Establishing Network Rail's Efficient Expenditure Workshop

21 September 2011





Paul McMahon Deputy Director, Railway Markets & Economics



Welcome and introduction

- Assessing the level of 'efficient expenditure' required by Network Rail in CP5 is a core activity in PR13
- Consultation document on our proposed approach published in July
- Closing date for responses: 14 October

Purpose of this workshop

- To explain and discuss our proposals/document
- To help inform your responses



Agenda

- 11.00 11.15 Welcome and introduction (Paul McMahon)
- 11.15 11.45 Support & operations

(Graham Richards, Carl Hetherington)

- 11.45 12.15 Discussion
- 12.15 12.30 Enhancements (Graham Richards)
- 12.30 13.00 Discussion
- 13.00 14.00 Lunch
- 14.00 14.15 Maintenance & renewals (bottom up) (Jim Bostock)
- 14.15 14.30 Maintenance & renewals (top down) (Gian Carlo Scarsi)
- 14.30 15.15 Discussion
- 15.15 15.30 Summary and close



Context...

- In PR08 we assumed NR needed £32.2bn for its OM&R in CP4, £2.9bn less than NR proposed. We assumed efficiency could improve by 21%
- Over CP3 and CP4 NR will have improved efficiency by more than 40% and saved more than £15bn
- Work on efficient expenditure will be important in PR13... smaller gap, McNulty recommendations, public finances, route based assessments, ...
- We will make our decisions on expenditure and efficiency as part of a 'balanced package'
- In a periodic review we do not (generally) specify the amounts of expenditure or dictate Network Rail's working methods or technologies



Key PR13 milestones





Support, operations and noncontrollable costs

Carl Hetherington, Head of Regulatory Finance Graham Richards, Head of Planning & Operations



Introduction

- For PR13 we are presenting support and operations separately

 this will increase transparency of controllable opex
- We will also look at non-controllable opex
- This presentation:
 - explains what support, operations and non-controllable costs include and their materiality
 - sets out our planned approaches to the assessments
 - looks for views from stakeholders on what the key issues are and how we should address them, e.g. operating strategy
- Network Rail has underperformed in CP4 but is forecasting to improve its efficiency on a REEM basis by 15.3% in CP4, 13.1% from 2011-12 to 2013-14 and 7.6% in 2013-14



Support & operations expenditure in 2010-11

£m (2010-11 prices)	Great Britain	England & Wales	Scotland
Human resources	75	68	7
Information management	76	68	8
Operations & customer services	439	400	39
Finance	31	28	3
Strategic sourcing (e.g procurement)	47	42	5
Planning & development	12	11	1
Safety & compliance	3	3	0
Other corporate services	40	36	4
Commercial property	87	82	5
Asset management & engineering	50	45	5
National delivery service (e.g. logistics support)	10	9	1
Group/central	39	34	5
Total	909	826	83



Support costs - overview

- Support costs are the costs of supporting the rest of the operational business, e.g. insurance, IT and HR
- This workstream also includes company wide costs that are recharged to maintenance, renewals and enhancements
- Assumptions for England & Wales, Scotland, Wales and operating routes
- Base year
- Efficiency assumption:
 - top-down benchmarking studies of total support costs compared to international railway operators (about to start) and non-railway operators (scheduled to start in April 2012)
 - specific studies, e.g. IT



Support costs – key work

- Network Rail needs to:
 - properly justify its plans showing why its forecasts are efficient
 - identify risks and opportunities
 - ensure consistency e.g. there should be a clear capitalisation of overheads and no double counting of costs and/or income, e.g. insurance costs
 - reconcile actual spend to forecast
 - improve on how it supported its plans in PR08, e.g. capitalisation of overheads
 - be transparent
- ORR:
 - assess Network Rail's plans and supporting data
 - where we need to we will commission our own studies
- Transparency we will publish the studies or at least a summary of them



Operations costs - overview

- Activities that operate the infrastructure to allow trains to run
- Largest aspect is signaller costs
- VfM study identified signalling as an opportunity to reduce the industry's cost base
- Civity report (May 2011) looked at benchmarking operating costs with international comparators
- NR has worked up a CP5 Signalling Asset Policy and NOS to inform its rationale for most of the operations expenditure in CP5
- Link to CP4 and CP5 renewals



Operations costs – key work

- We are currently scrutinising NR's asset policies and we will undertake a bottom up assessment of signalling renewals
- We will be reviewing NR's progress on the network operating strategy, rostering effectiveness and non signallers spend between now and next March
- We will be looking at the business case behind the operating strategy and whether the benefits will be realised
- We will be doing a top down comparison against other companies from abroad, building on the Civity report and sharing data for NR's own benchmarking work
- We will publish any studies that we do



Non-controllable costs

- In 2010-11 NR spent £419m on 'non-controllable' costs Traction electricity (£227m), business rates (£91m), British Transport Police (£74m), ORR fees (£18m) and RSSB levy (£9m)
- For simplicity, we only used two categories of opex in PR08 controllable and non-controllable
- Non-controllable means "may not have full control", i.e. it includes BT police costs where we set an efficient assumption
- For PR13 we will review how best to incentivise Network Rail to control all of these costs – especially some aspects of traction electricity costs such as transmission losses
- Some non-controllable costs are partly driven by other parts of the industry, e.g. traction electricity and we will use the industry reform process to review how a whole industry approach could make a difference



Discussion

- What are the key issues:
 - operating routes
 - efficiency assumptions
 - operating strategy
 - incentivising non-controllable costs
 - any others?
- How should we address them?

• Over to you





Graham Richards, Head of Planning & Operations



Introduction

- For PR13 we expect that there will be a number of enhancements to assess, as a minimum there are projects that have started and been given the go ahead to continue through CP5 (e.g. Stafford, Electrification, West Coast power supply)
- This presentation:
 - explains what enhancements costs include
 - sets out our planned approach to assessment
 - looks for views from stakeholders on what the key issues are and how we should address them.
- NR is on course to deliver the CP4 enhancements within the funding allowed, although it is too early to tell whether any underspend is efficient.



Background

- NR can be funded to deliver enhancements through either a periodic review, such as Airdrie to Bathgate, Birmingham New Street, platform extensions and power upgrades.
- or through the investment framework, such as Ayrshire to Inverclyde and many third party schemes.
- Assessing the efficient cost of enhancements differ from renewals, although some of the same data and techniques are used.
- In CP4, funds have been used (such as the SFN) to give operators a greater role in decision making.



Enhancement expenditure in 2010-11

PR08 funded schemes	
NRDF (Network Rail Discretionary Fund)	31
NSIP (National Stations Improvement Programme)	27
Performance fund (HLOS)	46
Safety and environment fund	22
Access for all (DDA)	47
King's Cross	105
West Coast main line committed schemes	15
Thameslink	504
Reading	59
Platform Lengthening - Southern	26
Power supply upgrade total	22
East Coast main line improvements	14
Western Improvements Programme	16
North London Line capacity enhancement	29
Airdrie to Bathgate	87
Paisley corridor improvements	51
Other*	-48
Total for PR08 funded schemes	1,053

Non PR08 funded enhancements	£m
Crossrail	47
Electrification	5
EGIP	22
Ayrshire-Inverclyde	17
Third party promoted	126
Other - promoted by Network Rail or DfT	68
Funded directly by third parties	392
Total for non PR08 funded schemes	677
Total enhancement expenditure	1,730

* negative because of a £111m direct payment from DfT relating to PR08 schemes previously funded through Network Rail's regulatory asset base. More detail on the breakdown of enhancement spend can be found in Network Rail's regulatory accounts. The £111m is included in the 'funded directly by third parties' category.



PR08

- Are NR's proposed schemes needed to deliver the governments' HLOSs?
 - in some cases we judged NR had over specified number and type of schemes
- What is the efficient cost of the schemes that were needed?
 - bottom up assessment of scope, costs, frontier shift
 - application of a portfolio effect
- Independent evaluation concluded that the process worked well but one of the main problems was that many schemes were at an early stage



PR13

- Our approach will depend on how the governments specify their requirements in the HLOSs, but broadly speaking we will
 - assess what projects are needed, drawing on the governments' required outputs, business cases and RUSs
 - use efficient costs for schemes already given the go ahead (e.g. Thameslink, Crossrail and EGIP)
 - determine efficient costs of any new schemes
- CP5 development fund allows NR to develop projects in good time for PR13
- Unit cost information from the existing programme of work can be used to better inform costs of new projects
- Wherever possible use international and non railway benchmarks



Discussion

- What are the key issues:
 - what projects are needed
 - international and non rail benchmarks
 - assessment and governance of funds
 - any others?
- How should we address them?

• Over to you



Maintenance and renewal expenditure: bottom up analysis

Jim Bostock, Head of Engineering & Asset Management



Background

- M&R Maintenance and Renewal of Network Rail's assets
 - including track, civil structures, buildings, signalling equipment, telecoms, electrification, fixed and moving plant
- PR08
 - NR given funding to deliver
 - £5 billion of maintenance
 - £10.7 billion of renewal



- Bottom-up assessment will be based around six workstreams, examining in detail:
 - asset management capability
 - asset policies
 - asset data
 - unit costs (including efficiency)
 - decision support tools
 - workbank planning



- Differing levels of scrutiny:
 - *IIP (Sep 2011):* assess likely range of efficient expenditure to inform likely range of funding requirements
 - Progressive assurance in the lead-up to SBP (ongoing to Jan 2013): ongoing process by which NR assures ORR about the robustness of its planning for CP5
 - Determination (draft Jun'13, final Oct' 13) onwards): detailed review of NR's plans, building on the progressive assurance process, and followed by setting M&R price-caps for Apr '14 – Mar '19



- Asset management capability:
 - Assessing NR's asset management capability and progress towards best practice
- Asset policy assessment:
 - Assessing whether NR's asset policies will deliver required outputs (robustness) over the long-term (sustainability) at minimum whole lifecycle and whole industry cost (efficiency)
- Asset data:
 - Assessing the quality and coverage of NR's asset data, for example number, type, age, condition, criticality, performance and degradation information
- Unit costs and efficiency:
 - Assessing the quality and coverage of NR's unit cost data, and NR's assessment of unit cost efficiency including internal, international and cross-industry benchmarking



- Decision support tools:
 - Assessing the quality of the modelling used to build up NR's efficient cost forecast
- Workbank:
 - Assessing the extent to which the workbank reflects application of minimum whole lifecycle cost policy
- Top-down international benchmarking:
 - Benchmarking of NR's expenditure at aggregated levels (for example, total M&R costs) against international comparators to understand the size of any efficiency gap



M&R efficient expenditure - next steps

- Ongoing assessment of asset policies underpinning the IIP
- Following receipt of IIP at the end of September, detailed review of IIP and WLCC modelling
- ORR provides advice to ministers February 2012, including suggested range of efficient M&R expenditure







Maintenance and renewal expenditure: top down analysis

Gian Carlo Scarsi, Head of Regulatory Economics



Purpose of this presentation

- To discuss our approach to the top-down efficient expenditure assessment of Network Rail's maintenance and renewal activities
- To briefly describe how we did this in PR08
- To set out our planned approach to assessing top down NR efficient expenditure (M&R) in PR13



PR08

- We carried out a top-down, statistical (econometric) analysis of Network Rail's maintenance and renewals efficiency using the UIC/LICB database (1996-2006) from the International Union of Railways
- This work was updated in 2010 using 1996-2008 data
- We are currently working on 1996-2009 data
- The top down econometric analysis using the UIC/LICB dataset in 2008 found a cost efficiency gap of 35%, with bottom-up evidence supporting this gap



PR13

- Improve data inputs (NR and international)
- Improve "steady-state" adjustment
- Sense-check results, taking into account (possibly off-model) network performance and safety
- Extending our analysis to sub-company data (domestically and internationally; devolution)
- Improving modelling techniques (econometric/functional form specification; cost drivers; time profile of inefficiency)
- Interacting with engineering benchmarking and bottom-up cost assessment



Planned activities (2011-2013)

- Top down UIC/LICB econometric update (in coordination with NR)
- Regional (sub-company) top-down econometric benchmarking
- Non-EU (North America and Asia) benchmarking
- Further "gap" analysis (not strictly part of top down benchmarking) – trying to understand the reasons for the cost efficiency gap becomes crucial as the gap gets narrower
- Report updated results throughout PR13 and share our views and emerging conclusions with NR



Reaching an overall view

- We will review the evidence from top down analysis and other areas of study, and use results across each area to inform our understanding
- Bottom-up efficiency analysis, for example, will help explain the efficient expenditure gap range highlighted by the econometric work
- Safety considerations and pace of change will be central: not only about the projected CP5 efficient expenditure end-point, but also about how quickly any changes can be made safely





