INDEPENDENT PR08 PROGRAMME EVALUATION

REPORT TO ORR BOARD



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TERMS OF REFERENCE

The objectives for this independent review were agreed by the Board of ORR at its meeting on 20th January 2009 and were to:

- examine the way in which ORR carried out PR08 (it was not the purpose of the evaluation to review the merits of the actual decisions that ORR took and its overall PR08 determination);
- seek views from stakeholders on the review process and whether ORR addressed the key issues in the review and consulted fully on its proposals and explained clearly its decisions; and
- prepare and publish a report on the findings of the evaluation and containing recommendations to ORR on areas it needs to give consideration to planning and carrying out the 2013 periodic review.

The evaluation "should have regard to established principles of good regulation and ORR's statutory duties in carrying out its work and making its recommendations".

The review team was given discretion to agree its own terms of reference in the light of the objectives given. The team accepted the objectives in their entirety as its terms of reference but also took the view that because the High Level Output Specifications produced by the two governments were crucial to ORR's conduct of PR08, it was relevant to consider the processes associated with their development as part of the independent review. The team also considered it legitimate to comment on aspects of the rail industry planning process of which PR08 was a part.

REVIEW TEAM

The review team comprised John Nelson (Chair), Mike Toms and Peter Vass. Chris Shapcott and Mark MacPherson also participated as observers, respectively from the National Audit Office and Audit Scotland. Personal CV's of the review team and any interests they hold in the rail industry are described in Appendix A together with a statement of conflicts of interest.

CONSTRUCTION OF THIS REPORT

The report is presented in four parts:

- The first outline provides an executive summary.
- The second provides our conclusions and recommendations.
- The third provides the team's more detailed assessment of the process.
- The fourth provides a summary of stakeholder views.
- The appendices contain detail on a range of issues providing the evidence and context on which some of our opinions are based.

1. EXECUTIVE SUMMARY

- 1.1 The 2008 Periodic Review (PR08) followed current practice for UK regulators. It passed without disorder or confusion on the part of ORR, Network Rail and most stakeholders. ORR managed the programme well. There was strong leadership and effective project management of what was an immensely complex task. ORR employed external advisers where appropriate and took proper account of their advice.
- 1.2 The process was open, inclusive and undertaken without visible rancour. The review delivered outcomes that met the principal objectives ORR had set for the review, to the extent that no party chose to appeal the determination to the Competition Commission or the courts. Ultimately the determinations were accepted positively by Network Rail, which has developed a strong Delivery Plan that will serve as the basis for ongoing monitoring by ORR and as a precursor for the next periodic review.
- 1.3 Stakeholders generally felt this was a process in which they were actively encouraged to participate with most taking the opportunity to do so. All stakeholders considered the review process to be a significant advance on past practice. They saw ORR as a competent economic regulator positioned uncomfortably between government and Network Rail, and vulnerable to the greater technical knowledge of the industry in Network Rail, DfT and the operating companies. By contrast, although Network Rail is still seen as conservative and not yet fully customer oriented, it is regarded as a great improvement on Railtrack. Stakeholders continue to believe that scope for considerable gains in efficiency still exists.
- 1.4 The fact that the process was both well received and effective in achieving its goals was especially creditable given that this was the first review to be undertaken since the 2005 Railways Act. PR08 provides a sound basis for approaching the next periodic review. Notwithstanding this creditable overall performance, there are areas where there is scope for improvement in the framing and management of the next price control review.
- 1.5 In particular ORR should seek mechanisms for better and earlier representation of the interests of passengers and freight customers as well as of the potential contributions of supply companies, freight and passenger owning groups to provide improved definition to the strategies, including partnerships that could be adopted to support an integrated approach to whole industry planning and investment.
- 1.6 ORR should ensure that the data and reporting requirements expected of Network Rail are clearly stated at the outset so as to avoid confusion and losing time in getting the next review under way. It should also set the objectives for the review in the right context from the start, especially but not only in relation to ORR's statutory duties, and follow them throughout the process.
- 1.7 ORR should be clear on what is being regulated and what isn't and spell out unequivocally how delivery will be monitored to provide clarity to Network Rail and confidence to stakeholders that key deliverables will be kept firmly under review and enforced. It should monitor the key "enablers" of delivery as well as outputs.

1.8 Given the central role in the review played by engineering issues ORR should consider whether it needs to appoint a director (preferably a board non-executive) with railway engineering expertise as part of the Board's Periodic Review Committee and with Network Rail it should continue to develop its understanding of international bench marking as a priority.

2. CONCLUSIONS AND RECOMMENDATIONS

2.1 THE OVERALL PROCESS FOR MANAGING THE REVIEW

2.1.1 The following recommendations address the principal conclusions concerning the overall management process discussed in the Executive Summary. Sections of the report on which recommendations are based are shown in brackets after each one.

Recommendation 1 (Sections 3.3-3.7)

- 2.1.2 To set the review off in the right direction:
- 2.1.3 At the start of PR13 and as an important part of the context for the review, ORR should summarise its existing policies, Network Rail progress in delivering the CP4 Plan, and any changes in circumstance that may bear on its deliberations. These could be legislative, or might reflect aspects of public policy, relating for example to funding or the environment.
- 2.1.4 ORR should consider initiating the next review with an open consultation on its objectives discussing the possible options and their implications, and explaining how these link to its statutory duties. It should explain where specific duties have been traded off, and on what basis. If some duties are considered to be irrelevant to the purpose of the periodic review, then the reasons should be made clear.
- 2.1.5 At the outset of the next review ORR should make clear to the Board of Network Rail its requirements in terms of data and analysis, and indicate the consequences of the failure to meet these requirements in a timely way. This would clearly establish the terms of engagement and provide the context for expectations, for example, on the provision of information and its verification before being passed to ORR.
- 2.1.6 At an early stage in the process ORR should set out who it believes are the main stakeholders in the review, and the particular issues upon which it seeks involvement from each. This should act to ensure earlier and fuller participation by the Train operating companies and owning groups in particular. This would also minimise the risk of stakeholders being unclear about what is expected of them in the process, a feature, which we think, did affect PR08. Nonetheless it should make clear that it does not expect stakeholders to be constrained in the contributions they wish to make on any issue they consider important.
- 2.1.7 In identifying stakeholders ORR should seek mechanisms for better representation of the interests of passengers as the end consumers of rail services. Consideration of the interests of passengers should include the use of relevant formal analytical techniques. ORR should review the practice of other regulators, such as OFWAT and apply it where appropriate, including preference studies and cost benefit analysis (perhaps in conjunction with the DfT and Transport Scotland). This could be especially important if funding were to be much more constrained in a future review than it was in PR08 and the emphasis in expressing outputs was to move from quantum to quality.
- 2.1.8 Considering the needs of freight customers alongside those of passengers is also likely to provide more effective definition of the output specifications to be met.

2.1.9 The needs and potential contributions of supply companies as well as of freight and passenger owning groups in the rail industry could be explicitly considered at the outset of the process to provide better definition to the strategies, including partnerships, that could be adopted to support an integrated approach to whole industry planning and investment. Again this could be especially important if funding were to be much more constrained in a future review than it was in PR08.

Recommendation 2 (Sections 3.3-3.7)

- 2.1.10 To manage the review effectively:
- 2.1.11 Given the central role in the review played by engineering issues ORR should consider whether it needs to appoint a director with railway engineering expertise as part of the Board's Periodic Review Committee.
- 2.1.12 ORR should ensure that the Board of Network Rail is fully engaged in the PR13 process from the start, including provision for hearings at each key stage. It should consider whether these hearings should be public.
- 2.1.13 ORR would expect the specific cost studies to be the responsibility of Network Rail (management information it needs anyway for running its business and arguing for efficient, cost-reflective access prices from the periodic review). ORR should protect itself by requiring Network Rail directors to sign appropriate declarations, and for these to be accompanied by audit reports signed by reporting engineers employed by the company but with a specific duty of care to the regulator. ORR could then focus on any residual 'gaming' elements which might exist, and responsibility for variance analysis of plans with outturns. This would also be likely to reduce the costs and resources devoted to the review.
- 2.1.14 ORR should improve the focus of its consultations by posing direct and specific questions to stakeholders, rather than simply inviting comment on any aspect of the document.
- 2.1.15 Whilst the PR08 documentation was clear and easy to read the weight of it, whilst understandable, did appear to represent a barrier to participation by some important stakeholders and consideration should be given in PR13 to more participative methods of involving consultees workshops at which minutes could be taken for example.
- 2.1.16 ORR should conclude the periodic review by explaining why its determination best meets its objectives and discharges its duties.

2.2 CONCLUSIONS IN RESPECT OF THE HLOS/SOFA AND INDUSTRY PLANNING

- 2.2.1 HLOS provided a clear context for the review of prices and outputs. UK Government departments spoke with one voice as did Transport Scotland. This was a crucial element of the success of the periodic review. The top down process of producing the HLOSs was welcomed by stakeholders and the bottom up RUS process was seen as valuable in reflecting infrastructure and performance needs at that level.
- 2.2.2 The industry planning process is vast and complex and we admire the progress that has been made in seeking to align its various elements. We think Network Rail is to be congratulated on its role in the process and question whether in future reviews it will be necessary to produce as many Business Plans as occurred in PR08.

- 2.2.3 Nonetheless further improvements could be made. For example, despite its success, 'HLOS 1' placed disproportionate dependence on a few people in DfT with a detailed, route-by-route knowledge of the railway rather than on process. In some cases potential third party investors told us they were put off from funding enhancements either because their contribution was not formally recognised in the process or they were concerned by the prices quoted by Network Rail which they considered to be too high.
- 2.2.4 It is possible to move towards a more integrated planning process for rail that would affect the expression of outputs in HLOS such that it could be constructed bottom up within a wider network framework. This would be welcomed by stakeholders and would provide greater emphasis on mechanisms such as the RUS as part of the periodic review. We think that the greater focus it would bring to matching resources might also provide a new channel for investment and the review of whole industry costs.
- 2.2.5 ORR's statutory objectives are such that it can legitimately take a direct interest in the extent to which the planning processes adequately address passenger and stakeholder interests working to ensure that these are integrated into the existing mechanisms.

Recommendation 3 (Section 3.8)

2.2.6 Next time to bring clarity to the relationship between HLOS and PR08, ORR should give stakeholders a clear exposition of its relationship to the two governments in HLOS, SOFA and PR13 including its view of the roles and responsibilities of each of the parties in each of these processes. These may be clear to some of the participants at the moment but they are not necessarily clear to a wider audience. ORR should articulate the approach it intends to take as part of the HLOS process, and identify the components of that contribution.

Recommendation 4 (Sections 3.8-3.9)

- 2.2.7 In the meantime there are likely to be a number of options available to improve the planning process at a disaggregated level to complement top down industry models. Indeed it may be feasible to integrate them. In particular:
- 2.2.8 We would encourage ORR with DfT, Network Rail, Transport Scotland and other interested parties to review the planning processes with a view to developing such integrated top-down-bottom-up mechanisms.
- 2.2.9 Given that the needs of customers are most closely related to delivering outputs at a train company level (irrespective of whether passenger or freight) consideration should be given to the extent to which these can be matched at a route or disaggregated network level. The Route Utilisation Studies and route planning mechanisms (together with the partnership working that exists at a more localised level) could provide an effective framework for such issues to be considered as part of the next review. Mechanisms to ensure national operators are not excluded from the process should also be considered.
- 2.2.10 ORR should work with DfT and Transport Scotland to ensure that the railway industry, especially TOC's but including important stakeholders such as TfL and the PTE's, are more engaged in service quality and capital investment decisions both at the HLOS stage and in the subsequent generation of specific outputs.

2.2.11 DfT should consider the role those involved in franchise delivery within the Department could play in providing a process link with strategic planning as an input to HLOS.

2.3 CONCLUSIONS ON NETWORK RAIL'S OPERATIONS, MAINTENANCE AND RENEWALS (OMR) ACTIVITIES AND ITS EFFICIENCY

- 2.3.1 The main elements of the review relating to Network Rail's activities including efficiency were comprehensively assessed by a rigorous process undertaken by ORR and its advisers. This was aided by a generally professional and increasingly analytical response adopted by Network Rail that ultimately enabled a thorough assessment of most activities and supporting policies to be undertaken. The maintenance and renewal activity work streams generally worked well and the development by Network Rail of the Infrastructure Cost Model was a significant step forward. However, the operations activity work stream appeared to lack data and of all activities was the least well validated.
- 2.3.2 The processes of robust challenge and the deployment of international benchmarking were effective. Going forward it is important that ORR builds on what worked in PR08 and uses CP4 to ensure that the momentum in developing a better joint understanding of efficiency in an international context is maintained.
- 2.3.3 We also consider that the process of monitoring Network Rail's progress in CP4 will be important in setting efficiency targets for CP5, a period in which the availability of public funding may be much more restricted but when the need for high quality outputs will remain. A problem here is the extent to which the preparatory phase for the next control period overlaps with the delivery of determinations for the previous one.

Recommendation 5 (Sections 3.10-3.11)

- 2.3.4 To ensure that the momentum achieved in reaching determinations on activity and efficiency is maintained through CP4 and into CP5 and to avoid reliance on data emerging late in the review process:
 - Joint effort should be put in at an early stage to determine the factors on which the next review of operations will be undertaken.
 - The use of international benchmarking, though contentious in PR08, offers a good basis on which to build for the next review and efforts should be made jointly with Network Rail to further develop this work as a priority. In particular processes to better understand the differences between network characteristics need to be put in place.
- 2.3.5 To facilitate benchmarking of Network Rail activities early consideration should also be given to ways in which meaningful UK comparators can be introduced. These might range from the use of internal data within Network Rail to comparisons with London Underground and the possible implementation of devolved structures.

Recommendation 6 (Sections 3.10-3.11)

- 2.3.6 To improve confidence in the quality of technical scrutiny and to build on what was achieved in PR08:
 - ORR should seek to reach an early understanding with Network Rail on the statistical and engineering comparisons that will underpin the next assessment.
 - Whilst sources of evidence and strong analysis are vitally important, so too is the use of experts. Given the contentious debate that took place around "efficiency" the professional expertise deployed by ORR could be enhanced by the use of international as well as UK based experts.
- 2.3.7 ORR should consider using more joint appointments of consultants with Network Rail on technical issues to avoid the danger of consultant capture and confrontation by either side in PR13.
- 2.3.8 It could aid the ORR's consideration of maintenance and renewal activities, efficiency and projects if it were to have a senior railway engineer as a Non Executive Director on its Board.
- 2.3.9 ORR should review methods of career progression for engineers within the wider industry that would enable a cross fertilisation of experience between Network Rail, its suppliers and ORR.
- 2.3.10 The ORR process for monitoring Network Rail's progress in securing CP3 efficiency targets might have been expected to have improved the quality of data in helping determine the longer term trajectory. The fact that this does not seem to have been the case suggests that the link between monitoring efficiency in one control period and what might be achievable in the next is not sufficiently strong. ORR should consider how the linkages between monitoring in one control period and planning for the next can be strengthened.

2.4 CONCLUSIONS ON ENHANCEMENTS

2.4.1 Generally this process worked well, especially given the relatively short timescales involved in developing, appraising and approving a large and complex programme of works, the largest in recent history. Delivery concerns remain amongst stakeholders

Recommendation 7 (Section 3.12)

2.4.2 We have no major recommendations to make in this area but given the importance of the schemes to delivering HLOS, the monitoring and enforcement processes adopted by ORR will be crucial to the credibility of the outcomes that ORR has determined.

2.5 CONCLUSIONS ON THE FINANCIAL FRAMEWORK

2.5.1 Despite certain qualifications which are discussed in Section 3.13, our overall assessment of the process of considering financial frameworks in PR08 is that it was well designed and implemented, and met the tests of best practice regulation.

Recommendation 8 (Section 3.13)

2.5.2 To the extent that any future determination involves assumptions on the use of either equity or unsupported debt, ORR should make every effort possible to ensure the maximum alignment between itself, Network Rail, DfT, Transport Scotland and the credit rating agencies to minimise the risk that the desired financial structure turns out to be undeliverable at costs which represent good value for money

Recommendation 9 (Section 3.13)

2.5.3 Competitive testing of inputs is an important element of information for regulators. Given the political context for out-sourcing in rail and the concerns of many stakeholders about Network Rail's pricing for schemes and projects, ORR needs to explain its regulatory stance, and what it expects.

Recommendation 10 (Section 3.13)

2.5.4 In undertaking analytical work on, for instance efficiency and the cost of capital, ORR should attempt to engage stakeholders on appropriate proposals and methodologies in principle before it focuses on the numbers, to minimise gaming.

2.6 CONCLUSIONS ON INCENTIVES

2.6.1 ORR had a difficult context in which to facilitate the development of an incentives process as part of its periodic review. Its 'incremental' suggestions for improvements were put forward proactively in the process, and stakeholders engaged, but incremental they were, given that expectations for them were low, as ORR recognised, due to the general incentives context of Network Rail's corporate and financial structure. Their incentive proposals and the incentives process were therefore understandable. Nevertheless, given the context, the process was proportionate and targeted, as well as transparent. Coherence would require a change of context. Company and management reputation probably remain the strongest incentives.

Recommendation 11 (Section 3.14)

2.6.2 ORR should consider whether the Network Rail management incentive plan (MIP) is driving the achievement of an appropriate balance of outputs, standards and cost-effectiveness. A full range of options for incentivisation, including profit based tools, should be evaluated before the next determination.

2.7 CONCLUSIONS ON MONITORING

2.7.1 CP4 represents a huge government commitment to the rail industry and the industry itself is poised to stake a bigger claim in terms of its contribution to the social, economic and environmental life of the nation (See "Planning Ahead, Control Period 5 and beyond, a recent joint publication by Network Rail, ATOC and the Rail Freight Operators' Association). The worst thing that could happen would be for the Delivery Plan to be perceived to have fallen short, especially during a period of historically high investment in railways and with the country facing tough choices on spending.

2.7.2 Despite acknowledging the significant improvements that have taken place in PR08 there remains a relatively high degree of concern amongst stakeholders about delivery. We found very clear expectations amongst all stakeholders, including the two governments, of the detail of schemes and activities to be delivered. Stakeholders are right to see ORR monitoring and enforcement as the principal mechanisms to ensure the delivery of schemes and activities that are often crucial to passenger and freight companies meeting their own obligations. Network Rail's recently published Delivery Plan is the opportunity for ORR to determine its preferred approach to monitoring in CP4.

Recommendation 12 (Section 3.14)

2.7.3 Although ORR is clear that it is an economic output regulator, Network Rail's activities represent "enablers" of delivery. A question arises as to the extent to which ORR should concern itself during CP4 with the progress Network Rail makes in developing certain of these activities. ORR will need to decide how it will monitor those activities that were ear marked in PR08 for significant improvement. Examples might include asset management policies, efficiency plans, enhancement scheme delivery and the "softer" actions Network Rail takes to work with its customers and stakeholders, all of which are fundamental to optimising whole industry costs and standards.

2.8 CONCLUSION ON THE PERIODIC REVIEW AS IT AFFECTED SCOTLAND

2.8.1 In the end PR08 was achieved with a reasonable degree of approval that the major outputs would be delivered for Scotland. The process covered all the key areas and was generally effective. Nevertheless, there was a sense in which Scotland's individual needs and specifications were subject to a review process that was focused on delivering outputs across the whole of Britain that were not necessarily aligned at the devolved level. Network Rail's role and status as a British company operating with a limited amount of devolved accountability reinforced this sense.

Recommendation 13 (Section 3.15)

2.8.2 ORR and Network Rail should specially review their approaches going forward as devolution raises important questions as to how Scottish needs are to be met within the context of the next periodic review.

3. OUR ASSESSMENT OF THE PROCESS

3.1 THE CONTEXT OF THE REVIEW

- 3.1.1 This was the first periodic review undertaken by ORR following the Railways Act 2005. This legislation followed the trauma of the Hatfield and Potters Bar accidents, Railtrack entering Administration and the creation of Network Rail. The Act created a new framework for industry planning and regulation following the abolition of the Strategic Rail Authority. For the first time a periodic review was undertaken in the context of rail strategies articulated by the UK Government (for England and Wales) and by the Scottish Government.
- 3.1.2 ORR's role as an economic regulator was inevitably affected by the new industry structure because it differs from other regulated industries, in particular, in the governance arrangements for Network Rail, in the control exercised by the government over the franchises, and because of public subsidy. These differences have an effect, in particular, on the incentive structure for Network Rail, and the options available to ORR in respect of that.
- 3.1.3 The review was also undertaken during a period of substantial growth in both the passenger and freight sectors, trends that were forecast to continue into CP4 and beyond. The review was substantially undertaken before the "Credit Crunch" became the dominating issue affecting the economy and financial markets; although by the time of the final determinations the downturn was underway.
- 3.1.4 The review team believes it is important to place PR08 in the context of these major changes and to take them into account in considering the way in which ORR carried it out.
- 3.1.5 The review team also believes it is important to acknowledge the context in which Network Rail was operating. It had accepted a significant management challenge with CP3, a period in which it not only made enormous progress in stabilising the country's infrastructure following the aftermath of Hatfield whilst contributing to a substantially better public performance measure for passenger services, but also improved its measured efficiency by roundly 27%.

3.2 METHODOLOGY

- 3.2.1 The methodology adopted by the team was an analysis of documentation mostly but not entirely in the public domain, combined with a series of structured interviews with stakeholders and key participants from within ORR in the PR08 process.
- 3.2.2 The processes adopted by ORR to undertake the review were identified and reviewed for their logic, consistency of application and effectiveness taking into account the objectives that ORR had set itself at the commencement of the periodic review.
- 3.2.3 On the basis of our findings comparisons were made with the principles of best practice regulation. The team also considered the way ORR carried out PR08 in relation to its Statutory Duties. These are found on ORR's website.
- 3.2.4 The method adopted in writing this report is one of describing the processes adopted by ORR in undertaken the periodic review and commenting on them. We do this for the process as a whole and for the important elements of the periodic review. The elements that we have considered in the most detail are the processes adopted by

ORR to review Network Rail's activities, its efficiency, its enhancements programme, its financial and its incentives frameworks. The elements that we did not consider in depth were the methodologies to determine single till income, access charges, and the performance and possession regimes, including the "Seven Day Railway".

- 3.2.5 In producing this report and informing its conclusions and recommendations, the team has relied on its individual and collective knowledge of the railway industry and of regulatory practice and principles in other sectors.
- 3.2.6 Because our time and resources were limited and because the volume of documentation covering the four year period was vast, we cannot claim to have read or considered every document in every detail and we acknowledge, therefore, that we may have missed data that those closest to the review could regard as relevant. We have done our best to check our understanding of events with those who were involved.
- 3.2.7 Similarly for various reasons we were unable to interview all of the participants or stakeholders in the review, although we do believe that those we did meet were themselves either substantially involved in the most important elements of the periodic review and / or were representative of them.
- 3.2.8 A letter dated 14th May 2009 was sent to all stakeholders who were consulted by ORR at the outset of the periodic review seeking their views on the process. This letter may be found in Appendix B.
- 3.2.9 A list of the principal documents considered by the review team may be found in Appendix C.
- 3.2.10 A list of organisations and people interviewed may be found in Appendix D.

3.3 THE EFFECTIVENESS OF THE PR08 PROCESS

- 3.3.1 We have considered the effectiveness of the process from a number of perspectives.
- 3.3.2 Firstly we describe the overall PR08 process that we were asked to review (Section 3.4) and the important associated processes (Section 3.5).
- 3.3.3 Secondly we look at the High Level Process in terms of what we consider to be the principles of best practice regulation (Section 3.6).
- 3.3.4 Thirdly, irrespective of these principles, we comment on key elements of the PR08 process. In order we have focused on programme and project management (3.7), the initial consultation (3.8), HLOS (3.9), activity (3.10), efficiency (3.11), enhancements (3.12), the financial framework (3.13), incentives (3.14) and PR08 in Scotland (3.15). In addition there is a brief section in which we consider how safety was integrated within the review (3.16).

3.4 DESCRIPTION OF THE HIGH LEVEL PROCESS (SEE ALSO PROCESS MAPS AT APPENDIX J)

- 3.4.1 This Section describes the processes we considered in our review.
- 3.4.2 Although the Process commenced formally when the Pr08 Notice was issued in Feb 2007 and finished with ORR issuing its Review Implementation Notice in March 2009, in fact it began much earlier and can be said to have ended with the publication by Network Rail of its CP4 Delivery Plan in April 2009. This coincided with the

commencement date of the revised Network Rail Licence (instrumental as an enforcement mechanism) following a parallel process of review by ORR.

- 3.4.3 Indeed the periodic review process looks like something of a continuum, overlapping and linking with other elements of what can be construed as a whole industry planning framework.
- 3.4.4 Obviously the outcomes of CP3 were an "input" to CP4 but the publication of the Governments' (2 including Scotland) HLOSs in July 2007 were also pivotal. These were informed by the 2005 Railways Act and by an iteration involving Network Rail Plans and ORR responses between 2005 and 2007. Network Rail's 2005 Business Plan (June), although having no formal link to the periodic review, was the document on which ORR based its Initial Assessment (Dec), to which Network Rail responded with its Initial Strategic Business Plan (July 2006). Early on and representing the start of the periodic review ORR issued its consultation document (Aug 2005) which set out its objectives for PR08.
- 3.4.5 Elements of the formal process that were particularly crucial were an Advice to Ministers (Feb 2007) issued by ORR at the same time as the formal Notice, Network Rail's Strategic Business Plan (Oct 2007), ORR's assessment of it (Feb 2008) leading to an updated Network Rail Plan (Apr 2008), ORR's Draft Determinations (Jun 2008), consultation on the draft determinations (to Sep 2008) and the Final Determinations (Oct 2008). Network Rail subsequently accepted the determinations and produced its CP4 Delivery Plan in March 2009. The purpose of this Plan was to explain in detail how the company intended to achieve the outputs required by the determinations. This was then reviewed by ORR during April and May 2009.

3.5 DESCRIPTION OF IMPORTANT ASSOCIATED PROCESSES

- 3.5.1 Related to PR08 was the process by which ORR was involved in supporting DfT and Transport Scotland to develop their HLOSs/SoFAs. These processes also involved the Treasury and were associated both with the Comprehensive Spending Review and the settlement of funds between Scotland and England & Wales. Other funding parties were also involved (e.g. Welsh Assembly Government and Transport for London) though not in the same way as Ministers in Whitehall and Edinburgh.
- 3.5.2 To manage the periodic review ORR determined a programme of work encompassing what it saw as the essential elements for success. These included advising the two Governments on delivering the HLOSs/SoFAs and on the basis of what was decided determining Network Rail's efficient expenditure within a wider Financial Framework that embraced an incentive framework including train performance, possessions compensation and a structure of charges for track and stations whilst also allowing for "single till income" derived from sources other than track access. As a result Network Rail should achieve the key deliverables that would enable it to meet required outputs, supported by a series of metrics designed to enable subsequent monitoring. A parallel review of Network Rail's Licence was also undertaken. An implementation work stream supported everything else.
- 3.5.3 Several sub processes were adopted in order to discharge the more complex of these work streams. Within "expenditure" these included OMR activity supported by Network Rail Asset Management Policies and enhancement programmes to meet extra demand, all underpinned by improved underlying Efficiency, Performance and Safety. Taken together these elements were the most important in PR08

3.5.4 The Financial Framework workstream also embraced several important elements including approaches to rate of return, risk capital, depreciation, and inherited RAB from CP3. These were considered important throughout the periodic review although in the event the deliberations on unsupported debt were overtaken by events, including in the financial markets. Nevertheless all parties continue to regard it as important and unsupported debt is being kept under review.

3.6 THE PRINCIPLES OF BETTER REGULATION – COMPLIANCE WITH REGULATORY PRINCIPLES AND BEST PRACTICE

- 3.6.1 In undertaking our assessment of PR08 we have chosen to test the process against the five principles of better regulation initially promulgated by the Government's Better Regulation Task Force, principles, which are now enshrined in the statutory duties of economic regulators. They are that good regulation should be:
 - Proportionate: Regulators should only intervene when necessary. Remedies should be appropriate to the risk posed, and costs identified and minimised.
 - Accountable: Regulators must be able to justify decisions, and be subject to public scrutiny.
 - Consistent: Government rules and standards must be joined up and implemented fairly.
 - Transparent: regulators should be open, and keep regulations simple and user friendly.
 - Targeted: Regulation should be focused on the problem, and minimise side effects.
- 3.6.2 This list has become generally accepted guidance to utility regulators. We have for this review added two additional considerations. We believe that good regulation should also be:
- 3.6.3 Comprehensive: it should discharge all the regulators responsibilities and ensure that significant issues are not neglected.
- 3.6.4 Coherent: the regulatory process should be capable of being clearly understood by all stakeholders, the elements of the regulatory process should be rationally put together and be demonstrably fit for purpose in meeting the objectives of the periodic review and the statutory duties.
- 3.6.5 Our working assumption is that ORR has sought to comply with these principles, and the question we have to ask ourselves is simply, 'where has ORR fallen short?' Below we consider each principle and note any questions about areas where the performance of ORR may have been open to improvement.

Proportionality

3.6.6 In the case of this review, regulation has been directed at only one outcome, the price determination, which is a statutory requirement. There is no evidence that the regulator attempted to extend his jurisdiction to regulate other activities, or to regulate for purposes other than those set out in his duties. (Indeed the opposite may be true, see completeness below).

3.6.7 The outstanding question in this area is whether ORR acted disproportionately in the extent to which it investigated Network Rail's inputs as a building block to price setting, given that ORR had asserted from as early as summer 2005 that it intended to base regulation on outputs. There was confusion as to what this meant in practice. On the one hand Network Rail had complained of excessive attention to inputs, but on the other hand it has also complained that ORR did not base its benchmarking on a detailed bottom up understanding of Network Rail's operations. We comment on this further in the section on best practice below

Accountability

- 3.6.8 It is not entirely clear that ORR believed that it was accountable to the broader public, rather than just to the Government, Network Rail and the rail industry. Its consultation process and documentation did not identify which of the participants was intended to represent the interests of the public, (or more narrowly, the interests of passengers) or how ORR made trade-offs in the interests of the public.
- 3.6.9 ORR subjected itself to public scrutiny when it published its draft determination on Outputs and Funding in July 2008. This document ran to 372 pages. It published the final determination in October 2008. This document ran to 447 pages and contained a full description of the determination together with a substantial amount of reasoning for the decisions. There are however two respects in which greater accountability might have been achieved.
- 3.6.10 At each stage in the process, from the August 2005 Initial consultation, ORR published proposals for comment, but it did not always publish information on the issues raised by stakeholders in those consultations, or explanation of the views raised by consultees and how they had been taken into account in the subsequent stages of the process. Consultees might wonder whether ORR had understood or was intending to address the points they had raised. As ORR moved through the process, it was in effect making a series of choices on key issues, to converge on the determination. Although the record shows where those choices were made, it does not indicate the options from which ORR made its decisions, and the consequences of selecting different options. As a simple example, it cannot be true that in the end ORR had no choice on the allowed level of funding, but users were not given any guidance as to the consequences of determining a higher or lower funding allowance for the probability of achieving HLOS levels of safety, service, or security, or the long term financial viability of the business.

Consistency

- 3.6.11 We found ORR's conduct of the review to be consistent in decision-making over time and in the equitable treatment of stakeholders, one with another. However, there were other areas of inconsistency which primarily resulted from the context in which ORR was carrying out its regulatory functions, for example the impact of devolution, and the impact of the governance structure of Network Rail on the ability to have incentive instruments that are consistent with other industry practice.
- 3.6.12 The only consistency issue raised with us by stakeholders was an apparent inconsistency between output and input regulation. This arose in part from a failure to appreciate that whilst the regulator may seek to regulate outputs, in order to assess the costs of providing those outputs a review will necessarily involve examination of input cost levels. We comment in section 3.8 that this point could have been exposed more fully in the Initial Consultation Paper.

Transparency

- 3.6.13 The regulatory process should be understood by all stakeholders and consultations and determinations should be easy and simple to understand. ORR has clearly attempted to conduct the process in a way which is accessible to anyone who might have an interest in the issues. The documentation is extensive, and is packaged at three levels to make it relevant to participants with different levels of interest. Main documents have executive summaries, detailed text and appropriate appendices. These and more technical material are all posted on the ORR website.
- 3.6.14 Three questions have arisen on transparency. The first is how far ORR could and should have gone to expose the content of the many informal contacts and oral discussions which took place, and which would have informed its thinking. Network Rail is not a quoted company, and its debt is guaranteed, so the argument of commercial confidentiality is less pressing than in, say the water sector. ORR could have covered this by posting minutes of key meetings on the website, or by holding public hearings or meetings, as indeed it did do, for the Industry seminar on the draft determination.
- 3.6.15 The second issue relates to how far ORR made relevant information easily accessible in its documents. In some cases the reader is referred to other documents, primary legislation or third party websites, for information which is core to an understanding of the issue. This made the process less accessible than it would have been if summary information or relevant extracts were appended to papers.
- 3.6.16 The third issue relates to the respective roles of HLOS, SoFA and the RUSs. ORR made clear at the outset of the process that these were key inputs to its determination. It did not however:
 - indicate to stakeholders how it expected them to participate in these key processes;
 - indicate the relationship between the processes and the weight it would give to each in its determination. The role of HLOS and SOFA was generally understood, but it is not clear what significance ORR attached to The RUSs.

Targeting and Completeness

- 3.6.17 We take these two considerations together since excessively focussed targeting may tend to be at the expense of completeness. Two questions have arisen in this area.
- 3.6.18 Firstly, ORR targeted its energies at specific objectives which it had identified for the review. It diligently included reminders of these objectives in its draft and final determinations. However, ORR did not explain systematically how its decision related to each of these objectives, or how these objectives were related to its statutory duties. At face value, some of the statutory duties appear to have been disregarded, such as the sustainability duty. We know that DfT did not include any reference in the HLOS although Scotland did. Was there a reason for ORR not to have covered it?
- 3.6.19 The second issue is deliverability. Although this was extensively discussed in the documentation, it has become clear that a number of stakeholders have doubts about the deliverability of either the planned capital expenditure or the desired outputs. There are concerns that the HLOS rolling stock and infrastructure schemes may not be sufficiently well integrated in the planning process. It is not clear that ORR considered

the integration of the infrastructure programme with rolling stock plans as part of the review.

Coherence

3.6.20 ORR's communication material was extremely coherent. It was generally written in plain English, with glossaries and appendices where needed. Material was available both in hard copy and on the ORR website. The coherence of the overall review process was established at the outset by the initial consultation document (subject to the reservation that ORR did not articulate its expectations of the remit and contribution of each stakeholder group, something we cover more fully in section 3.8). The reasoning behind the draft and final determinations was also coherent.

Regulatory best practice

- 3.6.21 In evaluating ORR's performance, we have also taken account of current regulatory best practice, as used in recent and current price control reviews by other regulators. In particular we have had in mind the current price review of the Water and Sewerage companies by OFWAT, and of the Electricity Distribution Companies by OFGEM. We have also considered the 2008 interim review of Royal Mail by PostComm and the CAA review of the London airports although we have noted that the government is minded to change the regulatory structures for both industries.
- 3.6.22 Each of these reviews has been tailored to the particular features of the regulated industry in question, but we have identified a number of common themes, which together create a coherent framework for the process.
- 3.6.23 All the reviews start out from a consideration of the regulator's statutory duties and their interpretation for the objectives of the review. Regulators open the process by setting the context for the review in terms of past decisions and subsequent industry performance. At this stage they also set out to stakeholders the intended steps and timetable for the process. The initial consultation paper sets out the regulator's view of its objectives, and the issues which will need to be considered. Taken together this initiation should create a framework which meets all the principles of good regulation.
- 3.6.24 Reviews then descend into consideration of each technical issue separately. Consultants are engaged to deal with specific issues. In parallel the company develops its business plan submission, and engages in a dialogue on this plan. The issues and the plan are brought together in a draft price control determination. This is subject to broad formal consultation before a final reasoned determination is published.
- 3.6.25 To foster incentives to efficiency and outperformance other economic regulators have sought to focus on outputs rather than inputs. This has clearly been a struggle, and it does not yet appear to have reduced the burden of regulation. ORR has been no exception to this rule. Stakeholders have reflected to us a continuing confusion about how far PR08 was truly output or input based. Output based regulation is said to offer the prospect of simpler, more proportionate processes, and better targeting. We hope that ORR will test this proposition and clarify its thinking further in this area as the industry framework continues to develop and mature. In this context ORR should take account of the strongly held views concerning deliverability of ORR's determinations.
- 3.6.26 Other regulators have universally attempted to ensure that the process is transparent by publishing and posting on their websites all their consultation documents and stakeholder responses. However there is also, and rightly, a great deal of ongoing

dialogue between the regulators, the regulated companies and other stakeholders. Thus, by the time of the draft determinations many of the key issues and analyses have been thoroughly worked though, and the range of outcomes has been narrowed down. Whilst private dialogue is inevitable it is important that this aspect of the process does not unduly reduce transparency by excluding the interests of the public and consumers.

- 3.6.27 Individual regulators have involved the managements and boards of the regulated companies in different ways. Some have directed key instructions formally and publicly at the CEO of the company, and have required some form of formal sign off to submissions. Formal company meetings have been built into the OFWAT process to allow companies to make their case in person. Other regulators have preferred to work more informally. Hearings between the board of the regulator and the board of the regulated company have not normally been a formal part of the process, although we understand that regulators have engaged in informal dialogue at this level. On one occasion a regulator built formal hearings for all parties in to the process, and this is a standard practice in the event that there is a reference to the Competition Commission (CC). ORR may wish to consider this for future reviews.
- 3.6.28 We have identified a number of areas where ORR could learn from current experience of other regulators.
- 3.6.29 Both OFWAT and OFGEM set out at the beginning of the process the specific format and information they would require from the companies to standardise analysis in multi company industries. A similar clear specification of the data requirements would have minimised the problem of the data shortfall ORR said it experienced. An early and detailed specification of ORR's data requirements could contribute to a better targeted process.
- 3.6.30 In addition, both OFWAT and OFGEM identified the need to capture and understand the priorities of the end consumer in making their decisions. OFGEM decided to address this by commissioning its own research on consumer views, whereas OFWAT instructed the companies on the analytical information it required on customer preferences and ability to pay. (We appreciate that it might be argued that the HLOS process stood in the place of consumer interests, but we remain concerned that the ORR/DfT process did not ensure that this perspective was fully captured in the price determination as a transparent part of the review.)
- 3.6.31 The most current review, by OFGEM, contains three additional features which may be relevant to future ORR reviews. Firstly, OFGEM has built into the formal process two sets of workshops at key stages, so the issues may be discussed with stakeholders face to face. This should contribute to both transparency and accountability. Second, The Initial Consultation Paper sets out the target audience for its consultations, although it falls short of indicating which issues are seen as most relevant to each group. Third although the consultation is very open, it does itemise a series of specific questions on which it seeks views. Again this would help to ensure the effective targeting of the process.

Overall View on Principles

3.6.32 In its conduct of PR08 ORR generally followed principles of good regulation and best practice in utility regulation and we found no cases of poor regulatory practice. We do however believe that in some specific areas there is scope for ORR to refine its processes in ways which would improve the efficient delivery of the best outcome to the next review.

3.7 BOARD, PROJECT AND PROGRAMME MANAGEMENT BY ORR

- 3.7.1 It is our opinion that ORR adopted a coherent, accountable and well integrated project management process for PR08. Generally the programme of work was well resourced and discharged.
- 3.7.2 ORR is to be congratulated on the ways in which it sought to assure itself on the effectiveness of its project management through the external advice and "audit" that it engaged. It also received internal audit reports of its own upon which it acted. Proper project management techniques were adopted and training was given. A culture of "continuous improvement" was evident in the whole project and programme management approach that ORR adopted.
- 3.7.3 We are aware that ORR has conducted its own internal review of how it can improve its process next time. We are also aware that DfT, Transport Scotland and Network Rail have done so too. It would be sensible for ORR to engage in open dialogue with these key stakeholders to establish learning points for the future.
- 3.7.4 The whole PR08 process was managed as a project with clear lines of accountability for the major work streams and for their integration as parts of an overall programme of work. The Chief Executive was accountable to the ORR Board for the review and chose to manage the whole programme through a Periodic Review Executive which comprised all of the Executive Directors and other senior directors. It directed the work of and received reports from personnel responsible for particular work streams and considered the progress of the project as a whole against the agreed timetable and key milestones.
- 3.7.5 To ensure that the expertise of non-executive directors (NEDs) was engaged in the process a separate Periodic Review Committee of the Board itself was also constituted that involved 2 NEDs, the ORR Board Chair and the Executive Directors of ORR. These latter three together with the CEO and Deputy Director of Competition and Regulatory Economics, who was responsible for PR08 programme management, were also members of the Periodic Review Executive.
- 3.7.6 Both groups supported the Chief Executive, who chaired the two committees, in his role as the officer accountable to the ORR Board.
- 3.7.7 The Periodic Review Committee received a generally more favourable assessment from ORR managers, although some thought that it could have been used more. The ability to use the expertise of Non Executive Directors to help inform and challenge the emerging outcomes of various work streams was regarded as valuable and a good use of time which could not have been adequately allocated at main board meetings. Superficially the need for two committees might appear questionable but there is little evidence to suggest that lines of accountability were blurred.
- 3.7.8 One important stakeholder was critical of the role of the ORR Board, which was seen as inserting additional time into the process and also as being insufficiently

knowledgeable about key railway matters, especially as these related to Network Rail's activity and efficiency. However, this was not a view generally held by others and we acknowledge the all round railway expertise that exists on the Board. Clearly the change of ORR's governance arrangements brought about by the 2005 Act had to be adhered to and it is difficult to see how the periodic review could have been properly undertaken without a significant Board involvement. The use of the Periodic Review Committee involving Non Executives should be seen as a helpful contribution to smoothing the Board approvals processes. Whether more delegation could be applied is one aspect of the management process ORR may wish to consider.

- 3.7.9 Having said that and given that so much of the periodic review was inevitably bound up in considering contentious activities involving areas of engineering and technical judgement, we think it was unfortunate that the ORR Board did not have the advice of a Non Executive Director with a background in railway engineering on which it could draw. This may be even more important going forward, especially if financial constraints arising from wider economic and financial issues begin to impact on what a future Government is prepared to commit to the railway industry.
- 3.7.10 The opportunity for the Executive team to tap into the expertise and advice of certain of the Non Executives through the PRC was well taken in particular aspects of the review such as the Financial Framework. In PR13 even finer judgements may need to be made concerning the trade off between outputs and efficiency than was the case in PR08 and the balance of the Board will be important in reaching determinations.
- 3.7.11 Although we have found no evidence that the whole ORR Board was not involved in either determining the review objectives or the questions to be addressed to stakeholders in the initial consultation, because we believe these to be two absolutely critical elements on which the ultimate success of the process was likely to hang, we strongly advise that sufficient time is given in future reviews to allow all Board members, especially the Non Executives, to contribute their ideas at the start of the next review. This might best be undertaken in a workshop format and amongst other factors could include consideration of ORR's statutory duties as points of reference in determining some of the objectives for the review.
- 3.7.12 There was limited engagement between the ORR Board and the Board of Network Rail. There were two occasions on which the Chief Executive of Network Rail was invited to address the main ORR Board on the subject of the periodic review and only two further occasions on which the two Boards met informally. In the case of the latter two, the first took place during the review but the latter was after final determinations had been made, though Network Rail had yet to decide its acceptance. It seems to us that these occasions, whilst possibly ticking the box in terms of process, did not really fulfil the opportunity for both Boards to have full and frank discussions about each others' positions in an open and risk free environment away from the public gaze. We think that both organisations should review the engagement that took place during and before PR08 with a view to determining how this could be improved next time.
- 3.7.13 Regarding the costs of PR08 we have been advised that a fair estimate (including an allocation of overheads) of the cost to ORR of undertaking PR08 was approximately £12 million for the four years 2005 to 2008 inclusive. This included the cost of consultants.

Overall View on Programme and Project Management

3.7.14 The processes used to manage PR08 were robust and it was well led. In future we consider that the process would benefit from more direct engagement between the Boards of ORR and Network Rail.

3.8 THE INITIAL ORR PR08 CONSULTATION DOCUMENT

- 3.8.1 It is generally accepted practice for regulators to open a price control review with an initial consultation paper which sets the scene for the review and alerts stakeholders to the process to be followed. Typically such papers set out the statutory responsibilities of the regulator (which are normally quite high level) and the translation of these responsibilities into more specific objectives. The opening paper usually signals the analytical approach the regulator intends to take to the determination, and logs up those issues which it is believes will be key to the outcome. These papers have high importance because they set the tone and direction for the process which follows.
- 3.8.2 It published its initial consultation paper in August 2005, nearly four years before the new funding arrangements would be implemented. This early start was appropriate since it ensured that early thinking on the likely outcome could be fed into the HLOS, and the output of that process fed back into the funding determination in good time.
- 3.8.3 The stated objectives of the paper were:
 - To set out the context to the review and its proposed objectives;
 - To set out the steps in the process;
 - To consider the scope of the review; and
 - To help stakeholders plan their involvement.
- 3.8.4 The document ran to 50 pages including one appendix. It was written largely in plain English and avoided technical analysis. As such it ensured that third party or minor stakeholders were let gently into the process and not intimidated from participation.

Content

3.8.5 After an executive summary the document was arranged in seven sections:

- Introduction
- Context
- Objectives
- Proposed timetable
- Setting whole industry outputs
- Network Rail's outputs and expenditure
- Network Rail's financial and incentive framework

3.8.6 The appendix contained ORR's statutory duties under the Railways Act.

The Introduction

- 3.8.7 The introduction was short, setting out the aims of the document, as above, the reasons for starting the process at that time and the structure of the document.
- 3.8.8 One of the express purposes of the document was to inform stakeholders of the process. However the document did not identify who it believed the relevant stakeholders to be, and what role ORR expected each stakeholder to play. Thus it was not clear from the outset who was expected to contribute views on, say, passenger interests, operating efficiency, capital spending priorities or financing issues. Of particular note is the absence of any guidance to TOCs, Passenger Focus or Government Departments as to each of their roles.
- 3.8.9 This omission is significant given that the fourth stated objective of the paper is to help stakeholders plan their involvement in PR08. It opened up the danger of parties believing others were covering their interests, or, equally unsatisfactory, intervening in areas outside their legitimate interest.

Context

- 3.8.10 Section 2 described the changes brought about by the 2005 Railways Act; developments in industry planning processes, and progress on related ORR workstreams. This was all very relevant and clearly set out.
- 3.8.11 It did not comment on the experience or lessons learned from previous price control reviews, in this or other sectors and the reader was not informed about how the current process has emerged. It did not set out any information on the terms of the previous settlement, or on Network Rail's performance either against those terms, against its own targets, or over time (this latter would have usefully framed the discussion on efficiency in section 6).
- 3.8.12 Interestingly, in a section entitled context, there was no reference to those elements of the external environment which were likely to bear on the final price determination, such as macroeconomic conditions, demand for travel, mode shares or government policy.
- 3.8.13 No questions were asked and no input was sought from users on ORR's interpretation of the context for the review.

Objectives for the review

- 3.8.14 Section 3 set out ORR's objectives for the review. In paragraph 3.1 these were summarised in a three line phrase, and this was broken down in to 12 specific objectives in paragraph 3.7. There was no linkage to ORR's statutory duties and it is difficult to see whether or how some of these duties were intended to be discharged through the objectives.
- 3.8.15 When regulators identify multiple objectives, there are normally implicit tradeoffs to be made. The document did not identify these, or explain how they would be managed other than by reference to what rail users value. There was no discussion of how the value placed by users on different aspects of service would be assessed, and this potentially significant theme did not re-emerge in the subsequent consultations. We understand from our interviews that cost benefit analysis was extensively used by the governments to assess capital projects, but this was not discussed in the

consultation, and no approaches to evaluating options for operating and maintenance strategies in similar terms were set out.

3.8.16 No questions were asked and no input was sought from consultees on the objectives.

Proposed Timetable

3.8.17 Section 4 set out ORR's proposed timetable for the review. The description was detailed, and in the event ORR met the timetable it had set out. In the light of our interviews and the consultation responses we have read, we question whether it flagged sufficiently explicitly the points in the HLOS and Determination processes where TOCs in particular needed to make their views known on capital and operating expenditure needs and priorities.

Setting Whole Industry Outputs

- 3.8.18 Section 5 described the process for setting whole industry outputs through the HLOS. It made clear that it was not consulting on this process, but since outputs were at the heart of the review, informing stakeholders of the issues which they might wish to see incorporated in the HLOS, and how they should do so, was relevant to ensuring that the HLOS delivered the right outputs as inputs to PR08. This avoided the danger at least in theory, of some issues falling between two stools.
- 3.8.19 Paragraphs 5.9 to 5.11 discussed the appropriate level of detail for output specification. They mentioned the RUSs and the RPAs but did not explain their role in the process. The appropriate level of disaggregation has subsequently emerged as an issue, but it is not clear what view ORR took on this, or indeed whether it was seeking the views of consultees on this (or indeed on any of the issues raised in this section).
- 3.8.20 This section also raised the issue of the extent to which other funders might be required to meet the costs of meeting the desired outputs. At paragraph 5.13 ORR signalled its intention to discuss these interests with those potential funders, but did not say how this was intended to fit in to the PR08 process.

Network Rail's outputs and expenditure

- 3.8.21 Pages 29 to 33 set out in some detail ORR's information requirements from Network Rail. It made clear that it intended to rely on review and challenge of information and proposals to be submitted by Network Rail, rather than by undertaking its own analysis. This approach is well established, as an appropriate method of examining the issues, since most data and industry expertise rests with the regulated companies.
- 3.8.22 The document did not spell out the consequences for Network Rail of any failure to provide the necessary material to the quality ORR wanted. This became a source of difficulty later.
- 3.8.23 The distinction between what ORR saw as outputs and what it regarded as inputs was not made entirely clear. This in turn stemmed from the absence of a discussion or consultation in principle on the options for input or output based regulation, with ORR's reasons for its proposed approach. Neither was it clear how ORR intended to use the data supplied by Network Rail in evaluating ORR's efficiency. ORR did not make clear the extent to which it intended to apply a bottom up approach to efficiency, and how far it intended to rely on benchmarking. This was an important point of principle, upon

which industry stakeholders could have been expected to have a view, and which would affect their work priorities.

Network Rail's financial and incentive framework

3.8.24 Section 7 covered the overall approach to incentive based regulation, the regulatory asset base (RAB) and amortisation, rate of return and incentives. It raised these issues in the most general of terms, and promised a more detailed consultation by the end of that year (which did appear as promised).

Overall View on the Initial Consultation

3.8.25 Although the paper was described as a consultation document, the low number and limited content of the responses suggests that it did not initiate a debate on the issues it covered. It asked only one specific question: 'Does the document provide enough information to allow stakeholders to plan their involvement'. Beyond that it simply invited stakeholders to comment on anything raised in the paper. Stakeholders could well have been uncertain whether this was the stage at which they should dispute ORR's direction and thinking. Thus while the Initial Consultation Paper informed stakeholders of the starting point and timetable of the process, and reflected current regulatory practice, similar papers in subsequent reviews could be developed to create a more comprehensive vehicle for ensuring there is an open debate on broad issues of approach before the review descends in to analysis.

3.9 THE PROCESS FOR DETERMINING INDUSTRY OUTPUT SPECIFICATIONS AND PLANNING

The Process Summarised

- 3.9.1 The concept of the High Level Output Specifications emerged from Government legislation introduced in 2005. Under this legislation it is for Governments (including Scotland's) to specify what they wish to procure from the rail industry in the form of outputs that it would deliver. A general additional duty was placed on Government "to promote improvements in railway service performance in terms of reliability, punctuality and minimising overcrowding and journey times."
- 3.9.2 In the context of the ministerial relationships with ORR the Act placed an obligation on the latter "to have regard to the general guidance given by the Secretary of State and Scottish ministers " and "the funds available for the purposes of [their] railway functions". In the case of an access charges review there is an obligation on ministers to provide ORR with information about what they seek to achieve and the funding available for that purpose. A comprehensive list of the kind of objectives and standards that may be specified is contained in the Act.
- 3.9.3 The Act is very specific that ORR must conduct an access charges review in such a way that the implementation of its determinations will secure the "most practical contribution to the achievement" of ministerial objectives.
- 3.9.4 A decision was subsequently taken for the Governments to express their requirements in the form of High Level Output Specifications (HLOS). These would be set in the

context of what the two Governments were prepared to fund which would be considered in parallel with HLOS. The funding would be defined as a Statement of Funds Available (SoFA).

- 3.9.5 ORR's role was to support the Governments in the HLOS-SoFA matching process and subsequently to undertake its periodic price review of Network Rail in that context. This included assessing Network Rail's developing business plans in response to emerging specifications and providing ministers with advice to support the HLOS that would form the basis of the periodic review.
- 3.9.6 Of course there are other funders of railway outputs. These are certain public authorities including most obviously but not limited to the Welsh Assembly Government, Transport for London and the Passenger Transport Authorities (run by six PTE's in England) and private investors, including freight and open access passenger operators. Their additional requirements together with the HLOSs were taken into account by Network Rail in its Business Plans, which were also subject to review in PR08.
- 3.9.7 Associated with the development of the HLOS was the process for determining the metrics by which outputs and standards would be measured. Ministerial approval was required for the metrics, which were developed as part of the process by which HLOS was developed. This involved DfT, Transport Scotland, ORR and Network Rail in a trilateral and frequent meetings process.
- 3.9.8 The process by which the outputs were determined was fundamental to the periodic review of Network Rail that followed. For these reasons we have decided to report on the effectiveness of this process and go further to discuss other aspects of what may best be termed "industry planning processes".
- 3.9.9 Network Rail is at the centre of many of the planning processes that are crucial to the operation and planning of Britain's railways. It produces Business Plans that give expression to those of its activities that underpin the delivery of industry outputs expressed in the HLOS and the activities that are necessary to deliver the reasonable needs of all operators, including those passenger train companies which hold franchise agreements with the two Governments and with the Welsh Assembly Government. Such companies constitute the vast majority of all passenger operators and of the passenger miles operated. There are also several significant freight operators holding high value commercial contracts for the distribution of goods by rail both domestically and internationally.
- 3.9.10 We found that there are several industry processes that are crucial to the development of Network Rail's Business Plans. These involve top down and bottom up assessments of the industry's future infrastructure requirements. Broadly speaking these feature top down business planning models that seek to forecast future demand and bottom up route planning mechanisms that review the totality of future activities specific to particular route sections and identify "gaps to be filled".
- 3.9.11 Governments led the top down forecasting processes (though through a trilateral process to develop HLOS Network Rail and ORR were party to the modelling used) and Network Rail co-ordinated bottom up plans through the management of route utilisation studies (RUSs), a central responsibility given to it after the 2005 Act. Operators and stakeholders were able to contribute to this process and ORR was also represented but as an "observer". There was also a Freight Utilisation Study to take account of the important needs of this sector, which managed also to successfully

lobby governments to provide the funding for schemes designed to enhance the national freight network through the HLOS.

- 3.9.12 We found that devolved transport authorities also have their own transport and rail forecasting models. For example, each PTE has its own multimodal transport forecasting model. Asked if these were bespoke for each region or consistent with the DfT's own model we were told that although they were bespoke, reflecting each region's unique features, DfT signed off the models for use in the Regional Funding Allocation / Local Transport Plan processes. It was thought that they should be able to sign off the models for the rail planning process as well. Network Rail apparently used the PTE models to help inform its own planning.
- 3.9.13 The principal purpose of all these various approaches was to match forecast demand with the schemes necessary to deliver it at standards of performance embodied in the HLOS.
- 3.9.14 The Governments clearly looked to ORR to ensure that the industry outputs were delivered cost effectively and within the SoFA. This was the crucial role of ORR not only as far as the Governments were concerned but also for operators since the settlement agreed by ORR would be reflected in the access charges levied on them.

Our Assessment of the Process

- 3.9.15 It is manifestly apparent that the industry planning process is vast and complex. That being so we admire greatly the progress the industry has made since 2005 in seeking to align the various elements of the planning process. We think Network Rail is to be congratulated on its role in achieving significant progress in whole industry planning. We note too that for Control Period 5 and beyond, a further step forward has recently been taken with the publication post PR08 of a document entitled "Planning Ahead", produced by Network Rail in conjunction with ATOC and the Rail Freight Operators' Association.
- 3.9.16 It is clear from our review that the top down process of producing the HLOSs was welcomed by stakeholders and that by and large the bottom up RUS process was seen as valuable in reflecting infrastructure and performance needs at that level. However, in this context we note that national freight and passenger operators (Cross Country in particular) were the least happy with the RUS process which they found difficult to resource and contended that it did not readily pick up their "network" needs.
- 3.9.17 The DfT has clearly made important strides in developing a forecasting model derived from existing rail revenue monitoring and demand forecasting systems, the aim of which is to predict the levels of demand that will require to be met with reference to zonal population catchments and other demographic and economic data. Given that rail had been growing apace for a number of years and that clear capacity constraints either existed or would occur, the principal purpose of their model was to inform decisions about the nature and location of enhancements that would need to be met.
- 3.9.18 Network Rail's Infrastructure Cost Model (ICM) was also an important part of the whole industry planning approach informing forecasts of infrastructure expenditure and train operating performance. The latter also had a bearing on the requirement to enhance the infrastructure on the basis of movements in the capacity utilisation index. The development of ICM was an important part of the periodic review and of the trilateral process involving government, ORR and Network Rail.

- 3.9.19 There was a separate safety risk model produced by RSSB but carbon emissions were not included.
- 3.9.20 That said there were certain things the demand model either did not deliver or include. PTE's complained that social cost benefit, including specifically economic benefit, was not included. PTE's and TOCs were also of the opinion that the demand forecasts generated and on which DfT's HLOS were based were in some cases already exceeded before the commencement of CP4. This appears to have been due to the lead time from development of HLOS to the start of CP4. However, we also learned that account was taken of this in reaching determinations on the enhancement programme. We also noted that DfT intends to continue to develop its forecasting tools and that, for example, when more reliable date is available in respect of carbon emissions, these will also be incorporated. We were also told that there is an intention to develop a multi modal transport predictive model, which could enable future output statements to be made in a wider transport context.
- 3.9.21 In our discussions with DfT in London we were impressed with the progress being made in the development of models specifically designed to inform the planning process. We were also pleased to note that it was not necessarily the intention in future to rely solely on top down methodologies. Bottom up processes were considered important but the context of the first HLOS was largely to adapt to reality, namely a railway that was recording substantial growth and was once again meeting performance standards not seen since before privatisation.
- 3.9.22 In the determination of the first HLOS people in DfT familiar with the railway had a particular influence on determining outputs as the extent of the 'bottom-up' detail needed to support the 'top-down' outputs became increasingly clear. A learning point was therefore the need to anticipate and plan for this in a more structured way. It seems that 'HLOS 1' placed disproportionate dependence on a few people with a detailed, route-by-route knowledge of the railway. Whilst this no doubt aided the process it seems to us that some process improvements could be introduced by the DfT next time.
- 3.9.23 We note in this context that there are several other parties including passengers, business and commerce, train companies, local and regional authorities, which have an interest in the outputs generated by the railways. All of them have an interest in both the quality and quantum of the outputs and either a direct or indirect interest in the value for money. Many of them are very close to the point of delivery and as such can be expected to have a good knowledge and experience of many of the aspects that could inform the effective development of bottom up plans. We note too that within the franchise management teams at the DfT there are people who are in regular dialogue with franchise operators and who, it might be thought, could potentially provide a process link between delivery and strategic planning.
- 3.9.24 To some extent each of the stakeholders (and of course the passengers themselves) pays or contributes to the costs of rail facilities. These are additional to the taxpayer interests represented by governments and the wider transport benefits that accrue to communities and passengers as a whole and for which the governments also pay.
- 3.9.25 In some cases we were told that potential third party PTE investors in the railway were put off from funding enhancements either because their contribution was not formally recognised in the process or because they were concerned by the prices quoted by Network Rail which they considered to be unreasonably high.

- 3.9.26 The nature of freight forwarding is such that the particular needs and expectations can reasonably be reflected through the main freight service providers, but it is more difficult to involve passengers. They are currently "silent" in the process even though we know from published data that they have a series of needs and expectations they wish to be met by rail operators. Several of these needs depend upon Network Rail and train companies working together. Passenger Focus stands in loco parentis and clearly has the ability to provide valuable inputs to the consideration of passenger needs on aggregate and disaggregated levels. It is also likely that individual passenger train companies undertake their own research that could be used to inform the process.
- 3.9.27 In particular we know that less than half of passengers consider that the railway services they use represent value for money. We also know from the same publicly available research that passenger perceptions across a range of attributes vary significantly from one service to another, not only by category (e.g. long distance or commuting) but within categories. In other words that passenger needs and expectations cannot be assumed to apply universally or even to service types.
- 3.9.28 We also note that the principal media reaction to the HLOS published by DfT placed emphasis on fares policy and failed to headline the substantial investments that were being made in the infrastructure. We think this further underlines the importance from the public's point of view of value for money.
- 3.9.29 We think that ORR's statutory objectives are such that it can legitimately take a very direct interest in the extent to which the industry's planning processes adequately address passenger and stakeholder interests and where possible work to ensure that these are integrated into the existing planning mechanisms, which we acknowledge have advanced significantly in recent years but which can be further improved.
- 3.9.30 There are likely to be a number of options available to improve the planning process at a disaggregated level to complement top down industry models. Indeed it may be feasible to integrate them. We would encourage ORR with DfT, Network Rail and other interested parties to review the planning processes with a view to developing such integrated top-down-bottom-up mechanisms.
- 3.9.31 Thus far our observations on HLOS have referred mainly to England and Wales. Scottish Ministers published their own HLOS, which was also subject to the type of trilateral dialogue that applied to DfT. The Scotland HLOS had many interesting and unique features. We were told that it was developed by one Administration and inherited by another. It appeared to enjoy cross Party support and reflected debates and votes in the Scottish Parliament.
- 3.9.32 The Scottish HLOS was expressed within a policy context wider than transport. This is in itself interesting being somewhat at variance with the approach adopted for England and Wales where the dominating feature was the growth taking place in passenger demand. In Scotland the emphasis was placed on improving quality, accessibility and affordability of rail services; improving journey times and connections and reducing carbon emissions. Transport Scotland also chose to express the HLOS in the context of the train service outputs to be delivered through the ScotRail franchise. Projects and service requirements were clearly specified.
- 3.9.33 The HLOS also included important references to the way in which it expected the various elements of the rail industry to work together. For example, partnership working was emphasised as was the promotion of integrated working practices in respect of operations and planning.

- 3.9.34 The Scottish HLOS showed in microcosm something which was not so easily discerned in relation to England, namely an intended planning approach that brought together the delivery of train operations and infrastructure in an integrated fashion framed within a wider social, economic and environmental policy framework.
- 3.9.35 Accepting that the Scottish rail system is very much less fragmented in terms of its organisational constitution than that in England, it is clear that the matching process between train operations and infrastructure in the latter represents a much more challenging task. However, reference to the 2008 Rail Plan for the South Yorkshire PTE for example, shows the same kind of detailed attention to service-infrastructure matching at a regional level that is to be found in Scotland. In such English Regions PTEs also frame policy approved by elected politicians in the wider context of regional economic and demographic planning frameworks.
- 3.9.36 We think that there are some transferable lessons from the Scottish experience that could be considered in England in relation to planning.
- 3.9.37 It seems to us that it is possible to move towards a more integrated planning process for rail that if adopted, would affect the expression of outputs in HLOS such that it would be constructed on a bottom up basis within a wider network framework. If this were to happen it is likely to be welcomed by most stakeholders and would provide a slightly different focus for ORR's periodic review, providing much greater emphasis on mechanisms such as the route utilisation studies. We think that the greater focus it would bring to matching resources might also provide a new channel for investment and the review of whole industry costs.

3.10 ORR'S REVIEW OF NETWORK RAIL'S ACTIVITY

The Process Summarised

- 3.10.1 A key part of PR08 involved an assessment of the levels of maintenance and renewals required in the period to achieve specified outputs at given levels of safety, performance and efficiency and to meet industry growth projections whilst also securing the network in the longer term. The assessment, which was undertaken over a three year period, also included the company's operational expenditure (opex) covering the full range of the company's activities and overheads that were not categorised either as maintenance or as renewals. Our review of operations may be found in the "efficiency" section of this report (section 3.11). The totality of activity and associated spend was known by the acronym OMR. Enhancements to the existing infrastructure were covered by a separate workstream.
- 3.10.2 The overall approach of reviewing Network Rail's M & R activities was to require the company to articulate and justify its asset management policies and to ensure that these were properly reflected in the levels of activity and associated costs described in the company's business plans. The Initial Consultation Document issued by ORR in August 2005 made clear that ORR wished outputs to be specified in a way that improved on past plans. In particular the plans should include an asset management strategy, be geographically disaggregated by activity and outputs, and be disaggregated by activity. A fourth area was "efficiency", which we discuss in section 3.11 below.
- 3.10.3 The methodology adopted by ORR in reviewing Network Rail's plans was to deploy well qualified functional engineers to perform professional assessments. These involved both top down, statistically based and bottom-up, site-based, sample

assessments. ORR's own engineers were responsible for leading this process supported by external functional specialists. There was a high degree of interaction between ORR and Network Rail's own engineering managers. In addition, independent reporters were deployed to review particular aspects of Network Rail's approach.

3.10.4 A more detailed description of our understanding of the process adopted for determining OMR activity is contained in appendix E for maintenance and renewals and appendix F for operating expenditure.

Our Assessment of the Process

- 3.10.5 Central to the review of renewals and maintenance activity were the asset management policies applied by Network Rail. Because these represented complex areas of activity requiring industry technical and safety standards to be met as well as those established by Government legislation such as Health & Safety at Work and EU guidelines (on working hours, for example) it was clearly essential that ORR's own engineers and advisers had the breadth of understanding of current standards as well as a depth of experience in the field if they were to carry out the reviews properly. The combination of in-house and external advisers, including HMRI, employed by ORR did enable this to happen.
- 3.10.6 ORR made clear from the outset how it wished Network Rail to describe its plans in terms of the asset policies requiring the company to define these in a number of specific dimensions. Network Rail accepted this framework and the review comprised of a sequence of events in which Network Rail articulated its policies and plans, supported by the development of an Infrastructure Cost Model, which were subject to challenge and scrutiny by ORR, leading to further iterations expressed in Network Rail's Business Plans and various other documents produced by the company in support of its asset management policy.
- 3.10.7 AMCL, an independent reporter on Network Rail's asset management policies, was also appointed. This and the engagement of engineers on both sides provided the basis for a significant measure of dialogue and consensus as the Asset Management Framework was developed. Functional assessments were undertaken by ORR's engineers and in the case of signalling there were the results of the Medium Term Signalling Review to draw on.
- 3.10.8 Network Rail seems to have responded well to the requirements placed upon it by ORR.
- 3.10.9 Considerable emphasis was placed by ORR on ensuring that there was a rigorous justification by Network Rail of its asset management policies and that these were supported by quantified assessments appropriate to each activity. As with other aspects of the periodic review, the approach adopted by ORR ensured that there was an ongoing iteration of plans which were assessed, challenged and sometimes revised at each key stage of the process principally the publication by Network Rail of three Business Plans (2006, 2007 and 2008) and the responses given by ORR culminating in its draft determinations (to which Network Rail also responded) and its final determinations.
- 3.10.10 At each stage of what can be seen as a developing process, Network Rail was required to demonstrate greater analytical justification for its plans and can be seen to have done so.

- 3.10.11 Generally this appears to have worked well. Specifically it seems to have worked best for track and signalling, two of the most important areas of activity and spend, and far less well for civil engineering structures. In the case of the first two, there was a far higher degree of agreement between Network Rail and ORR engineers (including its advisers) than there was in the latter case.
- 3.10.12 The first two were supported by a large measure of agreement on the asset management policies adopted by Network Rail. Perhaps this is not surprising since, in the case of track, a substantial amount of effort had gone into this activity following Hatfield whilst in the case of signalling a major study had already been undertaken. The conclusion must be that where there had been a significant weight of attention given to particular activities the level of justification was higher and the "professional consensus" greater too. This is an obvious learning point for application elsewhere.
- 3.10.13 It is difficult to conceive of a better method of validating safety and performance critical activities than through using experts in the field, although, given the separate and much more contentious debate that took place around "efficiency" it may be argued that the professional expertise deployed by ORR could have been enhanced by the use of international as well as UK based experts. Indeed the extent to which ORR relied upon the advice of engineering experts who had themselves effectively come from the same pool of functional engineers as those employed by Network Rail, may be seen as an obviously limiting factor. This is not to say that it is undesirable, but perhaps it is insufficient.
- 3.10.14 This would be true too in the case of civil engineering structures where there was far less of a consensus. The major problem here appears to have been the quantified system of assessment adopted by Network Rail. There appears to have been a significant difference of opinion between ORR's experts and those within Network Rail. Interestingly the independent reporter may have been closer to Network Rail's than to ORR's position. Whether this is accepted or not it would appear to be important going forward to reach a similar consensus on quantified assessment and modelling to those reached in the case of track and signalling renewals. It is clearly intended that work in this area is proposed and we certainly commend this approach.
- 3.10.15 Although some railway structures are unique to the transport mode, others are not and it would perhaps be appropriate to engage the professional input of civil engineers from other spheres as well as from railways overseas, to inform the development of asset polices and quantification going forward. The same would be true of some other aspects of engineering and technical disciplines, notably station structures (buildings), some plant and equipment, and electrification systems where the application to railways may be unique but where wider experience could significantly inform the development of best practice asset management policies.
- 3.10.16 Despite the challenges and occasional criticisms made by ORR of Network Rail it is very clear when assessing the trail of documentation and ongoing analysis that the company made significant strides in improving its approaches to asset management during PR08. Whilst this can be seen as a response to ORR's insistence it may also be seen as a tribute to Network Rail's own engineering teams.
- 3.10.17 A particularly significant contribution made by Network Rail was the development of the Infrastructure Cost Model. Although this clearly reflects the adequacy at any point in time of the company's own understanding of asset condition and impact on key outputs as well as costs, the utility of such a model as the basis for future work, resource and expenditure projections cannot be overstated. Whilst work in

continuing to develop this model will obviously need to continue it is appropriate to commend the adoption of the ICM as a major success.

Overall View on ORR's Process for Reviewing Activity

3.10.18 Overall we think that the processes adopted by ORR and accepted by Network Rail in reviewing M & R activities during PR08 were commendable.

3.11 ORR'S REVIEW OF NETWORK RAIL'S EFFICIENCY

ORR's Approach Summarised

- 3.11.1 ORR's initial approach to Network Rail's efficiency was to invite the company to present its proposals and assumptions in respect of Operations, Maintenance and Renewals in its Initial and then its Strategic Business Plan (SBP). However, having itself taken the advice of consultants LEK and OXERA, ORR also indicated to Network Rail that it had an expectation of potentially significant unit cost reductions of the order of up to 8% per annum in CP4. ORR thus set a challenge which provided a marker for the way in which the efficiency review was subsequently conducted.
- 3.11.2 Because it considered the initial response from Network Rail was cautious, as well as encouraging the company to produce and justify its bottom-up assumptions, ORR itself commissioned further studies. What ensued was a developing dialogue spread over three years which ORR itself described as a "debate". It became increasingly better informed by third party reports produced by both organisations and stakeholders were also invited to provide evidence and views of their own. A lack of confidence by ORR in the assessments provided by Network Rail caused them to broaden the search for comparable data and a considerable work stream, instigated and undertaken by ORR, was initiated to establish international benchmarks against which Network Rail efficiency could be measured.
- 3.11.3 Although the validity of the comparisons was contested by Network Rail to the end, it was the benchmarking data that ultimately gave ORR the confidence to reach its final determinations. Although there was a risk that Network Rail would reject the determination, the company's board did in fact accept it.
- 3.11.4 A detailed description of our understanding of the process adopted is contained in Appendix F.

Our Assessment of the Process

- 3.11.5 This section of our report deals initially with maintenance and renewals before discussing operations towards the end. Enhancements are discussed in Section 3.12.
- 3.11.6 In ORR's own words the engagement between the two parties was a "debate" and this is as good a definition of the process that was adopted as any. That there was a debate going on is not in doubt. Indeed ORR encouraged such a debate and there were several interested parties that joined the "hustings" through various stages of consultation as PR08 progressed. Unsurprisingly these parties not only included the principal funders, DfT and Transport Scotland, but also EWS, which was actively seeking a reduction in its access charges in order to enhance its competitiveness and passenger operators who were keen to secure more DfT funding for various purposes. Additionally EWS, through one of its shareholders, did have significant experience of

infrastructure costs in North America, which it could bring to the debate. The Railway Industry Association, which represented Network Rail's suppliers and whose businesses would obviously be affected by the decisions that ORR made, also joined the debate. On this issue the consultation was extensive, comprehensive and helpful to ORR as part of its process of reaching its determinations on efficiency. DfT and Transport Scotland made it clear to us in our interviews that they relied on ORR to determine efficiency levels.

- 3.11.7 From our observations it would be fair to characterise the debate (process) as being closer to an argument, though not a rancorous one, recognising that it is necessary for regulators to be challenging. The protagonists amassed increasing amounts of data and commissioned more and more consultant reports in a sequence of exchanges that started in a fairly low key way following publication of Network Rail's 2005 Business Plan (which contained some preliminary efficiency projections) but gradually warmed up through the various phases of the review.
- 3.11.8 What is apparent is that the basic argument about the pace of change and the relevance of foreign comparisons remained constant throughout from 2005 to 2008. Despite the fact that the quality of the data and reports which appeared late on in the process (much of it as late as 2008 in the last few months before draft determinations were reached) was of a high order bringing shafts of light to beam down on practically all aspects of efficiency, Network Rail did not move its position on the numbers. Informed by its own assessments, however, ORR did move in Network Rail's direction.
- 3.11.9 Whilst it is easy to appreciate that the weight and increasing thoroughness of the studies towards the end of this process enabled ORR to make its determinations with a reasonable degree of confidence, one is nevertheless left with an impression of Network Rail remaining unconvinced not necessarily for tactical reasons. Whilst tactics may well have played a part in the claim and counter-claim that was the hallmark of the exchanges between the parties, we do not think it is unfair to suggest that this may have started with ORR, though it may have been inadvertent. This was exemplified by the LEK/OXERA 2005 study which ORR used early in the process to make public its view that savings of up to 8% per annum might be achievable.
- 3.11.10 If this was a tactic it is not clear that it worked. Putting down such a marker to Network Rail even before the company had produced its Initial Business Plan must have put the company on the back foot. Given that Network Rail barely moved its position at all from then until the completion of the process may suggest that the company thought it was better to let ORR force the pace and place it in the position of having to decide the scale of efficiencies on the basis of research that was heavily contested to the last.
- 3.11.11 This is not to say that the determination on efficiency was incorrect or badly conceived. We do not comment on the decisions but on the process. One can only speculate with the benefit of hindsight how the debate might have progressed if Network Rail had been able to make its own efficiency proposals first before ORR passed comment on their adequacy. As it was Network Rail's immediate response was to describe ORR's upper end assessment as "wholly unrealistic".
- 3.11.12 It is also possible that the debate would have been more constructive had the information that became available late in the process been available at the beginning. The fact that it wasn't suggests that both Network Rail and ORR were in effect starting from positions of considerable uncertainty as to what efficiencies were achievable in CP4. By Network Rail's own admission it was uncertain about what was possible whilst ORR was informed initially by a single piece of work which the authors themselves
described as a "desk exercise, carried out in a short time frame and without any collaboration with Network Rail". The ORR process for monitoring Network Rail's progress in securing CP3 efficiency targets might have been expected to have improved the quality of data earlier on and to help determine the longer term trajectory. The fact that this does not seem to have been the case suggests that the link between monitoring efficiency in one control period and what might be achievable in the next is not sufficiently strong. We think this is a learning point for the future.

- 3.11.13 If the state of knowledge in 2005/6 was as uncertain as it appears to have been then it is understandable that the process to determine efficiencies became a "debate". It also explains why significant factual data, including benchmarking information, did not become available until late in the review process. In effect much of the data on which informed decisions could be made was not produced until late in the timetable. The fact that it remained contested could be explained by the "prove us wrong" approach adopted by ORR as far back as 2005 which might have engendered a defensive stance on the part of Network Rail. Another important aspect is that Network Rail managers responsible for delivering efficiencies did not themselves appear to have the confidence to project savings to anything like the degree posed by ORR's initial assessment.
- 3.11.14 This brings us to the issue of management. Ultimately the achievement of efficiency targets is as much about management as it is about statistical and econometric comparisons, especially where the managers in question are just emerging from a period in which they have been under huge pressure to deliver substantial savings already and when they perceive that the comparisons being drawn do not reflect the operating or safety environment in which they are working and do not focus on the "how", that is the methodologies that might explain the differences.
- 3.11.15 It is therefore understandable that ORR would be more persuaded by the benchmarking comparisons than Network Rail. The extent to which ORR went in order first to make comparisons and then to understand their statistical significance was, we think, an impressive process given the nature of the data and the fact that it had never really been used for this purpose before.
- 3.11.16 On the other hand it is also understandable that Network Rail was reluctant to accept the data without being able to comprehend, let alone endorse, the reasons for the variations. That the variations were significant is not in doubt. The reasons for them, however, were not clear (certainly to Network Rail) and still remain unclear even after the determinations have been accepted.
- 3.11.17 Understanding the significance of variation is a key task of management. For Network Rail to improve its efficiency to the levels determined by ORR requires its managers to understand the reasons for the comparisons and then to be able to act upon them. What may reasonably be said is that at the time of the determination Network Rail did not fully understand or accept the variations and therefore we can conclude that it was at best uncertain as to how they could be achieved. Inclusion of a substantial amount of "stretch targetry" in its own estimates served to underline the point.
- 3.11.18 Network Rail's 2009 Delivery Plan embraces ORR's expenditure and efficiency targets but stresses that for the years 2010-14 the company has as yet undefined plans to meet them. The financial year 2009-10 will not reflect the same order of savings. Thus we can see the management dilemma. In the immediate term what can be achieved is dependent on the trajectory of existing productivity initiatives, whilst what is to be achieved in future years remains un-quantified to a significant

extent. An unfortunate side-effect of this position is that some key stakeholders harbour reservations about Network Rail's ability to deliver what is required, diminishing somewhat their confidence in the process. Both ORR and Network Rail should seek to avoid this in future.

- 3.11.19 How can we explain that ORR appeared to have more confidence in the ability of Network Rail to deliver the efficiency targets than the company itself? Was it entirely an inevitable result of a regulatory review that will always challenge management assumptions?
- 3.11.20 Perhaps the clue was in Network Rail's own vision of becoming a world-class infrastructure provider. If it were to be world class then it would have to aspire more towards the upper quartile of comparator countries than to the "average" and it would be difficult tactically for it to reject targets that were based on a trajectory taking it towards world class status within ten years. Ultimately the proof of the pudding was in the eating and Network Rail's Board accepted the settlement as "challenging and realistic" having decided against rejecting the determination resulting in a reference to the Competition Commission.
- 3.11.21 Despite this, acceptance does not imply achievement. The question of management capability remains. Detailed plans are more important than aspirations and targets. Also the fact remains that at the outset of CP4 in April this year, sufficient bottom up plans did not exist to underpin the numbers. Despite its decision to allow efficiency "catch-up" to be phased over a ten year period we think that the absence of more definitive plans places a greater onus on ORR to monitor the progress being made by Network Rail to satisfy itself that the company is on track to deliver plans that are robust. This may mean monitoring enablers (which in this instance we would define as "plans") as much as outputs.
- 3.11.22 We think it will be important for ORR to understand the extent to which Network Rail's outputs are being achieved by "efficiency" as defined by "best practice" as opposed to cost savings achieved through changes in scope or reductions in workload which in the short term could leave outputs unaffected but which in the medium to longer terms might have deleterious results. We also think that this could become increasingly important if the industry is going to find itself in the next control period in a much tighter funding regime. Driving productivity will be even more important particularly if demand continues to grow and standards are not to fall.
- 3.11.23 We also think that the use of international benchmarking, which was ultimately the decisive factor in the determination, must start to play a much more significant role in Network Rail's application of best practice. It would also be strange if having placed such reliance on the high level data, ORR just as much as Network Rail did not also interest itself in the application of the best practice that is said to underlie the achievement of foreign administrations in the upper quartile. We think this is a monitoring issue and from ORR and Network Rail's point of view a much greater joint understanding of cause and effect, together with the collection of meaningful comparative KPI's, will provide the basis for avoiding the kind of "argument" that characterised the efficiency debate in PR08.
- 3.11.24 Although the PR08 efficiency debate was intellectually robust and increasingly well informed on both sides, time ran out before it was possible for a consensus to emerge between ORR and Network Rail that translated into a quantified assessment. The constructive way forward is to build on what has been achieved so as to ensure that the parameters for determining efficiency in CP5 include a shared position on the statistical and engineering comparisons that will underpin the next

assessment. Given the trend towards separation of the infrastructure and train operations coupled with EU countries increasingly encouraging competition between operators, ORR and Network Rail jointly could provide the impetus for a concerted attempt to promote the understanding of international best practice.

- 3.11.25 Our report considers in Section 3.14 the processes adopted by ORR to align Network Rail's corporate and management incentives with the efficiency targets that it set for CP4.
- 3.11.26 The exploration of efficiencies in operations was less robust than it was for maintenance and renewals. The process adopted by Network Rail and which formed the basis for ORR's reactions at various stages in PR08 in some important respects appeared to lack detailed assessment and justification. The large "stretch" target adopted by Network Rail in packaging its projections appears to be evidence of ambition but a lack of rigour. Whilst proposing such a large stretch component might have been interpreted as a bold proposition, given that the company was projecting so many components to either rise in real terms or for various reasons not be capable of any reduction, it might also have been construed to imply that Network Rail itself saw opex as an area full of inefficiencies.
- 3.11.27 The logic ORR applied in reaching the conclusion that there was indeed a lot to go at, may or may not be correct. The approach it adopted to benchmark operations against the efficiencies of recently privatised utilities had a certain logic which ORR was obviously prepared to defend and with Network Rail itself apparently acknowledging that there was a high degree of scope beyond what it could itself identify through specific initiatives, it may be concluded that the process adopted worked.
- 3.11.28 Network Rail has told us that this is one area of the review in which it thinks with hindsight that more analysis should have been undertaken. In saying this we cannot interpret it as meaning that Network Rail would necessarily have reached different conclusions. However, it might have allowed a more robust review to take place.
- 3.11.29 As to the future it seems to us that a high proportion of the operating expenditure does in effect represent the Network Rail "overhead". As a point of principle it must be right for this to be subject to significant challenge. Indeed there is a sense in which the entire overhead of any organisation needs to be justified on the basis of the added value it brings to the end user. Tracks that are safe and stations that are welcoming can readily be seen to add value, especially when they are subject to a rigorous review in determining the quantum and the extent to which they deliver outputs that are beneficial to users.
- 3.11.30 Overheads are different. In a fully commercial company with shareholders and competitors, this would be an area of expenditure that would be continuously under review. In Network Rail this is far more difficult to identify. We think a different approach might be considered. If Network Rail were to see itself as part of a supply chain delivering value to customers it would be feasible to construe a series of internal customer supplier relationships in which successive layers of the organisation, as they become more remote from the end user (by which we mean passengers and freight customers) are challenged to justify their budgets on an added value basis. If the company would go a step further and involve real customers in the process (by which we mean TOCs and even passenger and freight representatives) this might be considered a rather more challenging process than one in which targets are set which may result in sub-optimal cuts made by what is a fairly blunt instrument.

3.11.31 Finally, some stakeholders have expressed concern about what they perceive to be the relatively high costs of some elements of work undertaken by Network Rail. They advocate a more extensive exposure of Network Rail's teams to external competitive tenders, especially in activities that are not safety critical. Whilst we understand that the issue was to some extent considered by consultants, the level of stakeholder concern suggests that this could be an area for specific assessment in PR13.

Overall View on ORR's Process for Reviewing Efficiency

3.11.32 The processes of robust challenge and the deployment of international benchmarking were effective. Going forward it is important that ORR builds on what worked in PR08 and uses CP4 to ensure that the momentum in developing a better joint understanding of efficiency in an international context is maintained. We also consider that the process of monitoring Network Rail's progress in CP4 will be important in setting efficiency targets for CP5, a period in which the availability of public funding may be much more restricted but when the need for high quality outputs will remain.

3.12 ORR'S REVIEW OF NETWORK RAIL'S ENHANCEMENT PROGRAMMES

The Process Summarised

- 3.12.1 Enhancements to the capacity of the rail network were a principal feature of the HLOSs generated by both Transport Scotland and the DfT. The process for determining the HLOS is discussed elsewhere in our report but in summary the methodology adopted for determining schemes was both top down and bottom up. Put simply, top down forecasts were generated by a demand model that identified supply solutions through a combination of train service changes, train lengthening and associated infrastructure enhancements.
- 3.12.2 Schemes were developed by Network Rail working with DfT strategists, other industry partners and stakeholders, including the TOCs and FOCs. Route utilisation studies informed the development of the schemes which were then included by Network Rail in the Business Plans that were the subject of the periodic review conducted by ORR.
- 3.12.3 The list of schemes was very specific and the process for determining which would be progressed rested on a number of factors which ORR took into account in its review. At the most basic level there were projects nominated specifically in the HLOSs whilst others were listed because of their importance in supporting the delivery of the capacity and crowding metrics in HLOS. Others were proposed in support of improving performance, another HLOS output. Others were proposed by Network Rail that would not specifically deliver HLOS metrics but which it considered nevertheless represented value for money on a benefit cost ratio (BCR) basis.
- 3.12.4 The review process is best described as a continuously improving iteration and development of a number of very specific schemes, often involving several parties, which over a relatively short period in PR08 became progressively better defined, providing a basis on which ORR could determine what it would endorse. The list of schemes under consideration remained pretty much the same throughout the process

and the schemes that were listed in Network Rail's April 2009 Delivery Plan replicated those in ORR's draft and final determinations.

- 3.12.5 ORR reviewed the schemes first of all on whether or not they delivered HLOS outputs, secondly whether they did so as cost effectively as possible and finally whether they were actually capable of being delivered and resourced in the timescales proposed. Subject to the agreement of stakeholders and the application of a control process which requires ORR's approval to any changes, ORR also took the decision to allow Network Rail some flexibility in the delivery of certain schemes, based partly on the extent to which demand actually developed and on the progress made by other industry parties in providing the extra rolling stock for which some of the infrastructure projects were designed to accommodate and which was also being funded by government as part of the HLOS, though not through Network Rail.
- 3.12.6 Schemes were assessed individually as well as collectively in relation to the outputs they would deliver. ORR was well served by Network Rail in the process and engaged its own consultants to advise on the robustness of the costs, output deliverables and overall delivery capability. The latter was also looked at in the round.
- 3.12.7 Through every iteration of each Network Rail Business Plan from 2006 to 2008, after every evaluation published by ORR and after taking into account the substantial stakeholder interest and engagement in the process, individual projects and each overall category of projects was exposed to increasingly rigorous challenge and assessment.

Our Assessment of the Process

- 3.12.8 The process started with the nomination of schemes. In our view the top down, bottom up process for developing enhancement projects was a rational planning process which, if successfully progressed, would be expected to provide confidence in the enhancement programme for funders, operators and stakeholders alike. There was consistency throughout in terms of the schemes being considered and there was clarity about the objective each one was intended to meet.
- 3.12.9 ORR started the process well by giving clear guidance to Network Rail about the construction of its 2006 Initial Business Plan saying that it should allow for a reasonable projection of growth and provide for a steady state system assessment that would serve as a benchmark for "efficient minimum cost" against which growth scenarios could be measured.
- 3.12.10 Given that significant enhancement of the network was inevitably going to be a feature of HLOS and that major reviews of asset management policies and efficiency would also be key elements of PR08, this separation of projects was a sensible methodology and one which Network Rail observed, providing an initial view of 26 route strategies including enhancements, which were emerging from RUSs and other discussions with interested parties.
- 3.12.11 Because many schemes were at an early stage of development and it was for the governments to determine what they were prepared to fund, publication of HLOSs and Network Rail's 2007 Strategic Business Plan was ORR's opportunity to commence a full evaluation. In response to an ORR consultation in advance both DfT and Transport Scotland made it clear that in framing its Strategic Business Plan Network Rail should have regard to credible and affordable delivery and asked ORR to do likewise in appraising the plan.

- 3.12.12 In seeking responses from stakeholders to Network Rail's plans ORR specifically invited operators, PTE's and other funders to comment on Network Rail's enhancement proposals, including the demand forecasts that underpinned them. It also asked stakeholders to comment on the effectiveness of their engagement with Network Rail.
- 3.12.13 We consider this to have been a sensible course for ORR to take given that train operators, PTE's and TfL, for example, had all been involved locally in considering how to cater for the growing demand that was occurring right across the network. Given that train operators are effectively the delivery agents to passengers and that transport authorities are seeking to plan rail solutions in a wider transportation context, ORR's approach was clearly justified and would be likely to throw up any significant problem areas where they existed.
- 3.12.14 This was a very successful consultation with high levels of participation and showed clearly the importance that operators and stakeholders attached to enhancements. Most companies and important stakeholders responded raising substantive issues.
- 3.12.15 ORR's next assessment of Network Rail's enhancement plans was published in February 2008 and did reflect some but not all of the concerns expressed by stakeholders. Although ORR did not comment specifically on the points stakeholders had raised about the completeness and robustness of the appraisal of schemes, ORR did nevertheless state that it considered the schemes proposed by Network Rail would enable the HLOS capacity metric to be met. It did not explain why it was able to reach this conclusion. It may however be inferred that it did so on the basis of assessments it was making of the schemes.
- 3.12.16 It concluded, for instance, that further work was needed to determine whether all the schemes were needed to deliver HLOS and if so whether their costs could be reduced. It did so on the basis of a combination of bottom up, detailed costing of some schemes and top down benchmarked assessments elsewhere. Major projects specified by DfT in the HLOS were each subject to challenge for reasons specific to the project whilst in accepting the list of projects necessary to deliver the capacity metric, ORR made clear that it was continuing to validate the costing as well as satisfying itself that all the schemes were justified. It rejected as either unnecessary or unproven, a number of schemes proposed by Network Rail to deliver the performance metric and the seven day railway. For Scotland, ORR raised specific but not fundamental issues relative to Network Rail's plans in respect of the three Tier 2 schemes included in the HLOS.
- 3.12.17 We think this shows that in a complex and fast moving position in relation to the development of the enhancements programme, and with schemes being at various stages of development, ORR was playing an important role in getting the industry as a whole to focus on the correct priorities.
- 3.12.18 It is difficult to see what else ORR could have done at this stage and it did lead to some significant adjustments to the programme proposed by Network Rail because when it published its Business Plan Update in April 2008 it reported on further iterations of the enhancements programme following renewed discussions with DfT, Transport Scotland and train operators. These were in part necessary to take into account DfT announcements made in January 2008 concerning the rolling stock plan.
- 3.12.19 Some people we interviewed have commented that the SBP Update was an avoidable part of the PR08 process. However, in the case of enhancements, we

observe that it was a further important step in firming up on the enhancements programme and its delivery process.

- 3.12.20 Even at that stage, however, Network Rail stated that it did "not yet fully understand" the impact of the rolling stock proposals. Other issues were being developed but were still at an early stage of development. For example, Network Rail included an assessment of the depot facilities absent from previous submissions but had only been able to assess costs "at a high level". It suggested operators should fund car parks from incremental revenues.
- 3.12.21 All of this is evidence that with only weeks to go before ORR was due to publish its draft determinations; there was still a degree of uncertainty surrounding some of the HLOS schemes. Nevertheless when ORR issued its draft determinations progress by Network Rail in channelling schemes through its GRIP process had been made and costing had also moved forward.
- 3.12.22 ORR's actions in arriving at its draft determinations can be seen as an entirely rational and objective response to considering an extensive programme of works that had been evolving fairly rapidly through a continuing planning iteration involving DfT, Transport Scotland, TOCs, Network Rail and other important stakeholders.
- 3.12.23 It undertook an assessment of project costs by reviewing project programmes and scope, efficiency and the way that risk had been treated in the estimates. It was informed by three well respected advisers, two of them technical with substantial experience of railway projects from both a feasibility and construction point of view. The third is a sector leader in matching demand to service provision in practical railway operating environments both in the UK and overseas. ORR also drew on work in the "efficiency" workstream to inform its view of the potential cost reductions associated with projects. This included further consultancy advice from three other companies. ORR also commissioned a particular piece of work to assess what further management and process changes Network Rail might need to make to provide a greater degree of confidence in its project delivery capability. This highlighted some weaknesses and pointed to the need for some better partnership working with suppliers and sponsors.
- 3.12.24 Given the scale of the programme and in the light of some of the concerns expressed about delivery, ORR was clearly right to undertake these assessments as well as undertaking a further piece of work to review the risk associated with project costs, ultimately concluding that Network Rail's methodology was broadly acceptable.
- 3.12.25 Subject to a change control process requiring regulatory approval, ORR proposed to give Network Rail some flexibility in delivering enhancement projects in relation to meeting growth in London and other urban areas. Although this has proved a contentious issue amongst some of the stakeholders we interviewed, we can see the sense in allowing flexibility in circumstances where the scale and pace of growth had been made less certain by the general economic situation. It was also the case at the time that rolling stock plans emerging from DfT were still not finalised and closing down on infrastructure schemes could not therefore be sensibly finalised.
- 3.12.26 In its response to the draft determinations Network Rail encapsulated the continuing fluidity of the position well. "It is very evident that further iteration of our infrastructure proposals will be required and the line between "delivering the HLOS" and maximising the value of the rolling stock plan will become further blurred. ORR will need to consider how the situation should best be addressed in its final determinations. "

- 3.12.27 Whilst accepting much of ORR's draft determinations in relation to enhancements, Network Rail did seek to raise again the case of certain projects rejected by ORR, which, if carried out simultaneously with planned renewals would offer significant positive benefit to cost ratios. It also listed eight performance enhancing schemes rejected by ORR but announced an intention to seek alternative sources of funds. Network Rail made a specific plea for a scheme at Gatwick Airport station to be done in CP4 in conjunction with planned renewals and platform work so as to avoid what it claimed would be a significantly increased cost of doing the work in isolation during CP5.
- 3.12.28 Network Rail contested several of the assumptions made by Arup of the costing associated with certain projects, including platform lengthening works and power supply upgrades, both accepted by ORR in its draft determination. Network Rail also contested a number of specific schemes or parts of schemes that ORR had rejected and in particular challenged a decision to reduce the funding available for enhancing the network capacity in the Manchester and Leeds areas, schemes, it claimed, that had the support not only of the TOCs but also of DfT.
- 3.12.29 In respect of Scottish schemes Network Rail challenged ORR's determination to reduce on several counts the allowable spend on the Glasgow Airport link and less significantly on the Airdrie-Bathgate scheme.
- 3.12.30 Finally Network Rail challenged the efficiency assumptions made by ORR, stating that the scheme estimates were insufficiently firm in themselves to warrant further amelioration on what it said was a false comparison with its renewal activities.
- 3.12.31 In explaining its final determinations ORR described each project or category of project in turn, restated its draft determination and any responses from Network Rail, which it addressed, explaining clearly the basis for its final decisions. It provided reasoned explanations for its decisions, which clearly reflected the fact that each scheme was considered individually on its merits. In a number of cases ORR, in support of its own decisions, referred to third party scrutiny arrangements or oversight, adding weight to its determinations. In several other cases ORR accepted the allowances Network Rail itself had proposed for schemes, especially where these were at an early stage of development, demonstrating a reasonable and pragmatic approach.
- 3.12.32 It specifically rejected Network Rail's objections to its efficiency assumptions. It explained the reason for this clearly, without apparently adding anything new to its earlier positions except to comment that a significant number of stakeholders had responded to its consultation by challenging Network Rail's cost estimates, thus implicating them in the view ORR itself upheld.
- 3.12.33 Nevertheless ORR used Arup to undertake a detailed reappraisal of some of Network Rail's plans and assumptions and used this as a basis for reaching its final determinations, which did acknowledge some of Network Rail's points. It also acted on advice received from the train operator, Northern, in adjusting upwards its allowable expenditure on enhancements in Manchester. For Leeds it confirmed its earlier determination, again providing justification. For Gatwick Airport, after further assessment of the case, ORR accepted Network Rail's argument.
- 3.12.34 Specifically in respect of schemes to improve PPM, ORR undertook a very detailed assessment of a number of enhancements that Network Rail had proposed. It

used another expert consultancy to examine the performance impact of schemes. The company concerned is one that is acknowledged as pre-eminent in the field of performance budgeting and appraisal. Based on its detailed assessment, ORR confirmed a "performance enhancement" investment substantially less than Network Rail's submission.

- 3.12.35 In Scotland ORR gave further detailed consideration to Network Rail's latest cost assumptions for three key projects (GARL, Airdrie-Bathgate and Glasgow-Kilmarnock) and made some modest adjustments in Network Rail's favour as compared with their draft determinations.
- 3.12.36 ORR also gave full consideration to Network Rail's ability to deliver its capital programme. Given the size, scope and coverage of the programme and that during the course of CO4 other major national projects (notably the Olympics) might be expected to compete for resources, potentially also putting pressure on prices, this was a reasonable and sensible approach. It was also appropriate given the expressed views of some stakeholders concerning what they alleged to be Network Rail's tendency to deliver projects late.
- 3.12.37 ORR undertook a number of what we consider to be commonsense tests. It considered first of all the CP4 programme compared with CP3, combining renewals and enhancements, which in financial terms were in total little different. It also noted that the scale of the programme it would approve would be less than Network Rail had originally proposed and drew the rational conclusion that this provided some cushion against project slippage in relation to the resources that would be deployed.
- 3.12.38 ORR had required Network Rail to demonstrate its assumptions in terms of delivery capability (for example, by providing a detailed analysis of the "value" chain ranging from design to installation across the various major asset categories) and was broadly happy with its assessment although in one or two important respects ORR formed the view (on the basis of advice from consultants) that it would have to change its working methods significantly (to implement the 7 Day Railway programme for example) and that it had underestimated the risk of delay in the planning process in seeking external planning permissions.
- 3.12.39 In the end ORR reached the conclusion that Network Rail's overall delivery capability for CP4 enhancements was robust although it clearly acknowledged that some risk was involved by re-profiling the overall spend slightly away from the first to later years. Sensibly ORR flagged up its intention to keep a firm monitoring hand on progress and that it would commission independent reviews as necessary as part of this process.
- 3.12.40 Given the scale of enhancements proposed and that they were beyond anything experienced in recent times in the rail industry in this country we consider that the approach adopted by ORR to review the enhancements element of Network Rail's Business Plan, was sufficiently rigorous and proportionate. We also acknowledge the significant role of Network Rail in co-ordinating the whole project programme not only in such a complex environment in which some of the plan elements were still fluid, but also in what was a very constrained timescale given the scale of things.

Overall View of ORR's Process for Reviewing Network Rail's Enhancements

3.12.41 Generally this process worked well, especially given the relatively short timescales involved in developing, appraising and approving a large and complex programme of works, the largest in recent history. Delivery concerns remain amongst stakeholders, however, and given the importance of the schemes to delivering HLOS, the monitoring processes adopted by ORR will be crucial to the credibility of the outcomes that ORR has determined.

3.13 ORR'S REVIEW OF THE FINANCIAL FRAMEWORK

ORR's process summarised

- 3.13.1 The process for assessing the financial framework in a conventional price control review is well established. It comprises an assessment of the cost of capital, taking independent advice and reviewing recent regulatory precedent, and a calculation of the RAB to which this cost of capital is applied. The RAB calculation comprises the determination of the opening RAB and a roll forward including an allowance for capital expenditure and one for amortisation, taking account of the likely rate of decay of assets. The whole is indexed, using evidence both of general price movements (the RPI) and specific changes in relative capital costs. All these issues are set out in principle before stakeholders for consultation, before the discussion focuses on the quantification of those principles. The process adopted in PR08 included all these components. All the issues were raised for consultation and ORR took independent advice from CEPA on the cost of capital. It cross checked its thinking with contemporary deliberations by the Competition Commission, OFGEM and others. It also held discussions with the rating agencies to understand the implications of its proposals for the availability of funds from lenders, although for understandable commercial reasons the detail of these discussions was not published.
- 3.13.2 The sequence of the review was complicated by the HLOS process. Ideally the regulator consults and forms conclusions on the principles of the analytical approach before moving on to strict quantification, in order to avoid the temptation on all sides to back justify methodologies which deliver the desired results. In this case the need for ORR to provide affordability input to the HLOS meant that it had to table estimates of the cost of capital at an early stage. Although ORR stressed that stakeholders should not see these early estimates as determinative, they did set the scene for an early descent into the figures.
- 3.13.3 The process was further complicated by the status of Network Rail as a CLG (company limited by guarantee) effectively without risk capital to be serviced. PR08 fully recognised and addressed this issue. In particular the financial structure of Network Rail raised the question of how the company could be incentivised to deliver cost effective performance. ORR dealt with the issues of financial frameworks and incentives jointly throughout the review process. The lack of equity to be serviced also gave rise to the question of how an appropriate return should be set, and how any risk return should be used. Subject to one caveat below, this was also fully recognised. As unsupported debt emerged as the preferred solution to aspects of this issue, ORR took appropriate external advice from NERA in response to a core challenge from the HM Treasury on value for money.

Our Assessment of the process

- 3.13.4 The process followed by ORR was undoubtedly transparent, thorough and coherent. Logical stages were set out in the Initial Consultation paper and were then followed in a timely manner. It was also targeted on the key issues. The approach of setting financial frameworks in their overall context at the outset, then consulting separately on the specific financial issues before bringing them together with other workstreams, first in the HLOS advice to ministers and then in the draft determination allowed the technical issues to be viewed in their strategic context.
- 3.13.5 Our review of the consultations indicates that at most stages the substantive dialogue was confined to a small number of stakeholders, primarily government and Network Rail. This is not altogether surprising, given the fact that these two parties had a direct financial interest in the outcome. It does however raise one concern.
- 3.13.6 The ultimate customer of regulation is the consumer which in this case we take to include both taxpayers (as the funders of the settlement) and passengers and freight operators. The involvement of both DfT and the Treasury ensured that the interests of taxpayers were represented, but ORR also has specific statutory duties towards passengers and freight operators (including inter alia Sections 4(1)(a) and 4(2)(a) of the 1993 Act as amended by the 2005 Act). The financial frameworks discussion bore directly on both these groups, since it shaped the amount they would pay for service as well as the service they would receive. This was particularly the case in the discussion about what use should be made of the equity return absent the need to pay dividend. ORR rightly flagged the option that this could be returned to passengers in the form of lower fares, but it received no feedback on this option which could be said to reflect passengers' views.
- 3.13.7 (There is a current view amongst some regulatory thinkers that intermediate users, in this case TOCs, represent the views of their customers. This is arguable as a general regulatory principle, but would not apply in this particular case where the cost of the settlement is passed through by TOCs under their franchise arrangements. The contribution of Passenger Focus fell short of covering this issue.)
- 3.13.8 Part of the problem may have rested with the weight and complexity of the issues, but it does also raise the question whether in future ORR should consider more active ways to capture the passenger interest in its determination. Regulators, such as the CAA have relied on industry engagement. Certainly engagement by the TOCs in PR08 was lower and later than it might have been, and ORR will wish to consider how it can capture their expertise earlier and better. Other regulators, such as OFWAT, have directly specified analytical methods of capturing individual customer views. In any event ORR may wish to consider how it communicates the issues to stakeholders who may find dense written material difficult to digest.
- 3.13.9 One test of the effectiveness of the process is the credibility of the outcome. Whilst it is not in our remit to judge ORR's decision we note the following:
 - The tone of the consultation documents and responses, both on financial frameworks and on other issues tended to be calm and measured, and resort to the press was mainly confined to the end game, where it is almost universally in regulatory determinations. This suggested a broad degree of acceptance of the legitimacy of ORR's deliberations.

- ORR's thinking on issues can be seen to have evolved constructively through the process, including, for instance, the development of the Ring Fenced Fund. The process demonstrated that ORR did listen and respond to the views of its stakeholders in important respects, including on the cost of capital and the financial structure.
- The final determination produced an outcome in terms of cost of capital which was in the zone of reasonable expectations, although not at the end of the zone which Network Rail had looked for.
- Network Rail was not so aggrieved by the process or the result that it felt it necessary to revert to the Competition Commission or the Courts.
- 3.13.10 Two aspects of the outcome have exercised us.
- 3.13.11 The first was the failure of Network Rail to obtain the necessary credit rating to raise the unsupported debt at rates of interest which represented good value for money, which was a cornerstone of ORR's determination. We have noted a certain amount of finger pointing between the parties as to the responsibility for this. We do not pass judgement on this. We have also noted the argument that the rating discussions were frustrated by the credit crunch. However the financial deterioration was already evident at the time of the final determination. We therefore conclude that ORR should ask itself two questions:
 - Was the regulatory process adaptive enough to accommodate the change of circumstances at the end of the review, and if not, how can this be improved?
 - Can more be done by any of the parties at the next review to align the views of ORR, Network Rail, DfT and the Rating Agencies as the process evolves to the final determination, so that the risk of the desired financial structure not being delivered is minimised?
- 3.13.12 The second was the issue of the tax double count adjustment which emerged relatively late in the process and is still a contentious point between Network Rail and ORR. Without forming a judgement on the merits of each side's views, it seems to us unsatisfactory that a matter which is essentially technical should be so fractious and remain unresolved. This is a case where the joint appointment of an independent expert might have been useful.

Overall View of ORR's Processes for Determining the Financial Framework

3.13.13 Subject to the caveats above, our overall assessment of the process of considering financial frameworks in PR08 is that it was well designed and implemented, and met the tests of best practice regulation.

3.14 ORR'S REVIEW OF NETWORK RAIL'S INCENTIVES

The Process Summarised

3.14.1 ORR stated its objective clearly at the start: "A key objective of any periodic review is to ensure that the regulated company's management faces strong incentives to deliver

the efficiency savings that will enable it to meet the regulator's allowances and, indeed, outperform against the targets" (7.20, First Consultation Document). At the same time, however, ORR drew attention to Network Rail's corporate structure, noting that Network Rail's 'not-for-dividend' status" (7.9, FCD) would have to be taken into account in its review because "Unlike many regulated companies, Network Rail does not have equity at risk", going on to say that "In a CLG, the incentive structure is quite different and it is reasonable to ask whether financial incentives will necessarily be as effective, particularly incentives significantly to outperform regulatory targets" (7.22, FCD). We consider this question further in the context set out in appendix H because the answer has affected what ORR could realistically achieve in the incentives process, despite its key objective.

- 3.14.2 The approach to incentives was fully set out in a series of ORR documents starting with the first consultation in August 2005 and culminating in the final determinations in October 2008. The sequence of key documents was:
 - First Consultation Document (FCD) Chapter 7, Network Rail's Financial and Incentive Framework, August 2005;
 - Enhancing Incentives for Continuous Improvements in Performance: A Consultation Paper, July 2006;
 - Advice to Ministers and Framework for Setting Access Charges, Chapter 8, Incentives Framework, February 2007;
 - Update on the Framework for Setting Outputs and Access Charges, February 2008;
 - Draft and Final Determinations, Chapter 27, Financial Incentives, October 2008.
- 3.14.3 In this process stakeholders had the opportunity to state their views and put forward ideas.
- 3.14.4 The consequence of the CLG structure for ORR's incentives process was an increased emphasis on the lever of reputation "For the management of Network Rail, the impact on individual reputations of success and failure provides in itself a very real incentive to perform well" (7.21, FCD), also drawing attention to the licence condition on Network Rail for a management incentive plan (MIP). Inevitably though, to make the reputational incentive effective through exposure and accountability for performance, ORR would become more involved in detailed (and possibly intrusive) monitoring of Network Rail's decisions and activities. An important question is then how cost-effectively ORR plays this role.
- 3.14.5 ORR concluded that "a CLG structure raises major challenges for regulation, but we consider that financial incentives continue to have a role to play in influencing behaviour" (7.23, FCD). The current list of corporate incentives was stated as (7.33, FCD):
 - An out-performance incentive (retaining efficiency savings)
 - A performance regime (on delivering to TOCs, otherwise penalties)
 - A possessions regime (bearing the cost of disruption on TOCs)
 - A volume incentive (additional revenue for accommodating growth in traffic)

- An asset stewardship incentive (for improving the condition and serviceability of assets); and
- In the case of management incentives, condition 28 of Network Rail's Licence requires the company to formulate a management incentive plan which must have regard to regulatory targets.
- 3.14.6 The first consultation document made it clear that there would be a specific consultation document on the incentives framework and the role of the different elements within it (7.23). This was published in July 2006.
- 3.14.7 The consultation document on enhancing incentives was a comprehensive 60 page document which set out clearly the context, came to a judgement on what 'incremental' options were feasible, identified key questions for consultees, and gave the opportunity for all stakeholders to respond. A reasonable, but tight timetable (given it spanned the summer holiday period) was set down, with comments on the financial framework (predominantly set out in chapter 5) required by 22nd September, and all other comments by 20th October. The close relationship between the incentives and the financial frameworks was clearly identified (paragraph 1.8), and the consequences for the ORR process, as there would be a need for ORR's decisions to be "co-ordinated carefully with those of other PRO8 work streams".
- 3.14.8 The consultation paper sets out again the limits to the incentives process which had been flagged in the initial consultation process, given that "no fundamental changes to the industry structure are envisaged". ORR clearly states however that "there is benefit in exploring whether there are 'incremental' changes, within the framework set out in the White Paper, that can be made" (5-9, executive summary).
- 3.14.9 The consultation process on incentives was thoroughly supported by meetings, a workshop and research work. ORR held preliminary meetings with Network Rail, the DfT, and ATOC, as well as a stakeholder workshop held at ORR on 23rd May 2006. ORR also commissioned "three studies to help inform their views: two high level 'think pieces' on the role of incentives for Network Rail and the wider industry, which were undertaken by NERA and CEPA, and a study from NERA on the likely financial impact of various possible amendments to the franchising regime" (paragraph 1.10). Other technical matters were addressed in separate consultations via a short series of 'regulatory letters' in September. (paragraph 6.2)
- 3.14.10 Overall, the identification of options, and the opportunity for stakeholders to comment, and offer other options, was fully present in the process. There were 25 responses in total, and these covered most of the major stakeholders. The responses were published and it can be seen from the robust responses that the process had achieved participation: agreeing with ORR where appropriate, disagreeing in other cases, with reasons given, and offering further technical and challenging alternatives on occasion (see for example the two responses from ATOC and Professor Chris Nash, University of Leeds). In providing feedback to ORR and the development of the regulatory system, the consultation process played an important role.
- 3.14.11 Whilst the number of responses to consultation was limited, this was to be expected, and our stakeholder interviews did not reveal any dissatisfaction with the incentives process. However, we could discern concerns about the strength of the incentives framework generally, with references to Network Rail's capacity or willingness to deliver even the core targets set out in the review, and the way in which ORR had felt it necessary to become more intrusively involved, rather than rely on the normal corporate and managerial incentives of the regulated industry. ORR can be

commended for addressing this issue, and the context of governance in Network Rail which had to be taken into account in order to understand the incentives process.

- 3.14.12 ORR has clearly been transparent in setting out its incentives process about the difficulties which are inevitably going to be caused by Network Rail's corporate structure removing some high powered incentives.
- 3.14.13 The consultation paper covered both managerial and corporate incentive options, noting in relation to the former that "clearly incremental improvements could be made to the existing regulatory framework, for example in relation to strengthening the power and design of Network Rail's management incentive plan (MIP)" (5, executive summary). This is particularly relevant, given the recent press announcement that Network Rail's Chief Executive is to voluntarily forgo a proportion of his bonus as it would distract from his task of highlighting Network Rail's performance. Whilst the licence condition requires the MIP to address all the regulatory target areas, including efficiency, concerns about the efficacy of the MIP, and its ability to strongly incentivise efficiency improvement and outperformance, as well as the achievement of standards and output targets, has been reinforced by the recent letter from ORR's Chief Executive to Network Rail's Remuneration Committee (13th May 2009), with its emphasis on transparency and the need for Network Rail's Board to "explain very clearly the underlying rationale for your management incentive plan" (paragraph 4).
- 3.14.14 The management incentives were set out in paragraphs 3.48-3.52, stating that the MIP is "widely seen as an effective tool for focusing management on the delivery of key outputs", whilst noting that its strength could be improved, and drawing attention to Welsh Water (a CLG which relies on similar management incentives) where the MIP "provides for bonuses of up to 80% of salary for outperforming regulatory targets (paragraph 3.53). Key importance is attached to reputational incentives in the consultation process, and the consequences for ORR processes, given ORR stated that "we aim to leverage the reputational incentives on Network Rail's managers by undertaking robust and transparent monitoring of the company's performance against regulatory targets and assumptions" (paragraph 3.54). Such activities will therefore be part of the post-determination process, and will inevitably appear to some as intrusive, and inconsistent with light touch regulation. Nevertheless, this approach is one consequence of the governance structure of Network Rail, and the on-going process question will relate to ORR's cost-effectiveness in carrying out its monitoring and leverage on Network Rail's reputation.

Specific Corporate Incentive Initiatives

- 3.14.15 Certain 'incremental improvements' were actively canvassed by ORR, involving discussions with stakeholders, and were brought together in the published Advice to Ministers. The three specific attempts to improve incentives, introduced by ORR in the periodic review, were understandable, but, because of the context, lacked the coherence and alignment which would be expected by, and are available to, other sector regulators (see also appendix H)
- 3.14.16 The first initiative developed from the fact that Network Rail is debt-financed; debt which is guaranteed by the government. For various reasons among key stakeholders, the idea of 'unsupported' debt emerged. For ORR, it argued that this would introduce another stakeholder scrutiny focused on improved efficiency. The problem is that debt holders are not concerned with efficiency per se but the security of their loans. It is not therefore a strong incentive, and given the political commitment to

the railways, the debt holders would probably judge that default would not be an option for the government in any event.

- 3.14.17 Whilst both Network Rail and the DfT supported the idea of extending unsecured debt, for its supposed incentive properties, it might be inferred that the underlying driver for the government was to reduce the risk of Network Rail being put on the government's balance sheet, and for Network Rail it was to reduce the degree to which oversight is exercised by government.
- 3.14.18 In the event the proposal was reduced to an aspiration for the future, in part due to the 'credit crunch', but also because of Network Rail's failure to achieve an investment grade credit rating and the consequent increased costs of unsecured debt, which might not be recompensed by improved efficiency through the increased stakeholder scrutiny on Network Rail. The issue of risk in relation to unsupported debt underlines how important it is for both ORR and Network Rail to communicate effectively with the City, such that lenders' assessment of risk can be well-informed and based on confidence that regulatory and political risk is minimised.
- 3.14.19 The second and third elements were the 'volume' incentive and the 'efficiency benefit sharing mechanism', both of which draw on standard regulatory incentive mechanisms, but are subject to the problem for ORR that the underlying incentive of economic profit for shareholders is missing. ORR has had to rely on the idea of the reputational gain to Network Rail managers (see for example 27.14, p384, of the final determination). Nevertheless, the process was well conducted in that it provided the opportunity for technical analysis and an interchange of ideas among stakeholders on how such an incentive mechanism should work. Issues such as the timing of payments of additional revenue, basing the benchmark on actual volume growth in traffic, and the definition of the longer run incremental costs of meeting traffic growth (a key measurement if the incentive is to be effective) were all considered in the process.
- 3.14.20 The benefit sharing mechanism is intended to incentivise the TOCS to become more engaged with Network Rail, but if it is reputation which is the driver, then diverting 25% of the gain to the TOCs could be said to reduce the gain to Network Rail in respect of what it could have promoted or facilitated in any event. Given that ORR has set a challenging efficiency target, the likelihood of major benefit sharing schemes coming forward is a moot point. Finally, Transport Scotland's opposition and the DfT's lukewarm reception for the scheme in order to maintain its cash control to TOCs means that the process lacks important stakeholder acceptance.

Our Assessment of the Governance Context of Network Rail

- 3.14.21 ORR has to determine the allowable access prices for the monopoly infrastructure provider, Network Rail. In this regard the position of ORR looks little different from regulators in other utility and network industries. However, the corporate model and industry structure chosen by the government following Railtrack's administration has had a distinctive effect on the armoury of incentives available to ORR in terms of the process of the regulatory review.
- 3.14.22 The members of Network Rail are not shareholders, and with the exception of train operators they are not therefore incentivised by the personal gain of economic profit. They are likely to focus on the achievement of standards rather than the cost-effectiveness of those standards or the quality of output. This is because reputational damage is much more likely to occur in relation to non-achievement of standards than to the cost-effectiveness of outcomes.

- 3.14.23 Finally, competitive testing of inputs into Network Rail's business has been affected by the decision to place more delivery in-house (following the failure of Railtrack to control its contractors).
- 3.14.24 In this context it is understandable that ORR would develop its regulatory process to focus to a much greater extent on the potential efficient frontier outcomes for Network Rail than might be the case for other regulated industries, where the incentives to outperform are arguably better aligned. The efficiency review was therefore a particularly important part of PR08.
- 3.14.25 In a sense, the corporate governance of Network Rail, and the incentives on management resemble a traditional nationalised industry. If those industries were considered by government problematic for securing cost-effectiveness, then we can see that ORR's process elements in relation to facilitating effective incentives are likely to have been limited.
- 3.14.26 ORR has conducted a proactive incentives process as far as it reasonably could in relation to Network Rail, and has sought to explore "incremental changes, within the framework of the White Paper" (see The Future of Rail 2004) and 2005 Transport Act, but the results were perhaps predictable, and limited because ORR could only decide its incentives process in the current context for the industry. Responsibility for changing the corporate context for the regulatory process and incentives in rail rests with the government, something that is certainly beyond our remit to consider and beyond ORR's too as it made clear in its own statements.
- 3.14.27 Whilst ORR "recognise that no fundamental change to the industry structure or Network Rail's financial structure are envisaged" (8, Enhancing Incentives), ORR noted that "This then raises the question as to how best the constraints identified can be addressed" (7, EI). ORR concluded "that we only have certain levers to facilitate change and that other parties would have to be persuaded in respect of the desirability of changes where we do not have the levers, if these are deemed appropriate"(11, EI).
- 3.14.28 As the contextual observations we have made in this section (and in appendix H) in relation to weakened incentives are continuing debating points in the industry (including ORR's review), we hope this brief overview is of some use for looking forward, learning lessons, and encouraging government to consider the limitations of the current corporate structure, including whether there should be a significant injection of equity risk capital, whether new organisation structures might be more appropriate, or whether other means of leveraging third party investment (from passenger or freight owning groups for example) should be considered. Whilst we appreciate ORR's powers are limited we understand that it could ask the Competition Commission to review Network Rail's structure. The consideration of such possibilities may be particularly important in PR13 due to the financial squeeze on government funding.

Our Overall Assessment of the Process

3.14.29 The regulatory framework for utilities and network industries (water, energy, transport and communications) is often described as 'incentive regulation'. This reflects the fact that regulators are seeking both to control the abuse of monopoly power (allowing prices no higher than the prevailing long run cost of supply), and to provide incentives to improved efficiency (reductions in the long run cost of supply). Standards and quality of output are key features of incentive regulation because price

has no meaning unless referenced to the quality of the product or service being supplied.

- 3.14.30 However, the rail industry has distinctive differences from the other privatised utilities and network industries, with the government supporting non-commercial rail services through subsidy, and in terms of Network Rail's corporate structure, being a not-for-dividend company limited by guarantee. The government's stakeholder interest therefore covers both the traditional role across the regulated industries of setting standards and outputs in the public interest, whilst also acting as a customer in paying for part of the services
- 3.14.31 Our judgement on ORR's approach to the incentive aspects of its regulatory methodology and process has therefore to take these differences into account, particularly because the current rail industry structure does not have equity, an element of the traditional incentive framework found in the other industries. We discuss this in the context of the general incentive elements found across the regulated industries in a special appendix to this report (Appendix H).
- 3.14.32 ORR therefore had a difficult context in which to facilitate the development of an incentives process as part of its periodic review. Its 'incremental' suggestions for improvements have been put forward proactively in the process, and stakeholders engaged, but incremental they were, given that expectations for them were low, as ORR recognised, due to the general incentives context of Network Rail's corporate and financial structure. Its incentive proposals and the incentives process were therefore understandable. Given the context, the process was proportionate and targeted, as well as transparent. Coherence would require a change of context.
- 3.14.33 The absence of the normal range of aligned incentives meant that ORR was forced to some extent to rely on greater involvement and more intrusive, and extensive, monitoring techniques to act as a surrogate for market incentives. The ownership and governance context for Network Rail meant that reputation and public service ethos had to be used as levers, whilst the focus of achievement meant that standards were likely to become pre-eminent, not financial performance.
- 3.14.34 For this reason ORR stands in a special place in monitoring cost-effective outcomes, and revealing those outcomes, being constrained to the extent it can facilitate aligned incentives as part of the periodic review process. The cost-effectiveness of its role, and the extent to which it could play a more strategic supervisory and regulatory role, allowing greater self-regulatory responsibility to be devolved on Network Rail, whilst maintaining its critical role as the main 'incentive' on Network Rail to perform efficiently and effectively, is a key question. This task could be assisted by ORR considering whether ideas of 'menu' regulation developed by OFGEM and OFWAT could usefully be applied in rail in order to encourage better forecasting of outcomes by Network Rail and discourage the incentive for 'tactics'.
- 3.14.35 ORR's role in the incentives process as far as it should be applied to support effective government decision making in the HLOS and Sofa process, and achieve cost-effective standards, needs to be made more explicit, and the outcomes more transparent. The role for fine-tuning of the HLOS by TOCS and Network Rail could also be further developed in the public interest. To achieve transparency in the process would require the stakeholders in either a tripartite or quadripartite process to set out clearly their respective roles, and why, at the start of the process. Consultation during the iterative process has developed in water, following the 'cost of quality' debate occasioned by OFWAT in the early 1990s.

3.15 THE PERIODIC REVIEW AS IT AFFECTED SCOTLAND

- 3.15.1 This section describes our assessment of the review as it affected Scotland. This does not mean that the rest of our report does not apply to Scotland. It does.
- 3.15.2 The position of Scotland in PR08 can be viewed in one of two ways. The first is to look at it from the position of Scotland's Government and other stakeholders and ask how effective the PR08 processes were in delivering their legitimate expectations. The second is to look at it from ORR's end of the telescope and consider the effectiveness of it undertaking two separate but related access reviews whilst taking into account that Network Rail is one company covering the whole of Britain. To do either would be to provide an emphasis that might underplay the importance of some issues. To do both might run the risk of fudging our views without bringing sufficient clarity to bear on the issues.
- 3.15.3 In the end we think that from a future learning point of view there is rather more merit in considering the process principally from the Scottish perspective because the thrust of UK Government policy regarding Scotland – reflected in part in the transfer of powers in respect of railways – places the emphasis first and foremost on devolution. Certainly there are wider contextual issues relating to the whole of Britain's railways but in terms of what the railway in Scotland is there for the emphasis is overwhelmingly on the Scottish Government.
- 3.15.4 So in our assessment of PR08 we make no apology for considering the processes from Scotland's point of view.

The High Level Output Specification

- 3.15.5 Our starting point is Scotland's HLOS. We were struck by three points early on. The first was that the expression of outputs by Scottish Ministers stemmed from a wider review of social, economic and environmental policies. As such the railway was seen as an agent for their delivery. The second was that the Transport Policy was developed by one administration and inherited by another. We were told that it enjoyed cross Party acceptance. Finally, we were told that not only had the policy as a whole been approved by the Scottish Parliament but individual schemes and projects had also been specifically approved by the same sovereign body. What these elements emphasised to us was the political importance of the policy, another reason for looking at PR08 from Scotland's perspective.
- 3.15.6 The Scottish Ministers' High Level Output Specification was a different expression of policy to that issued by the DfT. There were some similarities and common elements (notably on standards relating to safety and deriving from European legislation) but the policy context was different. The Government's National Transport Strategy and Scotland's Railways policy document specified the strategic objectives and priorities for the rail network in the context of the specification of train service outputs. These would be delivered through the First ScotRail franchise and various Major Projects which would enhance the network and services provided.
- 3.15.7 The major aspiration for the network was minimising the impact on the environment by making train services more attractive to road and air users. The way this should be achieved was significant. The Government wanted to see greater partnership working between the various elements in the railway and wider transport framework and more effective integration of operations and planning. Improved financial and operating performances were also important. Background growth of passenger usage was

assumed to be 3% per annum plus additional growth generated by new routes and services and improved clearances for freight. These were identified in Scotland's RUS and the Freight RUS.

- 3.15.8 Outputs for the network in Scotland were specified in the HLOS in three categories, or Tiers, the first two of which were to be delivered as part of the funding allowed. Tier 1 broadly defined the existing network in terms of its capability, capacity and quality to enable it to deliver background growth, improved performance and reduced journey times. Tier 2 comprised schemes approved by the Scottish Parliament briefly Glasgow Airport Rail Link, Airdrie-Bathgate and the Borders Railway. Tier 3 represented further outputs the government might fund subject to affordability, either from money left over after the delivery of Tiers 1 and 2, or additionally, subject to affordability. These included improved journey times and electrification between Edinburgh and Glasgow, an hourly faster service between Inverness, Perth and Edinburgh/Glasgow, longer trains on Ayrshire routes and other enhancements to improve journey times (e.g. between Aberdeen and Edinburgh/Glasgow) and capacity.
- 3.15.9 This then was the HLOS that formed the Scottish element of Network Rail's Business Plan that ORR would review. Generally Transport Scotland agreed that the trilateral structure of meetings used to develop the HLOS worked well. It felt that there was a shared ownership and the process involving Network Rail Scotland, Transport Scotland and ORR worked well although Network Rail Scotland as a subsidiary was not necessarily involved in discussions on all the subjects. Engagement with First ScotRail also took place.

Summary of PR08 and our Assessment of it as it affected Scotland

- 3.15.10 As PR08 gathered momentum it became clear that whilst the defined Tier 2 projects were incorporated in Network Rail's plans, Transport Scotland was unhappy that its aspirations for improved journey times between the country's major cities (an objective that can be seen by an outsider to be very important politically) were not specifically identified. Neither were line speed improvements yet Transport Scotland needed such changes to encourage growth not to meet it, the opposite of what was the thrust of policy in England and Wales.
- 3.15.11 We note that in its reaction to Network Rail's Delivery Plan published in April 2009 to reflect implementation of ORR's determinations, Transport Scotland still had the same concerns. We can reasonably conclude, therefore, that neither Network Rail nor ORR considered this to be relevant for the purposes of regulation. We are surprised that an issue that had been articulated by Transport Scotland from the outset of the process and was clearly important to it was not publicly explained.
- 3.15.12 Transport Scotland raised early issues in relation to Network Rail's Asset Management policies. Prime amongst them was the concern that their effect was to increase the costs of maintenance and renewals in Scotland. Transport Scotland suspected that Network Rail's projections were based on GB-wide condition models and did not relate to Scotland where it believed asset performance was in many instances better than elsewhere. By the time of the final determinations this issue was resolved so we may conclude that ORR acted upon the concern and reached a conclusion that Transport Scotland acknowledged.
- 3.15.13 At an early stage Transport Scotland was keen to see Network Rail respond to ORR's efficiency challenge. It was supportive of ORR's processes and particularly welcomed the international benchmarking approach. There was a concern that it was

provided with the "Emerging Cost Efficiency" analysis on a very short notice and perceived that this was because ORR realised that what worked for GB as a whole might not work for Scotland.

- 3.15.14 We discussed with Transport Scotland whether the fact that Scotland was geographically separated from the rest of the network was an opportunity for benchmarking in PR08. We were told that at the start of CP3 and with devolution of power to Scotland there had been a proposal to have separate Scottish regulatory accounts for specific routes and regions. These had not been implemented but could have offered a useful tool for comparison. We concur.
- 3.15.15 By the end of the process Transport Scotland noted a tightening of its own financial situation following the 2007 Spending Review and was looking to ORR to protect its funding through an affordable determination. It therefore supported ORR's approach on efficiency targets but stressed that Network Rail must be challenged to deliver them as a "minimum output and not a ceiling". In the end Transport Scotland was satisfied that its outputs were capable of being delivered in CP4.
- 3.15.16 Overall Transport Scotland was satisfied that "the determinations were an important step towards the delivery of the ministers' specification and the quality of analysis was robust". Nonetheless some concerns remained. The first was that any move towards unsupported new debt in Network Rail might not represent value for money for Scottish Ministers. It remained unconvinced on this issue throughout the process and was still looking for assurances at the end of PR08. Transport Scotland felt that 'Unsupported Debt' was the 'crux' of the financial framework but it was not provided with empirical evidence supporting the theory behind how the mechanism would work and, more importantly, how it represented value for money. ORR provided a report by CEPA to give assurance to Transport Scotland but it was left with the feeling that the unsupported debt mechanism was merely based on economic theory and not empirical analysis. It might have been useful to see the quantified version (i.e. in pounds sterling) of the model on which this concept was based which might have helped to justify the "value for money" of adopting this new strategy of raising debt by Network Rail in future.
- 3.15.17 Our interviews with ORR personnel underlined the fact that there were communication issues around the policy as far as Transport Scotland was concerned and we think both sides should consider how this situation arose so as to avoid misunderstandings developing in future.
- 3.15.18 The second of Transport Scotland's concerns, and the most important, was about deliverability. From the outset of PR08 Transport Scotland had expressed worries about the visibility of Network Rail's plans and following ORR's determination was looking for Network Rail's Delivery plans to contain unambiguous detail including milestones that could be "monitored and enforced". Transport Scotland was anxious about aligning Network Rail's delivery behaviour in Scotland with that of other national policy agendas and needed to have greater visibility on delivery than it had. After publication of Network Rail's Delivery Plan monitoring remains Transport Scotland's principal concern.
- 3.15.19 One reason Transport Scotland was uneasy about delivery, despite having within Scotland a much more integrated structural framework for managing the railway than anywhere elsewhere in Britain, was that it perceived that Network Rail had failed to deliver renewals in CP3 and were concerned that forecasts for CP4 could be unreliable. As PR08 progressed ORR provided more reassurance on enhancements

but none on renewals. Transport Scotland was left feeling that ORR was satisfied with Network Rail's ability to deliver outputs based on analysis done for Great Britain. If more of ORR's analysis had been done exclusively for Scotland and was evidence based then this could have provided greater confidence.

- 3.15.20 Transport Scotland also perceived that the review of Network Rail's Licence (a separate but parallel process with CP4) did not take into account the importance of the Licence as a mechanism for enforcing CP4 delivery. Funding had been determined before the enforcement mechanisms were announced. Transport Scotland felt that this diminished the force of the PR08 process. Although ORR did undertake the two reviews simultaneously and we know that the Licence was a particular work stream within the project, we think that ORR should be aware of this concern and take it into account in the way it conducts the next review.
- 3.15.21 Transport Scotland (in common with DfT as it happens) did not support the "Efficiency Benefit Sharing Mechanism". Transport Scotland was concerned about the political implications of handing over public money to First Scotrail under this system, especially in circumstances whereby the Scottish Government funded both its share of CP4 expenditure and the large Scotrail subsidy. Although ORR was still implementing this mechanism Transport Scotland said that the scheme could not be put into practice as it would require Transport Scotland to vary the franchise contracts, which the Scottish Government was not willing to do. If this indeed was the Scottish Government's approach at the time that ORR was considering implementing the mechanism we find it surprising that the practical problems Transport Scotland envisaged were not addressed in the determination but will remain to be confronted when the situation arises in CP4.
- 3.15.22 On the wider incentives question Transport Scotland was concerned that Network Rail's incentives for Scotland should focus on Scotland but that the incentivisation of the company on a Great Britain did not obviously achieve this end given that the objectives of the two governments were different. We do not comment on the decisions that ORR reached in this regard but it does seem a fairly obvious point to make that were Transport Scotland's rail objectives at some time in the future to be significantly at variance with those of the DfT (and devolution of course allows for this) then there could well be a point at which specific mechanisms might be needed. We think that, given the importance placed upon the effectiveness of relationships between Network Rail and other industry parties, it is an issue that ORR should keep under review going forward.
- 3.15.23 There is undoubtedly a feeling that as a large company with interests across Britain (mostly in England) there is at least a risk that Scottish needs could receive less attention from Network Rail than they should. With funding settlements being made up front, incentives applied on a country-wide basis and outputs to be delivered downstream, it is understandable that Transport Scotland would want to see a high degree of commitment to Scottish objectives. Both ORR and Network Rail should not underestimate the strength of feeling on this matter and would be wise to consider how it should be addressed in the future.
- 3.15.24 In particular we note that the Scottish Government places particular importance to partnership working to achieve its rail objectives. Reviewing how such relationships should function does not seem to have featured prominently as part of the periodic review. Yet in Scotland there is a closer alignment of railway organisations than in any other part of Britain. How these elements work together is something ORR might wish to consider. We think that, given the importance placed upon the

effectiveness of relationships between Network Rail and other industry parties, it is an issue that ORR should keep under review going forward.

Overall View of How the Review worked as applied to Scotland

- 3.15.25 In the end PR08 for Network Rail's activities in Scotland was achieved with a reasonable degree of approval that the major outputs would be delivered. The process certainly covered all the key areas and was comprehensive. Given some of the reservations expressed in Scotland at various stages in the earlier part of the process this does suggest that it was generally effective.
- 3.15.26 However, there was a sense in which Scotland's individual needs and specifications were subject to a review process that was focused on delivering outputs across the whole of Britain that were not necessarily aligned at the devolved level. Network Rail's role and status as a British company operating with a limited amount of devolved accountability reinforced this sense.
- 3.15.27 We think both ORR and Network Rail should review their approaches going forward as devolution does raise important questions as to how Scottish needs are to be met within the context of the next periodic review.
- 3.15.28 We also recommend that Transport Scotland shares with ORR its own review conclusions concerning the effectiveness of PR08.

3.16 ORR'S PROCESS FOR INCORPORATING SAFETY IN THE REVIEW

- 3.16.1 Although we have not undertaken an in-depth assessment of the processes adopted to integrate safety into the periodic review, we have interviewed selected ORR and DfT personnel who were involved in the PR08 process and have reviewed certain documentation relevant to it. We are satisfied that appropriately qualified members of Her Majesty's Railway Inspectorate as well as ORR's own Director responsible for Railway Strategy including Safety were involved in all important processes associated with PR08.
- 3.16.2 Whilst ORR's Initial Consultation on PR08 was properly sent to the Health and Safety Executive in 2005, it was not until the already anticipated transfer of HMRI from HSE to ORR took place in 2006 that safety matters were effectively brought into the review process. Although this did not formally commence until 2007 there is no evidence of which we are aware that suggests this impaired the consideration of safety in the review.
- 3.16.3 Once the review process got under way in PR08 an ORR safety representative was attached to each of the primary work streams as well as to the Periodic Review Executive, the remit of which was comprehensive covering every aspect of the review programme. The opportunity was therefore afforded for safety to be considered as a fully integrated element of the review. Given the number of work streams involved, in placing representatives from safety on teams, prioritisation was given to those areas with the biggest perceived risk. We think this was a reasonable approach. HMRI also adopted a methodical and process driven approach which resulted in the formation of an issues log which it pursued with Network Rail.

- 3.16.4 We note in particular that ORR was clearly involved in the process whereby ministers determined the safety output and metric for the first HLOS and that in the matter of Network Rail's "efficiency", HMRI was involved in determining the extent and phasing of the targets. ORR safety personnel were also involved in looking at Network Rail's asset management policies as part of the review. We commend ORR for this approach which can encourage an assessment of the performance of the railway system as a whole, ensuring that the fixed infrastructure for which Network Rail is responsible is considered in relation to rolling stock, for example.
- 3.16.5 Although it was for DfT to determine the safety output and associated metrics, we are satisfied that ORR was involved in providing advice as part of the overall trilateral process associated with the development of the HLOSs. Because Network Rail, which is the "lead" organisation for developing integrated rail industry safety plans, was a member of the trilateral group it would appear to us that the key parties were involved in the central process for determining all outputs.
- 3.16.6 Because the transfer of the HMRI to ORR occurred part way through the preparatory phase of PR08 it is probably fair to observe that its engagement in the process was not as early as it will be next time. Given what we say elsewhere in this report about the need for ORR to reference its statutory duties and to provide context to the periodic review we think that if this approach is adopted, safety will be given full and appropriate consideration in determining the objectives for the next review.

4. STAKEHOLDER VIEWS OF THE PROCESS

4.1 INTRODUCTION

- 4.1.1 We undertook in-depth, confidential interviews with a number of important stakeholders as part of this Review. We used these as the basis for informing our conclusions about elements of the PR08 process. In addition we invited written comments from the wider group of stakeholders who were addressed specifically by ORR in its initial consultation in August 2005. Where additional comments have been provided to us in response to our letter we have taken these into account in coming to our conclusions.
- 4.1.2 In this section we summarise the views of stakeholders concerning the processes adopted by ORR to undertake the periodic review and refer specifically to the companies and organisations concerned where this is important to establish a point or provide evidence.

4.2 OVERVIEW

- 4.2.1 ORR consulted widely with stakeholders at every stage in the periodic review process. All stakeholders we interviewed felt that they had been properly consulted – even where we may believe that consultation could have been better.
- 4.2.2 Generally, those organisations representing what might be termed the directing minds of rail industry policy were the most content whilst those closest to the point of delivering services to passenger and freight customers were the least. This is not to say that this latter group was actually unhappy. All recognised that PR08 was the first review to be undertaken under the 2005 Railways Act and practically everybody we spoke to thought that as such it should be credited as a success.
- 4.2.3 It is important to state that it is not always a concern about ORR that drives the attitudes of stakeholders. In many cases it is their attitude to Network Rail that underpins any concern. This is often driven by a view of Network Rail as a delivery agent for those outputs that lie at the centre of what the stakeholder itself wishes to achieve. Indeed the most widespread concern we encountered was whether Network Rail would actually deliver the determinations that ORR had reached. Such concerns continue to be expressed after Network Rail's publication of its CP4 Delivery Plan.
- 4.2.4 It is not necessary to agree with the apprehensions of stakeholders to recognise that this is an issue for ORR and the processes that it adopts. Perceptions are important, especially where these are expressed by stakeholders who are in almost daily contact with Network Rail and who are therefore entitled to their views.
- 4.2.5 The thoroughness with which the review was undertaken and how it will monitor and enforce its determinations is therefore centrally important processes affecting stakeholder perceptions of PR08 and the ORR.

4.3 VIEWS ON CONSULTATION

- 4.3.1 ORR issued many consultation documents throughout the periodic review, starting with its initial consultation document in August 2005. There was a variety of views amongst stakeholders on the thoroughness of these consultations.
- 4.3.2 Some praised the comprehensive nature of many of the documents issued whilst others found the sheer weight of documentation daunting or intimidating. Whilst some stakeholders took the consultation as an invitation to get involved in every aspect of the review (one even committing £1m in resourcing its contributions), others felt underresourced to engage. Some even failed to engage as fully as they might have done because they were overwhelmed by the documentation.
- 4.3.3 A major process point for ORR to consider for subsequent reviews is the formulation of its review objectives and initial consultation document. These are clearly vitally important to the subsequent conduct of the review. It is apparent from our interviews that both industry suppliers and franchised train operators would have welcomed ORR highlighting more clearly the contribution required of them. Whilst some took a lack of clarity as an opportunity to engage on any issue, bearing in mind that this was the first review to be undertaken following the 2005 Act, firmer guidance might have elicited earlier engagement from others.
- 4.3.4 Some of those who did not engage in the formal process as fully as they might have done did nonetheless feel that there were opportunities at informal meetings with ORR to express views on key issues. Indeed there was a general view that meetings and, specifically, workshops could represent a more useful mechanism for engagement than written responses. We think this is something ORR should consider making a formal feature of the periodic review process for PR09.
- 4.3.5 Some key stakeholders (mainly the customers and suppliers of Network Rail) appeared to rely more on their representatives (ATOC and the RIA for example) than on their own resources for prosecuting their interests in the periodic review. These resources were limited and without necessarily advocating that these should be increased, it does strengthen the case for engagement to be undertaken in workshop mode as an arguably better use of time and resources.
- 4.3.6 The owning groups we interviewed admitted with the benefit of hindsight that they had been slow to get involved in PR08. Initially the review was seen as something taking place only between Network Rail and ORR. On the other hand suppliers appear to have left their involvement very much in the hands of the Railway Industry Association, which itself was not entirely happy with the formal consultation process. A question is begged. Does ORR wish to engage with the companies that commit significant resources and investment to the industry as part of its periodic review or is it more comfortable dealing with the representative groups? It is our view that it probably needs to do both but if it is to achieve their engagement ORR will in future need to take active steps to secure it.
- 4.3.7 That is not to say that train operators did not take part in the review or offer their opinions when asked. Many did to a greater or lesser extent. Some said that the people on who they tended to rely for contributing to the periodic review were often the same as those who populated franchise bid teams. Where franchise bids were being undertaken at the same time as consultations on PR08 companies tended to prioritise work towards bidding. Again the limited nature of an expensive management resource in the form of senior executives argues for methods of engagement that make best use of limited time.

- 4.3.8 Having said that, ATOC, though itself not resourced for the fullest engagement, was centrally involved and had a significant influence on the way some aspects of the review were undertaken. The very positive engagement of train operators in reviewing the performance regime (especially Schedule 8) and the possessions regime (where meetings to improve the arrangements were led by a TOC MD) were notable elements of PR08. Additionally ATOC was pleased that ORR picked up specifically on its proposal for benefit sharing and on systems for allocating the cost of electricity for traction.
- 4.3.9 Freight companies were fully engaged in the consultations undertaken by ORR and some made very considerable contributions on a range of issues – proof positive that consultees could seize the initiative, given sufficient motivation. DB Schenker (then EWS) made substantial contributions on a range of issues - access charges, efficiency, Network Rail's asset management policies, and performance and possession regimes. The only part of the review it did not contribute to concerned the Financial Framework.
- 4.3.10 Some have suggested that the commercial interests of companies impacted by the periodic review dictated the appetite for their involvement; that freight companies, for example, had a lot more at stake than say the passenger companies for who access charges represent a "pass through". Given that funding for franchises is part of the same pot from which Network Rail derives its access charges there would appear to us to be limited justification for such a view.
- 4.3.11 Even so we think it is important for ORR to note these opinions because in our judgement, where the view is held, it could lead to an unbalanced consultation process; another reason for ORR to ensure that all affected stakeholders take a more active role in future consultations. Whilst it may be suggested that DfT and Transport Scotland, as the ultimate funders of access charges through the franchise agreements, had the key interest in ensuring value for money, it would surely be a defective process if the views of the users (who are also investors in the industry) were not fully taken into account in parallel.

4.4 VIEWS ON THE HIGH LEVEL OUTPUT SPECIFICATIONS FOR ENGLAND AND WALES AND FOR SCOTLAND

- 4.4.1 Although the HLOS/SoFA's were a specific responsibility of the two Governments, because they were essential pre-requisites for the conduct of PR08 and because ORR and Network Rail were themselves involved with DfT/ Transport Scotland in the process that led to their publication, we decided to explore this as an element of the PR08. We discuss this more fully detail in Section 3.9.
- 4.4.2 Stakeholders welcomed the HLOSs as an important innovation and were pleased that outputs were expressed as part of a longer term, thirty year rail transport strategy (in the case of England and Wales) and of a wider transport, environmental and economic strategy (in the case of Scotland), the first time such a policy development had occurred.
- 4.4.3 Franchised passenger operators and their owners were not <u>formally</u> involved in the process but were involved in discussions about enhancements, performance and safety metrics, either directly through DfT/ Transport Scotland or indirectly through ORR. Freight was not formally part of the HLOS process but did press its needs through the periodic review consultation process. Despite (or perhaps because of) this

freight was successful in securing a government commitment to the completion of a national strategic freight network.

- 4.4.4 Amongst franchised operators, whilst the high level outputs were acknowledged as important, there was a desire for earlier and more detailed consultation in developing route based plans and metrics that more closely reflected their needs and those of passengers. Disaggregation was considered particularly important by passenger TOCs where they would be interested in knowing what capacity, performance and 7 day railway (possessions strategy) meant for them individually. They also held the view that the route utilisation studies (or more widely, route planning) were the best mechanism for ensuring that specific customer needs were reflected in Network Rail's plans. Some pressed the case for Route Utilisation Studies becoming a formal part of the periodic review.
- 4.4.5 This view was not shared by DB Schenker which saw risks to its network-wide business in route based planning, which it would be difficult for it to resource. There may indeed be a conflict between the needs of national and local providers of freight and passenger services and we recommend ORR give some early consideration to this as an issue to be addressed before the start of PR13.
- 4.4.6 PTE's, which have a substantial transport planning role in most of the major metropolitan areas in England outside London, felt that they were largely excluded from effective engagement in the process for determining rail industry outputs. They also held the view that some of the metrics applied to measure the outputs were meaningless at the local level. Transport for London by contrast was much happier with its ability to influence outputs.
- 4.4.7 It is obviously a matter for government to determine the nature of the engagement that it has with "regional" planning bodies, including PTE's, but we note that one side effect of the current perceptions held by the latter could be a reluctance to invest in rail schemes.

4.5 VIEWS ON NETWORK RAIL ACTIVITY AND EFFICIENCY

- 4.5.1 Generally the DfT and Transport Scotland relied on ORR to determine these issues. Both impressed on ORR the need for economy and efficiency in determining Network Rail's settlement.
- 4.5.2 Other important stakeholders also took part. These included the operators and Network Rail's suppliers. The outcome of ORR's determinations on these two facets was important to all parties. The suppliers had an obvious interest in them because of their contractor status with Network Rail whilst the operators had an interest in either reducing access charges to improve their own competitiveness (freight) or to sustain the quality of service outputs whilst protecting the money available to passenger operations from the SoFAs (franchised passenger operators).
- 4.5.3 The suppliers were concerned about the reliability of the international benchmarking studies adopted and were particularly unhappy that wider comparisons that they considered to be relevant to the UK were not made. Given that the supply base in the UK has much international experience in maintaining, renewing and building railway infrastructure and systems, it would seem sensible in future for ORR to specifically seek the engagement of supply companies with such experience as part of the ongoing review of activity and efficiency.

- 4.5.4 EWS also had international experience of infrastructure maintenance and renewal practices, notably in North America. However, in contrast to RIA, it held the very strong view that Network Rail could significantly improve its efficiency and was throughout the periodic review a keen protagonist for bolder efficiency targets. These views and studies they commissioned were taken into account by ORR but many of EWS's comparisons were ruled untypical of the UK situation.
- 4.5.5 Without taking a view on the correctness of ORR's judgement, it would seem to make sense in the ongoing consideration of international best practice to ensure that the benchmarking extends to as wide a group of railways as possible and that in the meantime efforts are made to better comprehend the similarities and differences that exist for the purpose of informing future reviews.
- 4.5.6 An issue of specific concern to operators was the cost of project, depot and station works undertaken by Network Rail. Several believed that many such items could be more cheaply undertaken by the facility operator. PTE's also held the view that Network Rail's costs were substantially higher than they would expect on a like for like comparison with similar work undertaken in relation to other modes of public transport. It seems to us that this widely-held view could be tested. Whilst noting that ORR did undertake some work to assess the benefits of competitive tendering we think that the perceptions of third parties should be taken into account by ORR in its approach to the next Review.

4.6 VIEWS ON INDUSTRY RELATIONSHIPS

- 4.6.1 Effective relationships are critical to the functioning of the whole rail system. The stakeholder interviews served as a clear reminder of the interdependence of the various elements of the industry matrix and of the importance of Network Rail in the effective functioning of relationships. It is important to point out that stakeholders are very anxious for Network Rail to succeed. One stated in answer to a question about efficiency that it served absolutely no purpose to have a Network Rail that was "on its knees". That Network Rail is central to the industry's collective achievements is not in doubt.
- 4.6.2 On a number of occasions in our interviews with stakeholders reference was made to the importance of effective working relationships involving Network Rail. The Scottish HLOS even made this a specific objective. It was one of Scottish Ministers' "aspirations for the rail network to include partnerships working between Network Rail, First Scotrail, Transport Scotland, Regional Transport Partnerships, local authorities and other key stakeholders". The RIA told us about its Value Improvement Programme with Network Rail, a workshop based approach to improving efficiency by adopting a new culture and behaviours between the infrastructure provider and its suppliers.
- 4.6.3 Additionally during the course of our interviews we learned of many joint initiatives that worked well to improve the quality of industry outputs. Here we would cite examples as diverse as Route Utilisation Studies, The Industry Steering Group and the Seven Day Railway Group. All of these exemplify the importance of different elements of the industry working together to develop strategies and plans.
- 4.6.4 Given the obvious importance of this subject we find it slightly surprising that the effectiveness of industry relationships involving Network Rail does not feature in ORR's approach to regulating Network Rail. We think it should be considered.

4.7 VIEWS ON DELIVERY

- 4.7.1 A concern of stakeholders of all types relates to Network Rail's delivery capability. Frequently stakeholders raised this issue in a number of contexts. To some extent this appears to be founded partly in a lack of faith in the company's ability to deliver whilst some stakeholders think that the nature of the CP4 settlement could enable the company to deliver high level outputs in the short term whilst not delivering performance, possessions and projects at the local or route level. One stakeholder, asked whether he thought the PR08 process had been a success replied, "ask me in 2014".
- 4.7.2 Specific concerns emerging following the publication of Network Rail's Delivery Plan relate to platform lengthening to meet growth, short term plans to cut track renewals and its plans to introduce the "7 Day Railway" possessions strategy. Again, without taking a view on whether these are real issues or imagined, it is plain that such misgivings provide a challenge to ORR in terms of its monitoring of Network Rail. Clearly it would be unacceptable if the franchise commitments of TOCs to meet performance, capacity and revenue targets were to be put at risk by Network Rail's management of activities that critically impinge upon all three.
- 4.7.3 Given these concerns (some of which may well be shared within ORR anyway) we think that ORR should consider the approaches it adopts to monitoring Network Rail's performance (including enforcement) in CP4. Some stakeholders are concerned that ORR may adopt too "hands off" an approach to high level monitoring and believe that a more intrusive approach is necessary.

APPENDICES

APPENDIX A: TEAM MEMBERS' CVS

ABOUT JOHN NELSON

Since leaving *British Rail in 1997 at the age of 49* to set up his own businesses John has been a *management consultant in the transport sector.* As *Chairman of First Class Partnerships Limited*, he specialises in the development of business strategy and managing change. He works both in the UK and abroad in providing advice to rail and non-rail companies and to foreign administrations.

He was for eight years until 2006 a *Non Executive Director of Laing Rail, the owners of Chiltern Railways*, the first company to be re-awarded its franchise, and from 2003 to 2006 was also a *Non Executive Director of South East Trains Holdings*, set up by the SRA to operate the first franchise to be terminated. He is a shareholding *Director of Hull Trains*, a Company established in 1999 to exploit "open access" opportunities for express trains to London and a shareholder in *WSMR (Holdings) Ltd.*, set up in 2006 to do the same for Wrexham, Shropshire and the Black Country. He is also a *Director of Renaissance Trains*, a promotional vehicle for new rail ventures.

He believes himself to be an objective commentator on industry performance and for ten years until May 2009 contributed a monthly column to *"Transit"*, a respected UK journal for transport professionals. Amongst other things, he successfully launched a major publication, *"Britain's Privatised Passenger Railway – A Practical Assessment"* which sold round the world.

John has worked in Britain's railways for 40 years and held several very senior posts. He pursued a career in general management with an emphasis on business operations and commercial activities in the London commuter belt, on Inter-City services and in the conurbations of Northern England.

He worked mainly in the passenger sector until 1983, amongst other things planning with the West Yorkshire and South Yorkshire Passenger Transport Executives the expansion of their rail networks that took place in the 1980's. Following a year as personal assistant to Sir Robert Reid (probably the greatest railwayman since the War), John was then appointed to run the Red Star Parcels business and in a period of 3 years tripled the turnover from an inherited £20m in a very competitive market place, whilst also substantially improving the group's profitability.

In 1987 he became General Manager of BR's Eastern Region, which then represented about a quarter of the national rail network, including substantial freight as well as passenger movements. His 5-year spell at York saw the modernisation of the East Coast Main Line between London and Scotland including the launch of Britain's fastest trains. He was also a leading figure in the drive for more commercially led railway management structures.

In 1991 John was appointed Managing Director, Network South East, (London's commuter railways), BR's largest business. He led a change programme that brought about a continuously improving performance of the railways' punctuality and reliability throughout his tenure, launched the Passenger's Charter, and delivered £200m to the bottom line over a period of less than two years from a combination of overhead reduction and revenue generation despite a severe local recession at the time. From 1994 in the run up to privatisation John was also given the unique responsibility of creating 13 new Train 67

Companies and developing them for privatisation. He chaired each of these until the task was completed in 1997.

Since 1997 John has advised many commercial train companies as well as government authorities in the UK on many aspects of process improvement and strategy.

John was also for five years until 2002 the part time Non Executive Chairman of a NHS Trust based in Yorkshire. He is currently a member of the Advisory Board of the National Railway Museum. John has an Honours degree in Economics that he took at the University of Manchester in 1968. He was President of the Railway Study Association in 1995/1996.

Potential conflict of Interest

John Nelson is currently a shareholder in two open access passenger train companies, Hull Trains and Wrexham and Shropshire. In terms of PR08 a conflict of interest potentially exists in relation to the methodologies adopted by ORR to determine access charges for such operators. However, the review team did not specifically review these, preferring to focus in depth on the processes whereby ORR reviewed Network Rail's overall costs and efficiencies rather than on the finer detail of the methodologies used to attribute those costs. To the extent that access charges were considered this aspect of the review was not undertaken by John Nelson. Decisions on what to report as part of the independent review were taken by the team as a whole.

ABOUT MICHAEL TOMS

Michael R Toms, MA, MRTPI, MRICS, FRAeS

2007 – present	Director, <u>Oxera Consulting Limited</u>
2003 – present	Non Executive Director, <u>Viridian group</u> to 2007, then Chair <u>NIE plc</u> (Northern Ireland Electricity, the regulated subsidiary of Viridian)
2006 – present	Non-Executive Director <u>UK Coal plc</u>
2007 – present	Non Executive Director <i>Birmingham Airport Holdings Ltd</i>
2009 – present	Non Executive Director <u>Bellway plc</u>
2002 – 2006	Group Director, Planning and Regulatory Affairs, <u>BAA</u> and member of the Board of BAA plc,

BAA was the owner and operator of seven airports in the UK, with operations in Australia, US, Italy and Hungary. It also had interests in railways, properties and retailing. Responsibilities included:

- Management of relations with the industry regulator, general regulators (the OFT and Competition Commission) and relevant Government departments
- Direction of the group's development planning function

- Supervision of a leading edge sustainability programme;
- Development and use of a state of the art financial forecasting capability; for rating, treasury and funding decisions on £3bn of debt;
- Direction of Stansted Generation 2 new runway project (£2bn investment)
- Direction of BAA's railways business developments including saving the Gatwick Express
- Representing the Group on TV, radio, at public inquiries and at Select Committee investigations.
- 2002 2004Member of the Board and Audit Committee, Australia PacificAirports Corporation
- 1994 2001Director, Corporate Strategy, <u>BAA plc</u>1991 1992Chief Economist, <u>Airports Council International (ACI), Geneva</u>1980 1994Financial and Planning Management Roles, BAA1978 1980Team Leader: London Docklands Redevelopment, Newham
Borough Council
- 1976 1978Planning Officer, Birmingham City Council

Academic Qualifications

- BA (first class hons) Durham University 1974
- MA, Urban Planning, Nottingham University 1976
- RICS diploma, 1979

Professional Qualifications

- Fellow of the Royal Aeronautical Society (FRAeS)
- Member of the Royal Institution of Chartered Surveyors (MRICS)
- Member of the Royal Town Planning Institute (MRTPI)

Potential conflict of Interest

Mike Toms is a Director of Oxera, a company that was involved in providing advice to ORR in some matters relating to Network Rail's costs and efficiencies. John Nelson led for the team in considering these aspects of PR08 and decisions on what to report as part of the independent review were taken by the team as a whole.

ABOUT PETER VASS MSc(ECON), CPFA

Peter Vass is a graduate and postgraduate of University College London in economics. He started his career in the Government Economic Service, at first in the Ministry of Transport and progressing to Economic Advisor in the Department of the Environment. He then joined Essex County Council, where he trained and qualified as an accountant, followed by working in their technical division on rate support grant, given Essex County Council was the lead authority for the local authority associations on this area of finance.

Peter then joined the Chartered Institute of Public Finance and Accountancy (CIPFA) as an Assistant Secretary, responsible for public sector accounting practice and for accounting

standards and their development with the profession's Accounting Standards Committee, including a secondment to the ASC. He was promoted to head the Research and Technical Policy division of CIPFA, and one area of that work included water industry policy and finance up until privatisation in 1989.

In 1990 Peter became an academic at the University of Bath, appointed as a senior lecturer in accounting and finance. At that time the Centre for the study of Regulated Industries (CRI) was established as a research centre, and Peter became the Director, a post he has held to date. This centre has specialised in the regulation of privatised utilities and network industries. He has published widely on regulatory economics and governance, and been a specialist adviser to select committees of both the Houses of Commons and Lords. In particular he was the specialist adviser for the House of Lords Constitution Committee's 2004 report on the accountability of regulators and the regulatory state. In recent years he has focused on regulatory and policy governance, the institutionalisation and codification of principles and processes to achieve better governance, sustainability, self-regulation with strategic oversight, and climate change policy

Potential conflict of Interest

We do not believe that Peter Vass had any conflicts of interest in relation to the independent Review.

APPENDIX B: LETTER TO STAKEHOLDERS

32 St Pauls Square York YO24 4BD Tel 07801 228087 Email fcp@easynet.co.uk

14th May 2009

Dear colleague

2008 periodic review - independent evaluation

Following publication of its determination of Network Rail's outputs and funding for 2009-14 (control period 4) and completion of its 2008 periodic review, the Office of Rail Regulation (ORR) has engaged me to lead an independent evaluation of the review.¹

My colleagues undertaking the evaluation are Mike Toms (Chairman of Northern Ireland Electricity and a Non-Executive Director of Oxera, previously Group Director, Planning and Regulatory Affairs at BAA plc) and Peter Vass (Director of the Centre for the study of Regulated Industries and Senior Lecturer in Accounting and Finance at the University of Bath). In addition, Chris Shapcott (Director of Regulation Value for Money) at the National Audit Office and Mark MacPherson (Portfolio Manager) at Audit Scotland are represented on the review group as observers.

The objectives of this evaluation are to:

- examine the way in which ORR carried out the periodic review (it is not the purpose
 of the evaluation to review the merits of the actual decisions that ORR took and its
 overall determination);
- seek views from stakeholders on the review process and whether ORR addressed the key issues in the review and consulted fully on its proposals and explained clearly its decisions; and
- produce a report on the findings of the of the evaluation and containing recommendations on areas that the review group considers ORR needs to give consideration to in planning and carrying out the next periodic review, planned for completion in 2013.

In carrying out the evaluation, we will take account of ORR's stated objectives for the periodic review (which are shown in appendix A of this letter). We will also have regard to established principles of good regulation and ORR's statutory duties (see appendix B).

¹ Determination of Network Rail's outputs and funding for 2009-14, Office of Rail Regulation, October 2008. This may be accessed at <u>http://www.rail-reg.gov.uk/upload/pdf/383.pdf</u>.

We intend to submit our final report to the ORR Board by the end of July 2009 and it is our understanding that ORR will then publish this on its website along with its response to our recommendations.

My colleagues and I have already met the main stakeholder organisations and further meetings are being arranged to follow up on the initial meetings. The purpose of this letter is to give you the opportunity to provide any further input to the evaluation, and for interested parties who we will not meet face-to-face during our evaluation to submit their views.

We are interested to receive any views you have. However, we are particularly interested in the following areas:

- the objectives of the periodic review;
- the substantive/policy issues covered / dealt with in the review (which will not be a detailed assessment of the technical detail of the pros/cons of each policy issue, but rather was it (properly) covered as part of the periodic review process);
- the process (including its transparency and timetable, and also the new statutory process – based on the high level output specifications (HLOSs) and statements of public funds available (SoFAs) produced by the Secretary of State and Scottish Ministers);
- communication (consultation and engagement) process including feedback to respondents;
- independence and integrity and expertise/competence of ORR;
- presentation (contents, legibility, etc) of consultation/decision/determination documents; and
- identification of what worked well in the periodic review, what did not work well and suggestions for issues ORR should consider addressing to improve the planning and conduct of the 2013 periodic review (including substantive/policy issues to be covered).
- All of the documentation relating to the 2008 periodic review is available on ORR's 2008 periodic review webpage.²

If you would like to respond, please can you send your response in electronic format (or if not possible, in hard-copy format) by Wednesday 17 June 2009 to:

Rupika Madhura Office of Rail Regulation 1 Kemble Street London WC3.4 4AN Tel: 020 7282 2055 Email: rupika.madhura@orr.gsi.gov.uk

² ORR's 2008 periodic review webpage may be accessed at <u>www.rail-reg.gov.uk/server/show/category.180</u>.
Rupika is providing administrative support to the independent evaluation and any information she receives will remain confidential to the independent evaluation and not be shared with others in ORR or published unless you are content for this to happen. Therefore, if you send a written response, you should indicate clearly if you wish all or part of your response to remain confidential. Otherwise we would expect to provide it to ORR along with our final report. Following this we understand that ORR would make it available in its library and on its website and potentially to quote from it. Where your response is made in confidence please can you provide a statement summarising it, excluding the confidential information that can be treated as a non-confidential response. ORR may also publish the names of respondents in future documents or on our website, unless you indicate that you wish your name to be withheld.

Please contact me if there is any aspect of the independent evaluation that you would like to discuss further. Alternatively, if you would like to discuss the evaluation with ORR please contact Paul McMahon, Deputy Director of Rail Markets and Economics (tel.: 020 7282 2095, email paul.mcmahon@orr.gsi.gov.uk).

Yours sincerely

John Nelson

Annex A: ORR's Objectives for the 2008 periodic review

ORR's overarching objective for the 2008 periodic is to ensure an outcome that secures value for money for users and taxpayers, by determining the level of Network Rail's access charges and outputs in a way that balances the interests of all parties.

In terms of outcomes from the railway, if this objective is achieved then ORR considers it should deliver a railway that is safer than ever before, is more reliable than ever before, whilst carrying significantly more passengers and freight, at a cost that represents ever better value for money for users and taxpayers.

ORR has established a range of specific objectives underpinning its overarching objective:

- To set Network Rail's access charges such that they are:
 - So far as practicable, cost reflective and therefore provide good signals to users and funders; and
 - Neither higher nor lower than they need to be to enable the high-level outputs to be delivered on an efficient and sustainable basis, and to provide value for money.
- To set Network Rail's outputs:
 - With improved definition (e.g. capability, availability, reliability), to focus Network Rail planning/management, and to facilitate measurement of outcomes;
 - So that they are targeted on what users and funders want from the railway and, wherever practicable, are based on final outputs rather than inputs; and
 - On a forward-looking basis, with a trajectory set in the short, medium and long term, to an appropriate level of disaggregation that challenges Network Rail to better understand the drivers of good performance in all time frames.
- To improve incentives, to:
 - Deliver continuous improvement in operations and maintenance and renewal/enhancement procurement efficiency;
 - Optimise cost/quality trade-offs, based on evidence of what railway users value;
 - Balance outputs in different time frames (e.g. performance in the short and longer term);
 - Challenge Network Rail to improve its knowledge/understanding of assets, especially its ability to predict the impact of changing patterns of usage and ways of working to optimise the extent/cost of accommodating forecast/emerging demand;
 - o Develop Network Rail's planning framework and asset knowledge; and
 - o Promote continuous improvement in health and safety.

Annex B: ORR's statutory duties and the 2008 Periodic Review

In developing its determination for control period 4 ORR said that it had been mindful of all of its public interest duties, which are set out in section 4 of the Railways Act 1993.

These duties are not in any order of priority and it is for ORR to decide how to balance them in making its decisions. ORR states that a critical duty in respect of setting access charges is to "act in a manner which [ORR] considers will not render it unduly difficult for [Network Rail] to finance any of [its] activities or proposed activities [...]." Other section 4 duties ORR says that it has been particularly mindful of in respect of the 2008 periodic review are:

- to promote improvements in railway service performance;
- to promote efficiency and economy on the part of persons providing railway services;
- to take into account the need to protect all persons from dangers arising from the operation of railways;
- to enable persons providing railway services to plan the future of their businesses with a reasonable degree of assurance;
- to have regard to any general guidance given by the Secretary of State, or Scottish Ministers in relation to Scottish railway services, about railway services or other matters relating to railways;
- in having regard to any such guidance from Scottish Ministers to give what appears to us to be appropriate weight to extent (if any) to which the guidance relates to matters in respect of which expenditure is to be [...] incurred by Scottish Ministers; and
- to have regard to the funds available to the Secretary of State for the purposes of his functions in relation to railways or railways services.

The full list of ORR's Statutory Duties and published on its website is reproduced below:

"The ORR has a number of statutory duties under certain legislation, including the Railways Act 1993. The duties are set out below. The ORR must balance them when exercising its functions.

- Section 17 of the London Olympic Games and Paralympic Games Act 2006 provides that section 4 of RA93 shall be treated as including the objective of facilitating the provision, management and control of facilities for transport in connection with the London Olympics. It also provides that ORR shall consult the Olympic Delivery Authority about this aspect of the duty;
- Section 21 of the Channel Tunnel Rail Link Act 1996 provides that ORR shall have an overriding duty to exercise its regulatory functions in such a manner as not to impede the performance of any development agreement;
- Section 22 of the Crossrail Act 2008 provides that section 4(1) of RA93 shall be treated as including the objective of facilitating the construction of Crossrail. It also provides that ORR shall consult the Secretary of State about this aspect of the duty;
- To promote improvements in railway service performance;
- Otherwise to protect the interests of users of railway services;
- To promote the use of the railway network in Great Britain for the carriage of passengers and goods, and the development of that railway network, to the greatest extent which it considers economically practicable;
- To contribute to the development of an integrated system of transport of passengers and goods;
- To contribute to the achievement of sustainable development;
- To promote efficiency and economy on the part of persons providing railway services;

- To promote competition in the provision of railway services for the benefit of users of railway services;
- To promote measures designed to facilitate the making by passengers of journeys which involve use of the services of more than one passenger service operator;
- To impose on the operators of railway services the minimum restrictions which are consistent with the performance of ORR's functions under Part 1 RA 1993 and RA 2005;
- To enable persons providing railway services to plan the future of their businesses with a reasonable degree of assurance;
- To take into account the need to protect all persons from dangers arising from the operation of railways;
- To protect the interests of users and potential users of services for the carriage of passengers by railway provided by a private sector operator, otherwise than under a franchise agreement, in respect of the prices charged for travel by means of those services, and the quality of the service provided;
- To have regard to the effect on the environment of activities connected with the provision of railway services;
- To protect the interests of persons providing services for the carriage of passengers or goods by railway in their use of any railway facilities which are for the time being vested in a private sector operator, in respect of the prices charged for such use and the quality of the service provided;
- In the case of functions other than its safety functions as an enforcing authority for the purposes of the HSWA 1974, to have regard to any general guidance given to it by the Secretary of State about railway services or other matters relating to railways;
- To act in a manner which it considers will not render it unduly difficult for persons who are holders
 of network licences to finance any activities or proposed activities of theirs in relation to which
 ORR has functions;
- To have regard to any notified strategies and policies of the National Assembly of Wales and the ability of the National Assembly of Wales to carry out its functions;
- To have regard to any general guidance given by the Secretary of State, or Scottish Ministers in relation to Scottish railway services, about railway services or other matters relating to railways;
- To have regard to the funds available to the Secretary of State for the purposes of his functions in relation to railways or railways services;
- To have regard to the ability of the Mayor of London and Transport for London to carry out the functions conferred or imposed on them by or under any enactment;
- To have regard, in particular, to the interests of persons who are disabled in relation to services for the carriage of passengers by railway or to station services; and
- To have regard to the interests, in securing value for money, of the users or potential users of railway services, of persons providing railway services, of the persons who make available the resources and funds and of the general public.

Last updated: 26 January 2009

APPENDIX C PRINCIPAL DOCUMENTS

Network Rail Initial Strategic Business Plan - October 2006 Strategic Business Plan - November 2007 Strategic Business Plan Update - April 2008 Responses by Various parties to the Network Rail Delivery Plan Network Rail's Delivery Plan - April 2009 Network Rail's Asset Management Policies Periodic Review Committee: terms of reference Periodic Review Executive - remit Secretary of State's Guidance to ORR, February 2007 Scottish Ministers' guidance to ORR, March 2007 Network Rail Licence 1994 Network Rail Licence 2009 Statutory Duties of ORR as publicised on OR's website Railways Act 1993 Railways Act 2005 Industry Steering Group Remit Various Papers to ORR Board meetings relevant to PR08 Various ORR Papers in relation to Programme Management Various Internal Audit Reports in respect of PR08 Initial Consultation - August 2005 - and responses Initial Assessment of Network Rail's CP4 Revenue Requirement – December 2005 Options and Issues - September 2006 - and responses Advice to Ministers - February 2007 Consultation on Network Rail's SBP and responses Update to advice to Minsters - February 2008 - and responses 77

Draft determinations - June 2008 - and responses

Responses to Enhancements

Final determinations - October 2008

APPENDIX D: INTERVIEWS

Department for Transport (four interviews) Transport Scotland (one interview) Her Majesty's Treasury (one interview) Network Rail (three interviews) Association of Train Operating Companies (one interview) Owning Groups of Passenger Train Operating Companies (one interview) DB Schenker (one interview) Railway Industry Association (one interview) Passenger Transport Executive Group including Transport for London (one interview) Passenger Focus (one interview) Office of Rail Regulation including advisers (ten interviews)

APPENDIX E: DESCRIPTION OF HOW ORR REVIEWED NETWORK RAIL'S ACTIVITY

- E.1 Network Rail's Plans were laid out in the Initial Business Plan (2006) and there followed an iterative process of review by ORR followed by revised plans submitted by Network Rail in the 2007 Business Plan and the 2008 Update. A final iteration occurred between the publication of ORR's Draft Determinations (July 2008) and its final determinations in October.
- E.2 The Initial consultation Document issued by ORR in August 2005 made clear that it wished outputs to be specified in a way that improved on past plans in 4 key respects. In particular the plans should (a) included an asset management strategy, (b) be geographically disaggregated by activity and outputs, (c) be also disaggregated by activity, and (d) contain a better analysis of unit costs including benchmarking all requiring Network Rail to improve its analytical tools. The last item (unit costs) is discussed in section 3.11 (efficiency) above and in appendix F.
- E.3 In addition ORR made clear that Network Rail's asset management system must (a) predict future needs more accurately, (b) define what needed to be done and why, (c) define criteria for the timing of renewals, (d) look much further ahead, (e) base its approach on British Standards Guidance PAS55 of 0504, (f) provide quantified performance and condition targets in relation to existing status, (g) demonstrate the options it had considered, and (h) demonstrate a robust prioritisation approach. All of these elements should inform Network Rail's engineering policies, technology specifications and growth assumptions.
- E.4 Network Rail responded to the consultation in a number of ways which we interpret as broadly accepting the principles ORR had outlined. Network Rail said that openness and transparency would be important going forward and to this end its newly developed Infrastructure Cost Model (ICM) would be a contribution to improving the understanding of activities. It expressed the wish that where ORR's assumptions were at variance with Network Rail's, they would be clearly stated by ORR. Whilst its plans would be produced bottom up by route section it warned of a danger that disaggregation could lead to further fragmentation of the national infrastructure, requiring bureaucracies to administer the various parts. It reminded ORR that there was always a degree of uncertainty about the precise locations of individual works and that this should be recognised when considering Network Rail's longer term planning.
- E.5 In issuing its initial assessment of Network Rail's outputs for CP4, ORR based its projections on Network Rail's 2005 Business Plan which for OMR made a working assumption that current network capacity and capability represented the base position. Functional discussions were held between ORR and Network Rail and as a result of these ORR suggested that Network Rail's data was inadequate in that it did not properly explore the trade-offs between maintenance and renewals.
- E.6 Although principal assumptions regarding the renewals programme had been discussed, ORR again noted that more supporting quantified data were required. Overall Network Rail's renewals projections did "not appear to be unreasonable" but most areas suggested a higher level of activity, especially in signalling. ORR commented that its own medium term signalling review had suggested a significant overstatement of costs by Network Rail. ORR's initial assessment reduced spends to yield a range of £8.9b to £10.9b, some £0.8b below Network Rail at the upper level.

- E.7 ORR's Overall <u>Pre-Efficiency</u> Initial Assessment of Network Rail's spending for CP4 was in the range £19.55b to £21.53.4 compared with £22.28b in Network Rail's 2005 Business Plan. Thus the stage was set for the formal review to take place, with what appeared to be a relatively high degree of acceptance of the principles to be applied with a gap in the likely spend levels projected, but within a range that did not suggest substantially different approaches.
- E.8 In his letter of guidance to Network Rail in February 2006 anticipating its Initial Business Plan, ORR's CEO set out the key planning assumptions that should be used which included (1) a reasonable projection of traffic growth, (2) sustained good performance at or above CP3 levels, (3) maintaining and incrementally improving safety, (4) meeting the reasonable expectations of passenger and freight operators, and (5) sustaining the network long term.
- E.9 It can be seen that the approach was high level output led, leaving Network Rail full scope to develop its Business Plan. However, Network Rail was required to set out all material assumptions and high level criteria used in its plan which was to draw increasingly on the Route Utilisation Studies that were in process of being undertaken under Network Rail's leadership. The ICM and the performance model should be commissioned to support Network Rail's plans whilst efficiency and asset management systems should be "radical" and the best possible. A 20 year projection of high level measures should be shown for each Control Period to 2028/9 and the Business Plan should include projections of industry outputs including asset condition and serviceability measures. Network Rail was asked to take the lead with ORR in demonstrating its assumptions.
- E.10 In its Initial Business Plan published in June 2006 Network Rail appeared to respond positively to ORR's directions as far as activities were concerned. It was Network Rail's first submission under PR08 and aimed to inform DfT and Transport Scotland to develop HLOS/SoFA. It started "the debate on options and tradeoffs", provided Baseline (Steady State) and Base Case (reasonable growth) options. It claimed to reflect route priorities and "national" disaggregation providing an initial view of 26 route strategies (including enhancements), updated asset policies and described the development of the Infrastructure Cost Model (ICM).
- E.11 Further work (with the industry) would be done over the next 18 months including assessing the trade off between renewals and maintenance costs (as required by ORR), publication of more RUSs, developing possessions strategies to optimise "whole industry" costs, and undertaking sensitivity analysis to take account for example of Crossrail and ERTMS, neither of which had yet been included in the Plan. (In the event only Crossrail enabling works were included.)
- E.12 Network Rail stated that relative to ORR's "Initial Assessment", underlying OMR costs were "slightly below" the "higher end" of ORR's estimates (with favourable variations in signalling but unfavourable in big structures and property). The company claimed that despite the major activity and spending following Hatfield, a steady state asset position had not yet been reached though projections beyond CP4 reflected an improvement.

E.13 Network Rail described its Asset Management Framework, which had 5 components:

- *Utilisation and outputs*, which were defined at route level and provided the basis to engage customers
- Asset policies, which described the maintenance and renewal regime to deliver outputs
- Asset plans, which were 10 year expenditure plans for OMR supported by the ICM
- Investment Regulations, which contained methodologies for prioritising schemes, and
- Enablers including information on asset condition, the ICM and best practice e.g. BSI PAS 55
- E.14 ORR and Network Rail jointly appointed AMCL as the "independent reporter" for asset management. Their work would inform the October 2007 Business Plan. Meanwhile the company's Asset Policies had 4 components:
 - a) Asset Management Principles covering functionality, safety and reliability outputs and costs
 - b) Functional Asset Policies covering asset types and applying the principles to each
 - c) Policy Assumptions & Justifications providing the rationale for the asset policies, and
 - d) Standards & Work Instructions describing how work should be carried out
- E.15 Network Rail stated that increasingly risk based procedures were being applied to determine asset policies on a whole railway, whole life cost basis taking into account the cost of the possessions involved in achieving them.
- E.16 Assets were categorised by type and by route classification primary, secondary, commuting, rural and freight only, the plan going on to describe assets by type and detailing the policies associated with each of them track, signalling, civil engineering structures and operational property (including stations), telecoms, electrification and plant.
- E.17 The ICM was designed to estimate the costs of operating, maintaining and renewing the network for different specifications of usage and capability. It produced forecasts of activities, expenditure and network output measures over the long-term (up to 40 years), and could disaggregate these forecasts to segments of the network. Version 1 was then complete and under evaluation by AMCL. ICM would continue to evolve and was seen as a long term tool that would support the calculation and allocation of access charges; more accurately model the interaction between maintenance and renewal activities; improve the modelling of relationships between activity and network outputs; incorporate developments in the understanding of cost causation and improvements in availability of asset condition data; model activity costs in more detail, (e.g. addressing resource input requirements and regional variations in cost rates); and incorporate enhancement cost estimates in a more integrated way.
- E.18 Network Rail assumed that it would start CP4 having achieved its overall CP3 targets although renewal targets had sometimes been achieved through reductions in scope rather than unit cost efficiency during that period. To achieve targets for track, possessions were needed that restricted operator access so that high output equipment could be deployed to best advantage.
- E.19 In its Advice to Ministers (February 2007) ORR commended Network Rail's plan as a "significant improvement" but said much more work needed to be done, especially to improve its asset management policies. Disaggregation was not yet sufficient and

Network Rail would be required to demonstrate its ability to deliver the volume of work. Crucially ORR wanted to understand why Network Rail believed spending money to improve the assets was justified under a steady state Base Line scenario. It noted that AMCL (independent Reporter) had questioned the cost effectiveness of Network Rail's asset management regime.

- E.20 ORR said that projected track renewals were not yet sufficiently justified and the mix of maintenance and renewals might not be optimal. More work was needed to substantiate the programme, especially on a whole life cost basis. "Cause and effect" algorithms in the ICM needed to be improved for all activities.
- E.21 ORR critiqued Network Rail's forecasts to assess expenditure by category on the basis of having itself conducted an engineering assessment of maintenance, renewals and their outputs.
- E.22 Network Rail published its Strategic Business Plan in November 2007 which set out its proposals for OMR activities. This included a 470 page document detailing the company's Asset Management Policies in which the company claimed significant progress in developing its policies and procedures since the Initial Business Plan had been published but acknowledged that it was committed to further improvements in its approach. The document set out the key principles on which its asset policies were based and provided a justification of these for each asset category. It included the Business Planning Criteria used by the company to prioritise the whole of its activities, including OMR. In summary these were based on calculating a risk adjusted NPV and took account of non-financial, socio-economic cost/benefit appraisal where appropriate.
- E.23 The Asset Management Framework comprised a number of "decision components". The process started with the output requirements of a route (categorised by type of use) and articulated the asset management policies required to achieve them in the context of the funding available. The asset interventions necessary had to meet laid down engineering standards and other guidance and were then prioritised according to a hierarchy of criteria related to, for example, safety, reliability, performance, the availability of funds, and the "business case" according to the Business Planning Criteria described above. Finally a piece of work would be implemented.
- E.24 For decisions to be effective a number of other "enabling and reviewing components" had to be in place. "Enablers" included basic information about asset location and condition supported by decision tools to assist management assess risk and prioritise activity. "Reviewing components" included KPI's, management audit and review processes.
- E.25 The Company's Asset Management Policy stated that "the collective totality of assets would be managed on a minimum whole railway system, whole life cost basis," balancing "business risk as a result of asset failure with the whole life, whole system cost of managing the asset." A statement issued by the Company's Chief Engineer on October 2007 itemised 19 key principles on which the Policy was based.
- E.26 Network Rail described the reported findings of AMCL, the independent reporter on its asset management policies, which had commented favourably on Network Rail's progress and compared it well with other "major infrastructure owners in the UK". Network Rail accepted AMCL's assessment and its recommendations for further improvement. Working with a risk based approach Network Rail identified a number

of areas in which it should change or upgrade its activities in order to improve the robustness of its asset management regime. A large number of specific initiatives relating to the range of its assets was identified and described. The company prioritised a series of "critical assets" requiring particular focus. For each major category of its assets Network Rail articulated its policy according to the same overriding principles.

- E.27 ORR commented publicly on these aspects of Network Rail's Plan when it issued a further Advice to Ministers in February 2008. This followed a period of public consultation on the Plan. Whilst the main thrust of its comments on OMR concerned efficiency (see sections 3.11 and appendix F), it did also make specific observations concerning the adequacy of Network Rail's activity forecasts. As far as operating activities were concerned, ORR said that there was insufficient justification in several areas and it would be reviewing many aspects with the help of consultants before reaching its draft determination.
- E.28 For M & R criticism concerned the lack of quantified definition underpinning the deployment of the company's asset management policies. As it continued with its assessment of Network Rail's Plans, ORR said it would focus on the quality of the asset policies and justifications for the levels of activity proposed. In particular ORR would look at both the modelling techniques adopted to make long term forecasts and at the bottom-up creation of work banks by the company's engineers. ORR would also consider the extent to which the activities proposed would deliver Network Rail's required outputs including safety and would consider whether items were actually capable of being resourced as planned. Above all ORR would be looking for rational quantification.
- E.29 In acknowledging the progress made by Network Rail in developing its policies ORR was nonetheless critical that some appeared simply to document pre-existing procedures and practices without the necessary justification, especially of "the nature, scope and timing of interventions" and how these delivered the required outputs.
- E.30 ORR referred to the independent asset management reporter's views, acknowledging that in some areas Network Rail was ahead of the curve in developing its asset policies, whilst in others it was behind. Overall the company was taking positive steps to improve its approach but in certain categories of asset type, the progress was insufficient to inform PR08 determinations on what might be achieved.
- E.31 Track policies were reported as being generally well supported but that nevertheless ORR would be undertaking further assessment through work plan sampling and inspection and considering further the link between work quality and whole life costs. Signalling proposals also appeared robust, based as they largely were on a previously commissioned Medium Term Signalling Review in which ORR had confidence.
- E.32 ORR was least content about Network Rail's plans for civil engineering structures. This was in part due to a projected spend level 13% higher than in CP3 which was itself a period in which ORR had supported a higher level of spending than in previous years. ORR went so far as to say that it did "not accept the case" that had been made. In fact this was the only area of activity in which there was a fundamental disagreement amongst the level of professional engineers involved on either side of the review. ORR said it would continue to challenge every significant aspect of the model and underlying assumptions used by Network Rail. ORR said it was at that

time minded not to increase spending levels in this category beyond the CP3 exit levels.

- E.33 ORR was also concerned about the activities proposed for maintenance and renewals at franchised stations. Network Rail's approach was described as "considerably less well developed" than the civil engineering structures of which it had been so critical. ICM generated costs were considerably higher than anything justified by bottom up assessments.
- E.34 ORR was generally positive in its comments on the development of the ICM, pointing out that it was "a significant undertaking". Elements of the model were still said to be unsatisfactory, notably the link between asset policies and model assumptions.
- E.35 When Network Rail published its Business Plan update in April 2008 it reported the further progress it had made in refining its asset management policies, principally in response to suggestions made by AMCL, the independent reporter. For track and signalling Network Rail demonstrated further progress in appraising renewals including on the basis of quantified assessments on a NPV per scheme basis.
- E.36 For civil engineering structures (the area of greatest ORR criticism) Network Rail referred to its CECASE model as the basis for its forecasts conceding that it was highly dependent on good quality input data. AMCL had been jointly commissioned with ORR to review the quality of the data, notably the statistical significance of the sample work areas used. Network Rail claimed that AMCL's review confirmed its estimates but agreed that a further increase in the number of schemes sampled was justified. On the basis of this study Network Rail confirmed its previous assessment.
- E.37 In its draft determination ORR referred to its ongoing, detailed, analytical process to assess activity one of challenging Network Rail's assumptions and methods. Its principal concern was why Network Rail had proposed activity levels for renewals than for CP3 (given the post Hatfield scenario for that period) and Network Rail's ability to resource M&R and a large enhancement programme. It re-iterated the methodologies it had employed throughout the process stressing the importance of challenge sessions it had held with Network Rail. Its concerns remained those activities which were proposed at higher levels than CP3 or where they were unconvinced as to Network Rail's polices.
- E.38 Although it expressed satisfaction at the progress made by Network Rail with its asset policies it was "disappointed" that it had not sufficiently developed the life cycle cost analysis to support its choices in all asset categories. ICM was acknowledged as a tool which had been improved during PR08 and that inaccuracies uncovered by independent reporters had been corrected.
- E.39 It concluded that Network Rail's track, signalling, electrification and plant renewal activities were broadly supported with only minor adjustments. It had many more concerns about the techniques adopted by Network Rail to project civil engineering activity but undertook a rigorous assessment of the methods used both of the modelling and of site visits. Where proposals were based on bottom up assessment they were accepted. Top down generated renewals were not accepted due to unease concerning the CECASE model and a level of spend for those items matching the peak CP3 spend of 2008-09 was determined. Network Rail's maintenance projections were accepted.

- E.40 Finally, for long run renewals ORR provided a draft determination for each category of M & R compared with an "average" annual figure for the long run. This showed that for track renewals ORR accepted that they would be higher in CP4 than the long run average because these years echoed the peak period of renewals in the 1970's.
- E.41 Operating Costs proved a generally more contentious area of evaluation than either maintenance or renewals. In its comments to us on this aspect of the review, Network Rail has said that with hindsight it would have chosen to have done more work in this area. ORR said that the main focus of its attention was not operations activity, which was difficult to measure, but efficiency. We have therefore considered this in section 3.10 and Appendix F.

APPENDIX F: DESCRIPTION OF THE WAY ORR REVIEWED NETWORK RAIL'S EFFICIENCY

- F.1 ORR's stated objectives for PR08 made reference to the need for value for money and identified the need for a continuing reduction in Network Rail's unit costs. Although references to "efficiency" were fairly muted, ORR made clear that in the preparatory phase of its review it would publish an assessment of Network Rail's 2005 Business Plan which, of course, included Network Rail's then view of forward efficiency potential. ORR also made clear that a robust analysis of costs was necessary for "sound decisions" to be made, that it would seek Network Rail's publication of its cost assumptions by June 2006 and would take into account Network Rail's historical ability to reduce costs.
- F.2 At the outset, therefore the approach adopted by ORR appeared to be one of inviting Network Rail to make the running.
- F.3 Network Rail's response to the consultation commented that a June date was too tight to provide definitive numbers and that its cost estimates would be subject to further work. It also made the point that since CP3 efficiency savings were not at that stage clear, further estimates into CP4 and beyond were likely to be even less so.
- F.4 This statement by Network Rail was significant because of what it said about the company's confidence in making future efficiency projections. Whilst it was not saying that further savings were not achievable it was saying that at that stage it was unclear as to their nature and quantification. This is of interest because of what it suggests about the interaction between Network Rail and ORR on efficiency during CP3. It might be expected that ORR's monitoring of Network Rail's delivery in the previous period would have picked up the extent to which Network Rail was cautious about ongoing improvements into CP4. That being so it might have suggested a more intrusive examination by ORR of the potential for further efficiency at an earlier stage than actually occurred in PR08.
- F.5 When ORR came to issue its first assessment of Network Rail's Revenue Requirement in December 2005 it made clear that its view of efficiency was based on its "initial analysis" of Network Rail's own projections. ORR said that a base assumption was that Network Rail would achieve its CP3 efficiency targets and stated that the company's then forward efficiency forecasts were inadequate. Based on its own assessment of what efficiency levels might be achieved in CP4 (a report by LEK/OXERA being the principal source) ORR expressed it in a range (preenhancements) of 2-8% pa compared with the indicative 2% efficiency benefit suggested by the company, although Network Rail did stress that its own estimate was before any real analysis had been undertaken by them in relation to the 2005 Business Plan. This suggests either that Network Rail was not focused on forward efficiency beyond CP3; or that it was playing a waiting game; or that it was so focused on the task of delivering in CP3 that it was not considering the longer term trajectory. In any event this tends to re-enforce the view that ORR should have geared itself up much earlier to a demanding review of Network Rail's plans and strategies.
- F.6 It seems fairly clear from these initial developments that early in the preparatory phase of the review it was already apparent that the scope for further efficiency savings had not been adequately identified by either Network Rail or ORR. That being so ORR flagged up its intention to undertake further work to validate its "preliminary

assessment". With hindsight it can be seen that such an approach might have been adopted earlier.

- F.7 When ORR's Chief Executive wrote to Network Rail's in February 2006 seeking the company's Initial Business Plan within 4 months, the guidance he gave them in firming up on efficiency estimates stated that this was a top priority. Network Rail was expected to explain how it had arrived at its efficiency assumptions, demonstrating a quantified approach to include how benchmarking and other assessments of efficiency drove projections. Network Rail was challenged to take the lead in demonstrating its assumptions.
- F.8 This can be seen as ORR beginning to formally challenge Network Rail's own approach to efficiency assessment and as the first real attempt by ORR to define the terms on which the assessment should be reached. Nevertheless the broad approach placed the onus on Network Rail to make its own proposals.
- F.9 ORR also seemed to place itself alongside some stakeholders who had claimed that Network Rail's efficiency could be significantly improved by requiring Network Rail to demonstrate the extent to which its next Strategic Business Plan took their views and evidence into account. ORR raised the stakes for Network Rail further by stating that Network Rail must state its reasons if it felt that efficiency savings at the upper end of LEK's range could not be achieved. In particular ORR pointed to evidence provided by EWS, the freight operator (now DB Schenker).
- F.10 At this time ORR was also beginning to commission a number of separate pieces of work aimed at identifying the extent of the efficiency savings it believed Network Rail was capable of achieving. Given Network Rail's own lack of clarity this was understandable. The content and tone of the official exchanges that took place during this "warm up" phase of the periodic review showed on the one hand that ORR would be looking for evidence beyond Network Rail to come to its view on efficiency and on the other that Network Rail itself had yet to reach a definitive view of its own. The extent to which tactics were dictating positions at this point is unclear and probably unknowable. It is clear though that ORR's approach to Network Rail's efficiency changed.
- F.11 By now both parties were beginning to take up positions of their own and a process of claim and counter claim was developing. Retrospectively reviewing the events that unfolded it almost appears that by that stage it was ORR's intention to adopt such an approach which was contrary to Network Rail's wish to avoid the use of consultants whose principal role was to critique the work of other consultants.
- F.12 When Network Rail published its Initial Strategic Business Plan in June 2006 the company was still being cautious about what was achievable. It accepted a mid range position in relation to the projections suggested to ORR by LEK/Oxera but discounted this by what it saw as the negative impact of input inflation. However, it did agree that achievement of its CP3 efficiency targets was a reasonable assumption and went on to describe its Framework for Efficiency Planning which placed its ability to improve in the context of the long term. Its aim was to achieve a "World Class Transformation "on the basis of an approach that combined the application of internal and international benchmarking to the development of bottom-up efficiency initiatives. Network Rail said it would need high output equipment and modular track solutions to achieve substantial improvements and that the case for these was "being evaluated". This statement alone suggested that Network Rail was indeed low on the curve in terms of understanding how to deliver its track relaying programme more productively.

- F.13 The way Network Rail expressed itself in the Initial Plan looks like evidence either of caution or of tactics in what it could see was going to become something of a "tug of war" in engaging with ORR en route to a final determination. Network Rail was very strong in its rebuttal of ORR's upper end assessments which it described as "wholly unrealistic". It also dismissed comparisons with post privatisation utility companies. It pointed to its own internal KPIs (including benchmarking) which showed a continuous improvement in maintenance efficiency and suggested that these offered a more realistic guide to what was achievable in the future.
- F.14 By this time the two parties were clearly moving to a position of disagreement with Network Rail tending to rely on its own internal measures and bottom-up plans and ORR widening the debate from a comparison with UK utilities to consider global comparisons and international bench-marking of rail infrastructure. Perhaps anticipating where ORR was coming from Network Rail commented on international benchmarking data pointing out that it was a member of UIC but that "the figures provide little insight on the causes of variations. It is not possible to make direct comparisons between the activities carried out by and costs incurred by different network operators, as expenditure, activity and outputs are not recorded consistently, and different safety regimes apply".
- F.15 Network Rail pointed to a number of pieces of work (including Lloyds Register undertaking an international review of possessions management) and actually itself engaged LEK to review input prices. Its plan stated that by early 2009 it would be able to demonstrate delivery of the "key enablers" to achieve "world class status". Thus Network Rail was at one and the same time indicating determination for the longer term whilst stressing caution in the short term. In any event it was beginning to resist the pressures to make shorter term efficiency commitments.
- F.16 In its September 2006 reaction to Network Rail's Initial Strategic Business Plan, which proposed efficiency savings of up to 3.8% per annum (reduced by input inflation to 2.1% pa), ORR announced that because the earlier work by LEK and Oxera suggested that a much higher figure of up to 8% was obtainable, ORR would be conducting some international benchmarking as part of further work to come to a better view of what could be achieved. By these means ORR thought that more robust estimates would emerge later in PR08, clear evidence that ORR saw efficiency as a developing debate. Nevertheless at that stage ORR appeared to be accepting that the lowest level of efficiency achievement in its range was Network Rail's own estimate of 3.8%. Overall its reaction was tantamount to a polite rejection of Network Rail's figures.
- F.17 Network Rail responded in December 2006 saying that when it produced its Strategic Business Plan it would ensure that its assessment of efficiency was based on realistic, evidence based assumptions and would improve the robustness of its unit cost forecasts for renewals and maintenance. It also continued to emphasise the risk of input price inflation.
- F.18 Shortly afterwards in February 2007 ORR issued its advice to Ministers to assist them in determining their High Level Output Statements and Statements of Funds Available. This was a further opportunity for ORR to comment publicly on the efficiency issue and it did so by stating that its independent reporters were advising that there was "substantial scope for efficiency". It said too that Network Rail's assumptions needed to be tested against those of others, a clear signal that external reference points were seen as central to ORR's assessment of what Network Rail could achieve. ORR said

its work on international comparisons would report later in PR08 and that it would deal with input inflation later in the process too.

- F.19 Network Rail's 2007 Business Plan was the company's opportunity to respond to the points made by ORR as well as to its industry stakeholder critics. On efficiency it stated that savings were proving increasingly difficult to achieve without changes in scope and that input prices continued to rise. Network Rail stated that it was within less than 1% of achieving ORR's CP3 efficiency target overall and stressed that this was a good starting point for CP4.
- F.20 Crucially, however, Network Rail maintained that having done extensive further work on efficiencies the assumptions contained in the Initial plan remained valid. It further stated that targets for opex and track renewals contained an element of "stretch" inferring that it had been unable to identify ways of achieving them at that stage. It rejected the assumptions underpinning an assessment of up to 8% pa of potential further savings and was especially critical of the savings claimed from international comparisons, which it said were "oversimplified". It also said there was "no evidence" to support the contention that Network Rail was comparable to other "recently privatised" industries and therefore capable of making similar efficiency savings. Pointing out that other regulatory reviews normally assumed 3% pa efficiency changes, even if it were to accept that Network Rail was less efficient than other railway infrastructure providers, the pace of change suggested by ORR was unrealistic. It appeared to be concerned at the management challenge that achieving more ambitious targets would create, possibly to the disbenefit of achieving other key targets such as performance.
- F.21 It is certainly worth logging the point here that from our interviews it seems that Network Rail's engineers, on whom the responsibility rested to achieve efficiency targets at the same time as delivering a high level of outputs and enhancements, were being put under a high degree of challenge as a result of the assumptions made by ORR. Their ability to deliver all of these outcomes effectively does represent a massive management task and , even if they were wrong about efficiency, if they were not "knowingly wrong" then their ability to deliver targets they did not believe in would be that much less. The risk of non achievement or of compromising performance (probably not safety if proper management processes are in place) would be that much higher with the financial spend levels perhaps still being achieved through a combination of deferred spend and re-scoping of schemes. In such circumstances the nature of monitoring would become important. Monitoring outputs would not necessarily be enough since deteriorating infrastructure would not necessarily show up in output statistics during the currency of a single control period.
- F.22 Network Rail acknowledged that ORR and itself were each looking at efficiency potential from two different perspectives bottom up and top down. Reconciling differences in the numbers was something that required judgement and a consideration of the full range of information available. It is worth observing that Network Rail's position would be valid if its own engineering managers either did not accept or fully understand the basis of international comparisons and their applicability in the UK. Whether they were right would not be the issue. What would matter would be their commitment and capability.
- F.23 In making its judgements it is possible that ORR assumed a capability that Network Rail did not possess.
- F.24 To some extent Network Rail's tentative approach was exemplified by its detailed commentary on the subject in the 2007 Business Plan. It argued that when it published

its Initial Business Plan a year earlier it did not "have sufficient evidence to develop a robust view of what we could achieve in CP4". The company was clearly annoyed that ORR had "misinterpreted" its view on what it could achieve when advising Ministers for the purposes of the HLOS and SoFA. Network Rail claimed that ORR had concluded that the minimum achievable in CP4 was what Network Rail itself believed was realistic and challenging. Furthermore ORR had stripped input inflation out of the calculation altogether, saying that it would deal with this separately.

- F.25 Network Rail stated that it would share its developing work on efficiency openly with ORR but stressed that, after ORR had determined what Network Rail should achieve, it should "step back and allow Network Rail the space to deliver its planned improvements with flexibility to deliver the outputs in the most efficient way". It argued against "an intrusive level of regulation" that would "stifle its ability to focus on driving improvements".
- F.26 Much of the detailed argument presented by Network Rail in its SBP described what the company had achieved during CP3 up to that point. The Plan also presented substantial commentary on a function by function consideration of what it believed might be achieved in CP4. Broadly speaking its efficiency plans were predicated on continuing to build on the achievements of CP3 whilst identifying new initiatives. Network Rail listed by functional activity each of a series of individual bottom up efficiency initiatives indicating the percentage improvement that was planned in CP4 compared with CP3. It also talked about identifying the "potential for further initiatives" <u>during</u> CP4. This seemed to underline the company's reluctance to commit to higher targets when it said it was unsure of what more could be achieved. This absence of firmer plans would explain the company's reluctance to commit to figures that were above its own estimates. Nevertheless it did include in its estimates a "stretch" target based on "top down" assessments of what might also be achieved taking into account "external studies" including benchmarking studies undertaken on its behalf.
- F.27 Amongst the studies referred to was the UIC's lasting infrastructure costs benchmarking study (LICB) the "emerging results" of which Network Rail said it was taking into account in developing "stretch" targets. In addition Network Rail referred to studies it had undertaken in relation to certain foreign infrastructure providers, notably SNCF, SNCB, SB and DB together with UK providers for the London Underground, Tube Lines and Metronet. It also engaged LEK to undertake an assessment of internal best practice based on Network Rail KPIs and AT Kearney to advise on procurement savings.
- F.28 It framed its efficiency projections in the context of what it described as the "30 year concept", namely a long term perspective of how the company could achieve its aspiration for world class status. Certain initiatives had already been identified as part of this programme but given that some of these required all industry co-operation and investment, Network Rail was reluctant to over-commit to numbers for CP4.
- F.29 In contrast to maintenance and renewals which contained a number of specific bottomup initiatives, one area in which Network Rail's projections were entirely "top down" was operational expenditure. This category included significant elements of the company overhead, in finance, human resources and IT, for example. Pension and insurance costs are also included. To review these, the company commissioned a benchmarking study which concluded that Network Rail was better than the norm in most areas benchmarked.
- F.30 Commenting on external sources quoted by ORR, Network Rail argued that LEK's 8% annual reduction figure was based on unrealistic assumptions and had not been risk

assessed for achievability. Network Rail also criticised the use of UIC figures as being unreliable as they were based on data that might not be comparable and on questionable assumptions about the long term condition of the assets. Network Rail stressed the importance of understanding these comparisons better and said that its own more detailed studies in foreign countries were more likely to yield a better understanding of the methods that might be adopted to improve efficiency. It noted that ORR had engaged ITS at the University of Leeds to undertake some work to normalise the data.

- F.31 Network Rail also took the opportunity to dismiss a study undertaken by LEK for EWS which compared railways in North America with the UK. Network Rail maintained that the characteristics of the railways were so different as to render comparisons meaningless. European comparisons were much more relevant.
- F.32 Network Rail also commented on studies undertaken by ORR in relation to possessions (Lloyds RR study with which it broadly agreed and said it was taking into account) and signalling renewals (Lloyds Register study with which it did not disagree but maintained that presumed cost benefits had already been factored in from CP3). In addition it had itself commissioned studies on procurement (AT Kearney, the results of whose work were factored into Network Rail's estimates); internal benchmarking (a LEK study which identified potential efficiencies on the basis of variations between Network Rail's own regions, and which Network Rail stated it was seeking to build in to its estimates); input price inflation (a study by LEK suggesting annual input inflation above RPI of 1% pa); HR and IT (studies by KPMG and Compass, the results of which suggested only limited savings); track maintenance (a jointly commissioned study with EWS in which a Canadian expert's advice was mostly rejected by Network Rail partly on the grounds that it disagreed that its renewal cycle was too frequent); track renewals (a Lloyds Rail Register study commissioned by EWS which was largely rejected on the grounds that it double counted savings already made, which when excluded broadly confirmed Network Rail's own estimates); and freight only line costs (a study by DTM commissioned by EWS with which Network Rail had some disagreements but also accepted that it contained some assumptions worthy of further development).
- F.33 In November 2007 ORR invited stakeholders to comment on all aspects of the SBP and specifically stated that ORR itself would use the period between then and publication of its draft determination in June 2008 to "review and challenge" all aspects of the Plan announcing that it was "taking the advice of consultants". It promised to issue its response to the Business Plan in February 2008. The consultation specifically invited stakeholders to comment on the scope for Network Rail to improve its efficiency and in general whether Network Rail had demonstrated that it had considered all delivery options.
- F.34 Several stakeholders commented on efficiency, notably:
 - DfT which said that it wanted to see realistic but stretching efficiency targets set by ORR
 - Transport Scotland which looked to ORR to push the boundaries on efficiency and to continue to challenge Network Rail's assumptions and numbers.
 - ATOC which said that it did not want to see a repeat of CP3 where in essence Network Rail took the lion's share of available industry funding. It wanted to see efficiencies delivered to enable the funding of other schemes important to TOCs, notably new trains.

- EWS which was very critical of Network Rail's approach of dismissing comparability with foreign railways and other regulated monopoly utilities.
- Freightliner which expressed disappointment at the modesty of Network Rail's proposed savings also pointing out that all businesses have to cope with input price inflation.
- Some passenger train company owning groups also commented on efficiency, generally in the same vein as the freight operators.
- F.35 In February 2008 ORR responded to the Business Plan and on efficiency made the point that not only were achievable but challenging targets necessary but that strong incentives were also needed to support their delivery. It opined that Network Rail had failed to provide the robust analysis that it sought and ORR was therefore undertaking more work of its own in developing its draft determinations. It noted that Network Rail had not identified sufficient initiatives to meet its own efficiency targets and that it had therefore included "stretch" as a means of achieving a bit more. For opex "stretch" was the largest element. It pointed out that much third party evidence had been rejected by Network Rail. ORR stated that its further work included an assessment of Network Rail's own work (Ernst and Young having been engaged to support), further top down assessments based on international benchmarks, an update from LEK/OXERA on its 2005 work, and the further evidence of stakeholders.
- F.36 Amongst the reasons given for rejecting Network Rail's work was that most of the bottom-up assessments had been undertaken by the managers who would have to deliver them – hence they were not challenging enough. Neither were the "stretch" targets especially challenging. Internal benchmarking within Network Rail had taken a backward step since PR04 when more information had been available for maintenance.
- F.37 ORR stated that work commissioned from the University of Leeds was likely to be "central to informing [its] view" on the scope for efficiency. It said that it was working with Network Rail to better understand the UIC LICB work but its analysis suggested that Network Rail was up to 40% less efficient than 12 other European railways. Further work undertaken by ORR elsewhere highlighted a similar "significant gap". ORR also announced its intention to do its own internal benchmarking work. It commented that Network Rail had already said that it would not improve its efficiency numbers in the plan.
- F.38 This response can be clearly seen as advanced notice that ORR was already minded to significantly up-rate Network Rail's own estimates of efficiency for CP4. Faced with obvious pressures from the Governments, from Freight and passenger operators alike and with the apparent steadfast, more cautious approach of Network Rail it was obviously critical that ORR conducted the final stage of its evaluation of efficiency robustly and convincingly.
- F.39 Network Rail published an up-date to the Strategic Business Plan in April 2008 and included a substantial section on efficiency. As a result of the further work it had carried out since publication of the SBP it did not alter its efficiency projections other than to increase by 1% pa the track renewals savings, a reflection of a shortfall that had developed during CP3 in that category of work.
- F.40 Network Rail refuted ORR's argument that targets set by its own mangers were undemanding by pointing to the "stretch" target as something to be achieved beyond the bottom-up numbers in the plan. Significantly Network Rail stated that the efficiency

targets did not pick up all planned items, some of which were included in changes of scope in certain activity areas, notably Switches and Crossings, where Network Rail estimated a 15% saving would yield a 3.5% benefit on the track renewal programme.

- F.41 Network Rail commissioned further work to consider ORR's contention that Network Rail was at least 30% less efficient than comparator railways. It stated that to utilise such top down data would not provide the right level of confidence that targets would be delivered. Doubting the conclusions of ITS Leeds, Network Rail engaged BSL Management Consultants (Germany based and part of Lloyds Rail Register) to undertake a separate exercise to understand the true difference between Network Rail and other countries. Amtrak was also included in the study. This demonstrated that although peer companies' maintenance and renewals costs were substantially lower than for Network Rail, the average age of the track on Network Rail was some 40% older. BSL concluded that newer assets being more reliable caused less wear and tear in use and required less maintenance pointing out that Network Rail had a higher incidence of equipment failures than other countries. BSL stated that unit labour costs in the UK were higher than elsewhere and that this would explain a significant element of any variation. Nonetheless BSL did point to best practice improvements that would reduce Network Rail's costs. Network Rail claimed that many of these (though presumably therefore not all) were already assumed in its estimates.
- F.42 BSL also identified a number of particular reasons why a gap existed between Network Rail and other countries in respect of maintenance and renewals. Some of these related to higher unit labour and equipment costs (the latter arising from UK safety regulations) and from the greater access hours abroad compared with the UK. When taken into account these more or less fully explained the "efficiency" gap against the "average".
- F.43 Network Rail concluded by agreeing that there was a "significant gap between its expenditure and the average in other European countries". However, this reflected the needs for UK to catch up with its renewals; the need for other countries themselves to renew at higher levels to maintain a long term steady state; and the impact of localised factors affecting costs and standards.
- F.44 Network Rail also hired LECG do undertake an assessment of the work done in 2005 by LEK/OXERA whereby it reached an upper end assessment of 8% pa compared with the experience of other privatised utilities. This study concluded that LEK had double counted some savings, used inappropriate comparisons and omitted to take into account that in other utilities savings had been achieved at the expense of outputs. LECG's conclusions were that Network Rail's upper limit for savings in CP4 was 4% pa and in practice was probably somewhat lower. They also commented that "regulators set lower efficiency targets when significant and other output improvements are expected".
- F.45 Network Rail also commented on both EWS's commissioned studies of North American railroads and ORR's work on international benchmarks which posed 84 challenges to Network Rail's assumptions. Although Network Rail provided its reasons as to why it could not accept that these challenges affected its assumptions for CP4, it did thank ORR for providing insights into how other administrations addressed the kind of issues that Network Rail was seeking to manage. One may question whether Network Rail, in seeking to be a world class provider, should itself have been aware of these practices, taking them into account in developing its own plans.
- F.46 On input prices Network Rail commissioned LEK to advise who suggested that for several reasons input price inflation would be likely to affect efficiency levels

significantly. These included construction costs inflated by other major projects, e.g. Crossrail and the Olympics plus world steel and copper prices.

- F.47 ORR published its draft determinations in June 2008. It explained its assessment of Network Rail's analysis and the further work it had itself commissioned. Once again its opening statement was that its "determinations must provide strong incentives on Network Rail to strive for continuous and sustained improvements in efficiency."
- F.48 It considered efficiency in relation to catch-up (compared principally with other countries), frontier shift and input prices. It noted that at the start of CP4 Network Rail would have achieved 28% in CP3 against its target of 31%. It noted that Network Rail had not changed its OMR efficiency projection for CP4 from the 17.6% it forecast in its 2006 Plan. It had thus not moved its position in 2 years but had discounted this total to allow for input price inflation yielding a net 12.5%. These varied from 7.4% for opex to 12.2% for maintenance and 14.8% for renewals. Removing the "stretch" element from opex appeared to result in a negative position once inflation was taken into account. Adding the shortfall in CP3 to the renewals target (accepted by Network Rail) increased the efficiency projection in that category to 19.1% before input inflation.
- F.49 ORR described its approach to assessment as embracing a range of methods, including both top down (using mainly statistical techniques) and bottom up (where experts focused on technology and work methods). Despite a wealth of information provided by Network Rail, ORR (advised by Ernst & Young) believed that its work "significantly understate[d] the scope for efficiency improvements". Network Rail's work was still subject to the same criticism as when it was first produced in 2006. First the gross projections were uniform across OMR and second they were developed by the managers expected to deliver them. No justification was given for the even treatment across OMR. This was puzzling since the processes adopted by Network Rail were different. For opex the high element of "stretch" was a concern. The absence of maintenance internal benchmark was a particular defect. Neither had the additional scrutiny of external lenders providing unsupported debt leading to extra efficiencies been factored into Network Rail's calculations. The clear implication was that Network Rail's methodology was unconvincing.
- F.50 ORR described its use of UIC and sub national benchmarking from North America, expressing the hope that such information might in future make a significant contribution to the rail industry worldwide. It acknowledged that there were elements that made comparisons difficult. In particular it took Network Rail's point about asset quality and topography, undertaking a further analysis of the data that excluded them from the calculations. The work also included understanding the results from an engineering as well as from an econometric point of view and included an alternative approach of assessing what the costs of peer railways would be if they adopted Network Rail's methods and assumptions.
- F.51 Without agreeing with Network Rail's point of view on its own back-log of renewals, ORR nevertheless made an adjustment to the data to allow for this. Comparisons were then made with the "upper quartile" of infrastructure companies showing that by any measure Network Rail was significantly less cost efficient. It concluded that Network Rail was 37% less efficient than the upper quartile in 2006. The separate "regional benchmarking" exercise (involving Amtrak, Belgium, Netherlands, Ireland and Network Rail) showed a shortfall of 44% "to the frontier".
- F.52 Having established through its econometric analysis that a big gap existed, ORR set out to establish the extent to which this was attributable to "inefficiency" rather than

other factors. It undertook international visits to establish reasons for the shortfall and "normalised" the data. In addition ORR took account of the work undertaken for Network Rail by BSL and assessed that Network Rail's cost base would rise by between 20 and 40% if its operating characteristics were the same as for the benchmarked countries assuming the application of Network Rail's methods and practices. This study involved an assessment of the main differences in practice between Network Rail and other European countries which, if applied by Network Rail, would be likely to generate further efficiency savings. A number of specific practices, common in Europe and uncommon or absent in the UK, were identified. ORR concluded that these provided strong evidence that working methods made a significant contribution to the efficiency gap.

- F.53 ORR also reviewed BSL's work for Network Rail. Whilst welcoming its work and noting that BSL had proposed a number of areas in which Network Rail could improve its efficiency ORR disagreed with several of its assumptions, the most important of which was the inappropriateness of measuring Network Rail against the average and not the upper quartile. Nevertheless ORR calculated that if the points about steady state and catch-up made by BSL were allowed in the comparison and if this were made with the upper quartile rather than the average, then the shortfall would be in the range of 20-25% even after delivering the CP3 catch-up and Network Rail's own proposed efficiencies for CP4.
- F.54 ORR also produced the results of a further OXERA study comparing other utilities with Network Rail, updating the work undertaken in 2005. This showed the potential to reduce costs by up to 7% per annum.
- F.55 ORR welcomed LECG's further assessment of OXERA's work on behalf of Network Rail as a "contribution to the debate on efficiency".
- F.56 ORR was more cautious in its reactions to the work undertaken by consultants engaged by EWS and appeared to adopt a "middle position", acknowledging that there were many initiatives that could be imported from North America but at the same time seeming to agree with Network Rail that the operating circumstances were very different.
- F.57 Overall ORR concluded that the efficiency gap faced by Network Rail at the end of CP3 based on "conservative assumptions" was 35% in O, 31% in M and 36% in R. It then addressed the issue of input price inflation and concluded that it would accept the assumptions advised to Network Rail by LEK. ORR claimed that this was common regulatory practice for regulated companies where prices rose above RPI despite Network Rail also being protected by a "risk buffer" and re-opener provisions in the determination.
- F.58 ORR also acknowledged the overall management challenge facing Network Rail in CP4 and addressed the issue of the "pace of change" in that context. ORR decided to profile the 35% efficiency change over two control periods, ending in 2019. It concluded that "for a company that aspires to be world class" two thirds of the efficiency should be achieved in CP4. It maintained that the residual element for CP5 was purely "indicative". Its draft determination was for Network Rail to achieve 22.6% for M&R compared with Network Rail's 14.0% and 16.3% for controllable opex compared with Network Rail's 7.4%, equivalent to 5% and 3.5% pa respectively. It justified the achievability of these numbers within a 5 year period by reference to similar achievements elsewhere in the world and to Network Rail's own consultants' reports. Only 0.5% per annum in CP4 was factored in as a consequence of ORR's draft determination on unsupported debt.

- F.59 Network Rail provided its response to the draft determinations in September 2008 and claimed that they were based on flawed and selective analysis, mainly by ORR's consultants. Network Rail commissioned its own consultants to critique these various studies focusing in particular on LEK/OXERA and Leeds ITS. Network Rail produced "evidence" that suggested the model developed by ITS was flawed and said that the UIC itself had stated that some of the LICB data was "likely to be inconsistent". The principal objection to the work, however, was the contention that all countries had not been maintaining their infrastructure in a steady state. It dismissed ORR's arguments presented in its draft determination on this topic. Network Rail also claimed that no account had been taken of the variations in the outputs that each company was seeking to achieve. UIC argued that safety, performance and asset condition factors needed to be taken into account and that there were several other variables omitted from the analysis by ITS.
- F.60 It criticised the form of cost equation used by ITS which it said was inappropriate in economic theory and was unsupported by any argument or justification by ITS. Network Rail said that it had not been provided with a report which allegedly provided justification for the techniques used. Network Rail also criticised several other aspects of ORR's work drawing the broad conclusion that there were "significant uncertainties in the key parameters". It engaged Horton 4 Consulting who criticised the methodologies used by OXERA.
- F.61 In short Network Rail continued to challenge every study and assumption made by ORR in reaching its draft determinations on efficiency for OMR.
- F.62 In its final determinations published in October 2008 ORR restated its logic in reaching its draft determinations and addressed each of the arguments put forward by Network Rail in its response. Although it conceded some minor points its general approach was to confirm its draft determinations, actually increasing the cumulative efficiency saving for maintenance from 17% to 18%.
- F.63 The detail of the ongoing "argument" between Network Rail and ORR was by now so well documented that the stage was set for a potential appeal to the Competition Commission. In the event this did not happen and Network Rail accepted the determination on 5th February 2009.

APPENDIX G: DESCRIPTION OF THE WAY ORR REVIEWED NETWORK RAIL'S FINANCIAL FRAMEWORK

- G.1 In section 7 of the Initial Consultation Document in August 2005, ORR set out its approach to determining the amortisation of the RAB and the rate of return on the RAB.
- G.2 On amortisation, ORR stated the intention to review the rules and approach which had been adopted in the previous review. Specifically it would revisit the principle that the total amortisation allowance in any year should be broadly equivalent to the proportion of renewals and enhancement expenditure that is required to maintain the overall capacity, age, condition and serviceability of the network. This led to a methodology which allowed for half the renewals and enhancements programme being financed through amortisation, and the other half through debt.
- G.3 On rate of return ORR flagged that the simple debt coverage approach adopted at the 2003 review would need to be supplemented by a more comprehensive consideration of issues. This would include determining the appropriate method of setting the rate of return, the need for, and size of any debt to RAB cushion, the scope for midterm reopeners, and the views of stakeholders, including the rating agencies.
- G.4 ORR received 11 responses to this consultation, but only one, from EWS, made specific reference to the financial framework, albeit at a high level.
- G.5 ORR's next published document was the Consultation on the Financial Framework in December 2005. This document was intended primarily to put up some cost and financing assumptions as inputs to the HLOS process, so that the government could make its decisions on outputs with some awareness of their consequences for funding. ORR was therefore careful to note that it was not intended to establish a range of outcomes which would constrain the formal PR08 process after the HLOS had been published. However, it is clear in the document that ORR understood that in coming to conclusions on inputs to the HLOS, in would in practice, be taking a position on the approach to financing which would then act as a starting point to the PR08 debate.
- G.6 The discussion of the financial framework in section 3 and appendix E of the Consultation Document addressed four key issues in determining the Rate of Return to be allowed to Network Rail. These are:
 - The principle that the return should be set so as not to preclude Network Rail raising risk capital not covered by the FIM (financial indemnity mechanism, or government guarantee).
 - The need to assess the level of risk to Network Rail's implied equity.
 - The need to decide between WACC (weighted average cost of capital) and cash flow analysis as the method of determining the allowed return.
 - The assumption which should be made about how the return in excess of debt service should be used (either to reduce debt, to refund users, or to further enhance the network.)

- The document also set out the important assumption that amortisation would be calculated as the amount necessary to maintain the network in a steady state over time, but noted that if this led to unsustainable financing over time, it could be increased.
- G.7 ORR received 13 responses to this document, including one from DfT.
- G.8 The main issue raised by TOCs related to the desirability of making a trade off in the financial framework between the infrastructure needs of Network Rail and the amount of subsidy given to Train operations. Network Rail strongly opposed any plan to depart from WACC based return calculations, but saw ways to reconcile these with actual interest and margin calculations. DfT appeared broadly to support this view. Most respondents argued in favour of any surpluses to be retained to pay down debt and invest in discretionary projects, rather than being returned to passengers or taxpayers.
- G.9 In July 2006 ORR published a paper taking its thinking forward on a number of key financial issues. This was Enhancing Incentives for Continuous Improvements in Performance; A Consultation paper. Section 5 of this paper considered options relating to the assumptions which should be made about the how the cost of the FIM to taxpayers should be treated, whether the raising of capital outside the FIM should be assumed, and what these decisions implied for the method of pricing the cost of capital. After considering the options, ORR indicated that it was minded to adopt the assumptions that (a) there should be a full charge from government to Network Rail for use of the FIM, (b) that access to unguaranteed debt should be allowed, and (c) that the cost of capital should then be derived on a conventional WACC basis. In paragraph 5.42 ORR asked consultees to comment on a number of specific issues relating to these issues. (part 1 issues)
- G.10 ORR received 8 responses to Part 1 of this consultation.
- G.11 DfT supported a fixed FIM fee. It also supported the introduction of unsupported debt, where it could be shown to enhance value for money. Its position on the use of surpluses was not entirely clear. DfT also proposed a radical change in RAB treatment, moving to an uninflated RAB and a nominal return.
- G.12 Network Rail's formal response to this consultation made clear that these issues had been subject to separate private discussion with government and ORR as part of the HLOS. Network Rail supported the introduction of unsupported debt. It also acknowledged that there should be a FIM fee, but not at the full WACC. It agreed that the company should be allowed to generate surpluses, based either on the WACC, or risk analysis, but that these funds should be used primarily for re-investment in the railway.
- G.13 At the end of September 2006, and still in the context of advice to ministers on the HLOS, ORR published two consultation letters on aspects of the financial framework. The first was on The Treatment of Risk and Uncertainty. It itemised a number of aspects of risk, indicated ORR's provisional view, and asked for the comments of stakeholders on each specific item. The second was on Amortisation. This provided more detail on how amortisation operated since ACR 2003, and flagged work required of Network Rail on future costs.
- G.14 ORR received 8 responses to these letters, which were generally supportive of its thinking. Interestingly, DfT's proposal for the use of a nominal RAB appears to have been quietly dropped at this stage.

- G.15 In February 2007 ORR published its Advice to Ministers on matters relating to the HLOS and SOFA. This was not a consultation document, but rather it repeated the conclusions of the consultations which had gone before.
- G.16 On the financial framework, it supported the restriction of the use of the FIM to the refinancing of existing debt, the introduction of unsupported debt, and the use of the WACC to derive the cost of capital to be incorporated in the revenue requirement. A FIM fee was also assumed based on the value of the credit quality (assumed at 50bp).
- G.17 The use of this approach would generate surpluses over the cost of debt service, and these would be divided into a risk buffer and a ring fenced investment fund (RFF). The rules for these and their values would be the subject of further work.
- G.18 The advice adopted a real vanilla cost of capital of 4.0 to 4.7%, based on recent regulatory precedent. The possibility of indexing debt by logging up differences was also left open for further work.
- G.19 On 6 September 2007 ORR published a letter headed Periodic Review 2008: Financial issues update and further consultation. This was a substantive document, opening up a number of technical and quantitative issues which would be material to the determination.
- G.20 It introduced work which ORR had commissioned from CEPA on Network Rail's cost of capital, the report on which was published separately. It set out a range of estimates for the building blocks used in the Capital Asset Pricing model, from which the range of cost of capital in the Advice to Ministers appeared to have been derived. The letter also set out recent assessments by other regulators. The letter noted other considerations around the nature of the formula which would influence the final determination of the allowed return.
- G.21 ORR also addressed the interest cost assumption which it would need to make to forecast the likely level of surplus derived from the allowed return, and hence the size of the RFF. It set out options for how this could be assessed and invited comment on an initial preference for the use of actual costs.
- G.22 On financeability the letter advised of the indicators which ORR intended to apply to the test, and to discuss with the rating agencies.
- G.23 It confirmed a number the principles to be applied in the roll forward of the RAB. It considered the treatment of corporation tax and introduced a proposal to change this significantly, from pre tax to post tax, using an ex ante tax forecast. This followed regulatory precedent in other sectors.
- G.24 Finally, the document set out ORR's provisional thinking on the treatment of pensions, and took forward the consultations on the treatment of inflation and re-openers.
- G.25 There were only three responses to this consultation.
- G.26 The DfT was broadly supportive of ORR's conclusions, although it argued, on a number of grounds, that the cost of capital should be set at the lower end of the range indicated by ORR. DfT maintained its strong opposition to indexation of debt, favouring increased hedging instead. On the interest allowance DfT was concerned to ensure that ORR lock in the most favourable possible policy for future reviews. Transport Scotland held similar views.

- G.27 Network Rail was also broadly supportive of the ORR approach, although it was more focused on the need for ORR to set an allowable return which fully captured the perceived riskiness of the business.
- G.28 In February 2008 ORR published its Update on the framework for setting outputs and access charges and strategic business plan assessment. This document summarised all the decisions made as a result of the consultations described above, and opened a consultation on two issues, the method for defining what projects go into to RFF, and the treatment of changes in service requirements of TfL and/or PTEs.
- G.29 The DfT response was forthright. Whilst it supported the use of unsupported debt, this was subject to a number of tests, some going beyond points raised previously in the consultation. DfT opposed the use of adjustment to the FIM fee in the event of Network Rail deferring ring fenced projects. DfT took a somewhat confusing line on the allowed return, one the one hand supporting ORR's approach, and on the other objecting to the use of a notional WACC. Taken in the round, the response appeared to be that ORR should set the allowed return as low as possible.
- G.30 Network Rail's response raised a limited number of key issues on the financial framework. One was the submission of a new analysis of the cost of capital. A second was objection to what Network Rail appeared to think was an unsubstantiated assumption about double counting of taxation. The third was a demand for ORR to mitigate the assumption of an efficient level of pensions to allow time for transition.
- G.31 ORR also received short responses from 9 stakeholders from the industry.
- G.32 In June 2008 ORR published the Draft Determination. This was a comprehensive document, running to some 400 pages, covering all matters related to the determination. It advanced analysis and decisions on the financial framework in the following respects:
 - The rules for operation of the RFF were set out more explicitly, in particular in relation to Network Rail's ability to defer expenditure
 - The challenge from DfT that unsupported debt should only be allowed if it could be demonstrated to add value for money was addressed through a consultants' report from NERA which quantified the expected gain.
 - The allowed return estimate was adjusted to remove the bottom end of the range, on the basis that this depended on indexed debt, which ORR had decided to discount.
 - The remaining range was recalibrated by CEPA in the light of market developments to determine a new preferred range of 4.7 to 4.9%.
 - Supporting evidence from First Economics was published.
 - Network Rail had proposed 4.8%, but ORR concluded that it would allow 4.87%.
 - Absent strong evidence to the contrary, the same return was adopted for Scotland as for England and Wales.
 - The FIM fee was set at 80bp on the opening CP4 debt level. No hard evidence was provided for this.

- The risk buffer was set at an average of £246m, supported in part by earlier work by Oxera published by ORR.
- The Ring fenced fund was set at an average of £310m pa.
- The policy was set that deferrals from the RFF funded programme would in the first instance reflect the geographical area where the overspend had occurred.
- ORR determined that it would impose a double counting charge in the order of £1.3bn in relation to the move from pre to post tax.

G.33 The document also set out ORR's proposals in relation to the RAB and its amortisation. Significant amongst these were:

- A risk sharing agreement for capex overspend which placed a greater burden on Network Rail either DfT or Network Rail had proposed, namely Network Rail responsibility for the first £75m of overspend.
- Absent an estimate of steady state amortisation from Network Rail which ORR had requested – ORR fixed an amortisation allowance of £3.4n at 2008/9 efficiency levels.
- G.34 There were 36 responses to the draft determination.
- G.35 The DfT submission was narrowly focused. DfT accepted Network Rail's approach to the allowed return, notwithstanding its earlier reservations, but made clear that it did not wish to see this rise without very good cause in the final determination. DfT also appeared to find it difficult to rely on ORR's assessment of the value for money of unsupported debt, and stated its intention of conducting its own evaluation.
- G.36 Network Rail's response was broader ranging. It did not attempt to reopen any of the issues of principle which had been debated at the informal stage of the review, and it reflected a great deal of discussion which appeared to have taken place with ORR before the response was finalised. However there appeared to be a gap between the parties on a number of significant quantitative issues. On one issue, double counting of tax, issues of both principle and application appeared to have persisted right to the end of the consultation period.
- G.37 Other responses to the draft determination primarily covered issues relating to efficiency, standards and investments. None contained any new profound insights into the financial framework.
- G.38 In October 2008 ORR published its Final Determination. This indicated several areas of movement in the light of the responses to the draft, ongoing discussions and changing financial circumstances (specifically the "credit crunch").
- G.39 In the determination ORR recognised the difficulty of raising unsupported debt at the time, and conceded that the FIM debt would have to rise. It accepted that the introduction of unsupported debt would therefore be more gradual. ORR set the level of the risk buffer at £208m (£185m + £23m.The reason for this change was unclear. ORR also raised the allowed return to 4.75%, only 0.05% lower than Network Rail's request. It cut the amount of overspend to be carried by Network Rail from £75m to £50m.

G.40 On two further points ORR was unmoved; the calculation of the corporation tax allowance and the amortisation allowance, where apparently Network Rail had continued to fail to produce its own estimates.

GENERAL OBSERVATIONS

- G.41 The tone of the consultation documents and responses was very even and nonconfrontational compared with some other regulatory processes.
- G.42 The record shows that ORR did in fact recognise a number of Network Rail's major concerns and incorporate them in its final determination, suggesting that consultation had been a worthwhile part of the process.
- G.43 The most notable area of unresolved dispute between Network Rail and ORR was the treatment of double counted corporation tax. Since this a largely technical point, first raised in 2007, it reflects on the participants that they could not sort it out.
- G.44 The other puzzling issue was why, having been put on notice of the issue by ORR in 2005, Network Rail did not produce any estimates of the steady state cost of renewals, which was a key driver of the amortisation allowance.
- G.45 The most critical relationship seemed to be between ORR and DfT, which appeared to apply a different emphasis on two key issues, unsupported debt and the allowable return.
- G.46 In the event, Network Rail has been unable to raise unsupported debt at reasonable costs. The written exchanges suggest that DfT was at the very least lukewarm on this proposal, although ORR told us that this was not in fact the case.
- G.47 There is also a sense from some of the interviews that not all of Network Rail's management was wholly committed to unsupported debt. If so, this could have added confusion to the process, and left ORR in a difficult place.
- G.48 On the allowable return, DfT clearly wanted the lowest possible number, and its formal responses were focussed on achieving this. It is not apparent why this should be the case, since the additional revenues from a higher return were to be kept within the industry to pay for capital which was required by the HLOS.
- G.49 Passenger Focus did not participate in the Financial Framework element of the review, although some issues, such as the ring fenced fund, had significant potential implications for passenger services.
- G.50 The contributions of TfL, PTEs etc were extremely light.
- G.51 One point of process is noteworthy. ORR issued consultation documents and received submissions, but it did not systematically report on its conclusions on the matters raised in the submissions before it moved on to the next stage of consultation. Thus users could have been left with the belief that a number of their points had simply been disregarded, which would have weakened their confidence in the process.

APPENDIX H: THE COMPARATIVE CONTEXT OF "INCENTIVE REGULATION"

The regulators have been concerned to ensure that mechanisms or incentives are developed, and put in place, such that:

1) Standards and quality of output are cost-effective (in principle standards should be set at a level where the incremental benefit is equal to the incremental cost of having the standard at that level). As governments set many of the standards, it is incumbent on the independent regulators (for reasons of consumer protection) to help ensure that those standards are set cost-effectively (see for example the cost of quality debate in the water sector, developed by Sir Ian Byatt soon after privatisation in 1989 when Director General of Water Services). In rail, this iterative process should involve ORR in this capacity as part of the HLOS/SoFA process;

2) Investments and operating expenditures are properly balanced and cost-effective from a long term, whole of life perspective (this is an important concern if each periodic review is considered rather in isolation from subsequent reviews). It requires a process for identifying the life-cycle options which span periodic reviews, and a logging up process to monitor the outcomes. Incentives should also be well-aligned to cost-reflectivity (e.g., distinguishing variable costs and fixed costs in 'volume' incentives, but taking account of both the short and the longer run effects on costs;

3) Management has sufficient 'corporate' disciplines on it to promote cost-effectiveness, thereby avoiding management succumbing to what the economist Hicks referred to as "the best monopoly profits are a quiet life". Well aligned incentives and disciplines on management are considered to be in place where there is a substantial equity shareholding at risk, i.e., shareholders bear the risk of economic losses if the management is ineffective and cannot control costs, there is the incentive for shareholders to earn 'economic profits' from management's outperformance of the regulator's price control settlement, and there is scope for competition for corporate control by way of takeover;

4) Penalties are in place for shortfalls in meeting standards and quality of output (and regulators have put in place guaranteed service standards for individual customers where appropriate). These penalties, apart from the financial penalties, include reputational damage to the management (and in the case of Network Rail, to some extent, the members) from the due process of exposure and accountability for non-performance. The potential role of such penalties has been given an added political impetus in rail recently when Lord Adonis, Secretary of State for Transport, questioned whether it would not be better to incentivise management with penalties for non-performance rather than bonuses for achieving the standards and outputs they are employed to meet;

5) 'Gaming' incentives by the regulated companies are controlled, both in terms of the information provided to the regulator as part of the price determination process, and in terms of determining after the event that 'economic' profit for shareholders has been legitimately earned (and examples of regulatory action include proposals on 'menu' regulation in order to give more incentive to the regulated company to declare what it expects to achieve by way of efficiency, and claw back of profits for the past period where variance analysis shows the company to have earned profit illegitimately, say by deferring funded investment which compromises the security of supply). Competition by way of competitive testing for inputs is often required by regulators to help overcome gaming and improve the quality of information;

6) Shareholders are protected from the directors' control over information, such that appropriate incentive remuneration packages can be designed for management directed towards improved efficiency and thereby higher economic profit (returns).

It is important to note that the price control set by the regulator is a benchmark for outperformance by the company, the incentive of which reveals improved efficiency to the regulator who can then pass on the benefits of that to customers at subsequent reviews. Regulators can occasionally lose sight of this in trying to 'second guess' the company (often by intrusive and expensive regulatory studies) and to show how close they can get to the prospective 'frontier of efficiency' (which is best left to companies to seek out). Clearly a balance has to be struck so as not to make it too easy for the company to outperform, but we note the trade-off between a lower regulatory target and the increase in the power of the incentive on the company to outperform. This tension is one reason for the development of 'profit-sharing' schemes within incentive regulation (but the issue of a price control being fundamentally an incentive benchmark, rather than being required to be an accurate regulatory assessment of the frontier of efficiency, were well addressed when the first electricity regulator, Professor Stephen Littlechild, indicated that he was reluctant to reopen the first electricity distribution price review in the early 1990s).

APPENDIX I: PR08 PROCESS MAP



GLOSSARY

ATOC	Association of Train Operating Companies
BCR	Benefit cost ratio
CAA	Civil Aviation Authority
Capex	Capital expenditure
CBA	Cost benefit analysis
CC	Competition Commission
CEPA	Cambridge Economic Policy Associates
CLG	Company limited by guarantee
CP3	Control period 3 (2004-2009)
CP4	Control period 4 (2009-2014)
CP5	Control period 5 (2014-2019
DfT	Department for Transport
EI	Enhancing Incentives
EWS	England Wales Scotland (Now DB Schenker)
FCD	First Consultation Document
FIM	Financial indemnity mechanism
FOC	Freight Operating Company
GARL	Glasgow airport rail link
HLOS	High level output specification
HMRI	Her Majesty's Railway Inspectorate
HMT	Her Majesty's Treasury
ICM	Infrastructure cost model
ISBP	Initial strategic business plan
LICB	Lasting infrastructure cost benchmarking
MIP	Management incentive plan
NR	Network Rail
OFGEM	Gas and Electricity Regulator
OFWAT	Water and Sewerage Regulator
OMR	Operating, Maintenance and Renewals
Opex	Operating Expenditure
ORR	Office of Rail Regulation
PF	Passenger Focus
Postcomm	Postal Services Commission
PR08	2008 periodic review
PR13	2013 periodic review
PTE	Passenger Transport Executive Group
RAB	Regulatory asset base
RIA	Railway Industry Association
RUS	Route utilisation strategy
SBP	Strategic business plan
SoFA	Statement of funds available
TfL	Transport for London
тос	Train operating company
TS	Transport Scotland
UIC	Union Internationale des Chemins de Fer