71]

Net debt

Movements in net debt

4.24 Table 4.6 shows the movement in net debt in 2010-11 for Great Britain.

Table 4.6: Analysis of the movements in net debt for Great Britain

	Actual 2010-11	PR08 determination	Actual 2009-10	PR08 determination variance
(£m, nominal prices)	(A)	(B)	(D)	(B-A)
Opening net debt at 1 April 2010	**22,819**	**24,087**	**20,890**	**1,268**
Total income	-6,020	-5,992	-5,817	28
Total expenditure	6,152	7,420	6,227	1,268
Financing costs	1,539	1,379	1,252	-160
Corporation tax	8	0	4	-8
Rebates	112	0	0	-112
Other	-134	0	263	134
Movement in net debt during the year	**1,657**	**2,806**	**1,929**	**1,149**
Closing net debt at 31 March 2011	**24,476**	**26,893**	**22,819**	**2,417**

Source: Network Rail and our own calculations.

4.25 The closing overall net debt of £24,476m is £2,417m lower than our PR08 determination. This is as a result of underspend in 2010-11 largely due to underspends on Network Rail funded enhancements (£943m)[72] and renewals (£367m) as explained in Chapter 2 (Expenditure), also Network Rail started the year with £1,268m lower net debt than we had assumed in our PR08 determination.[73]

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71 A summary of Halcrow's report is available at: http://www.rail-reg.gov.uk/upload/pdf/enhancement_spend_efficiency_assessment_270911.pdf.

72 This comprises £1,268m of underspend on PR08 funded projects partly offset by £325m of expenditure on Network Rail funded non-PR08 enhancements.

73 Generally, the movements in net debt reflect the movements in income and expenditure, so the explanations in the other chapters will also explain the movements in net debt. Where there is a timing difference between the receipt of income and the payment of expenditure and how it is recorded in the accounts, this is included in the 'other' category. More detail of expenditure variances is given in Chapter 2, income variances are explained in Chapter 5 and financing cost variances are further explained in this chapter. This will also apply to the analysis for England & Wales and Scotland.

4.26 The £134 of other movements is due to movements in working capital and the repayment of a £104m loan by NRIL to CTRL. Corporation tax (£8m) is in relation to interest received and property sales.

4.27 Table 4.7 shows the movements in net debt for England & Wales.

Table 4.7: Analysis of the movements in net debt for England & Wales

(£m, nominal prices)	**Actual 2010-11** (A)	**PR08 determination** (B)	**Actual 2009-10** (D)	**PR08 determination variance** (B-A)
Opening net debt at 1 April 2010	**20,521**	**21,666**	**18,809**	**1,145**
Total income	-5,431	-5,419	-5,256	12
Total expenditure	5,479	6,720	5,593	1,241
Financing costs	1,384	1,244	1,135	-140
Corporation tax	7	0	4	-7
Rebates	100	0	0	-100
Other	-121	0	236	121
Movement in net debt during the year	**1,418**	**2,543**	**1,712**	**1,125**
Closing net debt at 31 March 2011	**21,939**	**24,209**	**20,521**	**2,270**

Source: Network Rail's 2010-11 regulatory accounts and our own calculations.

4.28 The closing net debt for England & Wales of £21,939m is £2,270m lower than our PR08 determination. This is as a result of underspend in 2010-11 largely due to underspends on Network Rail funded enhancements (£998m)[74] and renewals (£296m) as explained in Chapter 2 (Expenditure). Also Network Rail started the year with £1,145m lower net debt than we assumed in our PR08 determination. The reason for the £121m of other movements in net debt is the same as for Great Britain overall.

4.29 Table 4.8 shows the movements in net debt for Scotland.

Table 4.8: Analysis of the movements in net debt for Scotland

[74] This comprises £1,239m of underspend on PR08 funded projects partly offset by £241m of expenditure on Network Rail funded non-PR08 enhancements.

(£m, nominal prices)	Actual 2010-11 (A)	PR08 determination (B)	Actual 2009-10 (D)	PR08 determination variance (B-A)
Opening net debt at 1 April 2010	**2,298**	**2,420**	**2,081**	**122**
Total income	-589	-574	-561	15
Total expenditure	673	699	634	26
Financing costs	155	138	117	-17
Corporation tax	1	0	0	-1
Rebates	12	0	0	-12
Other	-13	0	27	13
Movement in net debt during the year	**239**	**263**	**217**	**24**
Closing net debt at 31 March 2011	**2,537**	**2,683**	**2,298**	**146**

Source: Network Rail's 2010-11 regulatory accounts and our own calculations.

4.30 The closing net debt for the year for Scotland of £2,537m is £146m lower than our PR08 determination. This is as a result of underspend in 2010-11 largely due to underspend on renewals (£71m) offset by higher spend on Network Rail funded enhancements (£55m)[75] as explained in Chapter 2 (Expenditure), Network Rail also started the year with £122m lower net debt than we assumed in our PR08 determination. The reason for the £13m of other movements in net debt is due to movements in working capital.

Other net debt issues

4.31 We analyse below the key net debt issues. These include:

(a) a reconciliation of regulatory net debt to statutory net debt;

(b) an analysis of Network Rail's statutory net debt and derivative financial instruments;

(c) an analysis of the movement in net debt including how much new debt was issued in 2010-11;

(d) an analysis of the amount of index-linked debt and debt raised in foreign currencies;

(e) an analysis of the different types of debt included in net debt per Network Rail's statutory accounts; and

(f) an analysis of the maturity profile of Network Rail's gross debt.

4.32 Table 4.9 reconciles Network Rail's regulatory net debt with statutory net and gross debt. The main reason for the difference between regulatory debt and

[75] This comprises £11m of overspend on PR08 funded projects and £44m of expenditure on Network Rail funded non-PR08 enhancements.

statutory debt is that regulatory debt is valued at its historic cost rather than its market value at a point in time. For statutory accounting purposes, certain derivatives have been designated as part of a hedge accounting relationship which allows Network Rail to match gains and losses in the market value of these derivatives to the valuation movements of the hedged debt instrument.

Table 4.9: Reconciliation of Network Rail's regulatory net debt and statutory gross debt

	£m
Regulatory net debt at 31 March 2011	**24,476**
add back:	
change in fair value of net debt	458
foreign exchange differences	115
Statutory net debt at 31 March 2011	**25,049**
Add back: cash and finance leases	**610**
Statutory borrowings at 31 March 2011	**25,659**

Source: Network Rail's 2010-11 regulatory accounts and statutory accounts.

4.33 Table 4.10 provides an analysis of the different types of debt included in Network Rail's statutory accounts. It also identifies the valuation of derivatives which Network Rail has used to reduce its exposure to foreign exchange risk and interest rate movements.[76]

Table 4.10: Analysis of Network Rail's statutory net debt and derivative financial instruments

(£m, nominal prices)	**As at 31 March 2011**	**As at 31 March 2010**
Cash and cash equivalents	771	2,321
less: cash collateral taken	-159	-554
	612	1,767
Obligations under finance leases	-2	-2
Cash and finance leases	610	1,765
Bank loans and overdrafts	-25,659	-25,603
Net Debt	**-25,049**	**-23,838**
Derivative financial instruments:		
Derivative financial instrument assets	680	999
Derivative financial instrument liabilities	-947	-717
Net value of derivatives instruments	**-267**	**282**

Source: Network Rail's 2010-11 statutory accounts and our own calculations.

[76] More detail of how Network Rail has hedged its financial position is given in Network Rail Infrastructure Limited's Annual Report and Accounts 2011. The derivative financial instruments Network Rail uses include currency swaps, interest rate swaps, gilt locks and real rate swaps.

4.34 Table 4.11 analyses the increase in net debt during 2010-11 to show new debt issued, debt that has been repaid and debt that was raised but held as a cash balance to fund future costs or to repay existing loans (Network Rail's debt has a range of maturities, with some maturing each year so Network Rail's normal borrowing requirement is to finance both the deficit on running the business and its debt refinancing programme).

Table 4.11: Analysis of the movement in Network Rail's net debt

	£m
Regulatory net debt as at 31 March 2010	22,819
Regulatory net debt as at 31 March 2011	24,476
Increase in net debt in 2010-11	**1,657**
Represented by:	
New debt issued	1,782
Index-linked debt inflation (capital accretion)	657
Debt repaid	-1,926
Increase in net cash balances	1,155
Other	-11
Increase in net debt in 2010-2011	**1,657**

Source: Network Rail's calculations and our own calculations.

4.35 Table 4.12 shows a breakdown of Network Rail's net debt identifying the amount of nominal debt, index-linked debt and debt raised in a foreign currency. Network Rail's use of index-linked debt increased from 52% to 53% of its total borrowings in 2010-11.

Table 4.12: Analysis of Network Rail's net debt

	As at 31 March 2011		**As at 31 March 2010**	
	£m	**% of total borrowing**	**£m**	**% of total borrowing**
Nominal borrowings (GBP)	7,551	30%	7,780	32%
Nominal borrowings (Foreign currency)	4,322	17%	4,163	17%
Total nominal borrowings	11,873	47%	11,943	48%
Index-linked borrowings (GBP)	13,248	53%	12,702	52%
Total regulatory borrowings	**25,121**	100%	**24,645**	**100%**
Uncleared cash items	-35		-61	
Obligations under finance leases	2		2	
Net Cash balances	-612		-1,767	
Regulatory net debt as at 31 March	**24,476**		**22,819**	

Source: Network Rail's 2010-11 regulatory accounts and our own calculations.

4.36 Table 4.13 shows the maturity profile of Network Rail's gross debt.

Table 4.13: Maturity profile of Network Rail's gross debt

Maturity of debts:	£m
On demand or within one year	2,314
Due within one to two years	937
Due within two to five years	3,992
Due in more than five years	18,416
Total gross debt (as per statutory accounts)	**25,659**

Source: Network Rail’s 2010-11 statutory accounts.

Derivatives

4.37 Network Rail uses derivative financial instruments to hedge foreign exchange and interest rate risk on its issued debt (i.e. to offset valuation movements in its borrowings resulting from foreign exchange and interest rate movements).[77]

4.38 Table 4.10 shows the value of Network Rail’s derivative financial instruments at 31 March 2011. At 31 March 2011 the net value of derivative instruments held was a liability of £267m compared to a £282m asset at 31 March 2010. The movement is primarily due to the effect of currency swaps that matured during the year.

4.39 Network Rail holds cash collateral to limit its credit exposure against individual derivative counterparties. At 31 March 2011 the fair value of collateral held was £159m, having decreased from £554m at the previous year end. The decrease in collateral held reflects the decrease in positive fair value derivative positions held at this year end, i.e. Network Rail did not need to hold as much collateral.

4.40 The hedge accounting rules within International Financial Reporting Standards (IFRS) restrict the offsetting of valuation movements on derivatives against hedged items such as loans and bonds issued. Specifically, the notional gains or losses from the hedges which Network Rail take out to cover the real rate of interest (the interest rate excluding inflation) on future index-linked loans do not qualify to be hedge accounted. These gains or losses are accounted for at each reporting date, which means that Network Rail’s profits

[77] Network Rail’s policy is to hedge all foreign exchange exposures and at least 80% of interest rate risk.

are subject to valuation movements. In 2010-11 these losses amounted to £183m (£477m in 2009-10).[78]

Financing costs

4.41 Table 4.14 summarises Network Rail's financing costs for Great Britain in 2010-11. Network Rail incurred £160m higher financing costs than assumed in our PR08 determination.

4.42 As shown in Tables 4.14 and 4.15, the increased finance costs were largely due to inflation being higher than we had assumed increasing accretion on index-linked debt by £408m, partly offset by lower financing costs as a result of lower debt largely due to underspend on renewals and enhancements.

4.43 Given the volatility in the financial markets, we agreed with Network Rail that conditions were not favourable for issuing unsupported debt in 2010-11. Network Rail still thinks that it is right to move away from relying on supported debt and is keeping the position under review.

Table 4.14: Summary of financing costs for Great Britain

(£m, nominal prices)	**Actual 2010-11** **(A)**	**PR08 determin-ation** **(B)**	**Delivery plan update 2010** **(C)**	**Actual 2009-10** **(D)**	**PR08 determination variance** **(B-A)**
Interest on nominal debt - FIM covered	511	700	594	608	189
Interest on IL debt - FIM covered	176	152	179	157	-24
FIM fee[79]	187	187	194	182	0
Total interest costs	**874**	**1,039**	**967**	**948**	**165**
Accretion on IL debt - FIM covered	665	257	**393**	363	-408
Interest on nominal debt - unsupported	0	83	**0**	0	83
Total financing costs (per Network Rail's regulatory accounts)[80]	**1,539**	**1,379**	**1,360**	**1,311**	**-160**

Source: Network Rail's 2010-11 regulatory accounts, Network Rail submissions to us and our own calculations.

4.44 Table 4.15 summarises the average interest rates on Network Rail's debt.[81]

[78] Source: Network Rail Infrastructure Limited Annual Report and Accounts note 8.

[79] Network Rail pays a fee to Government in respect of the financial indemnity mechanism. This was set at 80 basis points (that is, 0.8%) on the outstanding FIM-backed debt.

[80] Financing costs per Network Rail's regulatory accounts of £1,539m, plus the expected return on assets less interest on liabilities in respect of the defined benefit pension scheme (£27m), less capitalised interest (£117m) and other (£52m, mostly interest income) equal the total financing costs included in Network Rail's statutory accounts (£1,501m).

Table 4.15: Summary of average interest rates

	Actual 2010-11	PR08 determination	Delivery plan update 2010	Actual 2009-10	PR08 determination variance
	(A)	(B)	(C)	(D)	(A-B)
Average interest rate on nominal debt - FIM covered	5.3%	5.0%	5.0%	5.4%	-0.3%
Average interest rate on nominal debt - unsupported	n/a	6.9%	7.5%	n/a	n/a
Average interest rate on IL debt - FIM covered	1.4%	1.6%	1.4%	1.4%	0.3%
Accretion on IL debt - FIM covered	5.3%	2.8%	4.4%	4.4%	-2.6%
Total average interest rate on IL debt - FIM covered	6.7%	4.4%	5.8%	5.8%	-2.3%
FIM fee rate	0.8%	0.8%	0.8%	0.8%	0.0%

Source: Network Rail's 2010-11 regulatory accounts, Network Rail submissions to us and our own calculations.

4.45 All of Network Rail's debt is raised on a Great Britain basis. However, for regulatory accounting and price control purposes, financing costs are allocated to England & Wales and Scotland.

4.46 Table 4.16 summarises Network Rail's financing costs for England & Wales for 2010-11. The £142m overspend is largely due to the same reasons as the variance for Great Britain.

Table 4.16: Summary of financing costs for England & Wales

	Actual 2010-11	PR08 determination	Delivery plan update 2010	Actual 2009-10	PR08 determination variance
(£m, nominal prices)	(A)	(B)	(C)	(D)	(B-A)
Interest on nominal debt - FIM covered	460	630	n/a	551	170
Interest on IL debt - FIM covered	158	137	n/a	142	-21
FIM fee	168	168	n/a	165	0
Total interest costs	**786**	**935**	n/a	**859**	**149**
Accretion on IL debt - FIM covered	598	231	n/a	330	-367
Interest on nominal debt - unsupported	0	76	n/a	0	76
Total financing costs (per Network Rail's regulatory accounts)	**1,384**	**1,242**	n/a	**1,188**	**-142**

Source: Network Rail's 2010-11 regulatory accounts, Network Rail submissions to us and our own calculations.

[81] Network Rail raises debt on a Great Britain basis so these average interest rates also apply for England & Wales and Scotland.

4.47 Table 4.17 summarises Network Rail's financing costs for Scotland for 2010-11. The £18m overspend is largely due to the same reasons as the variance for Great Britain.

Table 4.17: Summary of financing costs for Scotland

(£m, nominal prices)	Actual 2010-11 (A)	PR08 determination (B)	Delivery plan update 2010 (C)	Actual 2000-10 (D)	PR08 determination variance (B-A)
Interest on nominal debt - FIM covered	51	70	n/a	58	19
Interest on IL debt - FIM covered	18	15	n/a	15	-3
FIM fee	19	19	n/a	17	0
Total interest costs	**88**	**104**	n/a	**89**	**16**
Accretion on IL debt - FIM covered	67	26	n/a	34	-41
Interest on nominal debt - unsupported	0	7	n/a	0	7
Total financing costs (per Network Rail's regulatory accounts)	**155**	**137**	n/a	**123**	**-18**

Source: Network Rail's 2010-11 regulatory accounts, Network Rail submissions to us and our own calculations.

Rebates

4.48 Network Rail made rebate payments to its customers of £112m. These payments were made through reduced access charges to train operators, which should have been subsequently passed through to the Department of Transport and Transport Scotland.

Financial indicators

Introduction

4.49 We use financial indicators to help assess Network Rail's ability to raise finance and service its debt obligations. Table 4.18 shows the two main financial indicators that we use.[82] One of the trigger points in the access charges contracts for Network Rail's access review to be re-opened is the adjusted interest cover ratio (AICR). Network Rail's network licence also places limits on the company's overall level of net debt to RAB. Both of these indicators are discussed below.

4.50 The AICR is a measure of Network Rail's ability to pay interest charges taking account of all the business's running costs. It is a ratio that lenders and credit rating agencies tend to focus on.

[82] The definitions of each financial indicator are set out in our regulatory accounting guidelines.

4.51 The net debt to RAB ratio measures the value of Network Rail's net debt against the value of its RAB, i.e. Network Rail's notional gearing.

Great Britain

Table 4.18: Summary of the key financial indicators for Great Britain

	Actual 2010-11	PR08 determination	Delivery plan update 2010	Actual 2009-10
Adjusted interest cover ratio (AICR)	1.93	1.68	1.73	1.77
Net debt/RAB ratio	63.4%	63.5%	65.1%	63.9%

Source: Network Rail's 2010-11 regulatory accounts, Network Rail submissions to us and our own calculations.

4.52 The actual adjusted interest cover ratio of 1.93 in 2010-11 was 25 basis points better than we assumed in our PR08 determination largely due to the impact of the lower level of capital expenditure on the level of net debt.

4.53 The net debt to RAB ratio at the end of 2010-11 is 63.4%. This is 0.1% better than our PR08 determination assumption of 63.5%, largely due to the movements in net debt and the RAB explained above. It is lower than the 70.0% limit in Network Rail's network licence for 2010-11.[83]

England & Wales

4.54 Table 4.19 summarises the financial indicators for England & Wales for 2010-11.

Table 4.19: Summary of the key financial indicators for England & Wales

	Actual 2010-11	PR08 determination	Delivery plan update 2010	Actual 2009-10
Adjusted interest cover ratio (AICR)	1.94	1.67	1.75	1.77
Net debt/RAB ratio	63.5%	63.7%	n/a	64.0%

Source: Network Rail's 2010-11 regulatory accounts, Network Rail submissions to us and our own calculations.

4.55 The actual adjusted interest cover ratio of 1.94 in 2010-11 was 27 basis points better than we assumed in our PR08 determination. The reason for this variance is the same as for Great Britain overall. The actual adjusted interest cover ratio is higher than the 1.4 trigger level in the access charges contracts, which means it does not trigger a re-opener.

[83] Table 3.1 of the network licence granted to Network Rail Infrastructure Limited states the financial indebtedness limits for each year of CP4.

4.56 The net debt to RAB ratio at the end of 2010-11 is 63.5%. This is 0.2% better than our PR08 determination assumption of 63.7%, largely due to the movements in net debt and the RAB explained above.

Scotland

4.57 Table 4.20 below summarises the financial indicators for Scotland for 2010-11.

Table 4.20: Summary of the key financial indicators for Scotland

	Actual 2010-11	PR08 determination	Delivery Plan update 2010	Actual 2009-10
Adjusted interest cover ratio (AICR)	1.84	1.73	1.52	1.69
Net debt/RAB ratio	62.9%	61.6%	n/a	62.6%

Source: Network Rail's 2010-11 regulatory accounts, Network Rail submissions to us and our own calculations.

4.58 The actual adjusted interest cover ratio of 1.84 in 2010-11 was 11 basis points better than we assumed in our PR08 determination. The actual adjusted interest cover ratio is higher than the 1.4 trigger level in the access charges contracts, which means it does not trigger a re-opener.

4.59 The net debt to RAB ratio at the end of 2010-11 is 62.9%. This is 1.3% higher than our PR08 determination assumption of 61.6%.

5. Income

Introduction

5.1 This chapter reviews Network Rail's income in 2010-11 for Great Britain, England & Wales and Scotland. Comparisons are made with our PR08 determination assumptions and in some cases with Network Rail's own 2010 delivery plan update and 2009-10 figures (inflated into 2010-11 prices).

Income in 2010-11

Great Britain

5.2 Network Rail's income comprises track access charges, grant income and other single till income (OSTI) (including net income from Schedule 4 and 8 payments). Total income in 2010-11 for Great Britain was £6,020m. This was:

(a) £28m (0.5%) higher than our PR08 determination assumption;

(b) £117m (2.0%) higher than Network Rail's assumption in its own 2010 delivery plan update; and

(c) £71m (1.2%) lower than income in 2009-10.

5.3 Table 5.1 shows Network Rail's total income broken down into the various high level income categories compared with our PR08 determination assumptions, Network Rail's own 2010 delivery plan update and actual 2009-10 figures.

Table 5.1: Comparison of income for Great Britain

(£m, 2010-11 prices)	Actual 2010-11 (A)	PR08 determination (B)	Delivery plan update 2010 (C)	Actual 2009-10 (D)	PR08 variance (A-B)	Delivery plan update variance (A-C)	Prior year variance (A-D)
Fixed charges	912	882	867	819	30	46	93
Variable charges	691	669	680	753	22	12	-62
Total franchised track access income	1,603	1,551	1,546	1,572	52	57	31
Grant income	3,779	3,825	3,755	3,906	-46	25	-127
Other single till income	638	616	602	614	22	36	24
Total income	**6,020**	**5,992**	**5,903**	**6,091**	**28**	**117**	**-71**

Source: Network Rail's 2010-11 regulatory accounts, Network Rail submissions to us and our own calculations.

5.4 Total income in 2010-11 was £28m (0.5%) higher than assumed in our PR08 determination. This was largely because:

(a) franchised track access income[84] was £52m (3.4%) higher than we assumed in our PR08 determination largely because of higher traction electricity charges (which were offset by higher traction electricity costs included in non-controllable opex resulting from increased electricity prices) and higher fixed charges which included the release of provisions held against commercial claims which were settled during the year;

(b) other single till income was £22m (3.6%) higher than we assumed in our PR08 determination as explained further below; and

(c) these variances were partly offset by grant income being £46m (1.2%) lower than we assumed in our PR08 determination. This is due to a difference between the inflation assumption in the deeds of grant with the Department for Transport and Transport Scotland and the uplift of our PR08 determination from 2006-07 prices to 2010-11 prices partly offset by £25m of grant in Scotland, which was reprofiled into 2010-11 from 2011-12 to 2013-14.

5.5 Total income in 2010-11 was £117m (2.0%) higher than Network Rail assumed in its own 2010 delivery plan update. Significant variances include:

(a) franchised track access charges were £57m (3.7%) higher than Network Rail assumed;

(b) other single till income was £36m (5.9%) higher than Network Rail assumed in its own 2010 delivery plan update;

(c) grant income was £25m (0.7%) higher than Network Rail assumed in its own 2010 delivery plan update largely due to the reprofiling of £25m of grant in Scotland into 2010-11 from 2011-12 to 2013-14; and

(d) the favourable settlement of a one-off commercial claim.

5.6 Total income in 2010-11 was £71m (1.2%) lower than in 2009-10. This was mostly due to reduced grant income.

5.7 Table 5.2 compares other single till income for Great Britain with our PR08 determination assumptions, Network Rail's own 2010 delivery plan update and income in 2009-10.

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[84] Franchised track access income includes fixed charges and variable charges. Variable charges include traction electricity charge, electrification asset usage charge, capacity charge, station usage charge and Schedule 4 and 8 income.

Table 5.2: Comparison of other single till income for Great Britain

(£m, 2010-11 prices)	Actual 2010-11 (A)	PR08 determin-ation (B)	Delivery plan update 2010 (C)	Actual 2009-10 (D)	PR08 variance (A-B)	Delivery plan update variance (A-C)	Prior year variance (A-D)
Property income	140	120	208	104	20	-68	36
Freight income	43	78	57	54	-35	-14	-11
Open access income	21	20	22	24	1	-1	-3
Stations income	372	338	251	371	34	121	1
Depots income	60	52	61	57	8	-1	3
Other	2	8	3	4	-6	-1	-2
Total other single till income	**638**	**616**	**602**	**614**	**22**	**36**	**24**

Source: Network Rail's 2010-11 regulatory accounts, Network Rail submissions to us and our own calculations.

5.8 Total other single till income for 2010-11 was £22m (3.6%) higher than we assumed in our PR08 determination. This variance was largely due to stations income (£34m) and property income (£20m), partly offset by reduced freight income (£35m).

5.9 Stations income was £34m higher than we assumed in our PR08 determination due to the retail outlets at managed stations performing better than expected.

5.10 Property income was £20m higher than we assumed in our PR08 determination largely due to the favourable settlement of a one-off commercial claim.

5.11 Freight income was £35m lower than our PR08 determination as we had assumed a significant increase in the volume of freight traffic that did not materialise, largely as a result of the economic downturn.

5.12 Other single till income was £36m (5.9%) higher than Network Rail's own 2010 delivery plan update. For budgetary purposes, Network Rail reports property and stations income on a different basis to our PR08 determination so variances need to be looked at together. The overall variance on property and stations income compared to Network Rail's delivery plan update was £53m, which was largely due to the favourable settlement of a one-off commercial claim and the stronger than expected performance of retail outlets at managed stations.

5.13 Other single till income in 2010-11 was £24m (4.0%) higher than 2009-10. This was mainly due to higher income from property (£36m), partly offset by reduced freight income (£11m). Property income this year was higher due to the settlement of the one-off commercial claim. Freight income was lower largely as a result of the economic downturn.

England & Wales

5.14 Total income in 2010-11 for England & Wales was £5,431m. This was:

(a) £12m (0.2%) higher than our PR08 determination;

(b) £85m (1.6%) higher than Network Rail's own 2010 delivery plan update; and

(c) £73m (1.3%) lower than income in 2009-10.

5.15 Table 5.3 shows the income for England & Wales broken down into the various high level income categories compared with our PR08 determination assumptions, Network Rail's own 2010 delivery plan update and income in 2009-10.

Table 5.3: Comparison of income for England & Wales

(£m, 2010-11 prices)	**Actual 2010-11 (A)**	**PR08 determin-ation (B)**	**Delivery plan update 2010 (C)**	**Actual 2009-10 (D)**	**PR08 variance (A-B)**	**Delivery plan update variance (A-C)**	**Prior year variance (A-D)**
Fixed charges	794	764	750	704	30	44	90
Variable charges	652	631	640	713	21	12	-61
Total franchised track access income	1,446	1,395	1,390	1,417	51	56	29
Grant income	3,395	3,459	3,396	3,525	-64	-1	-130
Other single till income	590	565	560	562	25	30	28
Total income	**5,431**	**5,419**	**5,346**	**5,504**	**12**	**85**	**-73**

Source: Network Rail's 2010-11 regulatory accounts, Network Rail submissions to us and our own calculations.

5.16 Income in England & Wales in 2010-11 was £12m (0.2%) higher than we assumed in our PR08 determination. This was largely because:

(a) franchised track access income was £51m (3.7%) higher than we assumed in our PR08 determination;

(b) other single till income was £25m (4.4%) higher than we assumed in our PR08 determination; and

(c) these variances were partly offset by grant income being £64m (1.9%) lower than we assumed in our PR08 determination.

The reasons for these variances are largely the same as for Great Britain.

5.17 Income in England & Wales in 2010-11 was £85m (1.6%) higher than Network Rail assumed in its own 2010 delivery plan update. This was largely due to the same reasons as for Great Britain overall.

5.18 Income in England & Wales was £73m (1.3%) lower than in 2009-10. This was due to a reduction in grant income (£130m) partly offset by increases in franchised track access income (£28m) and other single till income (£28m) as explained for Great Britain.

5.19 Table 5.4 compares other single till income for England & Wales with our PR08 determination assumptions, Network Rail's own 2010 delivery plan update and income in 2009-10.

5.20 Other single till income was higher than 2009-10, largely because of higher property income (£41m), partly offset by lower freight income (£13m). Property income was higher this year due to the settlement of the one-off commercial claim and freight income was lower due to the economic downturn.

Table 5.4: Comparison of other single till income for England & Wales

(£m, 2010-11 prices)	**Actual 2010-11**	**PR08 determin-ation**	**Delivery plan update 2010**	**Actual 2009-10**	**PR08 variance**	**Delivery plan update variance**	**Prior year variance**
	(A)	**(B)**	**(C)**	**(D)**	**(A-B)**	**(A-C)**	**(A-D)**
Property income	133	113	195	92	20	-62	41
Freight income	36	68	55	49	-32	-19	-13
Open access income	21	20	22	24	1	-1	-3
Stations income	344	309	229	342	35	115	2
Depots income	54	47	55	50	7	-1	4
Other	2	8	3	4	-6	-1	-2
Total other single till income	**590**	**565**	**560**	**562**	**25**	**30**	**28**

Source: Network Rail's 2010-11 regulatory accounts, Network Rail submissions to us and our own calculations.

Scotland

5.21 Total income in 2010-11 in Scotland was £589m. This was:

(a) £15m (2.6%) higher than our PR08 determination;

(b) £32m (5.8%) higher than Network Rail's own 2010 delivery plan update; and

(c) £2m (0.3%) higher than income in 2009-10.

5.22 Table 5.5 compares income for Scotland with our PR08 determination assumptions, Network Rail's own 2010 delivery plan update and actual 2009-10 figures.

Table 5.5: Comparison of income for Scotland

(£m, 2010-11 prices)	**Actual 2010-11 (A)**	**PR08 determination (B)**	**Delivery plan update 2010 (C)**	**Actual 2009-10 (D)**	**PR08 variance (A-B)**	**Delivery plan update variance (A-C)**	**Prior year variance (A-D)**
Fixed charges	118	118	116	115	0	2	3
Variable charges	39	38	39	40	1	0	-1
Total franchised track access income	157	156	155	155	1	2	2
Grant income	384	366	359	381	18	25	3
Other single till income	48	52	43	51	-4	5	-3
Total income	**589**	**574**	**557**	**587**	**15**	**32**	**2**

Source: Network Rail's 2010-11 regulatory accounts, Network Rail submissions to us and our own calculations.

5.23 Income in Scotland in 2010-11 was £15m (2.6%) higher than we assumed in our PR08 determination. This was largely because:

(a) grant income was £18m higher than we assumed in our PR08 determination, whereas grant income was lower for England & Wales, and Great Britain overall. This difference reflects the reprofiling of the grant in Scotland with £25m being brought forward to 2010-11, which will be offset by reduced payments in 2011-12 to 2013-14; and

(b) other single till income was £4m (7.7%) lower than we assumed in our PR08 determination as explained further below.

5.24 Income in Scotland in 2010-11 was £32m (5.8%) higher than Network Rail assumed in its own 2010 delivery plan update. This was largely because grant income was £25m (7.1%) higher than Network Rail assumed in its 2010 delivery plan update as explained above. This difference was largely due to the reprofiling of the grant in Scotland with £25m being brought forward to 2010-11, which will be offset by reduced payments in 2011-12 to 2013-14.

5.25 Franchised track access income was £2m (1.2%) higher and other single till income was £5m (12.4%) higher than Network Rail assumed in its 2010 delivery plan update, largely due to the same reasons as for Great Britain overall.

5.26 Income in Scotland was £2m (0.3%) higher than in 2009-10, in contrast to England & Wales where it was £73m (1.3%) lower. The increase compared to 2009-10 was mainly because:

(a) grant income was £3m higher;

(b) franchised track access income was £2m higher; and

(c) these variances were partly offset by other single till income which was £3m lower, due to a combination of reduced property income (£5m), partly offset by an increase in freight income (£2m).[85]

5.27 Table 5.6 compares other single till income in Scotland with our PR08 determination assumptions, Network Rail's own 2010 delivery plan update and actual 2009-10 figures.

Table 5.6: Comparison of other single till income for Scotland

(£m, 2010-11 prices)	**Actual 2010-11 (A)**	**PR08 determination (B)**	**Delivery plan update 2010 (C)**	**Actual 2009-10 (D)**	**PR08 variance (A-B)**	**Delivery plan update variance (A-C)**	**Prior year variance (A-D)**
Property income	7	7	13	12	0	-6	-5
Freight income	7	10	2	5	-3	5	2
Open access income	0	0	0	0	0	0	0
Stations income	28	29	22	28	-1	6	0
Depots income	6	6	6	6	0	0	0
Other	0	0	0	0	0	0	0
Total other single till income	**48**	**52**	**43**	**51**	**-4**	**5**	**-3**

Source: Network Rail's 2010-11 regulatory accounts, Network Rail submissions to us and our own calculations.

[85] Scotland has a smaller property portfolio than England & Wales and so property income is more likely to be sensitive to one-off local factors.

Network Rail's compliance with the de-minimis limits for non-core activities

5.28 Network Rail carries out some activities which are not core to its operation of the railway network but may help to lower the total costs of running the network. Network Rail is permitted to carry out such activities subject to the de-minimis limits of a cumulative cap of £210m (April 2006 prices) on the level of investments and an annual cap of £140m (April 2006 prices) on the level of turnover. We have also granted Network Rail a specific consent for £50m of property development activities and a consent for certain other property activities.

5.29 As shown in Table 5.7, in 2010-11, Network Rail has told us that its turnover and expenditure were below the de-minimis limits set out in its licence and our consents.

Table 5.7: Network Rail's compliance with the limits set in the licence

(£m, 2010-11 prices)	**Actual 2010-11**	**Limits**
Licence condition		
Turnover (per annum)	4	158
Investment (any point in time)	4	237
Specific Consents		
Property development	11	50
Property	42	Below each of the various limits

Source: Actual 2010-11 from Network Rail. The limits are available on the ORR's website.[86]

[86] See http://www.rail-reg.gov.uk/server/show/ConWebDoc.9329

Annex A: Historic information

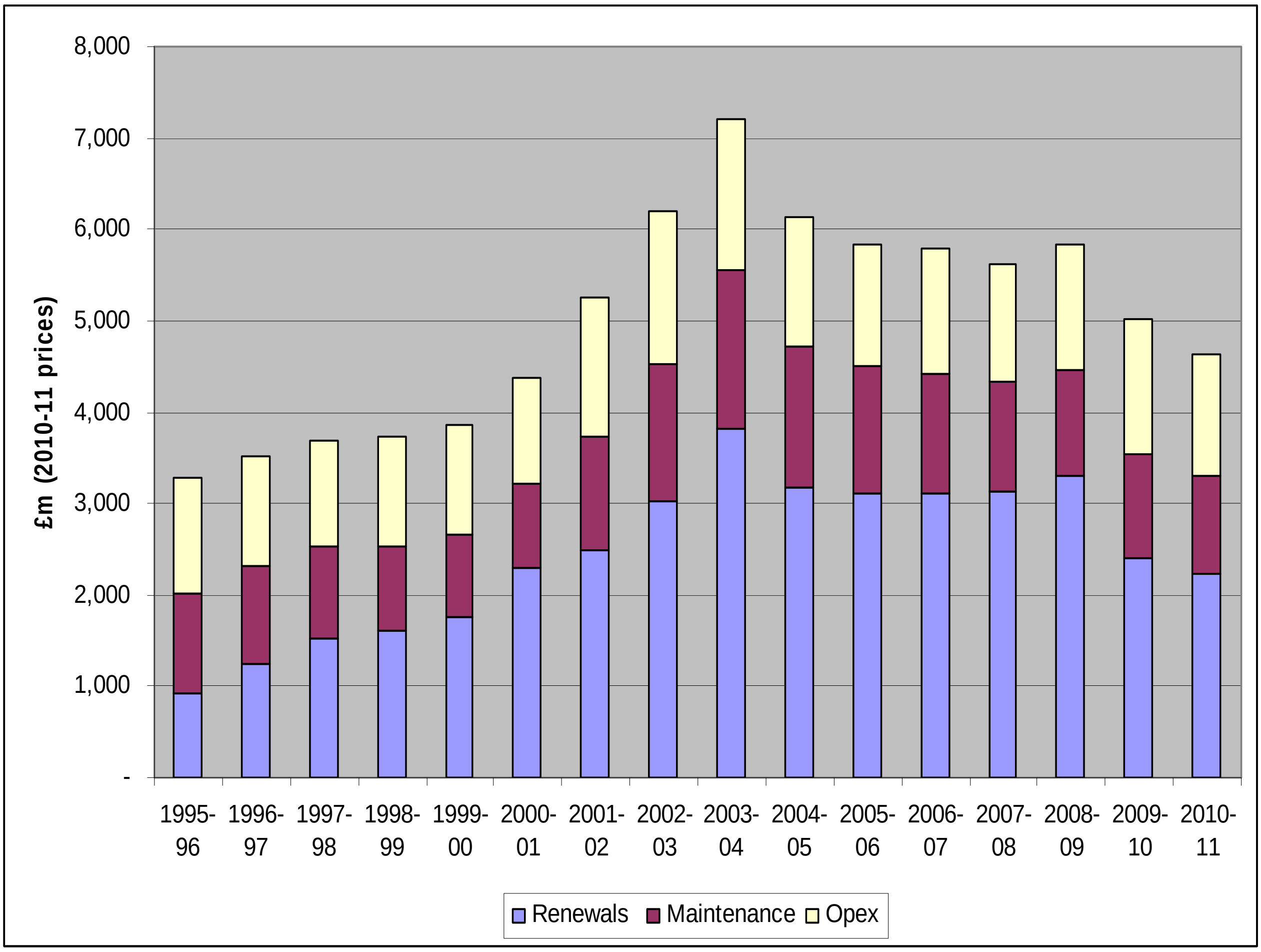
Introduction

1. This annex provides information about Network Rail's historic income, expenditure and efficiency. The information is for Great Britain and where possible England & Wales and Scotland separately. More detail about Network Rail and Railtrack's income and expenditure can be found in its regulatory accounts, which are available on Network Rail's website.

Expenditure

2. Graph A1 shows actual OMR expenditure since 1995-96 in Great Britain.

Graph A1: OMR expenditure from 1995-96 to 2010-11 in Great Britain



3. Tables A1, A2 and A3 provide information about Network Rail's expenditure since 2002-03 and Railtrack's in 2001-02.

Table A1: Historic expenditure for Great Britain

(£m, 2010-11 prices)	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
Controllable opex	1,124	1,319	1,316	1,121	1,013	990	950	953	1,038	909
Non-controllable opex	384	361	331	296	310	387	326	421	454	419
Total opex	1,508	1,680	1,647	1,417	1,324	1,377	1,275	1,374	1,492	1,328
Maintenance	1,242	1,507	1,749	1,525	1,396	1,292	1,209	1,159	1,121	1,068
Renewals	2,497	3,018	3,811	3,184	3,116	3,117	3,130	3,301	2,412	2,234
Total OMR	**5,247**	**6,205**	**7,207**	**6,126**	**5,836**	**5,787**	**5,614**	**5,835**	**5,026**	**4,630**
Enhancements: PR08	n/a	n/a	n/a	782	449	288	369	469	1,099	1,053
Enhancements: Non-PR08	n/a	n/a	n/a	60	27	151	333	912	566	677
Total Enhancements	**1,027**	**781**	**808**	**842**	**476**	**439**	**702**	**1,382**	**1,666**	**1,730**

Source: Network Rail and Railtrack's regulatory accounts. Note that for the years where we include n/a in the table, the information is not available. Amounts for 2009-10 are as per the published regulatory accounts.

Table A2: Historic expenditure for England & Wales

(£m, 2010-11 prices)	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
Controllable opex	n/a	n/a	n/a	n/a	923	899	864	866	938	826
Non-controllable opex	n/a	n/a	n/a	n/a	279	358	300	390	421	391
Total opex	n/a	n/a	n/a	n/a	1,202	1,256	1,164	1,256	1,359	1,217
Maintenance	n/a	n/a	n/a	n/a	1,257	1,171	1,099	1,057	1,025	972
Renewals	n/a	n/a	n/a	n/a	2,788	2,783	2,831	2,996	2,176	1,970
Total OMR	n/a	n/a	n/a	n/a	**5,247**	**5,210**	**5,094**	**5,309**	**4,560**	**4,159**
Enhancements: PR08	n/a	n/a	n/a	n/a	449	267	357	456	918	906
Enhancements: Non-PR08	n/a	n/a	n/a	n/a	23	132	296	776	520	629
Total Enhancements	n/a	n/a	n/a	n/a	**476**	**416**	**677**	**1,271**	**1,463**	**1,535**

Source: Network Rail and Railtrack's regulatory accounts. Note that for the years where we include n/a in the table, the information is not available.

Table A3: Historic expenditure for Scotland

(£m, 2010-11 prices)	**2001-02**	**2002-03**	**2003-04**	**2004-05**	**2005-06**	**2006-07**	**2007-08**	**2008-09**	**2009-10**	**2010-11**
Controllable opex	n/a	n/a	n/a	n/a	90	91	85	87	99	83
Non-controllable opex	n/a	n/a	n/a	n/a	32	29	26	32	34	28
Total opex	n/a	n/a	n/a	n/a	122	121	111	119	133	111
Maintenance	n/a	n/a	n/a	n/a	139	122	110	102	96	96
Renewals	n/a	n/a	n/a	n/a	328	334	299	306	237	264
Total OMR	n/a	n/a	n/a	n/a	**589**	**576**	**520**	**526**	**466**	**471**
Enhancements: PR08	n/a	n/a	n/a	n/a	0	20	12	14	181	147
Enhancements: Non-PR08	n/a	n/a	n/a	n/a	0	2	13	98	22	48
Total Enhancements	n/a	n/a	n/a	n/a	**0**	**23**	**25**	**111**	**203**	**195**

Source: Network Rail and Railtrack's regulatory accounts. Note that for the years where we include n/a in the table, the information is not available.

Income

4. Tables A4, A5 and A6 provide information about Network Rail's income since 2002-03 and Railtrack's in 2001-02.

Table A4: Historic income for Great Britain

(£m, 2010-11 prices)	**2001-02**	**2002-03**	**2003-04**	**2004-05**	**2005-06**	**2006-07**	**2007-08**	**2008-09**	**2009-10**	**2010-11**
Franchised track access	1,641	1,726	1,963	1,267	1,331	2,084	2,096	1,472	1,572	1,603
Grant income	1,146	1,195	1,259	2,470	2,323	3,639	3,551	4,219	3,906	3,779
Other single till	929	899	822	868	894	877	877	832	614	638
Total income	**3,716**	**3,819**	**4,043**	**4,604**	**4,548**	**6,601**	**6,524**	**6,523**	**6,091**	**6,020**

Source: Network Rail and Railtrack's regulatory accounts.

Table A5: Historic income for England & Wales

(£m, 2010-11 prices)	**2001-02**	**2002-03**	**2003-04**	**2004-05**	**2005-06**	**2006-07**	**2007-08**	**2008-09**	**2009-10**	**2010-11**
Franchised track access	n/a	n/a	n/a	n/a	1,248	1,905	1,910	1,277	1,417	1,446
Grant income	n/a	n/a	n/a	n/a	2,045	3,249	3,161	3,836	3,525	3,395
Other single till	n/a	n/a	n/a	n/a	834	811	809	770	562	590
Total income	n/a	n/a	n/a	n/a	**4,127**	**5,965**	**5,880**	**5,882**	**5,504**	**5,431**

Source: Network Rail and Railtrack's regulatory accounts. Note that for the years where we include n/a in the table, the information is not available.

Table A6: Historic income for Scotland

(£m, 2010-11 prices)	**2001-02**	**2002-03**	**2003-04**	**2004-05**	**2005-06**	**2006-07**	**2007-08**	**2008-09**	**2009-10**	**2010-11**
Franchised track access	n/a	n/a	n/a	n/a	83	179	186	195	155	157
Grant income	n/a	n/a	n/a	n/a	278	390	389	383	381	384
Other single till	n/a	n/a	n/a	n/a	60	67	68	62	51	48
Total income	n/a	n/a	n/a	n/a	**421**	**636**	**644**	**641**	**587**	**589**

Source: Network Rail and Railtrack's regulatory accounts. Note that for the years where we include n/a in the table, the information is not available.

Annex B: Reconciliation of the adjusted PR08 determination

Introduction

1. The tables in this annex show the reconciliation of controllable opex, maintenance and renewals for Great Britain, England & Wales and Scotland between Network Rail's PR08 strategic business plan (SBP), our PR08 determination and subsequent changes following our PR08 determination.
2. The adjustments that we made as part of our PR08 determination are generally set out in our PR08 determination and the post PR08 determination adjustments are discussed in more detail in the regulatory accounting guidelines.

Controllable opex

3. Table B1 shows the reconciliation of controllable opex for Great Britain, England & Wales and Scotland between Network Rail's PR08 strategic business plan, our PR08 determination and subsequent changes following our PR08 determination.
4. The PR08 pre-efficient determination adjustments to Network Rail's strategic business plan were for insurance and pension costs as set out in paragraph 6.33 of our final PR08 determination.
5. In Network Rail's 2009-10 internal reporting it revised the allocation of costs between controllable opex and maintenance. In order to more easily compare Network Rail's expenditure with our PR08 determination, we restated our PR08 determination operating costs and maintenance costs to be on a consistent basis. In its 2010-11 internal reporting it made a further reclassification of certain pension and staff incentives costs to operating costs.
6. Overall, this restatement has the effect in 2010-11 of increasing controllable opex by £9m and reducing maintenance by £9m for Great Britain compared to the PR08 determination. The restatement has no effect on Network Rail's income.

Table B1: Calculation of the controllable opex adjusted PR08 determination for 2010-11

(£m, 2010-11 prices)	SBP pre-efficient	ORR PR08 determin-ation adjustments	ORR pre-efficient PR08 determin-ation	ORR post efficient PR08 determination	Post PR08 determin-ation adjustment	Adjusted PR08 determination
GB	900	-62	838	792	9	801
England & Wales	819	-58	761	720	8	727
Scotland	81	-5	77	72	1	73

Source: PR08 determination, Network Rail submissions to ORR and our own calculations.

Maintenance

7. Table B2 shows the reconciliation of maintenance for Great Britain, England & Wales and Scotland between Network Rail's strategic business plan, our PR08 determination and subsequent changes following our PR08 determination.

8. The post PR08 adjustments to maintenance are explained in the controllable opex section above.

Table B2: Calculation of the maintenance adjusted PR08 determination for 2010-11

(£m, 2010-11 prices)	SBP pre-efficient	ORR PR08 determin-ation adjustments	ORR pre-efficient PR08 determin-ation	ORR post efficient PR08 determination	Post PR08 determin-ation adjustment	Adjusted PR08 determination
GB	1,201	58	1,260	1,181	-9	1,172
England & Wales	1,084	56	1,140	1,068	-8	1,060
Scotland	117	2	120	112	-1	111

Source: PR08 determination, Network Rail submissions to ORR and our own calculations.

Renewals

9. Table B3 shows the reconciliation of renewals for Great Britain, England & Wales and Scotland between Network Rail's strategic business plan, our PR08 determination and subsequent changes following our PR08 determination.

10. The post PR08 adjustments included in Table B3 are for:

    a) the reclassification of expenditure from renewals to enhancements. (£61m). These adjustments are to delivery plan projects which include elements of both renewals and enhancement expenditure (known as ‘mixed’ projects). Enhancements as a result are £61m higher; and

b) the inclusion of Seven Day Railway expenditure of £4m, which was inadvertently omitted from our PR08 determination.

Table B3: Calculation of the renewals adjusted PR08 determination for 2010-11

(£m, 2010-11 prices)	**SBP pre-efficient**	**ORR PR08 determin-ation adjustments**	**ORR pre-efficient PR08 determin-ation**	**ORR post efficient PR08 determination**	**Post PR08 determin-ation adjustment**	**Adjusted PR08 determination**
GB	3,090	-145	2,945	2,657	-57	2,601
England & Wales	2,705	-131	2,574	2,323	-57	2,266
Scotland	385	-14	371	335	0	335

Source: PR08 determination, Network Rail submissions to ORR and our own calculations.

Office of Rail Regulation
One Kemble Street
London
WC2B 4AN

T: 020 7282 2000
F: 020 7282 2040

www.rail-reg.gov.uk