

**Periodic Review 2013:  
First Consultation –  
Network Rail's response**

**2 September 2011**



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# 1. FOREWORD

Network Rail is responding to the Office of Rail Regulation's (ORR) 2013 Periodic Review (PR13) initial consultation shortly before the Initial Industry Plan (IIP) is published and shortly after the Rail Value for Money (RVfM) Study published its final report.

## 1.1. Initial Industry Plan

The IIP will set out how the industry can deliver a more efficient and better value railway and how the railway can play a key role in driving sustainable economic growth. It will examine the key choices and options facing the funders in specifying the future outputs of the railway and the level of funding required. These choices will inform the development of the Governments' High Level Output Specifications (HLOS) and Statements of Funds Available (SoFA) to be published in the summer of 2012, as part of the PR13 process as well as the programme of franchise re-letting.

In the IIP, the industry will set out a plan that addresses the twin goals of a more affordable railway and one that drives sustainable economic growth.

## 1.2. The Rail Value for Money Study

On 19 May 2011 the RVfM Study published its final report. The RVfM Study challenges the industry to reduce costs without reducing the outputs delivered by the order of 20-30 per cent by the end of Control Period 5 (CP5), compared to 2008/09. The RVfM Study did not envisage a smaller railway but a more efficient one. Delivering this scale of cost reduction will require action from funders and regulators to create the necessary environment for the industry to succeed.

The rail industry is determined to take up the challenge posed by the RVfM Study to improve cost-efficiency. The industry has started to develop proposals to tackle costs and develop greater partnerships between train operators, Network Rail and their supply chains.

The industry has already started to respond to this challenge. Train operators and Network Rail are exploring the benefits of greater collaboration or partnership and a key enabler for this is Network Rail's current process of devolution of decision-making to a local level, providing greater focus and responsiveness to the needs of the train operators. Network Rail is also developing plans which will engage suppliers much earlier in the delivery of projects, providing greater scope for innovation and competition.

## 1.3. Rail Delivery Group

Another relevant recent industry development is the creation of the Rail Delivery Group (RDG). RDG is made up of the chief executives of the passenger and freight train operating owning groups and Network Rail. It has been established to provide leadership on cross-industry issues enabling a higher performing, more cost-effective and sustainable rail network for Britain's rail users and taxpayers.

RDG has identified key priorities for itself, focussing on areas where only such a group can effectively improve the value for money of the industry.

RDG will take ownership of key cross-industry initiatives that cannot be delivered without collective action across the industry. The IIP will identify the impact of such cost savings on industry affordability and what action is required from funders and ORR to enable this. Change and collaboration is required by all parties involved in the specification and delivery of the rail system.

The creation of RDG and the fact that the IIP is also about to be published indicates the extent to which the industry is currently undergoing considerable change. We consider, therefore, that it is vital to step back in considering how the regulatory framework should be cast in order to help deliver the changes that the industry needs at this crucial time.

#### **1.4. Our response to ORR's consultation**

This document is Network Rail's response to the specific questions raised by ORR in its consultation. Due to the level of detail in some areas of the consultation, it has necessitated a relatively detailed response from Network Rail.

We consider that it is important to consider the high-level industry objectives that CP5 should seek to deliver, before considering specific details of the current regulatory and contractual framework, and possible changes to it during PR13. In particular we believe that CP5 should be mindful of the following:

- the need to provide the necessary **shared incentives** to drive the right behaviours to deliver the full scale of cost savings identified in the RVfM review;
- allowing the industry to operate in a **more commercial** way;
- delivering cost savings by **developing partnerships** built on mutual success; and
- giving **greater flexibility** to train operators and Network Rail to determine the most cost-effective way of driving up revenue.

CP5, which is likely to run from April 2014 to March 2019, will be a critical time for the industry, as it responds to the challenges that it was set by the RVfM Study. The regulatory and contractual framework on which ORR is consulting will form a vital piece of the industry architecture at this critical time.

We welcome the opportunity to respond to ORR's consultation and look forward to engaging further with the wider industry on meeting the challenges together. We are content for this response to be published by ORR in its entirety.

## **2. INTRODUCTION**

### **2.1. Introduction**

This document contains Network Rail's response to ORR's PR13 initial consultation and considers the context, process, timetable and objectives of the review, and addresses specific questions raised by ORR.

In this introduction, we set out our views on the over-arching issues that are relevant for the review as a whole, which also inform our specific positions considered in detail elsewhere in the document.

The remaining part of this introductory section therefore considers the opportunities and challenges that are presented by PR13, while the rest of the response is structured to mirror ORR's technical annex to the consultation, as follows:

- Network Rail devolution and price control separation.
- setting outputs;
- improving incentives;
- financial framework;
- structure of charges; and
- further issues for discussion (including issues raised in the summary document that do not appear in the technical annex).

### **2.2. Context**

This is an important time for the GB rail industry. The RVfM Study observed significant changes in the orientation of Network Rail and train operators. Network Rail has already demonstrably committed itself to change, with a renewed focus on its customers' needs, and to greater levels of safety, efficiency, transparency and accountability. This commitment has already translated into direct changes 'on the ground', with significant powers already devolved, or to be devolved, to operating routes.

There is considerable appetite and momentum in the industry for meaningful and long-lasting change. PR13 offers the most significant opportunity to lay the ground work for this change than any since privatisation. In order to exploit the opportunities to support long-term value for money and improve the customer experience, the industry's contractual and regulatory framework needs to offer the support that is necessary to meet these objectives. We consider that PR13 can be the basis for supporting this change in the medium- to long-term.

### **2.3. From objectives to principles / outcomes**

In Network Rail's view, there needs to be a clear progression from high-level industry objectives, to the type of regulatory regime that best supports these objectives, and to measures that enhance the effectiveness of the regulatory regime.

The high-level industry **objectives** that should underpin this review are:

- Improving value for money and affordability of today's railway for both taxpayers and users; and
- Contributing to the achievement of sustainable economic growth.

The **key characteristics of the regulatory regime** that will most effectively deliver these objectives are:

- an output-based approach; and
- one that provides appropriate incentives.

The **effectiveness of the regulatory regime** can be enhanced by a number of measures that can be undertaken as part of PR13, as follows.

- Increased emphasis on 'competition' where appropriate, such as on-rail competition, contestability and transparency.
- The introduction of risk capital.
- Simplification of the current regulatory framework, with the aim of improving alignment of interest between Network Rail and our customers and suppliers.
- In particular, a flexible framework which supports the formation of alliances between ourselves and our customers, providing flexibility for the parties to determine trade-offs between relevant output requirements and/or to agree mutually beneficial cost and revenue sharing arrangements, for example.
- Effective regulation, comprising a single safety and economic regulator with enhanced responsibilities and capabilities to oversee the entire sector, and with a focus on revenue generation in addition to cost saving.
- Contractual reform including the separation of rights to object to network and station change (which should be criteria-based) from compensation (which should be a fair reflection of costs).

With these in place, outputs and incentives can be developed to drive behaviours and responses that can deliver the proposed high-level industry objectives, as outlined above. We consider that it is very important to adopt a **principles-based approach** to regulation in order to **facilitate key outcomes**, in particular:

- government focus on high-level outputs;
- industry focus on end-users (passengers and freight customers);
- industry ownership of solutions;
- network optimisation;
- whole-system optimisation;
- whole-life optimisation;

- investment to improve efficiency;
- innovation;
- bespoke arrangements;
- evolution of business structures by the industry to optimise efficiency; and
- growth through competition.

## **2.4. Approach to regulation and opportunities for change in PR13**

A key enabler of these outcomes is flexibility in both the franchise and regulatory regimes. This flexibility is necessary to enable the industry to collaboratively and collectively agree on different ways of delivering the required outputs, and to allow for mutually beneficial arrangements to be struck.

An output- and principles-based regime will be the most appropriate basis on which to facilitate such flexibility, since it will offer guidance as to where priorities lie. Stakeholders should be encouraged to work together to identify where funds and other resources can best be directed in order to reduce net costs, by removing unnecessary costs and by growing revenue.

We believe that ORR will have an important role to support this type of flexibility and to help support Network Rail and other stakeholders in pursuing the opportunities that are beginning to emerge in the context of industry reform. Additionally, ORR has a critical role in supporting the wider reform agenda to overcome some of the obstacles to realising the high-level industry objectives, which are described above.

We consider that franchise reform, in particular, will be a key enabler for meaningful and enduring collaboration with our franchised train operator customers. In its absence, and particularly in the scope of the 'no net loss / no net gain' provision, incentives for innovative collaboration and the interest of franchised train operators to embrace change are likely to be limited. This could have potentially damaging effects on the scope and size of the industry.

It is recognised that ORR does not have the powers to effect changes in the franchise regime, or to mandate the introduction of risk capital. Furthermore the totality of such changes may not necessarily be accomplished within CP5. However, we believe that ORR can proactively and collaboratively develop a regulatory settlement that facilitates these outcomes with the industry's support.

In our view, such a proactive approach to influencing change in the industry, and allowing a market- and incentive-based mechanism to emerge would be consistent with, and directly supportive of ORR's overall objective for PR13 set out in its consultation. We recognise that achievement of this objective will require a considerable effort across the industry.

## **3. NETWORK RAIL DEVOLUTION AND PRICE CONTROL SEPARATION**

### **3.1. Introduction**

Network Rail is devolving a significant amount of responsibility to the operating route level. We are also considering the case for letting an infrastructure management concession.

Devolution to the Scotland and Wessex routes went live in May 2011, while the remaining operating routes will go live in the second phase of devolution by the end of 2011. The transfer of responsibility to routes is both substantial in scope and material in nature, and means that route managing directors will assume a number of critical responsibilities.

These actions by Network Rail reflect our willingness to embrace change that will meaningfully support the objectives of both PR13 and long-term value in the industry.

The regulatory treatment of Network Rail devolution is a crucial issue for PR13. In particular, there is a need to ensure that the changes introduced in this context are consistent with the overall regulatory framework and industry reform.

### **3.2. Regulating separation to support customer interests and value for money**

ORR's consultation includes a number of questions about accounting separation and devolution. These issues are addressed below.

This section also considers some of the high-level issues that underlie the questions raised by ORR, and which will heavily influence the success of devolution in supporting customer service and wider industry objectives.

ORR's consultation lists a number of reasons that regulators may use as a basis for introducing price control separation<sup>1</sup>:

- control of monopoly power;
- control or preclusion of cross-subsidy;
- improve transparency, incentives and accountability;
- improve ability to undertake comparative competition;
- align with separate policy or funding responsibilities; and
- support contestability.

The consultation does not clearly define which one or combination of these reasons will guide ORR's deliberations in its treatment of price control separation. It would be most helpful if ORR could clarify its views.

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<sup>1</sup> ORR ( May 2011), 'Periodic Review 2013, First Consultation – annexes', paragraph B.16.



In Network Rail's view, the priorities that should guide implementation of price control separation are transparency, incentives and accountability, and to facilitate comparative analysis of the efficiencies of different routes. The case for controlling and precluding cross-subsidy is not obvious, since cross-subsidy between different regions is an important and hitherto accepted feature of the railway system in its current configuration. There is a need for very careful treatment of this in PR13.

Devolution, in particular, should support competition and contestability by allowing, for example, innovative route specific approaches to emerge.

Before significant changes are proposed, they should be clearly linked to regulatory objectives. We consider that ORR should also remain open to modifications of proposals where the feasibility of changes is affected by complexity and cost, since a number of unanticipated constraints are likely to emerge as the exercise progresses.

The need to modify costing systems in the context of separation is a significant undertaking, and pragmatic approaches should be explored where appropriate.

In line with ORR's aspirations for an output-focused regulatory settlement, we consider that our devolved business units should be regulated on a principles basis. This would allow us to develop governance arrangements for these units which comply with agreed principles, rather than have a specific form of governance imposed.

### **3.3. ORR's consultation questions**

#### **Background**

In Control Period 3 (CP3<sup>2</sup>) ORR set a single GB-wide price control. In Control Period 4 (CP4<sup>3</sup>), ORR introduced separate price controls for Scotland and England & Wales. The key features of this were:

- a separate determination of the outputs and revenue requirement for each geographic area;
- a separate RAB for each;
- retention of outperformance or underperformance in each; and
- separate fixed access charges (although variable charges were set at GB-wide levels).

However, respecting the fact that Network Rail is a single company that raises debt and manages risk on a GB-wide basis, ORR allowed the company to manage financial risk on a GB-wide basis.

As discussed above, Network Rail has embarked on a programme to devolve considerably more decision making to its ten operating routes<sup>4</sup>.

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<sup>2</sup> CP3 is the period from 1 April 2004– 31 March 2009.

<sup>3</sup> CP4 is the period from 1 April 2009 – 31 March 2014.

<sup>4</sup> Network Rail is also considering the feasibility of creating an eleventh 'Northern' Route, although this is not planned for implementation in CP4.

## Discussion

When Network Rail took over responsibility for managing the GB rail infrastructure from Railtrack, the first priority was to stabilise the company. That has now been achieved, and costs have been decreasing year-on-year. Devolution is the next logical step for the effective management of the company. We consider that devolution will be crucial to drive out further cost savings on top of those already achieved in CP3 and CP4, by empowering staff who have the best information 'on the ground' to make effective decisions. There will, however, be controls in place designed to avoid losing the economies of scale or synergies from certain decisions being made in a 'joined-up' way, and in managing those activities that are network-wide or are systems' activities centrally.

One of the advantages of devolution will come from the transparency of each route having considerably more responsibility for its income and costs. Routes will have improved clarity of the cause and effect of decisions that are made in their area. Decisions will translate into financial effects, which will be evident in route-based financial accounts.

While each of the routes will have considerable autonomy with many decisions being made by the route, activities will remain that are best discharged centrally. The default will be for decisions to be taken at the route level. Decisions will only be made at 'the centre' when they can be better made there. However, there will also be activities that are carried out jointly with by routes and Network Rail central teams.

Consistent with Network Rail's devolution to its routes, there could be merit in ORR introducing a form of separate price controls for each of the routes.

### *Separate Determination of Outputs & Revenue Requirements*

For CP4, fixed access charges were calculated so as to include the costs of specific route-based investments for each route. This has considerable merit as it led to fixed charges being charged to train operators who benefit from the investments. If separate price controls were to be determined for each route, as part of PR13, this approach could be extended to the revenue requirements and required outputs for each route.

### *Regulatory Asset Base*

In considering whether to introduce route-based price controls, it would be sensible to consider the case for splitting the regulatory asset base (RAB) into route-based RABs. The RAB represents the economic value of the business determined by ORR, and is an important input in setting the future cash flows that will accrue to Network Rail to fund capital investments. When ORR chose to introduce a separate price control for Scotland, it also decided to 'carve out' part of the RAB that was associated with funding capital investment in Scottish railway assets. This has worked well and has allowed Network Rail, train operators and funders in Scotland to understand the future cash flows associated with Network Rail's Scottish infrastructure. More work should be carried out in this area to consider the pros and cons of adopting the same approach for each of the devolved routes. Care should be taken, however, to avoid 'locking in' allocation of RAB too early when a route-based system is still maturing. The case for Scotland was always more straightforward given its stable geopolitical alignment from the start. The same cannot be said of the England & Wales routes. For example, consideration is currently being given to the creation of a Northern route although this is not planned for implementation in CP4.

The recent discussions about the potential transfer of responsibility of stations have considered how best to deal with the implications on Network Rail's RAB. In principle, it seems appropriate that relevant assets, associated debt and a portion of RAB should all be 'purchased' together, otherwise there could be risks of undue cross-subsidy between beneficiaries of different assets. An issue that will require further consideration is who should bear legacy costs.

#### *Outperformance or Underperformance*

In CP4, when ORR introduced a separate price control for England & Wales and Scotland, it decided that outperformance should be retained in Scotland. Whilst not seeking to undo this approach for Scotland, it may not be appropriate for separate retention of outperformance for each of the nine England & Wales routes. It is likely that ex post performance by these routes against their CP5 targets will be varied (i.e. some routes will outperform and some routes will underperform against targets). If ORR determined, as part of PR13, that any route outperformance had to be retained for sole use by the route that generated it, it would mean that Network Rail would be exposed to the financial risk of the underperforming routes, without being able to offset against others. This greater exposure to financial risk would result in the need to increase the company's risk buffer, adding cost to the industry. In our view, Network Rail should be allowed to manage the risks of its 'portfolio' of routes (for England and Wales), by centrally pooling outperformance and underperformance. This approach should have the effect of minimising the overall risk buffer that is required to finance the business.

#### *Separate Charges*

In setting fixed charges for each of the routes, it might be appropriate to base them on the degree to which each route is commercially viable. Varying GB-wide cost recovery from historic fixed costs in such a way would mean that the more 'commercial' routes would be more profitable than non-commercial routes, which might even be loss making. This would be a form of market-based pricing on which we would welcome further discussion with ORR during PR13.

There would appear to be considerable merit, from an operational perspective, in variable usage charges continuing to be the same across all of the routes. This is considered in further detail in Chapter 7.

#### *Transparency*

Network Rail is committed to improving the transparency of data; a theme that was noted in the RVfM Study. Having separate price controls for each of Network Rail's routes could aid clarity of outcomes for each route and also improve the transparency of each route's performance. Separate price controls for each route would also be a tool for any cost and revenue sharing arrangements between Network Rail routes and train operators, which are considered in more detail in Chapter 5.

We consider that there would also be considerable merit in train operators publishing more of their financial data in a format that could be combined with Network Rail's route data. This would greatly improve clarity of the financial performance of each part of GB rail, as well as supporting greater industry alignment. It would also allow for better planning, partnership arrangements and accountability at the operating route level.

### *Network Rail Debt*

The debt that Network Rail issues to fund capital investment in the railways is currently raised at a company wide level, with ORR determining the appropriate cost of capital. It would be administratively very complex to try and secure and raise debt at the route level. Furthermore, if debt was hypothecated to parts of the network (such as routes) it would be likely to increase the rate of return demanded by purchasers of the debt as there would be fewer assets and less revenue available to each tranche of debt, in effect reducing the diversification of risk to the debt holder. In addition, because the business unit against which debt is raised would be much smaller, the financial results would be more volatile. Higher volatility typically leads to returns demanded by debt holders being higher.

### *Risk Management*

In considering whether to introduce route-based price controls, the issue of how Network Rail would manage risk requires consideration. Theoretically, it would be possible to create totally separate price controls at the route level, as if each route were a separate legal entity. ORR would then regulate each of the routes separately with individual assessments of risks and a financial allowance (risk buffer) to provide each route with some margin for unforeseen events. ORR would set these individual risk buffers for each of the ten routes. This would lead to the aggregate risk buffer being higher than if Network Rail were able to manage the risks of each route together as a 'portfolio', as it currently can. Managing risk on a portfolio basis reduces the company's overall exposure to risk.

### **Network Rail position**

Consistent with devolution we consider that there would be considerable merit from extending much of the same price control approach that ORR adopted for CP4 for England & Wales and Scotland, to all ten of Network Rail's devolved routes. We believe that much of ORR's rationale that it applied for CP4 when it introduced the Scottish price control, still holds.

However, we do not think that it would be appropriate for outperformance by a specific route to be 'ring fenced' to that route, as is the case in Scotland. Outperformance 'ring-fencing' would restrict Network Rail's ability to manage variations from one route to another and would be likely to necessitate a higher risk buffer for the company. A higher risk buffer would mean a higher cost to the industry. We do, however, recognise that the approach that ORR took with regards to retaining outperformance in Scotland in CP4 should not be reversed.

We consider that ORR should make separate determinations of the revenue requirements for each route. We also consider that this could support the introduction of cost and revenue sharing arrangements between Network Rail and train operators, which are discussed further in Chapter 5.

In relation to outputs, and as discussed in Chapter 4, we see merit in setting some outputs at a route level, although within reason there should be flexibility to vary outputs across routes, particularly where outputs are influenced by factors outside of the route geography. Network Rail is strongly of the view, however, that, inputs should not be set at the local level since this would constrain efficient delivery across the network.

As they are currently, fixed access charges should be calculated separately for each route and operator (this is further considered in Chapter 7). There could be merit in setting fixed access charges based on the degree to which Network Rail's fully allocated historic costs can be recovered on each route.

As was the case for CP4, we consider that variable access charges should be set at GB-wide levels so as to maintain ease of interoperability between routes. Altering the level of variable charges at what would be fairly arbitrary route boundaries would be complex, expensive and not be linked to fundamental cost drivers. There could be merit in variable charges being set at different levels depending on the type of route (such as primary, secondary or freight, for example). However, much more work would be needed in this area given the considerable complexity this would introduce to the industry.

Whilst there could be merit in, eventually, moving to separate RABs for each route we consider this would be premature in CP5. The routes will, potentially, evolve over the next few years as Network Rail optimises the new arrangements. For example, we are currently considering the case for the introduction of a Northern route (although this is not planned for implementation in CP4). We believe that splitting the RAB by route at this stage, would prematurely ossify the system and create a new constraint to whole-system optimisation.

With regards to Network Rail issuing debt, we consider that for CP5, it should be raised at the company wide level. Consistent with this, we consider that ORR should determine a single cost of capital for the company for CP5.

## 4. SETTING OUTPUTS

### 4.1. Introduction

One of the main elements of the periodic review process is determining the outputs that Network Rail needs to deliver in the context of the Governments' priorities and the public financial support made available. Network Rail considers that output-based regulation is the most appropriate and practical approach to establishing the requirements for PR13 and regulating their delivery.

At the same time, since the ultimate goal is broader than simply having Network Rail reach particular targets, the structure of outputs should be determined by first considering the high-level industry objectives, i.e. improving the value for money and affordability of today's railway and contributing to the achievement of sustainable economic growth. The regulatory regime also needs to provide appropriate incentives such that Network Rail, in partnership with other industry players, can deliver these objectives at the lowest net cost and in the most effective way.

We consider that instrumental to supporting a common set of objectives between train operators and Network Rail, is the consistency of outputs between those specified in the HLOSs, the periodic review process more generally and the franchising process. This is considered in greater detail in section 4.2 below.

A further point to note is that in order to deliver efficiently, Network Rail and its suppliers need to be able to plan with a reasonable degree of assurance. It is therefore essential that the approach to 'Early Start' (for renewals and enhancements) can be extended to cover a wider range of expenditure in the first two years of CP5, than was the case in PR08. Early expression of outputs by government, with appropriate support from ORR, is very important to provide certainty to industry.

### 4.2. ORR's consultation questions

#### Background

During PR08 Network Rail set out its view that outputs should be challenging but set at a level which still encourages outperformance and allows flexibility for responding to changing circumstances and creates the right incentives to continuously innovate<sup>5</sup>.

In its October 2008 determination, ORR stated that "*a core part of PR08 has involved reviewing and improving the scope and definition of the outputs Network Rail needs to deliver*"<sup>6</sup>. Network Rail's output obligations for CP4 were refined to include:

- top-level regulated output obligations which ORR specified its October 2008 determination; and
- disaggregated output obligations which Network Rail was required to fully define in its CP4 delivery plan.

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<sup>5</sup> Accessible at: [http://www.rail-reg.gov.uk/upload/pdf/pr08-op-Network\\_Rail-311007.pdf](http://www.rail-reg.gov.uk/upload/pdf/pr08-op-Network_Rail-311007.pdf)

<sup>6</sup> Accessible at: <http://www.rail-reg.gov.uk/upload/pdf/383.pdf>

Network Rail was set outputs in relation to safety, train service performance, capacity, network capability, station condition and network availability.

ORR's consultation states that as part of PR13, it will define what Network Rail will be funded to achieve in CP5, in particular delivery of the governments' HLOS requirements.

The consultation sets out that it will, following the publication of the HLOSs, consult on the structure of the outputs that Network Rail should deliver, including the role of the company in delivering the HLOSs and whether any further output obligations should be set beyond the HLOS requirements.

At this stage ORR's focus is on issues of principle, which are discussed, below, in further detail.

## **Discussion**

### *Consistency between HLOS and franchise outputs*

While ORR's consultation does not raise this issue, as highlighted in the introduction to this chapter, Network Rail strongly believes that consistency between the HLOS (and periodic review process) and franchise outputs will be key in the delivery of a common set of system outputs as well as individual organisational obligations. Network Rail notes that, currently, a key difficulty in achieving such consistency is the different timings of when outputs are specified between the periodic review process and the individual franchise re-lettings, as well as the different planning horizons involved.

Network Rail considers that one option to achieve this consistency could be to develop a more transparent, collaborative and iterative framework, within which Network Rail's and individual franchised operator's (and the franchised operators' as a whole) output obligations could be continuously reviewed for consistency, and with flexibility to flex outputs to maintain alignment.

Network Rail believes that this option would allow governments to determine outputs partly through the franchise process and partly through the HLOS process. Using the former would require the implications for HLOSs / SOFAs to be 'logged up' on a transparent and rolling basis. In turn, we consider that this could enable the periodic review to focus more on the efficient cost of delivering pre-determined outputs. There would, however, be merit in designing the framework so that it also provides flexibility to procure outputs during the periodic review process.

This option could also allow additional outputs to be bought during control periods, with the impact on the HLOSs / SoFAs updated by way of increment to the transparently recorded versions. Conversely if governments no longer wanted to buy an output(s) then the framework could be designed to accommodate this. However, we believe that a mechanism to modify contractual commitments to operators would merit consideration, along with a mechanism to change franchise operators' commitments consistent with this. Under this option, consideration would also need to be given to the management of non-franchised commitments.

### *Approach to defining outputs*

Network Rail supports the specification of output-based measures. We consider that outputs should be framed to reflect funder objectives and customer priorities, and the high-level objectives for the industry. Therefore, we believe that outputs need to be considered in the context of what the future railway should look like and the relevant key public policy questions. ORR then needs to ensure that the regulatory framework provides the appropriate incentives for Network Rail and the industry to deliver these outputs. The regulatory framework should provide flexibility and encourage collaboration between stakeholders to identify the least cost, whole-life way in which to meet these outputs. However, we consider that it is important that a balance between government and wider stakeholder objectives is maintained.

The IIP will explain the role that rail can play in meeting the needs of funders and users; the opportunities to improve the value for money and affordability of today's railway; and the choices facing funders as to how rail can contribute to the achievement of sustainable economic growth. In our view, it is important that prioritisation of investment options reflects this, and governments will ultimately need to decide on the outputs they want to buy. The IIP will be an important starting point for discussions with governments and ORR on the priorities for CP5, including the setting of outputs.

### *Outcome, output and input regulation*

While we consider that we should be planning for outcomes, we can only sensibly commit to the delivery of outputs. User satisfaction provides an example of why we would be concerned with outcome-based regulation.

Clearly, user satisfaction is a key outcome that should be measured, and there is industry recognition that action plans for improvement must be developed. However, there are some factors that influence satisfaction which are beyond the industry's control such as passenger fares policy, for example, which impacts on price and the perceived value for money of the service. Therefore, we would argue that while user satisfaction should be monitored, it should not be specified as a regulated target.

Network Rail notes that ORR's consultation is not entirely clear what the parameters for setting and monitoring outcomes would be, and what it would mean for the funding settlement. Network Rail considers that clarity in this regard is particularly important. At this stage we consider that outcome-based regulation may be too subjective and difficult to understand, in particular the input / output relationship.

ORR's consultation notes that an alternative approach could be to specify inputs. We consider that ORR's focus should be concerned more with the outputs produced than the inputs used to produce those outputs. Flexibility in this area is important, since we believe that it will avoid placing an undue constraint on the efficient delivery of outputs.

### *Number of outputs*

A variety of outputs may be valued by users, but it may also increase the challenge of fulfilling any one particular output measure. We consider that too many regulated outputs will jeopardise the clarity of intent, add complexity of delivery and potentially increase industry costs. We therefore believe that clarity on priorities for CP5 is very important, along with clarity on the consequences for non-delivery of outputs.



### *Metrics for monitoring outputs*

Under the current regime, there is a need to constantly balance outputs such as punctuality, capability, journey time and frequency of service, for example. This requires important trade-offs to be made. In principle, metrics could be specified for each of these although we believe that they would be imperfect and subject to variation which would result in distortions, especially since trade-offs need to be made at many levels across several organisations.

Rather than develop increasingly more metrics to monitor performance against output targets, we consider that there is merit in simplifying the current regime and creating better alignment of interest through a regulatory framework which supports alliance arrangements (which are considered further in Chapter 5). This would provide flexibility to Network Rail and its customers to determine trade-offs which suit individual circumstances, recognising that it is not a case of 'one size fits all'.

### *Whole-system outputs*

This section has already discussed the importance of consistency between the HLOSs and franchise outputs in order to deliver a common set of system outputs. In relation to the specification of whole-system outputs, Network Rail considers that they better reflect what is important to funders and users and would also be more consistent with industry reform.

However, for effective regulation, it is necessary that the outputs required are controllable by the regulated firm, and where appropriate, support cooperation and collaboration. Significant risk could be created if performance against an output measure is not fully or only partially at the discretion of the relevant party, or if there is uncertainty regarding who should deliver particular outputs. It would also be important to be able to determine the impact of the actions of third parties on outputs, as is currently the case with performance, for example.

In relation to this, the delivery of projects which change the capability of the network currently requires formal consultation and stakeholder agreement through the network change contractual process. In recent years, this process has proven to be increasingly difficult to deliver without stakeholders objecting. If these objections are not resolved, serious risks to the successful implementation of the project in terms of extended timescales and increased costs are created.

An important point on whole-system outputs is therefore the need for the Network Code to separate blocking rights from compensation, which will itself be an important enabler to facilitating system change. Network Rail considers that the sharing of any resulting benefits could be managed separately either through bespoke cost and revenue sharing arrangements (which are discussed in further detail in Chapter 5) or other arrangements introduced during PR13, but the underpinning regime should remove existing 'ransoms' while providing for fair compensation.

It is also very important that if more use is made of whole-system outputs in CP5, that there is consistency with the incentives regime to ensure that the desired behaviours are framed around the defined industry outputs.

### *Devolved outputs*

In the context of Network Rail devolution, Network Rail considers that there could be merit in setting some outputs at route level, although within reason it believes flexibility to vary outputs across routes is important, particularly where they are influenced by factors outside of the route geography. In relation to performance, for example, as with the management of a portfolio of risk from a financial perspective, trade-offs in performance may be required between different routes. Without the introduction of more tolerance for meeting devolved output targets, the total cost of the risk buffer would be higher.

It is also important to consider how devolved outputs would be consistent with customer reasonable requirements. For example, the West Coast franchise encompasses two operating routes: LNW and Scotland. The operator is likely to be concerned with end-to-end performance, as opposed to performance on one particular route.

Network Rail also considers that it is important to be clear on the type of regulated measures that would be appropriate for disaggregation. For example, we believe that devolved inputs would not be appropriate, since this would unnecessarily constrain efficient delivery across the network and increase costs. We do, however, recognise the case for transparency of inputs.

We consider, therefore, that further discussion is required as to which outputs would be suitable to specify at a route level, and how they would interact with other aspects of the regime such as customer reasonable requirements, for example. We look forward to engaging further on this matter during PR13.

### *Specific safety requirement*

Safety is fundamental to everything that Network Rail does. We are currently required to meet legal and statutory obligations, in addition to a three per cent reduction in CP4 (specified in the HLOS) in the risk of death or injury to passengers or rail workers from accidents on GB rail.

Network Rail considers that its legal and statutory obligations are sufficient in providing a clear safety objective, and that a regulated safety measure for CP5 is not required. However, we are developing proposals to reduce risks at level crossings and will be seeking explicit specification and funding for this. We are also currently carrying out work to improve safety culture within Network Rail.

### **Network Rail position**

Regulating on the basis of outputs gives us flexibility as to how these are achieved so that we can manage our business efficiently and respond to changes in circumstances, and the developing needs of its customers and funders. At the same time, it also provides clarity on what is expected as part of the periodic review.

Consistency of outputs between those specified in the HLOSs, the periodic review process more generally and the franchising process will be critical in supporting a common set of objectives between train operators and Network Rail.

At a principles level, we support focussed output-based regulation. While we should be planning for outcomes as an industry, we can only sensibly commit to the delivery of outputs. The current output-led approach should therefore be maintained, but

wider industry objectives should be considered when specifying these outputs to ensure that they reflect what funders and customers want from the railway.

We believe that specified outputs need to be clear and attainable so that the incentive framework can be designed to encourage Network Rail and the rest of the industry to reach these targets. Importantly, we also consider that there would be merit in simplifying the current regime, to provide us and our customers with the flexibility to determine trade-offs between various output metrics on a case-by-case basis.

We support the use of whole-system outputs, particularly in the context of industry reform. The discussion, above, sets out some important considerations to ensure that a framework designed in this way would be effective. We would also support the use of some route-based outputs, although we consider that the regime would need to recognise those outputs that are influenced by factors outside of the route geography, and therefore allow trade-offs between routes to be made where appropriate.

We do not consider that a specific safety target is required, given legislation is sufficient by itself in requiring Network Rail to take action in this area. Work is currently taking place to improve safety culture within Network Rail.

As highlighted in the introduction to this chapter, Network Rail sees early expression of outputs as critical, and that the approach to 'Early Start' (for renewals and enhancements expenditure) should be extended to cover a wider range of expenditure in the first two years of CP5, than was the case in PR08. Both are key in providing certainty to industry, and allowing us and our suppliers, in particular, to plan with a reasonable degree of assurance.

The IIP will be published shortly. Using this as a platform, we look forward to working with industry to further inform discussions on CP5 outputs, in particular in the lead up to ORR's February 2012 Advice to Ministers, and the Governments' July 2012 HLOSs.

## 5. IMPROVING INCENTIVES

### 5.1. Introduction

The incentive regime is a key component of the overall regulatory framework. While there is significant scope to improve this regime in the rail industry, only small improvements in outcomes can be expected to flow from modifications to existing arrangements, since they may not align incentives along the entire value chain. This chapter considers the big-picture issues, but also offers detail on suggested changes to existing incentives and potential new ones that ORR considers in its consultation.

ORR is reviewing a number of incentive mechanisms as part of PR13 and has also looked at the incentive tools used in other regulated industries to determine whether best practice can be adopted from elsewhere. It is not clear from the consultation, however, how ORR sees these individual mechanisms fitting into the broader incentive framework and ongoing industry reform. Network Rail believes that ORR should also consider whether the benefits of introducing new measures outweigh the associated costs.

More generally, ORR has suggested the use of market-based mechanisms and promotion of competition<sup>7</sup>. ORR considers that market-based approaches are likely to be more responsive to the changing needs of customers than pure regulatory mechanisms, and can therefore help Network Rail achieve the best outcomes for customers. Network Rail believes that ORR should ensure that market-based mechanisms reflect the constraints that affect the operation of incentives in the rail industry, such as the lack of risk capital, the financial indemnity mechanism and the significant government subsidy. The regulatory framework should equally support Network Rail to pursue new value-enhancing revenue opportunities in CP5 and beyond.

ORR's decisions on the incentive framework will also have implications for other areas of PR13, and should, therefore, be considered alongside the financial framework, devolution/price control separation, specified outputs and the structure of charges.

In particular, there is a need to relate individual incentive mechanisms, as well as the overall package of incentives, to the risk/reward balance that confronts Network Rail. There are important links between how different incentive mechanisms affect Network Rail's exposure to systematic risk, and how its cost of capital might change.

### 5.2. Designing incentives to support a whole-system approach

#### *Current incentive mechanisms*

There are various existing incentive mechanisms in the rail industry which are generally considered to be successful in facilitating the achievement of the desired outcomes. For example there have been significant improvements in safety and operational performance over the last decade and a corresponding rise in customer satisfaction with punctuality.

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<sup>7</sup> ORR (May 2011), 'Periodic Review, First Consultation', paragraph 9.

Network Rail does, however, consider that there is scope to improve the effectiveness of the incentive framework as part of PR13, particularly in light of current industry reform. We consider that reform of financial incentive mechanisms, by enabling engagement with our customers, has considerable potential to improve performance. It may also be beneficial to consider non-financial incentives if relevant and practical.

*What are the enablers and blockers of achieving industry objectives?*

Incentive mechanisms must be designed to encourage Network Rail, in partnership with other industry players, to achieve industry objectives such as value for money, customer focus, efficiency, revenue growth and whole-system / whole-life outcomes. There are enablers that can be built on and blockers that can be removed or minimised, in order to facilitate the achievement of these objectives in PR13.

Network Rail believes that the introduction of risk capital could act as a key enabler for the proper functioning of market-based mechanisms, as well as being an enabler for financial incentives such as cost control. We consider that it is important that the regulatory framework and associated incentives are developed to facilitate and support its introduction in CP5.

The complexity of the industry could continue to pose challenges, however, since incentives might not be aligned between various players, thus impacting the ability to take a whole-industry approach. This can be a significant barrier if delivery relies on whole-industry engagement, as it currently does in the areas of performance and cross-industry projects, for example.

We have started to make changes to our structure through our devolution programme, and are implementing / considering other changes which are discussed in this chapter. We consider these changes will better align incentives between industry players. ORR should ensure that the incentive package is consistent with ongoing industry reform, with incentives designed for separated entities as well as for the mechanisms that remain with the 'centre.' We will continue to engage on this during PR13.

*Towards a whole-system approach*

It is important that the incentive framework is considered as a whole. In order to support a whole-system approach, the incentive package being proposed for PR13 must be internally consistent. Trade-offs between different incentives should be informed by different priorities attached to relevant objectives.

Network Rail considers that the regime should not be made more complex. We believe that the focus should be placed on strengthening existing incentives, in the context of a clear framework, rather than creating new ones unless these can be demonstrated to deliver benefits in excess of their costs. If it is necessary to introduce additional incentives, they should be clear, transparent, understood by those affected by them and should minimise unintended consequences. There are also some incentive mechanisms, such as Schedules 4 and 8 which broadly work well and may benefit from only minor changes rather than radical overhaul.

We would agree that the current incentive framework needs to be improved as part of the periodic review. We consider that the onus of the framework should be on whole-industry involvement in delivery of outcomes, and for Network Rail and train operators to work together to reduce costs at the route level.

For the changes in incentive mechanisms to be effective, we consider that it will be necessary for ORR to engage with the Department for Transport (DfT) and Transport Scotland on franchise reform, particularly in relation to the 'no net loss / no net gain' provision. We also consider that flexibility within the franchise regime is very important, which we believe will allow us to work with franchised train operators to agree different ways of delivering what is required.

As a number of refranchises are due to take place, there is a strong opportunity to enshrine such reforms in the agreements. If these changes are not made, the extent to which other reforms can align incentives and enable the delivery of whole-industry outcomes is unclear.

ORR has also expressed its intention for the industry to increasingly rely on competition and contestability. This chapter discusses Network Rail's plans to introduce contestability into parts of the value chain, in further detail.

#### *Towards a whole-life approach*

Network Rail considers that it is also important that the regulatory framework supports a whole-life approach, and should incorporate a mechanism which incentivises and facilitates investment for the long-run benefit of the network, thus reducing future costs. An important related issue is the approach to 'Early Start' which is discussed in Chapter 4. Network Rail strongly believes that being able to plan with a reasonable degree of assurance will assist in supporting a whole-life cost focus.

#### *Summary*

PR13 can lead to substantial changes in the incentive framework so that users experience a seamless, cost-effective railway. This can be accomplished by making a range of changes to the regime, while considering the interfaces between industry players and the various incentives. Since ORR does not control all the levers that relate to all industry stakeholders, it will be important that it outlines how it will approach these issues in its November 2011 consultation on detailed incentive issues and proposals. We consider flexibility within the franchise regime to be particularly important, as we believe that this will support us and franchised operators to agree and develop different ways of delivering what is required.

We consider that ORR should develop a shared vision for the review with industry stakeholders, and an agenda for the steps to be taken ahead of the final settlement. We certainly have an important role to play in this regard, and our desire to embrace change is demonstrated by recent initiatives and our approach to the review. Our responses to the specific consultation questions are included in the rest of this chapter.

### **5.3. Financial incentives on Network Rail to improve efficiency**

#### **Background**

ORR's consultation considers existing financial incentives on Network Rail, as well as the possible introduction of others, that are aimed at improving financial efficiency. These include rolling incentive mechanisms, the possible introduction of menu regulation, Network Rail's Management Incentive Plan (MIP) and contestability. Each of these is considered in turn, below.

## Rolling incentive mechanisms

ORR notes that the price control framework can affect Network Rail's incentives to reduce costs in two important ways<sup>8</sup>:

- the balance of incentives over time; and
- the balance between different types of expenditure.

The balance of incentives over time relates to the possibility that Network Rail may have incentives to (inefficiently) undertake cost savings earlier in a regulatory control period rather than later, in order to retain the benefits of saving for a longer period.

A solution to this incentive, and one used in other regulated sectors, was put in place by ORR in PR08 in the form of a rolling capital expenditure incentive for renewals and enhancements that aims to equalise incentives over the control period.

ORR is also exploring the extent of any bias towards capital expenditure solutions in circumstances where operating expenditure solutions may be more appropriate. It is investigating whether any bias (if it exists) is a consequence of the regulatory incentive framework, or other factors, such as 'company culture' or incentives on other stakeholders (such as government).

In PR08, ORR reduced the incentive rate on capital expenditure from 100 per cent to 25 per cent, in response to concerns that Network Rail was overly exposed to capital expenditure overspend. The intended effect was to dampen any tendency to favour capital expenditure solutions over operating expenditure solutions.

ORR argues that it is appropriate to equalise the incentives on operating expenditure and capital expenditure (which Network Rail understands to mean that there should be no bias in favour of one form of expenditure over the other). ORR considers that incentives could be based on total expenditure, rather than on capital expenditure and operating expenditure separately, although notes some issues with this kind of approach.

## Menu regulation

Menu regulation is an incentive mechanism that is intended to encourage regulated companies to accurately forecast costs, while still allowing for the possibility of outperformance to be rewarded. It attempts to overcome a number of issues typically confronted by regulators:

- the problem of asymmetric information between the regulated company and regulator;
- facing a trade-off between the priority regulators attach to productive efficiency and cost-reflective charges; and
- the regulatory burden involved in evaluating companies' capital expenditure plans.

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<sup>8</sup> ORR (May 2011), 'Periodic Review, First Consultation – annexes', paragraph D.24.

The basic premise of menu regulation is to offer a number of regulatory ‘contracts’ relating to the scale of capital expenditure that the regulated firm may choose at its discretion, taking on ‘risk’ of the consequences for its subsequent performance against the terms of the contract.

ORR’s consultation notes that the Office of Gas and Electricity Markets (Ofgem) and Office of Water Services (Ofwat) have used versions of menu regulation, and that the Nelson review recommended that ORR should examine menu regulation as part of the PR13 review process<sup>9</sup>.

## **MIP**

ORR states in its consultation that it would expect any future MIP for CP5 to reflect PR13 output requirements, to ensure that Network Rail’s incentives are aligned to those of the periodic review.

## **Contestability**

The consultation notes that increasing contestability for infrastructure expenditure could improve incentives for efficiency. ORR considers various ideas, including:

- the transfer of some elements of infrastructure expenditure to train operators, who would competitively bid for the level of expenditure as part of the franchising process;
- putting a greater proportion of Network Rail’s expenditure out to competitive tender; and
- putting Network Rail expenditure out to competitive tender at an earlier stage during project development.

ORR indicates that it plans to do further work during PR13 to identify whether it can increase the contestability of Network Rail’s expenditure, to improve incentives for efficiency. This work will be informed in part by its market studies programme and emerging changes to industry structure.

## **Discussion**

### **Rolling incentive mechanisms**

We consider that the regulatory framework needs to be supportive of us making the appropriate trade-offs between capital expenditure and operating expenditure decisions. This should be done in the context of minimising whole-life costs for the industry. So as to allow the appropriate decision to be made, we believe that the regulatory framework should favour neither. Of course, ORR has a legitimate role to ensure best practice in this area, although we consider that further clarity about how it discharges its responsibilities would be very helpful to avoid confusion, particularly in relation to RAB additions.

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<sup>9</sup> ORR (May 2011), ‘Periodic Review, First Consultation – annexes’, paragraph D.34



In considering whether a bias currently exists, there is merit in considering some of the other incentives which influence the balance between different forms of expenditure, which are not explicitly set out in ORR's consultation:

- ORR's role in scrutinising capital expenditure proposals during the periodic review process, and the degree of collaboration with other industry players in developing short-, medium- and long-term expenditure decisions;
- the role of the existing incentive mechanisms overseen by ORR that affect capital expenditure, including the outperformance incentives introduced in PR08; and
- ORR's efficiency and benchmarking regime, which has a direct impact on the balance between types of expenditure.

We consider that these mechanisms are broadly effective, and that any further initiatives aimed at influencing the expenditure balance should proceed from an analysis of the specific issues with existing arrangements.

We note the issues with total expenditure-based incentives raised in ORR's consultation. ORR highlights that this kind of mechanism would require the company to make trade-offs between recurring operating expenditure and one-off, lumpy capital expenditure. Academic literature also suggests that modelling all expenditure types as a single total expenditure category could lead to losses in statistical efficiency compared to approaches that separately model cost components<sup>10</sup>.

### **Menu regulation**

ORR's consultation document identifies two ways by which menu regulation could be useful<sup>11</sup>:

- it would reveal how Network Rail is incentivised, for example, by showing its appetite for high-risk, high-reward options, or for low-risk, low-reward options; and
- it would reduce the risk of capital expenditure overbidding.

In relation to the first point, there are a number of other considerations that would be relevant to understanding Network Rail's appetite for risk and return, and if menu regulation were to be introduced, its appetite would be likely to depend closely on the parameters of the mechanism. This could in turn limit ORR's ability to draw more general conclusions about Network Rail's incentives in this regard.

The second claim also depends on the design of the system, since it is possible to conceive of menu regulation mechanisms which incentivise companies to submit bids that are in line with ORR's estimate, rather than Network Rail's own best internal estimate. This may remove the risk of overbidding, but does not necessarily improve the efficiency of capital expenditure regulation.

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<sup>10</sup> Horncastle, A. and Kumbhakar, S. (October 2010), 'Improving the econometric precision of regulatory models', *Journal of Regulatory Economics*, 38(2), pp. 144–166.

<sup>11</sup> ORR (May 2011), 'Periodic Review, First Consultation – annexes', paragraph D.37.

We consider that the applicability of menu regulation may also be limited, given the structure of the industry. In general, if designed effectively, menu regulation could offer a more powerful set of incentives than a 'single regulatory offer', both with respect to forecasting capital expenditure requirements reasonably, and in delivering required outputs efficiently. Currently, however, comparator information for the purposes of establishing a baseline to represent ORR's view of 'reasonable' capital expenditure is unavailable.

## **MIP**

Network Rail agrees with ORR's statement that any future MIP in CP5 should take account of the PR13 output requirements. We recognise that incentives on the company's Executive need to be consistent with regulated targets, and will continue to engage with, and provide assurances to ORR, in relation to the development of our incentive plans.

## **Contestability**

We note the comments ORR makes in relation to contestability and at this stage of the review would make a number of observations.

In relation to the contestability of infrastructure projects, Network Rail has expressed its desire to introduce contestability, which, as a result of operating in competitive markets, we believe will provide powerful cost reduction pressures and benchmarking opportunities to further drive efficiencies.

We are currently considering whether to let an infrastructure concession, and if so, where on the network it would be appropriate to do so. We have also developed plans to engage with suppliers much earlier in the delivery of projects, which we consider will provide greater scope for innovation and competition.

It is very important, therefore, that ORR's work during the review takes account of the changes described, above, that Network Rail has already started or is planning to make.

These plans indicate our desire to embrace competition. We would stress, however, that the regulatory framework needs to allow and support us to compete in other markets, that may not be related to 'core' railway activities. We consider that this is necessary to deliver the full benefits of competition, since it will allow us to 'test' ourselves and learn from others. Chapter 6 proposes some possible changes to the current regulatory ring-fence provisions<sup>12</sup> for consideration during PR13, which we believe could allow us to act in a more commercial manner.

Furthermore, as we open up more of the value chain to competition, it will be increasingly the case that Network Rail is operating in markets where the extent of its monopoly powers is reduced. There could be merit, in the future, in assessing whether there is a continued need for regulation in the competitive parts of the value chain, and whether the extent of some regulatory safeguards could be reduced.

In relation to the transfer of franchised stations, by the end of CP4 Network Rail will have transferred responsibility for over half of the portfolio to franchised train operators. While we support this transfer of responsibility and recognise the benefits,

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<sup>12</sup> As set out in licence condition 4 of the Network Licence.

there is a question as to whether transfer of responsibility for the entire stations portfolio would increase contestability, since groups of stations would simply be transferred to the relevant franchised train operator. We therefore raise for discussion whether there could be merit in Network Rail retaining responsibility for some franchised stations, which could assist with benchmarking activities. We consider that this is not a question for franchises which are up for renewal in the next few years, but a potential longer-term question for consideration and discussion.

In relation to Network Rail's managed stations, and as discussed in the single / dual till discussion in Chapter 6, we strongly believe that they should remain Network Rail's responsibility, since they form an integral part of the railway network where track and property are closely interrelated. However, we would hope to be able to work collaboratively with train operators to meet passenger needs as efficiently as possible.

Network Rail is interested in ORR's work on the market studies programme, although would stress again that this work needs to take account of our current and future initiatives that are aimed at increasing contestability.

### **Network Rail position**

This section has considered the specific financial incentives to improve efficiency that ORR discusses in detail in its consultation.

In relation to rolling incentive mechanisms, we believe that it is very important for the regulatory framework to support us in making capital expenditure and operating expenditure decisions that are aimed at minimising whole-life industry costs. Clarity on certain issues during PR13, particularly with regards to allowed RAB additions, would be very helpful.

As to whether bias between different types of expenditure currently exists, we consider that regulatory scrutiny during the periodic review process is fundamental and that this has worked well to-date. In addition, there are other incentives on the company that influence this balance, which are discussed above, and we consider these to be broadly effective.

Investment plans are also reviewed at the company level, through the Investment Panel process for example, which helps to ensure that proposed investment is appropriate.

In relation to balancing incentives over time, we see a continued case for the rolling capital expenditure incentive scheme in PR13, although there may be merit in reviewing its detailed workings during the review.

At this point, the case for introducing menu regulation does not appear strong, and we support ORR's 'minded-to' position to not introduce it as part of PR13. This is not to say that the concerns that motivate regulatory interest in menu regulation are irrelevant, but rather that they could best be pursued by other means.

In relation to the MIP, as discussed above, we agree with ORR that any future MIP should reflect PR13 output requirements.

Our response has made various observations in relation to contestability, but importantly, we consider that the proposals in ORR's consultation and its further work during PR13 will need to take account of the initiatives already underway, which are set out in the discussion section above.

As discussed above, we consider that as we embrace competition, we also need to be able to compete fairly, which will allow us to 'test' ourselves and learn from others. We believe that there is a strong case, therefore, to review the current regulatory ring-fence provisions, with the aim of supporting Network Rail to compete in other markets, consistent with our value chain becoming more competitive.

While this section has considered specific aspects relating to financial incentives to improve efficiency, we would welcome further engagement with ORR on all aspects of financial incentives in the lead-up to its November consultation on incentives, and during the review as a whole. The beginning of this chapter considered, in particular, the introduction of risk capital, which we consider would act as a powerful incentive on the business to improve financial efficiency.

## 5.4. Financial incentives to improve reliability: Schedule 8

### Background

Network Rail welcomes ORR's underlying level of support for both the existing passenger and freight regimes. This response discusses in turn:

- **key principles** of passenger Schedule 8 – its purpose, the liquidated sums nature of the regime, and the mechanisms for setting payment rates – and comments on the freight regime;
- the **broader issues raised by ORR** in its consultation document<sup>13</sup>, regarding whether Schedule 8 should be 'turned off' where there is vertical integration or other joint ventures or alliances, and whether bonus payment rates should be reduced below the underlying effect of performance on passenger revenue;
- the more **specific issues raised by ORR** regarding the functioning of the current regime<sup>14</sup>; and
- **additional issues** that we believe should be considered as part of the review of passenger Schedule 8.

### Discussion

#### *Key principles*

Before honing in on detail, we believe that there is merit in establishing a consensus within the industry on the principles of what Schedule 8 is trying to achieve.

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<sup>13</sup> ORR (May 2011), 'Periodic Review 2013, First Consultation – annexes', paragraph D.49 (a) & (b).

<sup>14</sup> ORR (May 2011), 'Periodic Review 2013, First Consultation – annexes', paragraph D.48 (a) – (g).

### *Purpose of Schedule 8*

Our view remains that, whilst it does have incentive effects, Schedule 8 should be viewed primarily as a compensation regime (or, equivalently, a risk transfer mechanism); and this should drive the industry's thinking on what Schedule 8 should look like, and how payment rates should be set. Its incentive properties are important to Network Rail, for example in prioritising investment, but these are complemented by other mechanisms such as Joint Performance Improvement Plans (JPIPs), regulatory targets and general reputational issues.

A good illustration of this is the removal of the societal rate from Schedule 8 in April 2004. For Regional services, the societal rate, on average, accounted for more than 80 per cent of the total Schedule 8 payment rate. If Schedule 8 had been the main incentive for Network Rail to improve performance, one would have expected performance of Regional services to deteriorate significantly, or at least to improve at a much slower rate. However, the performance of Regional services has improved substantially since 2004 (as for other sectors), demonstrating that the other incentives on Network Rail are in overall terms more important than the financial incentive provided by Schedule 8.

### *Liquidated sums nature of Schedule 8*

Schedule 8 was originally set up as a liquidated sums regime, with payments related to performance in a pre-determined way, as opposed to a 'claims-based' regime. It was set up this way because it was recognised that it is very difficult to measure directly the impact on revenue of changes in train performance, partly because of the time lag between performance and its effect on revenue, and partly because of the much greater impact on revenue of other factors (such as the economy).

We believe that the liquidated sums based approach remains one of the strengths of Schedule 8, resulting in a 'swings and roundabouts' effect, which over time provides an appropriate level of compensation (provided that payment rates are correctly set in the first place).

However, over time the liquidated sums approach has been eroded by a trend towards an increasing number of bespoke claims, both under the Sustained Poor Performance provisions, and under Part G of the Network Code (which provides an alternative channel to claim performance-related compensation outside of Schedule 8 by allowing changes in the condition of the network to be classed as Network Change, and thereby creating the entitlement to claim additional compensation). Experience of these claims has repeatedly confirmed the difficult, time-consuming and costly nature of a claims-based approach, and the corresponding benefits of a liquidated sums regime.

We continue to support the principle of a 'safety net' for operators in cases of extreme poor performance, where there is a risk that compensation from a liquidated sums regime may differ substantially from an operator's actual loss. However, we believe that the current mechanisms require significant review to make them fit for purpose.

We propose, therefore, that:

- all compensation provisions relating to performance should be put in one place, namely Schedule 8 of the track access contracts. The entitlement to performance-related compensation outside of Schedule 8 (for example in Part G of the Network Code) should be removed. This would be consistent with the approach taken in PR08 to clarify compensation for planned disruption by dealing with all compensation through one single channel (Schedule 4);
- the trigger level for Sustained Poor Performance (SPP) should be reviewed. More detailed comments are provided, below, in response to the specific question in ORR's consultation paper; and
- the nature of the costs and losses intended to be covered by the SPP provisions should be clarified. More detail is provided in the SPP section, below.

#### *Mechanisms for setting payment rates*

In order for Schedule 8 to function effectively, it is essential that the payment rates should reflect fares revenue as accurately as reasonably practicable.

In theory all parties (and particularly train operators, whom the regime is designed to protect) should have an interest in ensuring that this is the case. However, in practice this is only true if payment rates (including any 'kinked' rates, payment caps etc) are set in advance; it is unrealistic to expect rates to be set objectively once it is clear which way performance is turning out. If performance is better than benchmark, it is clearly in an operator's financial interests to have a low payment rate, and in Network Rail's interests to have a high payment rate; and vice versa if performance is turning out to be worse than benchmark. In such circumstances, a discussion regarding changes to payment rates is in effect little more than another version of a claims-based regime.

However, the current mechanisms for setting payment rates positively encourage this outcome. First, the 'no net loss / no net gain' provisions in franchise agreements hold operators neutral to changes in Schedule 8 at a regulatory review. Second, the provisions in paragraph 17 of template Schedule 8 enable either party, at any time, to request a change in payment rates (to which the 'no net loss / no net gain' provision would not apply). Operators thus have no incentive to ensure that payment rates are correct at a regulatory review, but rather have an incentive to request changes later using paragraph 17.

We would therefore propose that:

- the 'no net loss / no net gain' provisions in franchise agreements should not be applied to changes in payment rates at a regulatory review, where such changes are designed to make payments more accurately correspond to fares revenue. We recognise that this may only be possible for new franchises, and discuss the relaxation of financial protections in train operators' franchise agreements in section 5.8, below;
- the ability and/or incentive to propose changes to payment rates via paragraph 17 of Schedule 8 should be removed or restricted. Such restriction could be achieved in several ways, for example by introducing a provision that the change should be financially neutral, based on expected performance at the time of the

proposal; or by specifying that changes should only take effect at some point in the future; and

- paragraph 17 should return to being the recourse for data quality issues, caused by material changes to train services.

### *Freight regimes*

ORR does not raise specific questions about freight in its consultation, but our view is that the revised freight regime in CP4 has been successful, providing much greater clarity to all parties (including new entrants) and it has been straightforward to administer.

The primary issue is for the industry to agree on benchmarks and payment rates for CP5, in particular regarding the appropriateness of the kinked payment curve (where bonus rates are half that of 'worse than benchmark' rates). This debate will to some extent be driven by the consideration of whether the Network Rail payment rate is intended to deal with the effect of performance on revenue or on cost, and also by how much freight operators value the improvements in performance beyond benchmark.

Following the outcome of Access Dispute ADA04 in respect of 'no fault found' issues, there is misalignment between the delay attribution provisions within freight Schedule 8 and the Delay Attribution Guide (DAG) incorporated into Part B of the Network Code. We believe that consistency between Schedule 8 and Part B was always intended and that maintaining consistency is important. Our recommendation, therefore, is that freight Schedule 8 should be revised to ensure consistency. If this is not done, then the CP5 freight benchmarks will need to reflect the change in the application of Schedule 8.

### **Broader issues raised by ORR**

#### *'Turning off' Schedule 8*

ORR asks whether the Schedule 8 regime should be 'turned off' for train operations and infrastructure where there is vertical integration or joint ventures or alliances.

We agree that changes to Schedule 8 (whether 'turning it off' or some other change or overlay) may be part of the discussions between Network Rail routes and individual train operators. Sections 5.7 and 5.9, below, consider these discussions in further detail. We believe that such amendments should be left to those discussions as Network Rail routes continue to develop new ways of working at local levels; and that the primary focus of the PR13 work on Schedule 8 should be creating a fit for purpose default regime at national level.

We also note that 'turning off' Schedule 8 could not be done in isolation. The principle of Network Rail paying full compensation to train operators is embedded not only in Schedule 8, but in other parts of the industry contractual framework, for example in Schedule 4 and in Part G of the Network Code. 'Turning off' Schedule 8 would therefore need to be considered as part of a broader discussion of industry risk allocation and incentives.

### *Reducing bonus payment rates*

ORR also asks whether bonus payment rates in the passenger regime should be reduced so that Network Rail and train operators both benefit from continuous improvements in industry performance.

This could be viewed as a more limited version of ‘turning off’ Schedule 8, as described above. Our comments above would also apply here. Unless there is strong industry consensus on such a change being implemented through PR13, this would better be left to discussions between Network Rail and individual train operators; and in any event it should be considered as part of the broader issues of risk allocation and incentives.

In addition, we note that reducing bonus rates would create a regime that would not be financially neutral, but would have an expected cost to Network Rail; and that this cost would need to be recognised in setting Network Rail’s revenue requirement in the periodic review.

### **Specific issues raised by ORR**

#### *Recalibration*

ORR anticipates undertaking a full recalibration as part of PR13. We support the recalibration of all the individual elements of reference data, and are keen that this should be comprehensive and robust, with very clear criteria provided to whichever party undertakes the work.

We recognise that there may be a trade-off between the accuracy of recalibration and its cost. However, there are some elements of the current calibration that cannot sensibly be left unchanged, in particular the fact that payment rates are currently based on industry revenue at 2004/05 levels (in real terms). Given the scale of demand growth since then, and anticipated in future, it is hard to see how payment rates can be left on this basis until 2018/19.

The calibration timescales should allow all access parties sufficient time to fully consider the data which they are being asked to sign off. This will maximise the support for the regime in CP5. It is also important that any changes to the Delay Attribution Guide (DAG) are timed appropriately such that they can be fully incorporated into the recalibration exercise.

#### *Kinked payment curves*

ORR discusses the possibility of a kinked payment curve in the passenger regime so that there is a lower compensation rate for improvements at high levels of performance, on the basis that this “*may better reflect passenger perceptions*”<sup>15</sup>.

We advocate that rates are set to reflect the impact of performance on revenue. If there is evidence that a kinked payment curve best provides this, then this evidence should be brought forward in the review, and consideration should be given to setting rates on that basis. We would caution against simply assuming that the response of passenger revenue to performance must diminish once performance reaches a certain level. Recent research by Passenger Focus has concluded that passengers continue to value further performance improvements highly, even if performance is

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<sup>15</sup> ORR (May 2011), ‘Periodic Review, First Consultation – annexes’, paragraph D.48.



already very good. It should be noted that kinked rates were dropped after CP1 as no robust evidence existed at the time.

It is also worth noting that this would add complexity to the regime, with possible systems implications and associated costs. It would add an additional layer of work to the recalibration exercise itself, and would emphasise even more strongly the need to secure full industry engagement at an early stage, in which there is an incentive for all parties to set the basic (non-kinked) payment rate correctly in the first place (this is also discussed above in the section on mechanisms for setting payment rates).

#### *Differentiation between operators*

ORR asks whether there should be greater differentiation in the structure of the regime for long distance and other passenger services to reflect the different perceptions of passengers. In our view, differentiation between operators would be better left to individual alliancing discussions, with the standard default regime kept simple.

#### *Capping regime*

ORR asks whether changes are required to the capping regime to make it function more effectively.

It is not clear in what respect the capping regime is considered to be ineffective, or what changes might be proposed. We believe that the capping provisions and the associated ORR guidance have provided welcome clarity on the circumstances under which caps can be considered. The guidance essentially says no more than that a request for a cap should be accompanied by some evidence that revenue is not responding to performance in the way assumed by Schedule 8. We recognise that such evidence is not easy to produce (for the same reasons, referred to above, that Schedule 8 is set up as a liquidated sums regime in the first place) but that does not seem to be a reason to enable caps to be introduced without supporting evidence. We are not convinced, therefore, of the need to amend the capping regime.

#### *Sustained Poor Performance (SPP)*

ORR proposes a review of the level of the SPP threshold. We agree with this, as it continues to support the principle of a 'safety net' for operators in cases of extreme poor performance. However, we believe that the present SPP threshold (10 per cent of benchmark) is set too tightly, which contributes to the trend towards an increasing number of bespoke claims, undermining the effectiveness of the liquidated-sums based regime.

The intention behind the setting of the SPP threshold was twofold. First, it was intended to be set at a level at which the Schedule 8 rates might no longer adequately reflect the effect of performance on fares revenue. Second, it was intended to be set at a level such that it would not be triggered by short-term fluctuations in performance. Because of the tightly set threshold, neither of these intentions is currently being met.

Regarding revenue; by the end of CP4, the threshold for 'Sustained Poor Performance' will be broadly at the current benchmark level of performance, which is itself the best level of performance ever recorded by the GB railway. Indeed, as reflected in ORR's other consultation issues, there are now concerns that further

improvements in performance (beyond the current benchmarks) might generate less revenue than assumed in the Schedule 8 payment rates. It is hard to see how, by the end of CP4, the converse situation (with benchmarks as they will be at the end of CP4, but performance at current benchmark levels) would result in more revenue being lost than assumed in Schedule 8.

To put the same point in absolute terms; by the end of CP4, Network Rail performance 10 per cent worse than benchmark will typically equate to a drop in PPM of around 0.5 per cent for a train operator. Although this would obviously be a cause for concern in terms of Network Rail delivering its commitments to customers, it is questionable whether the 'poor' performance is really having a different impact on revenue.

There are also many cases where the 'sustained' nature of poor performance is questionable. At present, 14 out of 19 franchised train operators are experiencing performance which would theoretically trigger the SPP provision, even though in the majority of cases the poor performance was a short term phenomenon in the severe winter of December 2010.

If maintaining the existing structure, we believe that the SPP threshold should be reset substantially higher. This would also need to be considered in tandem with the consideration of kinked payment curves – if the latter were introduced to deal with poor performance then SPP should be even higher if it were required at all.

There is also a need to clarify what SPP claims are intended to cover beyond revenue loss due to passenger reaction to poor performance. Claims have at times included money paid by an operator to DfT under 'the no net loss / no net gain' provisions in franchise agreements. This has arisen when an operator has been compensated for revenue loss under the Schedule 8 in force at the time, but has paid part of this money to DfT under the provision (because its original Schedule 8, at the time of signing its franchise agreement, would have resulted in lower payments from Network Rail). Network Rail does not believe that such claims are consistent with the way that the contractual framework of the industry is intended to work.

There have also been claims that poor performance has necessitated management decisions by operators that have in turn caused loss of revenue. Such decisions include lower than planned increases in fares; delayed introduction of ticket restrictions; delayed or abandoned marketing campaigns; and delayed increases in car parking charges. In extreme cases the impact of poor performance is recognisable, for example operators not raising fares post Hatfield, but where there has been a PPM drop of just 0.5 per cent, such claims raise factual difficulties in distinguishing decisions due to poor performance from decisions due to other causes.

All such claims are protracted and costly to handle for both parties.

#### *Lagged compensation*

We would be content to discuss the possibility of a lag on Schedule 8 payments, as this would in most circumstances improve the matching between the timing of Schedule 8 payments and the corresponding effect on operators' revenue.

We suggest that this could be achieved most simply by making Schedule 8 payments in instalments. Alternatively, the regime could be based on moving average

performance data, although this would require some system changes, and would present issues if new service groups were introduced or existing ones redefined.

It should be emphasised, however, that a lag on payments would not change the underlying economics of the regime.

#### *Schedule 8 and other incentives*

ORR suggests reviewing the relationship between Schedule 8 and other incentive mechanisms (such as JPIPs/long-term performance plan and trajectories in franchise agreements) and the extent to which the various mechanisms reinforce or offset each other.

We would be happy to engage in an industry discussion about the relationship between Schedule 8 and other incentive mechanisms, particularly if this helps to establish an industry consensus on Schedule 8 principles and helps to promote understanding within the industry of how Network Rail uses Schedule 8 information at different levels within the company.

#### *Financial protections in new franchise agreements*

ORR asks whether the potential relaxation of protections in new franchise agreements would permit operators to benefit from changes in the performance regime. As noted above, we believe it is important for operators to have an incentive to engage in the process of establishing accurate Schedule 8 payment rates in a regulatory review, and so would welcome such a change. However, we note that this is ultimately a matter between franchised operators and DfT / Transport Scotland.

#### *Additional issues*

We have a number of further points which we believe merit consideration in PR13, which are in the interests of incentivising parties to 'do the right thing' by aligning this with their commercial interests more effectively.

- Revisiting the contractual provisions for dealing with extreme disruption (including Schedule 4 and possibly also Part H of the Network Code) so that all parties are still incentivised to run the best possible timetable even when the network is 'degraded'. For example, on a snowy day, Network Rail has a perverse incentive to cancel the entire scheduled timetable in advance, whereas operators have a perverse incentive to request a full, though realistically undeliverable, timetable. The 'right thing to do' sits somewhere in the middle, however, the contractual provisions do not facilitate this. In practice, the industry does its best to do the right thing for customers but then has an unhelpful contractual position to deal with afterwards.
- Revisiting contractual provisions where some aspects reflect older practice. A review of these areas would eliminate uncertainties and improve the interfaces between parties at key stages of the process.
- Uploading timetables: The definition of the Applicable Timetable no longer refers to the correct paragraph of Part D (and it may be worth considering whether the definition should be specific about the time that the information is uploaded).

- Issuing responsibility statements (paragraph 6). At present, these provisions are not considered workable, and whilst a work-around solution has been developed, PR13 presents an opportunity to improve the wording.
- Agreeing industry principles in response to the expected increase in on/off network movements in CP5 and the associated complexities for performance regimes. The single biggest example of this in CP5 will be Crossrail, however, there are already other instances at various locations on the network. A related issue appears in connection with 'traded' train services, where a service passes from one operator to another during the same journey. Both these issues would be addressed by review of paragraph 5.3(b).
- Revisiting the provisions for operator-responsible cancellations. This is an example where Schedule 8 gives an operator a disincentive to cancel a train, even if it is sometimes the 'right thing to do' because it would help assist service recovery. Removing this entirely would not seem to be a risk, as we consider that operators have sufficient incentives anyway to not cancel a train.

### **Network Rail position**

We continue to recognise the importance of the Schedule 8 performance regime, in particular its role as a compensation mechanism for the impact of performance on revenue. The liquidated sums based approach remains one of its strengths, with the implicit 'swings and roundabouts' effect. We believe that PR13 should seek to reinforce this principle, by increasing the role of the liquidated-sums approach in compensating for changes in performance, and by reducing the scope for changing payment rates between periodic reviews.

'Turning off' Schedule 8 would need to be considered as part of a broader discussion about risk allocation and incentives, as would changes to bonus rates. Both these suggestions would have a consequential impact on other parts of the contractual framework if done in isolation. We believe that PR13 should instead focus on maintaining a simple and stable default regime at national level, with significant amendments left to alliancing discussions locally.

We envisage recalibration of all Schedule 8 data being the dominant piece of Schedule 8 work within this review, with an emphasis on updating payment rates for the start of CP5 to accurately reflect the impact of performance on revenue, aided by changes to the 'no net loss / no net gain' provision, as discussed. Some discussion is also required on other aspects of Schedule 8, notably the Sustained Poor Performance mechanism, which we consider is not doing what was intended upon its introduction in 2006.

In addition, we suggest that a number of aspects for refinement, with the shared aim of better aligning the commercial incentives of industry parties with the 'right thing to do' for the users of the rail network.

## 5.5. Financial incentives to minimise planned disruption: Schedule 4

### Background

In PR08 there was an underlying theme that Network Rail needs to be given the right price signals in its possessions planning, so that it properly takes into account the financial impact of disruption on rail users. We continue to support the principle that Schedule 4 payments are intended to reflect those costs and losses and agrees that following significant changes at PR08, Schedule 4 is generally doing what it should, offering broadly the right incentives.

Although we support the principle of appropriate price signals, and de facto 'bearing the pain' of the financial impact caused by disruption, it is important that the impact of Schedule 4 is taken into account when comparing Network Rail's costs of delivering infrastructure projects to those of infrastructure managers in other countries, as they do not operate a similar regime. As well as the compensation costs of Schedule 4 itself, the regime influences the access strategy for the delivery of engineering work. Different access arrangements can have a major impact on the costs of delivery. For example, other infrastructure managers may be delivering work at lower cost than Network Rail, but this may be partly as a result of the less restrictive access enabling lower direct costs (through, for example, more daytime working or longer duration possessions). These factors need to be taken into account in benchmarking Network Rail's costs.

This remainder of this section discusses:

- the specific issues raised by ORR regarding the functioning of the current regime; and
- additional issues that we believe should be considered as part of the review of Schedule 4, including comments on the freight regime.

### Discussion

#### *Incentives to reduce length of possessions planning*

ORR asks whether the regime places sufficient incentives on Network Rail to reduce the length of the possessions planning process.

Rather than simply reducing the length of the process (which is determined by the provisions in Part D of the Network Code), the purpose of the regime is to incentivise Network Rail to plan in a way which reduces the disruption to passengers and thereby minimise the financial impact on operators.

The important question for the industry, therefore, is whether the regime places the right incentives on Network Rail to do what the operators want/need it to do. This requires industry discussion in PR13 on what the relative sizes of the notification factors should be, as this is what ultimately generates the extent of the incentive.

The maximum and minimum discounts were subject to lengthy review in PR08, so we would not encourage significant debate on these unless there were new evidence available, or if the compensation thresholds themselves were to be adjusted significantly. The medium discount, however, was set at a simple mid-point between the two, and so we consider that this is the feature which the industry should consider in PR13.

Currently, the size of the step between maximum and medium discount (essentially First Working Timetable to Informed Traveller Timetable) creates a strong incentive for Network Rail to book possessions early. This is based on research into the levels of passenger awareness of changed timetables in advance. More recently, however, passengers have been making increased use of electronic sources to research train time information, enabling them to check information (and make reservations where appropriate) later than when they relied solely on printed timetables or large display boards. The industry should consider, therefore, whether it still wants/needs Network Rail to be given such a large incentive to reflect possessions in the First Working Timetable. If the answer were to be no, then the most straightforward way to address this would be to decrease the size of the step between maximum and medium discount. This would leave the maximum discount unchanged, so still providing an incentive to secure the cheapest access by booking early wherever possible, but at the same time would increase the incentive to reflect possessions in T-12 timetables relative to making late changes. If the answer were yes, then the steps should be left as they are at present.

We would emphasise that this should be the outcome of an industry discussion, driven by the objective of setting Network Rail the correct price signals.

#### *Negotiation and enforcement*

ORR asks about “*the effectiveness of the negotiation and enforcement process*”<sup>16</sup>.

We suggest that the negotiation of possessions is a broader matter than Schedule 4, and this should be considered in the context of access strategy and Part D of the Network Code.

In terms of negotiating and agreeing compensation within Schedule 4, there is certainly a substantial workload, although we do not consider that the existing regime creates fundamental difficulties in reaching agreements with operators. PR08 successfully removed previous fundamental difficulties by putting all compensation for possessions into one place.

Similarly to Schedule 8, the liquidated sums based approach is important to Schedule 4, with a ‘swings and roundabouts’ effect which, over time, provides an appropriate level of compensation and which should minimise the number of claims. We would not support any changes which increased the claims-based workload.

#### *Access Charge Supplements (ACSs)*

ORR raises the issue of precision in computing Access Charge Supplements so that they reflect specific conditions faced by operators. We recognise that this is an issue - achieving greater precision on an operator-specific basis would increase the credibility of the regime.

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<sup>16</sup> ORR (May 2011), ‘Periodic Review, First Consultation – annexes’, paragraph D.55.

We would emphasise that at a network-wide level, the Schedule 4 funding requirement is credible, being driven by network-wide maintenance and renewals expenditure forecasts for the whole control period - it provides a clear and helpful target for Network Rail. Unfortunately it is impractical to disaggregate this down further to individual operator ACSs for a 5-year period without encountering a substantial margin of error. There are a number of factors affecting the cost of a possession, including its location (recognising that it is not just the exact worksite location which is disrupted but potentially a much longer section of route), the type of work (the Schedule 4 unit costs of different activities varying by several orders of magnitude, particularly within renewals), and most importantly the precise impact on the timetable. Calculating robust operator-specific ACSs over a control period would necessitate detailed work plans and possessions plans 6-7 years in advance.

We would welcome fresh industry ideas on how to solve this problem. In the absence of a solution, we would suggest that the overall Schedule 4 funding requirement could instead be incorporated into the fixed charge. We discuss the fixed charge in further detail in Chapter 7.

#### *Compensation thresholds*

The recent changes to Part D allow a good opportunity to review the contractual wording on compensation thresholds relating to the different notification factors (paragraph 9 of Schedule 4), and to align them with the now clearer reference points in Part D. This would improve understanding of Schedule 4 across the industry.

The thresholds at which liquidated sums can be reopened (Type 2 and Type 3 possessions, or for Sustained Planned Disruption) have worked well and Network Rail would propose no change here. In our experience, the workload associated with these bespoke claims is significant but manageable.

#### *Financial protections in franchise agreements*

ORR asks whether the potential relaxation of protections in new franchise agreements would permit TOCs to benefit from changes in the possessions regime. As with Schedule 8, we believe that it is important for operators to have an incentive to engage in the process of establishing appropriate regimes and in particular accurate payment rates in a regulatory review, and so would welcome such a change. We discuss this further in section 5.8, below. We do note, however, that this is ultimately a matter between franchised operators and DfT / Transport Scotland.

#### *'Turning off' Schedule 4*

ORR asks whether the Schedule 4 regime should be 'turned off' for train operations and infrastructure where there is vertical integration or joint ventures or alliances.

We agree that changes to Schedule 4 may be part of the discussions between Network Rail routes and individual train operators. As part of effective incentive alignment, this might include, for instance, the scope within alliances to pre-agree compensation for key schemes. We believe, however, that the precise nature of such amendments should be left to those individual discussions as Network Rail continues to develop new ways of working at local levels; and that the primary focus of the PR13 work on Schedule 4 should be on creating a fit for purpose default regime at national level.

The funding arrangements for Schedule 4 could make it difficult to actually 'turn off' the regime for an individual operator. Even if the ACS were to be absorbed into the fixed charge (see section above on ACSs), the 'funding contribution' of an operator could be substantially more or less than what it actually receives in Schedule 4 compensation payments, with little advance certainty either way. There may be a solution to this within individual alliancing discussions.

#### *Reducing compensation rates*

ORR asks whether the compensation rates should be reduced to increase incentives for operating companies to explore innovative timetabling solutions as an alternative to, for example, simply offering replacement bus services.

We accept the incentive argument, although urge caution that reducing the compensation rates would partially erode the price signals of Schedule 4, which the industry has previously highlighted as a priority to Network Rail in properly taking into account the impact of disruption on rail users. Reduced compensation might also affect the willingness of operators to agree to possessions.

We consider that this is an issue which would be best addressed in alliancing discussions.

#### *Free possessions allowance*

ORR asks whether there should be a return to a free possessions allowance where compensation would only be payable for possessions taken outside this allowance. In return the access charge supplement could be reduced or removed.

We would be reluctant to return to a free possessions allowance. The suggestion does not sit comfortably with the industry's previously stated intentions to send Network Rail the right price signals so that it will consider the real costs of possessions and the impact of possessions on rail users. However, an allowance were to be designed, implemented and managed (itself likely to be resource intensive), it would be likely to make it more difficult to assess the most appropriate and least disruptive access strategy for a piece of work, and would not incentivise any efforts to develop new access strategies in the future. Furthermore, the existence of a cut-off point between free and non-free possessions would distort the incentive effect.

A free possessions allowance would reduce the size of an ACS, although it would be unlikely to remove the need for it completely, as whilst it would be feasible to outline access requirements for maintenance, it would be more difficult to do so for renewals, which are 'lumpier' in nature.

#### *Additional issues*

There are a number of further points which we believe merit consideration in PR13, which are in the interests of incentivising parties to 'do the right thing' by aligning this with their commercial interests more effectively.

- In cases where it is feasible to do so (perhaps more likely for tightly defined schemes), allowing scope for Network Rail to incorporate its access requirements and associated compensation into franchise specifications. This would enable operators to reflect this in their franchise bid, with the benefit that this would not only create realistic expectations of disruption and



compensation for all parties, but also reduce the likelihood of overly protracted negotiations and potential disputes later on.

- As with Schedule 8, revisiting the contractual provisions for dealing with extreme disruption so that parties are still incentivised to run the best possible timetable even when the network is 'degraded'. For example, on a snowy day where not only is the network restricted but most trains cannot run either, the existence of a 'Joint Restriction of Use' concept would facilitate the parties working together to reschedule a realistic timetable. At present, unless the operator comes forward to declare it as an 'Operator Restriction of Use', then Network Rail is required to pay bus compensation even though buses do not always run (when the roads are also blocked), only to have to try to claim it back several days later using the claim re-opener provision. Although the industry does its best to 'do the right thing' for customers the contractual position is unhelpful in this regard. A 'Joint Restriction of Use' provision would support parties working together in this and other similar circumstances, with the effect of reducing 'money-go-round' and transaction costs.
- Revisiting the wording of contractual provisions for the Sustained Planned Disruption provision (SPD). ORR issued guidance in 2010 to clarify the level of each operator's SPD threshold, and the formal consolidation of this into the contract would be beneficial. We do not propose to change how this provision works, but believe that simplification of the wording here would help to increase support for the Schedule 4 regime.
- Revisiting the wording of contractual provisions for what happens when changes are made to Restrictions of Use (paragraph 2.9 of Schedule 4). Again, we are not proposing to change how this provision works, but consider that simplification of the wording here would help to increase support for the Schedule 4 regime.
- Assuming the continuation of the cost compensation formula (which we support), then all Appendix Bs in Schedule 4 should be revisited for CP5 by Network Rail's Customer Relationship teams and relevant managers of passenger operators, in order to validate the bus replacement patterns and Viable Transfer Points.

### *Freight regimes*

We consider that the structure of the new freight Schedule 4 regime is easy to administer and that it sends clear signals about the impact of disruption. However, we await the outcome of an industry re-opener about unit rates, following the first year of the regime proving to be over 50 per cent more expensive than the £9 million envisaged by ORR in PR08.

Subject to the implementation of lower unit rates, on which ORR is currently consulting within the industry, we believe that the regime is broadly doing what it should, providing compensation to freight operators while not being unduly onerous on Network Rail.

We would also suggest revisiting the contractual provisions to make sure that all the qualifying criteria for differing levels of compensation can be related to the effects on individual possessions. While many of the criteria are clearly related to specific possessions (for example additional distance or time), the criteria for route learning could be interpreted more broadly, which we do not believe was the intention during PR08.

### **Network Rail position**

We believe that there has been particular benefit in bringing all possessions related compensation into one place in CP4. Within Schedule 4, the scope remains for bespoke compensation in specific defined cases, and this has worked well.

We would reemphasise that, like performance related compensation under Schedule 8, Schedule 4 also has a 'swings and roundabouts' effect, with some possessions likely to be overcompensated and some likely to be undercompensated. We consider that basing the liquidated damages part of the regime on the timetable impact also remains the right approach.

As in PR08, it is important that the industry can feel comfortable that Schedule 4 gives Network Rail the right 'price signal' incentives which continue to reflect the financial impact of disruption. Any revisiting of notification factors and compensation thresholds should be driven by this consideration.

The thresholds at which compensation can be 're-opened' would appear appropriate for both parties ('Type 2' and 'Type 3' possessions, and Sustained Planned Disruption) and we recommend that these remain in place, as this enables the appropriate balance to be struck between efficiency and accuracy.

We consider that the funding of Schedule 4 remains a challenge at an operator-specific level, however, we do not believe that the introduction of a free possessions allowance would be an appropriate solution, for the reasons discussed above.

## **5.6. Financial incentives to make best use of and grow the network: the Volume Incentive**

### **Background**

The Volume Incentive was introduced in CP3, which provides a lump sum cash payment to Network Rail where we accommodate demand over and above that envisaged in the HLOSs and the freight RUS.

The incentive is implemented on a per train mile and farebox basis for passenger traffic and a train mile and thousand gross tonne mile basis for freight. The CP3 passenger incentive rates converted the economic benefits of additional rail passengers into a benefit per train mile using relative growth rates. The CP3 freight rates were calculated to be equivalent to the passenger rates.

### *PR08*

During PR08 ORR recalculated the incentive rates, as it considered that the CP3 rates could allow Network Rail to receive greater financial benefits than warranted by the economic value of additional traffic. For this reason ORR recalculated the economic value of additional passenger trains based on the economic benefit derived by operating additional services for the passenger incentive rates. The CP3 freight

rates were revised so that they were based on, DfT's guidance on, the economic value of additional freight traffic.

### *PR13: ORR's first consultation*

In its first PR13 consultation ORR highlights, as one of many issues to consider in improving incentives to make best use of existing capacity, that one option would be to increase the 'power' of the Volume Incentive, for example by exposing Network Rail to downside as well as upside risk.

## **Discussion**

Initiatives to make the best use of existing capacity are highly supported by Network Rail. Strengthening the Volume Incentive appears to be a positive step towards reaching this goal. However, exposing Network Rail to the downside as well as upside risk associated with changes in the volume of traffic does not appear to be the most appropriate way to do this. The threat of licence breach acts as an incentive in itself to meet the HLOS requirements, this incentive is relatively powerful. It would appear to be inappropriate to penalise Network Rail twice, should we fail to accommodate the traffic that we were required to.

Other ways in which to increase the efficacy of the Volume Incentive should also be explored, for example:

- increasing the incentive payment rates;
- making payments to Network Rail within the control period;
- disaggregating the Volume Incentive by route;
- combining the Volume Incentive with the Capacity Charge; and
- considering in the context of potential cost and revenue sharing arrangements with train operators.

While the current incentive rates are based on what appears to be a robust methodology, it is obvious that if the rates were higher, the incentive would be stronger. This would not necessarily be a strictly cost/economic value based rate, but if the overarching aim is to increase the power of the incentive, this appears to be the simplest approach.

Another way to increase the power of the incentive may be to make payments under the Volume Incentive to Network Rail within the control period, for example, at the end of each financial year. This may allow for the incentive to have a more immediate and tangible effect, which may drive behaviour more effectively.

The Volume Incentive does have a financial impact on Network Rail; specifically the ability to reinvest outperformance. Currently, it does not lead to fully effective actions 'on the ground' due to a lack of disaggregation to routes<sup>17</sup>. Given the devolution programme, there may now be an opportunity to go further than the current regime by disaggregating the Volume Incentive to 'regionalise' the incentives. This would be

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<sup>17</sup> ORR (October 2008), 'Periodic Review 2008 – Determination of Network Rail's outputs and funding for 2009-14', paragraph 27.13.

similar to the proposals being made for changes to the efficiency benefit sharing mechanism.

Another option is to combine the Volume Incentive with the Capacity Charge so that the Capacity Charge can provide incentives to Network Rail to accommodate additional traffic. This could be implemented by way of a mark-up on the Capacity Charge which could then replace the Volume Incentive altogether. This would allow for a move towards a more market-based mechanism to achieve the overall aim of making the best use of existing capacity, and may also provide specific incentives which are more disaggregated than the current network-wide Volume Incentive. This is discussed further in Chapter 7.

We note that ORR highlights in its consultation that consideration should be given to the possibility of amending other charges so that Network Rail's incentives to grow or develop the network are improved<sup>18</sup>. Changes to financial incentives to grow or develop the network, should be considered alongside other charges, which is discussed in Chapter 7.

It is also important that all options are considered in the context of potential cost and revenue sharing arrangements which could be agreed bilaterally and may be more effective than current Volume Incentive rates. These are discussed further in sections 5.7 and 5.9, below.

The basis by which the Volume Incentive is calculated appears to be reasonable. In particular, the fare-box metric used in the passenger incentive rate is key to ensuring that not only is Network Rail incentivised to accommodate additional passenger traffic, but that it is focused on accommodating traffic which moves as many passengers as possible.

### **Network Rail position**

We fully support initiatives to make the best use of existing capacity, and continue to welcome the principle of the Volume Incentive as an effective way to meet this objective.

We are, in principle, supportive of proposals to strengthen the Volume Incentive. However, exposing Network Rail to the downside as well as upside risk associated with traffic levels does not appear to be the most appropriate way to do this, as there are other mechanisms already in operation which address issues with traffic volumes being below targets.

We also think that the Volume Incentive should be considered alongside other charges, in particular the Capacity Charge. The possibility of a mark-up to the Capacity Charge should be considered as an alternative to the Volume Incentive, which would be consistent with a move towards a more market-based mechanism to achieve the same aims. We consider these proposals in more detail in Chapter 7.

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<sup>18</sup> ORR (May 2011), 'Periodic Review, First Consultation – annexes', paragraph D.60.

## **5.7. Aligning Network Rail and train operators' incentives and promoting industry wide efficiency: Regional efficiency benefit sharing mechanism**

### **Background**

An efficiency benefit sharing mechanism was implemented for CP4, separately for England and Wales, and Scotland. In its consultation, ORR considers that there would be significant benefits from introducing a regional efficiency benefit sharing mechanism (REBSM) and seeks views on its calculation at the Network Rail route level, and whether further issues about its introduction should be highlighted.

ORR considers whether the REBSM should be both upside and downside (compared with the mechanism currently in place which is upside only), although notes that there could be merit in designing the mechanism asymmetrically, for example through capping the downside exposure to minimise the introduction of risk to franchise bids. The trade-off, in ORR's view, is the introduction of risk versus providing train operators with a greater interest in how Network Rail performs.

ORR proposes that the other properties of the current regime should be retained, including its scope (operating, maintenance and renewal costs and a number of revenue elements), level (aggregate TOC sharing at 25 per cent of outperformance), distribution (in proportion to the variable track access charges paid in the operating route) and form / frequency of payment (in cash in the following year in which the efficiency impacts are realised).

### **Discussion**

Network Rail supported the implementation of an efficiency benefit sharing mechanism in CP4, and highlighted that simplicity in its design was key.

There have, however, been significant developments since PR08, which we believe merit important consideration when deciding whether or not to impose a REBSM in operators' track access agreements (TAAs) in PR13.

Network Rail's devolution programme has already been discussed in this response. Devolution is key in helping to develop much deeper working relationships with our customers at the local level. Network Rail and a number of train operators are currently engaged in negotiations for arrangements that align behaviours through shared incentives to work more closely together. The formation of alliances between Network Rail and train operating companies will facilitate a more collaborative working approach 'on the ground', and should achieve changes in behaviours across the industry. These arrangements may include cost and revenue sharing arrangements.

Experience from elsewhere suggests that the parties involved need to agree and determine between themselves how the specifics of each alliance should operate. We consider, therefore, that a universal approach to cost and revenue sharing arrangements such as the REBSM proposed in ORR's consultation, is unlikely to be optimal and could constrain the scope of what an alliance is able to achieve.

Instead, we consider that there is considerable merit in allowing alliances to pursue bespoke cost and revenue sharing arrangements, rather than mandating a specific universal sharing mechanism in train operators' TAAs. We discuss our thoughts on how such bespoke arrangements could work in further detail in section 5.9, below.

Although we do not consider that the introduction of a mandated REBSM is appropriate at this stage, given the current evolution of alliancing arrangements, we do wish to highlight some practical considerations in relation to the specific REBSM proposals in ORR's consultation.

While an upside only option would assist in keeping the REBSM simple, this would result in Network Rail's risk profile requiring adjustment (and thus increasing cost), in order to manage the increased risk of paying out for outperformance in particular regions, regardless of the cumulative national position. Another important consideration is how the cash payment would be determined. If the payments were not based on the expected cumulative position at the end the control period there would be a risk that a payment based on outperformance in one particular year could be greater than the payment resulting from cumulative outperformance at the end of the control period (i.e. if there is underperformance in later years). A full assessment could only be made, therefore, at the end of the control period.

A symmetric mechanism whereby both upside and downside are shared would have more merit, as it would substantially address the risk profile issue with an upside only mechanism, and would also 'naturally' adjust year-on-year for over and underperformance. However, consideration would need to be given of the impact this could have on introducing risk into franchises, and that it could result in a more complex mechanism.

We consider that the practical considerations raised above regarding the introduction of either an asymmetric or symmetric REBSM further support our view that there would be merit in Network Rail and its customers negotiating and agreeing cost and revenue sharing arrangements on a case-by-case and mutually beneficial basis.

### **Network Rail position**

The discussion above has highlighted that we believe there is considerable merit in allowing the industry to agree bespoke cost and revenue arrangements that suit the relationship in question, rather than mandating a standardised efficiency benefit sharing mechanism through train operators' TAAs.

We set out our thoughts in more detail in relation to how such arrangements could work, in sections 5.8 and 5.9.

## **5.8. Switching on TOC incentives: relaxing financial protections in train operators franchise agreements**

### **Background**

Current franchised passenger train operating companies' (TOCs) contracts with DfT contain a provision that insulates them from changes to access charges from periodic reviews, compared with their baseline of services agreed at the time of letting the franchise. This is sometimes referred to as the 'no net loss / no net gain' provision.

ORR's consultation seeks views on exposing franchised passenger train operators to changes in Network Rail's costs at a periodic review.

While it stresses that this is an issue for the franchise authorities, ORR suggests that there may be benefits from exposing TOCs to changes in Network Rail's costs, by helping to align TOC and Network Rail incentives during the periodic review process.

The options that ORR considers to achieve this are exposure to changes in variable usage charges; exposure to changes in a proportion of the fixed charge; and exposure to changes in a proportion of Network Rail's operating, maintenance and renewals costs.

ORR later suggests relaxing TOC protections from changes at a periodic review to Schedules 4 and 8 for a number of reasons. It recognises that removal of such franchise protections would increase risks and considers three options which are incremental in nature.

## **Discussion**

DfT has announced that it will move to longer franchises and more flexible specifications, which should help lead to better collaboration between Network Rail and TOCs, especially in terms of planning, and strengthening the alignment of (commercial) incentives. Such changes should also help TOCs to flex their service offerings in response to changes in passenger demand. This would have the effect of giving them more commercial freedom and making their costs more variable. While this will likely be an improvement on the existing arrangements, we believe there is a need to make further changes in franchise agreements by amending the 'no net loss / no net gain' provisions.

Combined with other enablers such as devolution, looser specification of franchise agreements and the introduction of risk capital, for example, the exposure of TOCs to changes in Network Rail's costs will be instrumental in creating incentives for them to work collaboratively with us to drive more effective, more customer focussed and cheaper local outcomes. Without this, we consider that TOCs' incentives to embrace cost and revenue sharing arrangements may also be limited.

While we are mindful of the rationale for such protection, and note ORR's statement that it is a matter for the relevant franchise authority, we have observed that where operators are exposed to cost changes, they have applied powerful input into driving change and have taken a keen interest in Network Rail's costs.

A good example of this has been the CP4 On-Train Metering (OTM) project, which is discussed in further detail in Chapter 7. TOCs who opt in to OTM are not insulated from changes in their metered electricity costs as a result of switching to metered billing (which means that the relevant franchise authority is unable to claw back any savings made, equally if costs increase as a result of OTM, TOCs are not afforded protection by the franchise authority), and have therefore been very active in ensuring the effective implementation of the project.

The freight industry's participation during PR08, and its active challenge of Network Rail's costs, also provides a relevant case study as to the level of engagement and challenge resulting from being exposed to changes in Network Rail's variable costs, and thus access charges, at a periodic review.

As discussed in section 5.7, Network Rail has already commenced discussions with operators regarding mutually beneficial bespoke alliance arrangements. It is important that the contractual and regulatory regime supports such arrangements.

We consider it crucial, therefore, that the 'no net loss / no net gain' provision is disapplied, such that TOCs are able to retain the financial benefits realised through bespoke cost and revenue sharing agreements, resulting from alliance arrangements.

In relation to the types of cost changes to which TOCs could be exposed, Network Rail considers it important that TOCs are only exposed to those that they are able to genuinely influence.

On this basis, it could be argued that there is merit in exposing TOCs to variable costs, although we are mindful that these costs are relatively low compared with overall costs. Also as ORR observes, it could place undue emphasis on track costs which form a great proportion of overall variable costs whereas the focus should cover a broader range of cost categories.

As ORR notes, some elements which make up Network Rail's fixed costs will be outside TOCs' control and therefore it would be important to exclude these if a fixed cost approach were favoured. For this reason we consider that exposing TOCs to changes in a proportion of Network Rail's operating, maintenance and renewals costs could be effective, particularly since we consider these categories are all ones on which TOCs could directly have an influence.

Network Rail believes that there could be a case for exposing TOCs to changes in costs relating to Schedules 4 and 8, particularly since these could form the focus of bespoke deals resulting from alliance arrangements, therefore underlining the need for incentive alignment. In sections 5.4 and 5.5 above, we propose that there would be merit in exposing TOCs to changes in payment rates for Schedules 8 and 4 respectively, although we recognise that this is ultimately a matter for the relevant franchise authority.

### **Network Rail position**

We recognise the case for exposing TOCs to changes in its costs, but importantly only those which they can genuinely influence and assist in their reduction. This is particularly important if the industry is to embrace cost and revenue sharing arrangements at the local level.

This is clearly an important policy choice for the franchise authorities given the impact it will have on perceived risk during the franchising process. As already discussed in this response, however, we believe that it is an important enabler to incentive alignment, and has the potential to deliver powerful outcomes to the benefit of the whole industry.

## **5.9. Exposing Network Rail to changes in train operators' costs and revenues**

### **Background**

ORR's consultation seeks views on whether Network Rail should share in train operators' costs and / or revenues.

In relation to exposing Network Rail to changes in train operators' costs, ORR notes that this could deliver benefits in those areas where Network Rail's own processes and actions, such as timetable production for example, have a direct impact on operator costs such as staff and rolling stock utilisation.

ORR recognises that there could be problems with such an approach, such as the treatment of group versus franchise costs; the requirement for an open book approach; some costs already being covered by existing contractual mechanisms such as possessions and performance already being covered by Schedules 4 and 8;



and the difficulty of Network Rail to influence some costs such as staff wage costs which are influenced by other factors.

ORR notes that Network Rail could be incentivised to help to grow industry revenue through exposing it to changes in TOCs' revenues, noting that such a mechanism could also reduce TOCs' exposure to fluctuations in revenue resulting from a recession or other unexpected events, for example.

ORR does recognise that there are existing incentives on Network Rail to grow TOC revenues and increase traffic, such as Schedules 4 and 8 and the Volume Incentive, and that these may need to be reviewed if Network Rail is exposed directly to TOC revenues. ORR goes on to outline a number of potential difficulties with a mechanism where Network Rail shares TOC revenues.

## **Discussion**

We recognise that there would be clear benefits in sharing train operators' costs and revenues for those areas where we have the ability to control, or at least help control. The rationale is much the same as train operators being exposed to changes in Network Rail's costs, namely alignment of incentives and each party having a clear incentive to help the other in achieving its goals or managing certain risks.

Section 5.7 refers to the current negotiations taking place between Network Rail and many of its customers for mutually beneficial arrangements, aimed at aligning behaviours through shared incentives which may include cost and revenue sharing arrangements.

As already discussed, in considering the design and scope of these arrangements, we believe that rather than defining the detailed mechanics of cost and revenue sharing arrangements and mandating them contractually, such that it is a case of 'one size fits all' (such as through a REBSM, for example), there could be merit instead in agreeing a set of high-level principles for such arrangements. It is important that individual alliances have the flexibility to agree mutually beneficial arrangements, which suit the specifics of the relationship in question.

In our view any cost and revenue sharing arrangements between the parties should effectively sit 'on top' of the generic track access charges, including Schedules 4 and 8.

We consider that sufficient protections would need to be in place for operators not covered by the alliance, although we strongly believe that freight and open access operators should not be precluded from these arrangements, and we are open to discussions with all our customers.

## **Network Rail position**

We support bespoke cost and revenue sharing arrangements that are not mandated by TAAs. Such arrangements should also be open to freight and open access operators.

We consider that the focus of PR13 in relation to cost and revenue sharing could be on agreeing a set of high-level principles for these arrangements, as discussed above.

## **5.10. Aligning incentives for efficient enhancement expenditure**

### **Background**

ORR observes that train operators can play an important role in increasing the contestability of enhancement expenditure and improving efficiency. It states that there may be a case for extending the scope for efficiency benefit sharing to cover enhancements so that train operators benefit if Network Rail reduces the cost of enhancement expenditure, although proposes that this should not be on a formulaic basis. It also proposes that there could be a case to expose train operators to an element of Network Rail's enhancement costs at a periodic review.

ORR seeks views on possible bespoke arrangements for enhancement efficiency benefit sharing and also questions whether there is a need for additional measures to increase contestability of expenditure.

### **Discussion**

As ORR observes in its discussion, given the scale of some enhancements and the distribution of liabilities, a formulaic approach to enhancement efficiency benefit sharing may not be appropriate. Instead and as discussed above, we see merit in allowing such arrangements to evolve on a bespoke, case-by-case basis to allow tailored train operator / Network Rail arrangements which could be included in any bespoke cost and revenue sharing. On this basis, therefore, there would be a case to expose TOCs to changes in enhancement costs at periodic review, although only those that they have the direct ability to control (i.e. enhancement costs that are related to the operator in question).

Given Network Rail has already laid out its plans to introduce contestability into its infrastructure works projects, which are discussed above in section 5.3, we strongly believe that this process should be allowed to evolve and that regulatory intervention would be unnecessary.

### **Network Rail position**

We would support bespoke cost and revenue sharing arrangements that include enhancement expenditure, that are agreed on a mutually beneficial basis as part of alliance arrangements. We do not believe that additional regulatory measures are required to increase the contestability of infrastructure works, given this is already a key area of focus for Network Rail in its current plans, which are discussed further in section 5.3, above.

## **5.11. Other incentives to improve industry outcomes**

### **Background**

ORR notes that there are concerns that the rail industry lags behind other sectors in terms of its ability to develop and deliver innovation. It refers to the work of the RVfM Study, which suggested that there should be a rail innovation and growth team (RIGT) to encourage industry parties to innovate. ORR also refers to the initiatives in other regulated sectors to encourage innovation, for example Ofgem's low carbon fund to provide funding for innovative projects.

ORR also refers to the importance of encouraging improved energy efficiency where it is economic to do so. It refers to the introduction of environmental incentives in

other regulated sectors and notes that the 'polluter pays' principle should apply, whereby less environmentally friendly forms of transport should pay a surcharge. ORR states that it is minded to not introduce environmental charges on rail, given it produces less carbon emissions than most alternative forms of transport and such charges could therefore result in a transfer of traffic to less environmentally friendly forms of transport.

ORR consults on whether any new incentives should be introduced in PR13, including ones to encourage innovation and energy efficiency.

## **Discussion**

### *Innovation*

Network Rail is absolutely committed to playing its part in accelerating innovation in the rail industry, and we have made considerable progress over the past 2 years with our 'Think, Explore, Prove and Do' model. Consulting widely with the industry was instrumental in helping to drive this work forward.

It is crucial that as an industry, we continue to drive technical and operational innovation forward. To-date the Technical Strategy Leadership Group (TSLG) has provided a useful platform on which to do this. TSLG sent out a strong signal of its intent to form, develop and lead the technical strategy for the industry, with the publication of the Rail Technical Strategy consultation in Autumn 2010. It has also led on the industry's behalf regarding the creation of a transportation Technology and Innovation Centre (TIC).

We do recognise, however, that industry incentives to innovate could be improved. In particular we consider that there is a need to move away from 'silo thinking', and that the RIGT proposed by the RVfM Study has merit.

Funding for cross-industry innovation initiatives is also key, which is potentially an area that could be supported through the regulatory framework, through the creation of a specific innovation fund for such projects.

### *Energy efficiency*

In relation to carbon reduction incentives, Network Rail is already committed to improving the sustainability of its production process, not only to demonstrate it is worthy of public funding, but also to support the development of a more sustainable industry overall, as part of an integrated national sustainable transport network.

We have identified six key impact areas in which we wish to drive substantial sustainable development improvements in CP5 and beyond. These are waste; carbon; land use; biodiversity and ecology; diversity and inclusion; accessibility; and climate change adaptation. We believe that, with current national and industry priorities, these will be the most beneficial areas on which to focus. We will develop detailed strategies and plans accordingly by the end of the PR13 process.

In relation to Network Rail's use of non-traction energy and its carbon emissions, as above, we are committed to sustainable development and will have a strategy in place to reduce both by the end of PR13. For example, we recognise the benefits that can accrue from metering our own use of trackside power on the network so that we can more carefully manage it, and we have already started to meter some of the key sites and plan to expand this programme.

We consider that the current ongoing initiatives, within the organisation and the wider industry, will be sufficient in driving further energy reduction and at this stage, therefore, does not consider that further incentivisation through the regulatory framework is required.

We agree with ORR's position that it is minded to not introduce environmental charges on rail given that this could result in passenger and freight users shifting to cheaper, less environmentally friendly transport modes on the assumption that such charges would not be universally applied.

### **Network Rail position**

TSLG already provides a platform for the industry to work together, although Network Rail recognises the importance of moving away from 'silo thinking' in relation to innovation, and that the RVfM proposals if implemented should support this.

We believe that funding for cross-industry innovation initiatives through the periodic review process could be an effective way of encouraging and incentivising innovation, and merits further consideration, therefore, during PR13.

We do not consider that incentives to encourage energy efficiency or environmental charges should be introduced as part of PR13, given the initiatives that are currently ongoing across the industry.

Taking ORR's consultation question more generally on the introduction of new incentives, we consider that incentives need to have a clear link to the high-level objectives for the industry, and new ones should only be created, therefore, if they are targeted at achieving these objectives and the benefits of introducing new measures outweigh the associated costs. We discuss this further in sections 5.1 and 5.2, above.

## 6. FINANCIAL FRAMEWORK

### 6.1. Introduction

ORR's consultation addresses several important points in relation to financial aspects of the price control, including:

- risk and uncertainty mechanisms;
- inflation risk;
- the duration of the price control;
- a single till versus a dual till approach; and
- amortisation.

These elements will, in interaction with other areas of the price control, determine the level of allowed revenue that Network Rail can expect to earn over CP5, and have critical implications for the overall balance of risk and reward confronting Network Rail. It is therefore especially important that these elements of the financial framework are aligned with the overarching objectives for PR13 and with long-term industry objectives, including the possible introduction of risk capital by Network Rail.

Other issues have not yet been consulted on by ORR. In particular, the approaches to the weighted average cost of capital (WACC), the risk buffer, the ring-fenced fund, risk capital, and how these relate to financeability. Ultimately, it will be important to consider the package holistically and ensure that the net impact on Network Rail's risk is reflected in the allowed return.

While Network Rail notes that ORR is not specifically consulting on the RAB at this stage, a possible issue that we would like to flag for early consideration, is the potential 'buy back' of certain elements of the RAB (and associated debt). We note comments made in the RVfM Study that the value of the RAB has increased significantly over the last decade and that not all of its value is accounted for by normal capital expenditure, with around 30 per cent of the increase reflecting other financial adjustments. We would welcome further discussion on this during PR13 with DfT, Transport Scotland and ORR.

## 6.2. Risk and uncertainty – principles

### Background

In its consultation document, ORR states that its approach to risk and uncertainty would be aligned with four main objectives, which can be summarised in the following categories:

- (i) efficient allocation of risk;
  - (ii) incentivising efficiency improvements;
  - (iii) providing adequate cash-flow buffer; and
- i) enabling risk capital<sup>19</sup>.

ORR also recognises the importance of providing adequate compensation for the risk allocated to Network Rail, although does not specify the details of how it would do so<sup>20</sup>.

### Discussion

We agree with these high-level objectives, and would emphasise the importance of further work on the details. We consider a further important consideration is that the approach to risk and uncertainty needs to incentivise and support making investment decisions on a whole-life cost and whole-system basis.

Network Rail notes that in relation to revenue risk, ORR's consultation states that most of the revenue earned by Network Rail is fixed, which it defines as "*independent of cost and volume changes during the control period*"<sup>21</sup>. This would imply that on the revenue side, most of the risk is shifted away from Network Rail. During PR13, however, it will be important to consider the impact on revenue risk of industry reform, such as if train operators are eventually exposed to changes in access charges, for example. It would also be impacted by other decisions related to the review, such as the decision on the single / dual till.

The current approach to risk-mitigation mechanisms is designed to shield Network Rail from certain types of risk that are better borne by other parties. On the whole, we consider that the approach appears to strike an acceptable balance between protecting Network Rail against certain risks and preserving the incentives to improve efficiency. That said, we would be open to considering more detailed risk-mitigation mechanisms in PR13, particularly given current industry reform. In particular, there may be a need to mitigate the main risk drivers affecting Network Rail's cash flows to facilitate the introduction of risk capital.

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<sup>19</sup> ORR (May 2011), 'Periodic Review 2013, First Consultation', paragraph E.14.

<sup>20</sup> ORR (May 2011), 'Periodic Review 2013, First Consultation', paragraph E.14 (a).

<sup>21</sup> ORR (May 2011), 'Periodic Review 2013, First Consultation', paragraph E.16.

## **Network Rail position**

The final approach to risk and uncertainty will need to be aligned with the overall regulatory objectives for PR13, including the reliance on market mechanisms wherever possible, the approach to incentives and efficiency, but also more widely with current and ongoing industry reform. The overall approach also needs to incentivise and support making decisions on a whole-life cost / whole-system basis.

We recognise the need for an early and transparent discussion with ORR on all matters related to risk and uncertainty, and look forward to further engagement during the review.

### **6.3. Risk and uncertainty – treatment of indexation and inflation**

#### **Background**

Network Rail is currently protected against the risk from general inflation through the indexation of the RAB, allowed revenue components and access charges, using the realised November retail prices index (RPI) for each year. Since the company has no direct control over inflation, it is considered to be inappropriate for Network Rail to bear inflationary risk. Inflation risk is effectively transferred from Network Rail to government and its customers.

ORR's consultation considers various aspects in relation to indexation and inflation, including whether, under certain circumstances, it is appropriate for Network Rail to take on some additional general inflation risk and the appropriate index to use; and options for managing input price inflation.

#### **Discussion**

##### *General inflation risk*

Network Rail considers that inflation risk would be too high to manage and / or absorb, and we therefore support the continued indexation of the RAB.

We note that ORR states the decision on the indexation of access charges will be taken as part of a package, and that it states there could be merit in Network Rail taking on some additional risk, if, for example, we do not raise unsupported debt. It goes on to consider two possible options, of which one would be to include an ex-ante inflation assumption in allowed revenue, and then log up / down any differences between this assumption and actual inflation, and adjust accordingly at the start of Control Period 6 (CP6).

Network Rail sees merit in considering this option, and would welcome further work and analysis in this area.

ORR also considers another option, which would be to assume and fix a level of inflation for the control period, and include a specific re-opener should inflation exceed certain levels. Network Rail does not consider that it would be best placed to absorb the exogenous risk associated with this option, and that it would potentially result in the need to increase the required risk buffer, as well as possibly increasing market uncertainty with a specific re-opener provision.

We continue to believe that the use of RPI in the indexation of expenditure, the RAB and access charges is appropriate. We do not consider that CPI should be used as a

general inflator, and note that currently, there is no precedent for the use of CPI indexation in the regulated utility sectors in the UK<sup>22</sup>.

An important issue to address in relation to the approach to indexation, will be the appropriate rebasing of the values for the access charges and grants in ORR's final determination to 2014/15 prices.

The current approach to rebasing values in the final determination to those in Year 1 of the new control period incorporates inflation forecasts. In PR08 this was an issue because these forecasts were volatile at the time, resulting in a high level of uncertainty. Moreover, although inflation forecasts are employed to rebase values in the final determination to those in Year 1 of the control period, after this charges are inflated on a lagged basis. We consider that this process could be reviewed during PR13, and would welcome early discussion on possible changes with ORR.

Finally, Network Rail considers that there could be merit in adopting a consistent approach to indexing access charges annually during CP5 (at present passenger and freight access charges are subject to different indexation factors).

#### *Input price inflation*

Network Rail recognises that RPI, like other economy-wide price indices, may not fully reflect movements in input prices that are relevant to rail. It was for this reason that during PR08, ORR decided to index renewal expenditures using a specific index, IOPI (on the basis that IOPI was a more accurate reflection of engineering-related infrastructure costs), resulting in RAB adjustments to reflect changes in input prices for renewal expenditure.

While we acknowledge the rationale for using IOPI, in practice we have found it to be volatile, difficult to forecast and an inaccurate reflection of our costs, which has resulted in planning uncertainty. We note the five risk sharing options proposed in ORR's consultation, which would aim to address the fact that there will always be some element of input price inflation that is beyond Network Rail's control. However, we consider that there is merit in the indexation of input prices being based on RPI. We believe that this would result in greater planning certainty, which is very important for the business.

We do, however, recognise that input price inflation is an important topic for the review, and would therefore be open to further discussion on this matter.

#### **Network Rail position**

We would be open to discussing further with ORR the approach to inflation and indexation, although would need to understand to a much greater extent the details behind any changes and how they impact the allowed return, both through the cost of capital (if the risk impact is systematic) and within the financeability assessment.

We note that ORR considers that there could be merit in Network Rail taking on some additional inflation risk, and that one possible option could be to include an ex

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<sup>22</sup> We note that Ofgem looked into this topic as part of its RIIO review, but decided to continue using RPI for at least its next two price reviews. Ofgem stated that CPI indexation would be premature while the 'real rate of return', which is used in the calculation of allowed revenue, is determined by RPI-indexed government bonds. This could be interpreted as indicating a view that the existence of a (mature) market in CPI-indexed bonds is a pre-condition for incorporating CPI into the setting of price controls.



ante inflation assumption in allowed revenue, and that any variations in that ex ante assumption could be reflected in the opening RAB, by way of adjustment, at the beginning of the next control period. We see merit in considering this option during the review.

We continue to believe that it is appropriate to index expenditure, the RAB and access charges using RPI, and have highlighted the need for the appropriate rebasing of values for the access charges and grants in ORR's PR13 final determination to 2014/15 prices.

In relation to input price inflation, we have set out our concerns with the current use of IOPI. We would support the use of RPI in the indexation of input prices, although acknowledge that this area may merit further discussion with ORR.

## **6.4. Risk and uncertainty – re-openers**

### **Background**

ORR's consultation notes that in PR08, it considered it appropriate to compensate Network Rail for exogenous events that resulted in exceptional changes in costs (in either direction), through various re-opener provisions.

ORR highlights the need to consider whether these re-opener provisions remain appropriate, and in particular whether the 'material change in circumstances' re-opener removes the need for other specific re-openers (for example, ones related to the adjusted interest cover ratio and Network Rail's ability to finance itself efficiently), and also whether new ones may be required in the context of industry reform.

### **Discussion**

Many aspects of the regulatory framework take account of an element of risk, and currently accommodate it in different ways (such as through the cost of capital).

Network Rail considers that the current arrangements are broadly acceptable and would see merit in retaining the status quo, although considers that there may be a need to consider them in the context of other aspects of the review, such as the impact of potentially separate price controls.

This chapter has already considered the treatment of indexation and inflation. In relation to the overall risk framework, we believe that there could be merit in PR13 considering the risk of possible deflation during CP5, as this would be likely to increase Network Rail's efficiency challenge (given salary costs, which form a considerable proportion of its operating expenditure, would be unlikely to decrease in line with deflationary movements in RPI).

### **Network Rail position**

While Network Rail believes the current re-opener provisions are broadly acceptable, we would welcome further engagement on this area during the review, particularly to consider the impact of industry reform on risk management mechanisms.

## **6.5. Control period length**

### **Background**

ORR's consultation considers the length of CP5, highlighting that it needs to balance the need to provide appropriate incentives on the company to operate and invest efficiently, with the increased uncertainty involved in forecasting output requirements and costs further into the future.

### **Discussion**

There are theoretical benefits from having either a shorter or a longer period for CP5.

A shorter control period would mean that it should be easier to accurately forecast Network Rail's costs and revenues. Train usage dictates the pace at which Network Rail will need to renew some of its infrastructure. A shorter control period would make it easier to accurately forecast traffic volumes and Network Rail's costs.

A shorter control period would also mean that any unforeseen issues would have less time to 'play out' before they can be taken into account by ORR at the next control period.

We do consider, however, that ratings agencies would find it very difficult to evaluate Network Rail's risk, if control periods were very short.

On the other hand, a longer control should provide greater certainty and stability to stakeholders. In the context of Network Rail devolution and as it makes more of its value chain contestable, there could be a case for longer control periods in order to provide more opportunity for the industry to act in a more commercial manner.

A longer control period could mean, however, that it would be more difficult to accurately forecast traffic volumes and Network Rail's costs and revenues. In addition, it would also mean that any unforeseen issues will stay in effect for longer, before they can be taken into account by ORR at the next control period.

A further issue that would require consideration in relation to longer control periods is how changes to investment programmes could be accommodated. A possible option to address this would be to set a base plan for operating, maintenance and renewals expenditure over a longer period. The framework could then allow for the procurement of additional outputs during this period. Under this option, there would be merit in designing a mechanism that takes account of key decision points over the period, at which time outputs could be specified. This has a strong link to the discussion on consistency between HLOS and franchise outputs in Chapter 4.

### **Network Rail position**

While Network Rail acknowledges some of the pros and cons of shorter and longer control periods, it does consider that the most important aspect is that it is incentivised to make sound operating and investment decisions on a whole-life cost basis, irrespective of where it is in the control period. The price control should therefore be designed such that the length of the control period matters as little as possible. Furthermore, given the amount of industry change either taking place or planned, we are content with the existing duration of 5 years for CP5.

We note ORR's reference to PR08's 'Early Start' and that it could address issues of industry uncertainty for some types of investment which can be created by the periodic review process, by providing early conclusions once it has a clearer idea on CP5 capital expenditure plans. We consider that this is a key issue, and have highlighted elsewhere in this response the importance of us and our suppliers being able to plan with a reasonable degree of assurance, and that the approach to 'Early Start' should be extended to cover a wider range of expenditure in the first 2 years of CP5 (than was the case in PR08). We consider that this would also support making decisions based on whole-life cost, by avoiding a stop / start approach to renewals and enhancements that can occur as a result of the change in control periods.

## **6.6. Single/ Dual till**

### **Background**

ORR's consultation considers whether it should retain the single till approach to assessing Network Rail's income and costs. Under this approach ORR assesses all of Network Rail's forecast income and expenditure together, irrespective of the specific businesses from which they accrue. If the combined revenues are lower than the combined reasonable expenditure, then the difference is made up with Network Grant in order to allow Network Rail to finance its operations.

### **Discussion**

The current single till approach has the advantage that any profits that Network Rail makes from its 'non-core' railway activities such as property development, automatically help to finance 'core' railway activities.

A move to a dual till approach would lead to 'core' railway activities being dealt with separately from 'non-core' activities (such as property). We consider that the commercial activities we pursue are generally related quite closely to our railway activities, and as such should be considered together so that any 'non-core' profits that we accrue can be used to help finance the 'core' railway. Indeed, and as ORR highlights in its consultation, a move to a dual till could increase the extent of subsidy that the 'core' railway may require since it would cease to benefit from the cross-subsidy that it currently enjoys from our interrelated 'non-core' railway activities.

In the context of industry reform, by the end of CP4 the majority of long leases for franchised stations will have been transferred to franchised train operators. Network Rail considers that there could be merit in the separate identification of franchised stations costs and income, which could assist in facilitating a more transparent and straightforward transfer process. We would welcome further discussion on this area with ORR.

We strongly believe, however, that the costs and income associated with property and managed stations should continue to be assessed through the single till, since managed stations, in particular, form an integral part of the railway network in our view.

For example, hypothecated gains (where, as part of a property transaction, we would secure a station enhancement, for example, in lieu of cash) are an important source of third party funding into the railway that can deliver improved facilities to passengers, at no extra cost to funders and / or our customers. In our view, these transactions further support the case to retain the current single till approach, since

the assets on which value can be created are 'core' railway assets, requiring the support of the 'core' operational railway.

Related to this discussion, we do consider that other changes are needed to the regulatory regime to allow Network Rail's 'non-core' activities (especially its property division) more autonomy so that they can make a greater contribution towards the funding of the railways. We consider that the simplest way in which to affect this change would be for ORR to streamline the regulatory ring-fence provisions, which currently slow down and potentially hinder the degree to which we can exploit commercial opportunities related to the railway.

We recognise that ORR will have legitimate concerns about the extent to which Network Rail operates beyond its 'core' railway activities. We consider that a principles-based approach should be considered as a replacement for the current ring-fence arrangements. Such an approach would require Network Rail to put in place procedures and risk mitigation measures, so that ORR could be assured that the 'core' railway was not being neglected or encumbered with excessive commercial risk. Similar mechanisms have been used successfully by other regulators, such as Ofcom in its regulation of the telecommunications industry. We would welcome discussing our ideas for reform of the regulatory ring-fence with ORR further during PR13.

Furthermore, as discussed in Chapter 5, as we open up more of our value chain to competition it will increasingly be the case that we are operating in markets where the extent of our monopoly power is reduced. In the future, there could be merit in assessing whether there is a continued need for regulation and whether regulatory safeguards could be reduced in these areas.

### **Network Rail position**

Network Rail considers that CP5 should continue to be built around the single till approach, although has highlighted that there could be merit in considering the separate identification of franchised stations costs and income, to facilitate the transparent and straightforward transfer of long leases on stations to franchised train operators. However, Network Rail strongly believes that managed stations and property income should continue to be assessed under the single till approach.

We do consider that other changes are needed to the regulatory regime, in order to afford Network Rail's other activities more autonomy so that they can make a greater contribution towards the funding of the railways. We would welcome discussing our ideas for reform, particularly in relation to the regulatory ring-fence provisions, with ORR.

## **6.7. Amortisation**

### **Background**

The amortisation charge determines the portion of Network Rail's capital expenditure that is remunerated through access charges. In the PR08 final determination, ORR determined an amortisation allowance of £1.5 billion per annum, which represented approximately 27 per cent of Network Rail's allowed revenue over CP4. ORR's assumed charges were based on an annual long-run steady-state renewal expenditure estimate of around £2 billion (based on end-of-CP3 efficiency levels), with adjustments for expected efficiency catch-up (estimated by ORR at 36 per cent) and for the amortisation of non-capital expenditure RAB additions.

ORR is consulting on its approach to amortisation for CP5, implying that it is minded to retain the same high-level approach as in CP4<sup>23</sup>.

## Discussion

In its consultation, ORR queries the way in which Network Rail's RAB is amortised. Our understanding is that ORR is seeking views as to whether basing the amortisation of the RAB on Network Rail's long-run steady-state renewals is appropriate.

We consider that other approaches could be adopted to both the way in which the RAB is valued and to how it is amortised.

In some sectors regulators have based regulatory asset values on the replacement cost of assets. In Network Rail's case no account has been taken of the cost of historic assets in the valuation of the RAB. Enhancements are added to our RAB at the cost incurred in delivering them. In addition, other adjustments have been made to the value of our RAB to take account of deferred income and of under and over performance in delivering enhancements.

With regard to the current way in which RAB amortisation is calculated, there is a potential issue if enhancements are delivered that do not have enduring use. This is because the initial cost of enhancements is not amortised. Their cost will continue to be funded by the regulated rate of return on an 'interest only' basis. If an enhancement is delivered that ceases to be used at some point in the future, there would be an issue of its costs being stranded i.e. being financed by way of the RAB in perpetuity.

We recognise that an in-depth discussion and understanding is required of the technical issues relating to amortisation during PR13. ORR specifically refers to how it will calculate the amortisation assumption, such as the method by which long-run renewals are estimated; how efficiency will be applied; and how financeability will be taken account of. We agree that these aspects require detailed consideration.

ORR also highlights that it may make an adjustment to the amortisation allowance to ensure Network Rail is able to finance itself<sup>24</sup>. Again, we agree that this is an important area. The price control package as a whole, including the approach to setting amortisation charges, needs to be such that Network Rail can finance its efficient operations and investment programme.

ORR's consultation also considers the treatment of certain reactive maintenance costs, which since 2002–03 have been treated as operating expenditure in Network Rail's statutory accounts, but were capitalised for regulatory purposes for PR08.<sup>25</sup> We acknowledge that this is an area which merits further consideration during PR13.

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<sup>23</sup> ORR (May 2011), 'Periodic review 2013, first consultation', paragraph 6.49

<sup>24</sup> ORR (May 2011), 'Periodic review 2013, first consultation – annexes', paragraph E.54

<sup>25</sup> ORR (May 2011), 'Periodic review 2013, first consultation – annexes', paragraph E.57

## **Network Rail position**

In our view, the RAB is an effective mechanism for spreading the cost of long-life investments, and provides us with regulatory certainty about long-term funding. We also consider that there is merit in using the RAB to make other adjustments to our RAB to 'funding' incentive arrangements, such as outperformance on the cost of an enhancement, for example.

We consider that the current policy of setting Network Rail's amortisation allowance equal to the long-run average of capital expenditure required to maintain the network in steady-state is broadly appropriate, since in our view, enhancements to the network should have enduring use and benefit to rail users. It is, however, important that the implications of RAB additions to deliver additional outputs are explicitly understood by funders and are fully transparent. We would be open to further discussions with ORR on these matters.

There are many technical aspects of the amortisation calculation which Network Rail wishes to discuss in more detail with ORR, and we recognise the need for early engagement with ORR, particularly given its importance as a building block of allowed revenue.

## **6.8. Other aspects of the financial framework**

### **Background**

ORR's consultation includes sections on network grant and unsupported debt, for information.

In relation to network grant, ORR highlights that, in principle, the preferred method of funding Network Rail would be for all its income to be derived from customers, which would assist in solving the perception that it is inherently publicly funded and unprofitable, as well as addressing the perception that its primary accountability is to the governments, as opposed to its customers.

In relation to the introduction of risk capital, ORR states that it continues to be supportive of plans to issue unsupported debt when conditions are appropriate to do so and that industry reform presents new options in this area. ORR refers to work it commissioned from Royal Bank of Canada to consider some of the issues involved with risk capital, and the study's findings.

### **Discussion**

Network Rail agrees with ORR's discussion on network grant, and as far as reasonably practicable would prefer to receive income through access charges, as opposed to network grant. This could also act as an enabler to allocating fixed access charges and sunk RAB costs to routes on more of a market basis, which we also discuss in Chapter 3.

Network Rail welcomes ORR's comments relating to the introduction of risk capital in its consultation. This response has already underlined the importance Network Rail attaches to being able to raise risk capital in the future, particularly in relation to the incentives framework and the positive impact we believe this would have on the company.

There are important practical considerations associated with the introduction of risk capital. An option which may merit further consideration, given the pressing timescales of PR13 and the general economic climate, is whether a mechanism for the introduction of risk capital can be developed outside of the periodic review. Subject to the unanimous agreement of governments, ORR, and Network Rail, the mechanism could facilitate the introduction of risk capital at some point during CP5, when the three parties consider that the timing is appropriate.

### **Network Rail position**

We note ORR's comments in relation to network grant and the introduction of risk capital.

We look forward to further engagement on both aspects with ORR during the review, and will need to discuss in particular the practical considerations of the introduction of risk capital, such as timing for example, and the design of possible mechanisms that could support its introduction outside of the review process.

## 7. STRUCTURE OF CHARGES

### 7.1. Introduction

Network Rail believes that before considering the effectiveness of current charges and possible future charges, it is important to consider what the industry is trying to achieve and the enablers in place to achieve the objectives. The charging regime can then be assessed, alongside the incentive framework in particular, as to how it supports these enablers.

We consider that there could be three main aims for charging:

- Cost recovery;
- Signals to decision makers; and / or
- Supporting competition / contestability.

We believe that making trade-offs between these aims requires an understanding of how the charging regime fits in with the wider regulatory and contractual framework, and in the general direction of industry reform. If the charging regime is intended to go beyond cost recovery, then consideration about what it can realistically achieve is very important. In addition, there should be a clear articulation of any problems with the existing regime, and the outcomes that changes are intended to support.

In order to understand the impact of many of the charging proposals and whether they will achieve their desired outcomes, it is important to have a thorough understanding of the interactions between overall policy and charges (e.g. competition and scarcity charging); the charges themselves (e.g. the Capacity Charge and any potential scarcity charge); and the charges and other incentive mechanisms (e.g. the Volume Incentive).

In the context of devolution and closer working with our customers we would see merit in making only minor changes where necessary to the structure of charges in PR13. We consider that this will support and encourage new ways of working between ourselves and our customers, avoiding the introduction of further complexity. As highlighted in our response to ORR's initial July 2010 structure of charges consultation, we would be very concerned if the charging regime was a blocker to developing partnerships and alliances at the local level.

While ORR's consultation does not pose questions on all existing charges, the remainder of this chapter reviews each of the current charges, and also considers the possible introduction of new charges which ORR discusses in its consultation.

This chapter also outlines how we intend to engage with industry on our proposals for existing charges. We look forward to developing these proposals and working closely with our customers and ORR, to ensure their effective introduction at the beginning of CP5.



## 7.2. Variable Usage Charges

### Background

The variable usage charge (VUC) is designed to recover Network Rail's operating, maintenance and renewal costs that vary with traffic. In economic terms this reflects the short run incremental cost. The charge ensures that Network Rail is compensated for the increased wear and tear that results from traffic on the network. It also incentivises operators to develop and modify vehicles to be more 'track friendly', reducing whole industry costs. In 2009/10 Network Rail's income in respect of the VUC was £184 million, 3.5 per cent of total access charge and grant income.

The current VUC rates were calculated on a network-wide average basis. Therefore, the rate an operator pays in respect of an individual vehicle is the same irrespective of what part of the network that vehicle operates on. Network Rail calculated the existing rates by estimating total operating, maintenance and renewal costs that vary with traffic, using its Infrastructure Cost Model (ICM). It then allocated these costs between vehicles based on the relative wear and tear that they impose on the network using a model developed by the engineering consultancy TTCI (UK).

### *PR08*

In PR08 Network Rail explored the possibility of geographically disaggregating the VUC. Following the principle that charges should be cost reflective, we noted that there is a potential benefit from geographic disaggregation. However, we also noted that the potential benefits of geographic disaggregation were dependent on the extent to which it can be expected to optimise stakeholder behaviour.

As part of our analysis we calculated indicative costs by the following route categories:

- Primary;
- London & SE;
- Secondary;
- Freight; and
- Rural.

This analysis demonstrated material variations in cost. Primary routes were lowest cost on a £/thousand gross tonne kilometre basis, and rural ones the highest. In light of this analysis, Network Rail expressed concern about the perverse incentives that a geographically disaggregated VUC might lead to in the absence of charges to manage scarce capacity. The indicative analysis showed that it would be cheaper to operate on congested primary routes than less congested rural ones, potentially encouraging switching from the latter to the former.

Network Rail was also concerned about introducing greater complexity and administration into the charging system. ORR subsequently determined that a geographically disaggregated VUC should not be introduced in CP4. It stated, however, that it would keep this issue under review in CP4, in parallel with further examination of the case for a scarcity charge.

### *PR13: ORR's first consultation*

ORR's consultation again considers the option for geographic disaggregation of the VUC. It notes that the recommendations of the RVfM Study relating to devolution and incentivising operators to reduce Network Rail's costs are particularly relevant to this option.

ORR considers that geographic disaggregation may be merited if there are material differences in the variable usage costs associated with parts of the network with different capacities and capabilities. However, it recognises that vehicle / route choice is subject to a number of constraints, and the costs associated with increased complexity also need to be taken into account.

ORR also states that it is important to consider track access charges in the round. It notes that primary routes are thought to have relatively low usage costs but relatively high scarcity costs; therefore, refinement of charges for the former may not be appropriate without the introduction of charges for the latter.

Moreover, it notes that the VUC is highly disaggregated by vehicle type and this provides important signals to manufacturers, operators and funders. Therefore, any proposals to simplify the charges, thereby reducing the number of charging categories, may have some advantages but should seek to avoid blunting such incentives.

## **Discussion**

### *Geographic disaggregation*

Network Rail considers that a prerequisite for geographic disaggregation is material variations in variable usage costs across the network. If usage costs do not vary significantly, one would not expect geographic disaggregation to result in VUC rates that are materially different from the existing ones that are calculated on a network-wide average basis. As noted above, the indicative analysis carried out in PR08 suggests that costs do vary materially by route category. However, this is not the only relevant consideration; one should also consider the extent to which the potential benefits of geographic disaggregation outweigh the costs.

In principle, Network Rail believes that geographically disaggregating the VUC could have benefits, including:

- improved cost reflectivity and equitability;
- stronger incentives on operators to deploy and modify vehicles in a manner that reduces whole industry costs because charges will better reflect the track characteristics of the routes that they operate on; and
- stronger incentives on operators to reduce whole industry costs because VUC rates would be based on costs at a more local level. Hence, they would be more likely to see a reduction in wear and tear costs reflected in their VUC rates.

However, Network Rail considers that geographic disaggregation would impose significant additional costs on the industry. These costs would include the following, which are associated with increased complexity and higher administration:

- Under a geographically disaggregated pricing structure the VUC price list would have to be extended significantly to include multiple rates for every vehicle class. It would, therefore, be more complicated for operators to calculate the overall VUC that they will incur where they operate services that cut across route categories, potentially making it more difficult for them to plan their businesses.
- Network Rail would also have to upgrade its track access billing system in order to charge operators on a geographically disaggregated basis. These upgrade costs should not be underestimated.
- Operators will receive significantly more charge item data within their weekly/periodic charge files, making it more difficult for them to assimilate the information. Network Rail's billing systems' processing time is also likely to increase.
- Track damage models may need to be enhanced to calculate damage on a geographically disaggregated basis. Currently some models operate on a national basis (disaggregated by track characteristic). As the geographic size that is modelled reduces so does the statistical confidence in the predicted damage. This effect may limit the minimum size of route that could be modelled with confidence.

As noted, above, Network Rail's indicative analysis in PR08 showed that introducing a geographically disaggregated VUC could give rise to perverse incentives where busier routes are cheaper to operate on than quieter ones. As custodians of the network, Network Rail wants to see the optimal use of network-wide capacity and would not be in favour, therefore, of geographically disaggregating the VUC if this encouraged inefficient capacity utilisation. Network Rail shares ORR's view that track access charges should be considered in the round, and our view in respect of scarcity charging is set out in section 7.5.

Notwithstanding the indicative analysis carried out in PR08 that showed geographically disaggregating the VUC according to route category could give rise to perverse incentives, we consider that if geographic disaggregation is to be explored further in PR13, there is greater merit in retaining this approach than, for example, assessing disaggregation by Network Rail operating or strategic route. The costs that the VUC is designed to recover are directly related to the asset management policies adopted across the network. These policies vary according to criticality band (close to route category), not Network Rail operating / strategic route boundaries. From a user perspective, varying prices according to operating / strategic route boundaries may also appear relatively arbitrary, which would be an added disadvantage.

In addition, the approach to modelling variable usage costs will also impact on the extent to which they vary by geography. In PR08 Network Rail calculated the cost impact of renewals using a long-term modelling horizon (35 years) so that the impact of periodic renewals and differences between incremental tasks are 'smoothed out'. This smoothing of renewal costs will serve to reduce the extent to which variable usage costs vary by geography (although asset management policies will still vary) and therefore could reduce the benefits of geographic disaggregation.

We also consider that the extent to which geographically disaggregating the VUC will actually impact on operator behaviour / decision making remains unclear. For example, under the existing VUC pricing structure, operators are already incentivised to make 'track friendly' vehicle modifications. At present, there are ongoing trials of a new novel 'hydro bush' on Siemens Desiros vehicles, and on Mk 4 vehicles on the East Coast Main Line.

In response to ORR's recent consultation on VUC rates for modified vehicles, we stressed the need for flexibility. We consider that a flexible regime that, where appropriate, allows VUC rates to be calculated outside the charging model and enabled through bespoke deals could facilitate 'track friendly' vehicle modifications, without introducing additional complexity into the pricing structure through geographic disaggregation.

We consider that materiality is also a relevant consideration when assessing the appropriateness of geographically disaggregating the VUC. In 2009/10 Network Rail received 3.5 per cent of total access charge and grant income through the VUC. ORR estimates that the charge typically accounts for 1-3 per cent of total franchised train operators' costs. The VUC represents, therefore, a relatively small proportion of revenue and cost for Network Rail and franchised train operators respectively. Hence, it could be argued that it is not sufficiently material to offset the additional costs and complexity that would result from geographic disaggregation.

#### *Simplification of charges*

Network Rail notes that at present the VUC price list is highly disaggregated. For passenger vehicles the VUC price list is disaggregated to vehicle class level and for freight vehicles it is disaggregated further to reflect commodity type and whether the vehicle is laden or unladen. Although there could be merit in simplifying the pricing structure, Network Rail considers that this could reduce the cost reflectivity and / or incentive properties of the VUC.

If, for example, price bands were introduced (i.e. grouping similar vehicles together such that they pay the same VUC rate), this would result in vehicles that impose different levels of wear and tear on the network being charged at the same rate. A consequence of this would be to blunt the incentives that operators face to deploy vehicles that impose relatively less wear and tear on the network. It would also weaken the incentives that operators face to make 'track friendly' vehicle modifications, where such modifications did not result in a more favourable banding.

### **Network Rail position**

#### *Geographic disaggregation*

Network Rail considers that geographically disaggregating the VUC could theoretically have advantages. However, we are not convinced that these outweigh the additional costs that would be imposed on the industry. Moreover, we consider that the extent to which disaggregation will further optimise behaviour remains unclear, and that it is not required for revenue recovery, competition and benchmarking. There are also technical uncertainties regarding the ability to accurately model track damage on a highly disaggregated basis. Therefore, on balance, Network Rail does not consider that it would be appropriate to introduce a geographically disaggregated VUC in CP5. We would note that if geographic disaggregation is to be explored further in PR13, we do not consider that it would be appropriate to do so on the basis of operating or strategic routes.

### *Simplification of charges*

We support vehicles being deployed and developed in a manner that reduces whole industry costs. Therefore, we would not support simplification of charges if the incentives that operators face in this respect were to be weakened.

### *Communication plan*

We recognise the importance of engaging with the industry effectively when developing our proposals in respect of the VUC. We intend to engage with stakeholders through issuing consultations and hosting workshops during PR13. We will also continue to consult with stakeholders on a less formal basis at the regular cross industry VUC meeting that we attend, and other forums where appropriate.

Key issues on which we intend to consult with the industry include:

- the methodology for establishing variable operating, maintenance and renewal costs; and
- the vehicle characteristics that determine the level of wear and tear a vehicles imposes on the network.

## **7.3. Traction Electricity Charges**

### **Background**

Currently, all electrified operators are charged a traction electricity charge, also known as an Electric for Traction Current (EC4T) charge. For most operators, the charges are based on published modelled consumption rates<sup>26</sup>. For those that have opted-in for on-train metering (OTM), charges are based on metered data. The price paid is based on, for franchised passenger operators, electricity purchased at Network Rail's actual cost, and for freight, a price based on the MLUI<sup>27</sup>.

At the end of each financial year, the volume reconciliation (volume wash-up) is carried out. This is where, for each electricity supply tariff area (ESTA), the difference between the total modelled consumption and the actual amount of electricity billed to Network Rail for that ESTA is shared between electrified operators in that area in proportion to their modelled consumption. This amount can be positive or negative depending on the accuracy of the modelled rates.

Similarly, a cost reconciliation (cost wash-up) is carried out at the end of each financial year. This is where, for each operator, the difference between the total billed cost for electricity and the actual cost to Network Rail is shared between all electrified operators in proportion to their total billed traction electricity charge.

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<sup>26</sup> The Traction Electricity Consumption Rates List for CP4:  
<http://www.networkrail.co.uk/browse%20documents/regulatory%20documents/access%20charges%20reviews/cp4%20charges/c%20-%20traction%20electricity%20consumption%20rates%20list%20for%20cp4.pdf>.

<sup>27</sup> Moderately large users' index, this is published quarterly by Department of Energy and Climate Change, accessible here:  
<http://www.decc.gov.uk/en/content/cms/statistics/publications/prices/prices.aspx>.

Electricity prices are expected to increase significantly over CP5, and we note that the Department of Energy and Climate Change (DECC) and Ofgem are currently considering new strategies<sup>28</sup> to manage more volatile electricity pricing in the future. The policy for charging for EC4T should be considered together with these initiatives. The price of electricity will directly influence what is judged to be an efficient level of transmission losses for the industry.

In 2009/10, Network Rail received £233 million in EC4T income from both passenger and freight operators in GB.

### *PR08*

The key changes to the policy for EC4T charges in PR08 were:

- the revision of the consumption rates;
- the introduction of the option for operators to move to metered billing;
- the inclusion of freight in the annual volume wash-up; and
- the basis for freight tariffs.

Network Rail developed and consulted on a new model to estimate traction electricity consumption rates, which used an established performance modelling tool called Railsys. In its determination, ORR said that there were too many concerns with the use of Railsys to approve the new consumption rates, and for this reason, the proposed rates were not implemented.

During PR08, Network Rail and passenger operators proposed that freight operators' traction electricity charges should also be subject to the volume wash-up adjustment in the relevant ESTAs<sup>29</sup>; this was opposed by the freight operators due to the increased levels of uncertainty. However, ORR concluded that freight should be subject to the volume wash-up from CP4 onwards.

Since April 2007, franchised passenger train operators have faced prices set at the actual costs to Network Rail associated with the preferred electricity purchasing strategy decided by franchised passenger operators collectively. This replaced the MLUI which was used to rebase the charges each year. Freight operators decided not to take part in the changes to the pricing arrangements, and so their prices are still based on the equivalent costs in 1999/00 but indexed by MLUI. The freight operators did, however, indicate that they would like to have the ability to discontinue the use of the MLUI index. ORR determined that this could be triggered at the start of any financial year during CP4, and that it would share the drafting for this with freight operators and Network Rail shortly after its final determination.

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<sup>28</sup> DECC has announced its strategy to roll out smart meters to every house by 2020: [http://www.decc.gov.uk/en/content/cms/tackling/smart\\_meters/smart\\_meters.aspx](http://www.decc.gov.uk/en/content/cms/tackling/smart_meters/smart_meters.aspx).

<sup>29</sup> If freight operators remained outside of the wash-up and the freight consumption rates underestimated their use of electricity, the resulting cost would fall to the franchised operators through the volume wash-up.

### *On-train metering*

Since 1 April 2010, some operators have opted-in for OTM. Metered operators are billed for their traction electricity based on metered usage (plus a mark-up for transmission losses) instead of modelled rates. These operators are excluded from the annual volume wash-up, unless more than 90 per cent of consumption in the ESTA is metered.

In 2011, Network Rail introduced a Transitional Risk Sharing Mechanism (TRSM) for CP4. The TRSM caps each operator's average post volume wash-up consumption rate at 7.5 per cent, where more than 10 per cent of the consumption in that ESTA is metered. This was introduced to share the risk of the uncertainty associated with the move of some operators to metered billing.

### *PR13: ORR's first consultation*

In its first consultation, ORR has proposed the following framework<sup>30</sup>:

- charge metered vehicles on the basis of metered consumption plus a mark-up to reflect system losses attributed to that vehicle;
- calibrate modelled rates on the basis of metered trials, where it is possible to do so;
- strengthen incentives for operators to meter through applying an uplift to modelled rates (levied on unmetered operators);<sup>31</sup>
- allocate volume risk (the volume wash-up) in each ESTA between unmetered services and Network Rail, so that the allocation reflects their respective ability to manage the risk (taking account of Network Rail's and operators' relative ability to manage transmission losses); and
- allow Network Rail to recover costs – calculated using ex-ante assumptions – for an efficient level of system losses.

In its consultation, ORR asks for stakeholders' views on the proposals to improve incentives to reduce traction electricity consumption.

ORR states that *"For PR13, there is a major opportunity to build on this work and the knowledge gained [from OTM] to strengthen both operators' and Network Rail's incentives to reduce electricity consumption, where there is an economic case to do so."*<sup>32</sup>

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<sup>30</sup> ORR (May 2011), 'Periodic review 2013, first consultation – annexes', paragraph F.32.

<sup>31</sup> This uplift would reflect internal and external cost differences such as the lower expected efficiency associated with vehicles that are unmetered.

<sup>32</sup> ORR (May 2011), 'Periodic review 2013, first consultation – annexes', paragraph F.31.

## Discussion

### *Consumption rates*

In principle, it may be sensible to recalibrate modelled consumption rates for similar trains and/or network types on the basis of historically recorded metered data<sup>33</sup>. There are some parts of the network, where a substantial amount of the electricity is being metered, namely the West Coast Main Line. There is also a piece of work being undertaken by ATOC on sample metering<sup>34</sup>.

On the parts of the network where there is little or no metering, there is a case for the modelled rates to remain the same. This is because:

- using very small and/or unrepresentative samples to recalibrate the rates is unlikely to significantly increase the accuracy of the modelled rates;
- any recalibration of the modelled rates would use Railsys, which raised significant concerns during PR08; and
- developing a new model to recalibrate modelled rates using something other than Railsys may be an inefficient use of time and resource, which could be better spent on improving incentives for and encouraging more OTM.

The extent to which an uplift on modelled consumption rates provides an incentive to franchised passenger operators is almost nil, since the 'no net loss / no net gain' provision in franchise agreements holds franchised operators neutral to changes in the consumption rates made during a periodic review. Applying an uplift to modelled rates is a positive step toward a strong financial incentive for freight and open access operators to opt-in for on-train metering. Basing the uplift on the approximate costs associated with the lower expected efficiency associated with vehicles that are unmetered seems sensible, but may be disproportionately difficult to quantify and we consider that this work should be scaled accordingly. There may be merit in clarifying that an uplift will be applied in the same way across all operators on all routes, in order to provide the same relative incentive to all electrified operators.

It is also important to consider the way in which this uplift would work in terms of the annual volume wash-up. The incentive properties of the uplift may be reduced if it is paid back through the wash-up. Ways to avoid this are:

- for the uplift to apply to the post wash-up consumption rate; or
- for the uplift to be levied as a separate charge to the current traction electricity charge.

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<sup>33</sup> There may be issues with obtaining data from operators using data for own analysis and not opted in for metering. There may also be perverse incentives to provide best data and not opt-in for metering.

<sup>34</sup> ATOC is working with Birmingham University to carry out statistical analysis of the efficacy of partial fleet fitment of DC energy meters.



### *Price*

Currently franchised passenger train operators are able to purchase electricity at Network Rail's actual cost; however freight operators' prices are still based on the MLUI. There may be merit in requiring all freight operators to move over to similar price arrangements as for passenger operators, from CP5 onwards.

It was proposed, in PR08, that delivery charges should be passed through to operators according to their post consumption wash-up costs in each ESTA. Although agreed in principle, this proposal was not included in the amended TAAs. Since charges should always be based on the costs incurred, there is merit in considering the disaggregation of the delivery charges, so that it is charged to operators based on the costs incurred by that operator.

### *EC4T Delivery Charge*

The EC4T Delivery Charge covers the cost of delivering electricity from the power station gate to the Network Rail boundary supply points. Part of the charge is paid to National Grid and the remainder to the Distribution Network Operators. National Grid charges Network Rail according to Network Rail's consumption in three half-hour periods in the winter months. The periods are determined by the maximum demands on National Grid's system and are only known towards the end of March each year. An estimate of the charge is paid throughout the year and a reconciliation exercise is performed in April. Charges vary geographically according to which Distribution Network the connection is located.

The introduction of OTM has resulted in better quality of data, which includes location data. The location data would mean that it would not be too onerous to calculate an operator's demand in each charging area for the three half-hours.

### *Regenerative braking discount*

ORR's consultation document does not mention the regenerative braking discount, which we consider should also be revisited for CP5, given the increased quality of data being collected through OTM. The data obtained during CP4 has highlighted that the energy recovered from regenerative braking is more variable than initially realised. The ability to recover energy through regenerative braking is dependent upon train design, weather, and driver behaviour as well as service pattern, for example. The energy recovered during leaf fall and winter conditions can be around zero.

### *Transmission losses*

In its consultation document ORR proposes that metered consumption is marked-up to reflect system losses by a fixed percentage. There are a number of benefits of charging train operators in this way, as it allows them to:

- create business cases for moving to OTM;
- move away from the wash-up process; and
- have more control over the level of their bills.

Currently the losses mark-up for OTM for the entire AC network is set at 5 per cent and 27 per cent for DC. It appears sensible that these figures are further validated

and revised as more operators opt-in for OTM, and the industry has a better understanding of the actual losses on the network. Similar to the arrangements in CP4, there appears to be clear advantages of fixing the losses mark-ups for the whole of CP5.

ORR proposes that Network Rail should charge its customers for the efficient level of system losses. This appears to be a fair way to charge operators and could take the form of an evidence-based percentage efficiency which could be applied to the losses mark-ups. The mark-up should take account of actual network characteristics rather than targets, which may be theoretical but impractical.

It is sensible to consider the allocation of volume risk; and it seems appropriate that those who are able to manage the risk are allocated a portion of this.

ORR's consultation document states that Network Rail has no financial incentive to reduce electricity losses. However, Network Rail does have some financial incentives currently to reduce electricity losses e.g. through its inclusion in the volume wash-up for its own use of traction power; and through its TRSM liability in CP4. Network Rail agrees that these could be improved for CP5.

#### *Technical losses*

Resistive losses would be expected to rise in CP5 due to increased electric train operation, and new trains<sup>35</sup> being introduced with regenerative braking as standard. While this will reduce overall energy consumption, it will increase the current flowing in the electrification system, and therefore increase electrification losses.

Leakage losses are independent of train load but only contribute to 1-2 per cent of assumed losses. Initial findings suggest polymeric insulators could reduce leakage losses when compared with ceramic insulators. This change may save up to 50 per cent of the 1-2 per cent; so would be very small, and is again weather dependent.

#### *Commercial losses*

It is important to note that even if the electrification system was 100 per cent metered and efficient, commercial losses would still occur due to metering tolerance, and timing / location rounding up over the five minute samples. While, in theory, these should all cancel out, they rarely do. In the Electrical Supply Industry, commercial losses are typically around 2 per cent.

#### *Other issues*

ORR's consultation does not consider the option of:

- making OTM compulsory (although it does suggest an incentive by way of the uplift on the consumption rates); or
- rolling forward the existing consumption rates.

These issues are discussed further below.

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<sup>35</sup> e.g. Thameslink, IEP, Crossrail, EGIP etc

## **Network Rail position**

### *Full on-train metering*

Network Rail has worked proactively to facilitate metering, and strongly believes that the key to driving out inefficiency is to strongly encourage full OTM across the entire network. Network Rail continues to support this initiative, and believes that there is the need for better incentives to meter in CP5. Network Rail has also started to meter its use of traction electricity, which is also discussed in section 5.11. If participation in OTM were to be compulsory for both passenger and freight operators in CP5, or at least a minimum requirement that all new electric vehicles are included, it would greatly simplify the billing arrangements for EC4T as well as reducing the need for adjustments such as regenerative braking.

### *Consumption rates*

In light of the overall aim for full OTM, Network Rail does not consider that the work being done on sample metering, where metered data from a sample of meters is extrapolated to the rest of the fleet, is the best way forward. This type of billing is likely to significantly reduce the benefits of metering because it could lead to reduced tracking of driver performance, as many trains will not be fitted with equipment to actually record drivers' use of electrical power<sup>36</sup>.

On the parts of the network where there is little or no metering, Network Rail considers that the modelled rates should remain the same.

Network Rail fully supports the strengthening of incentives for operators to meter through applying an uplift to modelled rates. Basing the uplift on the approximate costs associated with the lower expected efficiency associated with vehicles that are unmetered seems sensible, but may be disproportionately difficult to quantify, and we consider that this work should be scaled accordingly. Network Rail suggests that the uplift should be applied in the same way to all operators on all routes, in order to provide the same relative incentive to all electrified operators; reduce complexity; and reduce costs for changes to the billing system. Network Rail also considers that it is important not to reduce the incentive properties of the uplift in terms of the annual volume wash-up. In doing this, the incentive benefits should be realistically scaled to take account of the protection provided to franchised operators through the 'no net loss / no net gain' provision in their franchise agreements.

### *Price*

Network Rail welcomed ORR's PR08 determination to allow individual operators to influence purchasing of electricity, and it has worked closely with operators to facilitate this. Network Rail considers that it is appropriate for freight operators to move to using similar pricing arrangements to those used by franchised passenger operators, as we do not consider the MLUI to be an adequate reflection of actual electricity costs, and would unify the EC4T charging regimes.

Network Rail proposes that instead of spreading cost variances across all franchised operators as the TAA currently states, the costs incurred by each operator should be passed through to the operator which has incurred the cost. Introducing this change

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<sup>36</sup> Our understanding is that under this approach, only around 25 per cent of train sets would be fitted with meters.

would also allow the 'energy' element of the EC4T cost to be passed through to the operator, as per the price setting strategy that the operator has executed.

#### *EC4T Delivery Charge*

Network Rail proposes that metered operators could have this element of the EC4T cost passed through to them by paying for the 'transmission' element of the Delivery charge in the same way that Network Rail is charged. As all OTM consumption is accompanied by location data, it would not be too onerous to calculate the operator's demand in each charging area for the three half-hours. Since unmetered operators are still charged based on modelled consumption rates, they should continue to be charged as they are now.

#### *Regenerative braking discount*

Network Rail considers that data being collected currently from meters should be used to reset the regenerative braking discount.

#### *Transmission losses*

We consider that it is appropriate to continue with the current arrangements for charging for metered consumption plus a mark-up to reflect the associated system losses in that ESTA.

Network Rail is committed to carrying out further work to validate or update the losses mark-ups. Similar to the arrangements for CP4, Network Rail believes it is appropriate that the losses mark-up is fixed for the whole of CP5, to provide operators with certainty, and the ability to manage their EC4T bills.

It is sensible for Network Rail to charge its customers for the efficient level of system losses. This should take the form of an evidence-based percentage efficiency which should be applied to the current losses mark-ups<sup>37</sup> across the network. The work carried out, to-date, has found that transmission losses increase with higher traffic density. We need to be careful that in trying to keep transmission losses low, we do not create disincentives to Network Rail to accommodate additional traffic.

Network Rail would prefer a single AC and a single DC mark-up, as setting losses mark-ups at a more granular level may compromise the clear signals and simplicity that the current arrangements provide to those operators considering opting in for OTM. Network Rail does, however, recognise that longer trains will have higher losses attributed to them, and therefore this simplification may introduce another inaccuracy.

As the evidence to support the losses mark-up improves<sup>38</sup>, the need for the Transitional Risk Sharing Mechanism (TRSM) will diminish. Therefore, Network Rail proposes that the TRSM does not apply for CP5.

Network Rail considers that it is sensible to consider the allocation of volume risk; and that those who are best able to manage the risk are allocated a portion of this.

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<sup>37</sup> Currently set at 5 per cent for the AC network and 27 per cent for the DC network.

<sup>38</sup> Evidence will almost certainly improve as more operators opt-in for OTM.

Transmission losses are caused by trains running on the network. It is worth noting that Network Rail's unmetered use of traction electricity for non-traction purposes is included in the annual volume wash-up, and we consider that this arrangement should also remain for CP5.

Network Rail does have some financial incentives currently to reduce electricity losses, however, we agree that these could be improved for CP5.

#### *Network Rail's alternative proposal*

There is also an argument for making OTM compulsory in CP5 for all electrified train operators. In this situation, the TAAs would not allow for the EC4T charge to be calculated based on modelled rates, and instead all operators would be treated as 'opted-in', and would be subject to the EC4T Metering Rules<sup>39</sup>. Where no metered data is provided, the operator would be subject to the penalties associated with missing data.

#### *Other Issues*

In recalibrating consumption rates based on metered trials, the major issue would be in collecting relevant metered data. In order to use data for this purpose, Network Rail would need access to more granular metered data than that provided for billing<sup>40</sup>. Obtaining this data may be difficult, as this belongs to the train operators. Train operators may choose not to provide this for the use of recalibrating rates for which they are no longer billed, or may not have data at the sufficient level of granularity.

Operators which have not opted-in for OTM, but are still collecting metered data, may be incentivised to provide only the 'best' data in order to drive down consumption rates without opting-in.

This makes the case stronger for rolling forward into CP5 the existing consumption rates (without recalibration) plus the uplift.

## **7.4. Electrification Asset Usage Charges**

### **Background**

The electrification asset usage charge (EAUC) is based on the same principles as the variable usage charge. It is designed to recover the costs of electrification assets (e.g. overhead lines) that vary with traffic. It is charged as a mark-up on the VUC and separate rates exist for vehicles operating on the DC (third rail) and OLE (AC) network, reflecting the different levels of cost causation. In 2009/10 Network Rail's income in respect of the electrification asset usage charge was £8 million (0.15 per cent of access charge and grant income).

#### *PR08*

In PR08 Network Rail estimated the costs to be recovered through the EAUC using its Infrastructure Cost Model (ICM) and expert judgement. Total OLE and conductor-

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<sup>39</sup> The latest version of the EC4T Metering Rules can be accessed here: <http://www.networkrail.co.uk/asp/12873.aspx>.

<sup>40</sup> Metered data for billing is provided in kWh per 5 minute interval.

rail electrification asset maintenance and renewal costs were estimated using the ICM. Expert judgement was then used to determine what percentages of these costs vary with traffic.

As part of its review during PR08, Network Rail refined the methodology for calculating EAUC rates. In CP3 the EAUC was recovered through a mark-up on EC4T rates. In PR08 Network Rail successfully proposed that the EAUC should be recovered as a mark-up on the VUC, reflecting the fact that costs are more closely related to vehicle miles than electricity consumption.

Network Rail also successfully proposed revised assumptions in relation to cost variability. The EAUC rates in CP3 assumed that the costs of AC / DC distribution and switchgear renewals varied with traffic. In PR08 these assumptions were revised to reflect the fact that these renewals are driven by natural degradation such as weather and ageing, rather than traffic. The impact of these revised variability assumptions was a significant reduction in the income Network Rail receives through the EAUC, down from approximately £30 million per annum in CP3, to £8 million per annum in year 1 of CP4.

In PR08 Network Rail identified four potential charging options in relation to the EAUC (pence per electrified vehicle mile, pence per electrified train mile, different charges based on speed and route-based rates) but proposed levying the charge on a pence per electrified vehicle mile basis.

#### *PR13: ORR's first consultation*

ORR does not discuss the EAUC in its consultation. However, Network Rail would like to take this opportunity to set out its view in relation to the future direction of the charge.

## **Discussion**

### *Methodology*

Following the work carried out in PR08, Network Rail recognises that there is scope for improving the cost reflectivity of the EAUC methodology. Consultancy advice<sup>41</sup> previously provided to ORR indicated that variable electrification asset costs are driven by the force applied to the assets. This force is determined by a number of factors including speed, the number / type of pantographs and the extent to which the overhead line has to lose height for bridges and other route features. The current charge does not reflect the type of pantograph a vehicle has, nor does it reflect route features that impact on the level of wear and tear. However, because it is billed on a pence per electrified vehicle mile basis, it does broadly reflect the existence of multiple pantographs (an 8 car consist with 2 pantographs would have twice the number of electrified vehicle miles as a 4 car consist with 1 pantograph).

Improving the cost reflectivity of the EAUC could also potentially improve its incentive properties. For example, if a reduced rate was applicable to vehicles with pantographs that impose a lower level of wear and tear on the OLE network, operators could face a stronger incentive to adopt pantographs that reduce whole industry costs.

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<sup>41</sup> Booz | Allen | Hamilton & TTCI (January 2005), 'ORR Revision of Variable Usage and Electrification Asset Usage Charges: Initial Report'

However, improving the cost reflectivity and incentive properties of the EAUC is likely to result in additional complexity and higher administration costs. The main point made by stakeholders during the PR08 consultation process was that the charge should be kept relatively simple. Network Rail considered the existing methodology the best overall approach, balancing issues around simplicity and cost reflectivity. The balance between cost reflectivity and simplicity remains a relevant consideration when assessing the extent to which it is appropriate to refine the EAUC in CP5.

#### *Re-calibration*

Re-calibration of the EAUC would result in CP5 rates being based on updated cost and traffic data. It should also capture any efficiency improvements in relation to the maintenance costs of electrification assets.

An alternative to re-calibration would be rolling forward the existing EAUC rates, adjusted by RPI. This approach would mean the charge is not based on updated cost and traffic data. However, it would provide certainty in relation to CP5 rates and would also require less administration.

#### **Network Rail position**

Electrified vehicles continue to impose wear and tear costs on electrification assets and therefore it continues to be appropriate for Network Rail to recover these costs from those who cause them.

#### *Methodology*

Although there is scope for refining the EAUC in order to increase its cost reflectivity and incentive properties, Network Rail does not consider that it would be appropriate to do so for CP5. In 2009/10 Network Rail received £8 million from operators in respect of the EAUC. This equates to 0.15 per cent of Network Rail's access charge and grant income and approximately 1 per cent of franchised train operator access charge expenditure. In Network Rail's view the value of the EAUC is not sufficiently material to warrant introducing additional complexity and administration costs, in an attempt to improve its cost reflectivity and / or incentive properties.

Therefore, Network Rail proposes that the EAUC continues to be levied on the same basis as in CP4. That is, as a mark-up on the variable usage on a pence per electrified vehicle mile basis, with separate rates for vehicles operating on the DC (third rail) and OLE (AC) network.

#### *Re-calibration*

Although there could be merit in a roll forward, Network Rail proposes that the EAUC is recalibrated to reflect updated cost and traffic data. This will mean charges are based on robust cost and traffic data and should also capture any efficiency improvements in relation to the maintenance costs of electrification assets.

#### *Communication plan*

Network Rail intends to engage with stakeholders in relation to the EAUC through issuing consultations and hosting workshops during PR13. It will also consult with stakeholders on a less formal basis.

## 7.5. Charges for Managing Scarce Capacity

### Background

#### *Capacity Charge*

The Capacity Charge is based on congestion costs, and as such allows Network Rail to recover its increased Schedule 8 costs incurred as a result of accommodating additional traffic. The costs arise because as the network becomes more crowded it becomes more difficult for Network Rail to recover from incidents of lateness. These costs differ across the network and at different times of the day due to the capacity utilisation and the proximity of train services.

The Capacity Charge was introduced as part of the 2000 Periodic Review. Previous to this, these costs were recovered through the fixed charge.

As part of PR08, Network Rail's SBP proposal was to disaggregate the Capacity Charge by strategic route section and six time-bands. This would have been less complex than the original CP2 charge but more cost reflective than the CP3 charge. A number of concerns were raised by stakeholders in response to this proposal, which are listed, below:

- partial double recovery of the same costs through the Capacity Charge and freight performance regime;
- the impact of the performance regime benchmark recalibrations for CP4 on the level of the Capacity Charge; and
- the change in the circumstances between early CP2 and the start of CP4, where increasing capacity constraints and tighter franchise specifications may limit the ability to later services and reduce the incentives effects of the Capacity Charge.

ORR determined that the Capacity Charge should remain, as it recovers a genuine cost to Network Rail. ORR also considered it was appropriate to retain the current simplified version of the charge<sup>42</sup>, since incentive effects were diminished by increasing capacity constraints and tight franchise specifications.

The key changes were:

- the introduction of the weekend discount; and
- the removal of the distinction between freight commodity types.

ORR concluded that the Capacity Charge should be reviewed in CP5, to address the remaining anomalies associated with the charge, taking into account the impact on incentives.

In 2009/10, Network Rail recovered £160 million in Capacity Charge income from all operators in Great Britain.

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<sup>42</sup> List of capacity charge rates for CP4:

<http://www.networkrail.co.uk/browse%20documents/regulatory%20documents/access%20charges%20reviews/cp4%20charges/d%20-%20list%20of%20capacity%20charge%20rates%20for%20cp4.pdf>.



In its first PR13 consultation document, ORR states that the Capacity Charge gives operators price signals regarding the congestion they are causing other vehicles although it notes that, to date, the charge has been applied in an aggregate way which blunts this incentive<sup>43</sup>. This implies that ORR may be minded to further disaggregate the Capacity Charge.

#### *Scarcity and reservation charges*

A scarcity charge can be described as a charge which recovers the economic costs associated with the use of a train path. Where capacity demand outweighs the capacity available, traffic may be forced to use less favourable paths/time, or to not use rail at all.

A reservation charge can be described, in this context, as a charge which is levied when a path is booked, but reimbursed if the path is used. This could also be described as a cancellation charge.

Both of these are seen as charges that are based on the economic value of an over-subscribed path, as opposed to the cost recovery style charges that train operators pay currently. Neither a scarcity nor reservation charge is currently levied to train operators in Great Britain.

During PR08, ORR examined and consulted on the introduction of a reservation or scarcity charge. This included a report commissioned by the Institute of Transport Studies (ITS), which recommended that charges could be made more cost reflective through the adoption of a simple scarcity charge. However, in its June 2006 consultation on the structure of track access and station long term charges, ORR said it would be wrong to do further work on the introduction of a scarcity charge at that time, given the complexity likely to be involved and that it was important to allow sufficient time for the route utilisation strategies to be developed nationwide.

Similarly, following a cost/benefit study undertaken by the consultancy NERA, and consultation with the industry, ORR said that there was insufficient evidence that a reservation charge would produce net benefits and that it would therefore not introduce it in CP4.

While ORR decided that it was not appropriate to introduce the scarcity or reservation charges at that time, it did say that it would give further consideration to the introduction of these charges during CP4 for possible implementation in CP5.

In its first consultation document, ORR asks for stakeholders' views on:

- introducing a charge levied to reflect network scarcity; and
- a reservation charge (assuming it would be set to be financially neutral for freight operators).

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<sup>43</sup> ORR (May 2011), 'Periodic Review, First consultation – annexes', paragraph F.36.

## Discussion

### *Capacity Charge*

The Capacity Charge allows Network Rail to recover the additional Schedule 8 costs to the business as a result of accommodating additional capacity.

The Capacity Charge is not well equipped to incentivise train operators to make the best use of capacity; its primary purpose is to hold Network Rail cost neutral to additional traffic. While the charge provides no disincentive to accommodate additional traffic, we consider that it does not provide any incentive.

If the aim was to develop the charge so that it could provide better incentives to accommodate additional traffic, we believe that it needs to be developed beyond cost recovery.

A way to provide better signals to operators about the use of the current network capacity could be to further disaggregate the charge. This would, however, make the charge more complex and while it may provide signals and visibility to operators about their use, it may not necessarily provide incentives to shift services. In any case, franchised train operators are less able to respond to these signals due to the current requirements specified in their franchise agreements.

To further develop the incentive to accommodate additional traffic, we consider that the Capacity Charge should be considered alongside the current Volume Incentive, since the two mechanisms are very similar in their aims, and any development of one is almost certainly going to affect the other.

Before considering further disaggregation of the Capacity Charge, which would introduce further complexity, it is important to consider the merits of retaining a relatively simple charging regime, on top of which bespoke deals and arrangements (which are discussed in further detail in Chapter 5) can be made. It has been argued that the Capacity Charge does not correctly reflect the real Schedule 8 costs of additional traffic, therefore, agreeing bespoke deals and arrangements can reflect the correct costs more accurately.

### *Scarcity charge*

We consider that the current regime does not prevent viable uses of capacity, however, some parts of the network will lend themselves better to competition than others<sup>44</sup>. Furthermore, only some parts of the network are considered 'full' and many are not. We believe that it would be inappropriate to levy a scarcity charge on parts of the network that are not full.

For very congested suburban routes, we consider that a scarcity charge is unlikely to change behaviours. For example, in the case of commuter services, the over-arching priority is to enable smooth running of the economy, and aid economic growth.

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<sup>44</sup> e.g. Long distance inter-city services and freight.

### *Reservation charge*

If set at the right level, a reservation charge may provide signals to freight operators, since they are more likely to alter their use of paths due to the more flexible nature of their businesses.

Network Rail recognises that there are some parts of the network where access rights are not always being used, and could be better used by other operators if freed up<sup>45</sup>. A reservation charge may promote better use of scarce capacity, by encouraging operators to apply only for access rights which they will use to avoid paying the charge. In order for it to be effective, it would need to be set at a level which influences decision-making.

Part J of the Network Code already seeks to address this issue. We consider that tightening up of the Part J drafting should allow this contractual mechanism to be more useful. It is important, in considering this charge, to first set out what Part J can and cannot do<sup>46</sup>, in order to better inform the issues we are trying to tackle.

ORR's consultation document asks for views on a reservation charge assuming it would be set to be financially neutral for freight operators. It is unclear what this means. If this means that following the introduction of a reservation charge, freight operators would see an equivalent reduction in their freight charges, one would question the extent to which a reservation charge would provide the relevant incentive. In addition, if the freight charges were reduced and all paths were used, Network Rail would not be recovering the relevant marginal costs of those services. We consider that further clarity on this point is important.

### **Network Rail position**

#### *Capacity Charge*

We support a simple Capacity Charge. We consider that the current Capacity Charge does not discourage Network Rail from accommodating additional traffic as it 'holds Network Rail neutral', from a cost perspective. The current Capacity Charge does this by recovering genuine costs associated with reduced performance where there is increased congestion on the network.

We believe that further disaggregating the charge would introduce further complexity, and that there are considerable merits in retaining a relatively simple charging regime, on top of which bespoke arrangements could then be so that the charge is recovering the right costs. This is consistent with the work being done on creating alliances which is discussed further in Chapter 5. Realistically, it would be very complex to automate a charge like this, such that it always recovers the 'exact' costs associated with relevant train services. However, we do consider that there is scope for improving the way in which performance targets are adjusted when traffic levels change. Currently the Capacity Charge deals only with the monetary effect.

In summary, Network Rail considers it appropriate to retain the current Capacity Charge, and would support recalibration of the charge where possible. Network Rail does not support further disaggregation of the charge.

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<sup>45</sup> In particular on the West Coast and the East Coast Main Line.

<sup>46</sup> Part J of the Network Code removes access rights which are not used.

### *Scarcity charge*

Network Rail considers that there could be merit in charging for the use of scarce capacity, but only if the industry aim is to actively encourage more on-rail competition.

We do not consider it practical to introduce a new standalone scarcity charge, as this would introduce significant complexity to the charges. Nor do we consider it appropriate to apply the scarcity charge as a mark-up to the VUC, this is because the VUC is not sophisticated enough to distinguish areas where capacity is scarce and such an approach could be considerably burdensome to bill.

### *A more radical proposal*

Notwithstanding Network Rail's views in relation to charging for scarcity, this section discusses the possible options to develop the current Capacity Charge so that it is more effective in incentivising better use of the network. The proposed modifications are to apply:

- a volume incentive mark-up<sup>47</sup>; and
- a scarcity mark-up.

The first proposed modification would apply a volume incentive mark-up to the Capacity Charge, which could be a flat mark-up on all Capacity Charges calculated in a similar way to that of the incentive rates under the current Volume Incentive. This could remove the need for the current Volume Incentive mechanism<sup>48</sup>, instead recovering this money from the train operators directly. This modification would allow the Capacity Charge to provide incentives to Network Rail to accommodate additional traffic on the network.

The second proposed modification would apply a scarcity mark-up to the Capacity Charge, in parts of the network where there are considerable capacity constraints. This approach may provide signals to train operators about their use, and incentivise best use of this capacity. Network Rail considers that this could be a practical approach to introducing charges for managing scarce capacity.

As discussed above, levying a scarcity charge in the form of a route-based mark-up on the VUC would not seem to be as effective as our proposals for the scarcity mark-up.

We would welcome discussing these options with ORR and stakeholders during PR13.

### *Reservation charge*

Network Rail agrees that it is important that any proposal to introduce a reservation charge should be considered alongside the work to reform Part J of the Network Code.

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<sup>47</sup> Payable by franchised passenger operators only.

<sup>48</sup> This is discussed further in section 5.6.

Additionally, it is important to identify the scale of the issue, i.e. we must first establish whether hoarding of rights is a material issue.

Similar to the position on scarcity charges, Network Rail would support the introduction of a reservation charge if the industry aim is to encourage on-rail competition.

If this was the case, and the charge was to be introduced, there would be practical issues in terms of billing and implementation. The practical issues of implementation relate to the mapping of broad access rights to specific paths, which will be complex, and is likely to incur significant additional costs. Additionally, the billing system would need to be developed to determine where a booked path has not been used<sup>49</sup> and the reasons for this. It is likely that this type of charge could encourage more spot bidding, thus imposing increased performance risk on all network users and an increase in the planning resource required. We consider that it is important to be sure that, before considering the introduction of a reservation charge, there is a clear indication that it will bring benefits.

It is very difficult to judge the merits of a reservation charge without sight of the final ORR proposals for reform of Part J of the Network Code – which may be a better means of achieving the same ends.

It is felt that if a reservation charge does bring benefit, it should be applied according to needs on the most congested routes only, and not spread across the whole network. Because of the complexity involved in applying a reservation charge, it may be better to introduce it on a limited basis only.

## **7.6. Charges for Open Access Passenger Operators**

### **Background**

Currently, open access operators are charged variable charges only, and do not pay any fixed charges.

ORR does not approve rights to new competing services, including open access services, which are primarily abstractive of incumbents' revenue without compensating economic benefits. To implement this policy, ORR applies its 'not primarily abstractive' (NPA) test.

#### *ORR's Review of Access Policy*

In January 2010, ORR consulted on a review of its access policy. The nature of the existing policy for granting access rights to new competing services is difficult to understand, and the NPA test is often seen as a barrier to entering the market.

ORR issued its phase 1 conclusions in November 2010. We would expect that responses to that consultation should be considered alongside responses to ORR's PR13 consultation.

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<sup>49</sup> Access rights in freight contracts are usually loosely defined.

*PR13: ORR's first consultation*

In the consultation, ORR states “we are also examining changing the structure of charges to encourage competition, i.e. to enable operators to compete more directly with franchised operators...”<sup>50</sup>. It asks whether passenger open access operators should pay charges that exceed variable costs, and if so, how these charges should be calculated.

**Discussion**

As discussed in the section relating to charges for managing scarce capacity, before considering the introduction of charges based on economic value aimed at encouraging competition, it is important to consider whether we are operating in a ‘competitive’ or ‘franchise’ model.

If on-rail competition is really to be embraced then there may be merit in exploring different charging options for open access that go beyond the direct cost approach currently used. However, as discussed above, the scope for on-rail competition appears limited. Network Rail has previously stated that some parts of the network are more suited to competition than others such as long distance intercity passenger and freight services, for example.

Given the current charging arrangements, some form of protection for existing franchised operators is necessary, to avoid the risk of open access operators’ cherry-picking profitable services. As discussed earlier, the NPA test is often seen as a barrier to entering the market, because:

- generated revenue may not be a good proxy for economic benefits;
- it is not clear what the relationship is between the generation to abstraction ratio and the Benefit Cost Ratio; and
- it lacks transparency.

Developing charges which replace the need for the NPA test may be beneficial in reducing these barriers. There are a range of alternatives to the test which should be considered. Reforming open access operator charges is one option.

The extent to which charges could be marked up to recover some of the fixed costs (linked with the associated revenue abstraction from the incumbent) will depend on the degree of specification in current franchises. It is also important to consider how the dependencies change as the specifications become looser. It is also unclear how these additional charges can be levied where the market is unable to bear it<sup>51</sup>.

In addition, it is important to consider how capacity would be allocated. We believe that the infrastructure manager should retain accountability for the overall coordination of the timetable and should also take a view on what the most efficient use of the timetable may be.

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<sup>50</sup> ORR (May 2011), ‘Periodic Review 2013, First Consultation’, paragraph 6.61.

<sup>51</sup> EC directive 2001/14 states that mark-ups on the short-run marginal costs can be levied only where the market can bear them.

We note that ORR has commissioned MVA Consultancy and the Institute of Transport Studies to explore how greater on-rail competition may work in practice.

### **Network Rail position**

Network Rail is dedicated to planning the development, utilisation and allocation of capacity to deliver the best value for existing and future users, the economy and the environment. If competition is more effective in delivering this, then Network Rail would support this.

On the subject of the NPA test, Network Rail is not convinced that it is the necessarily the most appropriate test to apply when considering the approval of new competing services. This is set out in Network Rail's response to the Review of Access Policy consultation in April 2010, which outlined the need to clarify the role of competition between operators.

Network Rail accepts that charging may be an alternative to the NPA test, but stresses the importance of having more clarity on how levying a portion of fixed costs to open access operators would work where franchises are less specified and / or where the market is unable to bear it.

In relation to the allocation of capacity, Network Rail would expect to play a major role, with accountability for the overall coordination of the timetable and taking a view on what the most efficient use of the timetable may be.

## **7.7. Franchised Stations Long Term Charge**

### **Background**

The arrangements which are currently in place were developed in PR08 to assist greater transparency of spend for each station facility owner (SFO), and also to support a greater involvement by SFOs in station works planning, as part of the integrated stations planning initiative.

#### *PR08*

Long Term Charges (LTCs) for PR08 were based on total expenditure levels agreed with Network Rail for Operational Property buildings' maintenance, repair and renewal (MRR) across each SFO's portfolio of stations. This total spend figure was then disaggregated to individual station level, based on a formulaic measure reflecting (inter alia) station size and importance<sup>52</sup>.

There is no direct correlation at an individual station level, therefore, between the LTC levied and the anticipated cost of works proposed.

Network Rail supported this approach since it resolved concerns expressed by SFOs in CP3 that they had limited visibility and understanding of the works programmes for their stations.

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<sup>52</sup> ORR (October 2008), 'Periodic Review 2008, Determination of Network Rail's outputs & funding for 2009-14', Chapter 21.

### *PR13: ORR's first consultation*

While there are no direct questions in ORR's consultation document relating specifically to franchised stations LTC, there is a reference to the LTC charging arrangements<sup>53</sup>. In the absence of any wider discussion indicators, it would appear likely that the arrangements put in place for CP4 would continue in CP5<sup>54</sup>.

The consultation also makes several references to the Greater Anglia franchise (GAF) leasing proposals, which will increase SFO responsibility for delivery. There is a recognition that this and similar initiatives associated with franchise awards, will require LTC adjustments in CP5.

### **Discussion**

We would broadly support the retention of the established methodology for LTC calculation and collection. In our view, the regime is understood within the industry; provides a direct linkage between income and expenditure which supports integration of wider works proposals; and is simple to calculate and revise.

Having reviewed the experience of the past three years, however, we would propose making two adjustments to the charging regime. These adjustments relate to the scope of works covered by the LTC, and the manner in which it is collected. Specifically we suggest:

- the inclusion of station information and security systems (SISS) within the LTC cost base; and
- a move to portfolio billing (rather than station specific billing).

It is considered that these changes would emphasise and consolidate a whole station, portfolio-centred approach and reduce administration costs. The full rationale and implications are set out below.

### *SISS*

SISS systems, which comprise customer information screens; fire alarm systems; closed circuit television equipment; and public address equipment, are a key component of the passenger experience at stations. Much attention has been given within the industry recently to the need for improved means of communication with passengers. ORR has itself recently consulted on this topic<sup>55</sup>.

The costs of SISS MRR were included as part of Network Rail's general telecommunications settlement for PR08<sup>56</sup>. The agreed costs were not reflected in the LTC calculation, which was wholly derived from the Operational Property MRR totals.

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<sup>53</sup> ORR (May 2011), 'Periodic Review 2013, First consultation – annexes', paragraph F.47 – F.52.

<sup>54</sup> ORR (May 2011), 'Periodic Review 2013, First consultation – annexes', paragraph F.52.

<sup>55</sup> Accessible at: [http://www.rail-reg.gov.uk/upload/pdf/passenger\\_information\\_consultation\\_290311.pdf](http://www.rail-reg.gov.uk/upload/pdf/passenger_information_consultation_290311.pdf).

<sup>56</sup> ORR (October 2008), 'Periodic Review 2008, Determination of Network Rail's outputs & funding for 2009-14', paragraph 5.90.



It is suggested that for this anomaly is corrected in PR13, and the LTC cost / expenditure linkage at SFO portfolio level is extended to this key part of station equipment. This can be supported for the same reasons that drove the PR08 change for Operational Property, namely improved visibility of the station works programme and increased involvement of SFOs in station works planning and prioritisation. Additionally, with the potential for greater SFO involvement in MMR activity at stations under the GAF proposals during PR13<sup>57</sup>, such a move would assist financial and equipment migration to SFOs, when such changes do occur.

### *LTC Charging Regime*

The current regime allocates specific charges to each station. These are in turn billed to each SFO at an individual station level, with each station being treated as if it were an individual and free standing property entity. The activity is administratively burdensome for both SFOs and Network Rail, creating the risk of input or payment error; complex account statements; and resultant billing queries. This is particularly the case when billing alterations are necessary, due to changes in the portfolio, which can result from indexed reviews; enhancement activity; or franchise change. Over time this can make reconciliation of the current charge to the opening position both time-consuming and difficult.

Network Rail proposes that for CP5 each SFO would receive a single regular charge, reflecting the agreed settlement figure across its whole portfolio. This charge would be subject to indexation and payment terms in accordance with the agreed mechanisms set out in the Station Access Conditions.

Billing at individual station level would only be retained to identify station specific non-indexation variations, such as subsequent changes to the size of the portfolio, or recovery of station specific LTC variations associated with enhancement activity. This approach would simplify the bulk of the SFO charging arrangements, whilst highlighting more clearly where variations have occurred.

It is recognised that a SFO may need to recover some of the proposed portfolio LTC from users at some or all of its stations. In our view, this could be achieved by expressing the individual station allocation as a percentage of the portfolio total, rather than a cash sum. Consequently, total LTC sum changes resulting from indexation, or station transfers to other SFOs, could be calculated relative to the opening or revised portfolio LTC position.

### **Network Rail position**

We consider that the proposals, above, in relation to SISS and portfolio billing are both simple to implement and would have tangible benefits for Network Rail and SFOs.

In relation to the SISS proposal, the main requirement is to ensure greater granularity at station level of MRR plans for SISS assets, so that these costs can be reflected in the LTC calculations. Significant work took place during PR08 to improve understanding in this area<sup>58</sup>. There would be a commensurate reduction in fixed

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<sup>57</sup> ORR (May 2011), 'Periodic Review 2013 First consultation – annexes', paragraph F.49.

<sup>58</sup> ORR (October 2008), 'Periodic Review 2008, Determination of Network Rail's outputs & funding for 2009-14', paragraph 9.106; and Network Rail (September 2008), 'Periodic Review 2008, Response to ORR's draft determinations', page 55.

access charges, since the relevant asset costs would no longer be recovered as part of the general Network Rail telecommunications settlement.

Where SFOs have full or partial responsibility for SISS MRR, they would benefit from not having to contribute indirectly to Network Rail's SISS MRR costs. Equally, where Network Rail retains MRR responsibilities, the costs would fall directly to those SFOs that benefit.

We consider that changes to the current billing arrangements, and expression of the individual station charge as a percentage of the portfolio total, would be extremely simple to implement and no special measures are envisaged to enable this proposal to be implemented.

## **7.8. Managed Stations Long Term Charge**

### **Background**

LTC is also recovered for anticipated Network Rail MRR expenditure at Managed Stations.

#### *PR08*

For CP4, Network Rail projected expenditure forward up to CP24 to derive a long-run view of renewals costs. This projection was accepted by ORR during PR08. The data was based on projected asset renewals requirements on a life-cycle basis, taking into account the varying complexity and the current / future anticipated condition and deterioration rates of the various asset elements forming each Managed Station. Network Rail calculated the individual station LTCs on the basis of the long run efficient costs (i.e. averaged over CP5 to CP24) rather than on the CP4 efficient costs. This avoided large peaks in charges at some major stations when there were large peaks in expenditure, due to major projects. Retail income was not netted-off the station level charge, which resulted in LTC being charged at all Managed Stations for the first time.

#### *PR13: ORR's first consultation*

In the consultation, ORR states that as part of PR13, it will be reviewing and setting the long term charges for stations.

### **Discussion**

The method summarised above to calculate the LTC for Managed Stations for CP4 is likely to be used again for CP5, although the modelling approach employed will be improved. This is because Network Rail's property asset systems have been enhanced, which will allow better long term cost estimates to be carried out.

As discussed, above, in PR08, SISS expenditure was not included in the LTC calculations, and in line with the proposals for franchised stations, we consider that it would be appropriate to include it in PR13. This would mean that all MRR costs at stations are treated in the same way, and included in the LTC.

ORR's consultation does not mention Facility Charges, which were introduced at the start of CP4 to recover the capital costs of enhancements and / or adjust for ongoing costs to Network Rail of maintaining and repairing enhanced (or 'de-enhanced') assets. Previously, the LTC was amended. We envisage that this arrangement would

continue in CP5, with the only alterations to LTC being a yearly RPI increase during the Control Period, as per the Independent Station Access Conditions (ISACs).

### **Network Rail position**

We consider that LTC continues to be the most appropriate way for Network Rail to recover the anticipated MRR costs at Managed Stations during CP5.

During PR13, we will carry out the detailed assessments and calculations regarding the LTC composition at each Managed Station, and will involve the relevant areas of the business in this activity. We would expect this to include a detailed consideration of the expected cost for SISS assets, as well as an assessment of the large scale projects that are due to occur at the Managed Stations during the control period. Smaller life-cycle replacement of medium size fabric and machinery items, such as lifts and escalators, will also require consideration.

We will consult with industry on our proposals.

## **7.9. QX management fee for Managed Stations**

### **Background**

Under Annex 2 of the ISACs, Network Rail is entitled to apply for a management fee to cover indirect central costs / overheads that arise as a result of Network Rail operating the Managed Stations. These overheads include areas such as Facilities Management, Regulation, Legal, Central Finance and Strategic Sourcing. Direct overheads who deal with 'QXable' matters on a day-to-day basis, are dealt with as Area Support Charges as part of the fixed QX charge itself (which does not require approval by ORR).

#### *PR08*

As noted in ORR's consultation, for CP4 it approved the management fee for the first time, for the duration of the control period.

#### *PR13: ORR's first consultation*

In the PR13 consultation, ORR states that it expects Network Rail to submit a revised management fee for ORR's approval under the ISACs.

### **Discussion**

ORR's consultation does not raise any issues regarding the management fee.

We consider that there could be an opportunity to revisit the way in which the management fee is composed for CP5. We are considering various options for the treatment of direct and indirect overhead costs, although no firm conclusions have so far been drawn.

Given that in PR08, ORR asked for the overhead element to be a fixed fee based on our overall Year 1 charge for fixed QX across the whole Managed Stations portfolio, the final detail of the numbers involved in the fee will not be known until the final fixed QX charge is assessed for the portfolio of Managed Stations.

It is expected that the management fee would be based on the organisation likely to be in place on 1<sup>st</sup> April 2014. This should take into account any efficiencies made in CP4; the relevant activities to support the fixed QX charge arrangements for CP5; and any known future organisational changes. The impact of our devolution programme on these central costs, and indeed if any devolved responsibilities would need to be included in the management fee, will also need to be ascertained.

### **Network Rail position**

We will apply for a management fee to be approved by ORR along similar lines to the application for CP4. Part of our consideration during PR13 will include the impact of devolution and which posts should / should not be included in the management fee.

We will engage with the industry on our proposals during the review.

## **7.10. Facility charges for franchised Stations and light maintenance depots**

### **Background**

Facility charges are the means by which Network Rail recovers capital expenditure, which it has funded via its RAB, on enhancement schemes promoted by station and depot operators.

#### *PR08*

The arrangements which are currently in place were developed during PR08 to enable greater levels of investment by operators and particularly to support payback periods extending beyond the life of franchises. Further details can be found in ORR's Investment Policy and Guidelines document<sup>59</sup> which summarises and consolidates the arrangements which had been developed prior to the start of PR08, and subsequently expanded.

#### *PR13*

While there are no direct questions raised by ORR in its document relating specifically to facility charges (although we note that they are referenced as a means of financing operator promoted schemes<sup>60</sup>), we consider that their treatment in PR13 merits discussion in our response.

### **Discussion**

We would support the retention of the established methodology for facility charge calculation and collection, and remain committed to supporting rail industry investment in this manner.

We consider that the regime is broadly understood within the industry, and has become widely used across a range of projects. These have included major depot

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<sup>59</sup> Accessible at: [http://www.rail-reg.gov.uk/upload/pdf/investment\\_framework\\_guidelines\\_october\\_2010.pdf](http://www.rail-reg.gov.uk/upload/pdf/investment_framework_guidelines_october_2010.pdf).

<sup>60</sup> ORR (May 2011), 'Periodic review 2013, first consultation – annexes', paragraph D.80.

reconstruction, multi-storey car park provision and various improvements to passenger facilities at stations, as well as track schemes.

However, we believe that there are three emerging issues that merit consideration in PR13 in relation to facility charges, which we would like to develop further with ORR. These are:

- the use of facility charges at depots in the context of other depot charging considerations;
- the potential impact of the GAF lease model on our ability to offer RAB-based facility charges; and
- the potential for converting property rent charges at stations and depots to facility charges, as a means to reduce administrative requirements and industry costs.

#### *Depot charging considerations*

ORR's consultation refers to the single till regime and the potential for separation between 'commercial' and 'railway' income (which is discussed further in Chapter 6 of our response).

We consider that the introduction of facility charges for depot investment has highlighted the narrow divide between these two activity types, and in the case of light maintenance depots (LMDs) the potential for differential treatment of depot investment recovery.

The basis of charging for LMDs has, prior to the introduction of facility charges, been seen as a 'commercial' activity, and the income is collected as property rent. The implication of this is that the income from these sites is not based on a regulated return in relation to the capital value of the sites, but by comparison to property values in the vicinity and, therefore, commercial rates of return. Additionally, there has previously been substantial investment in depot facilities by non-franchised independent depot operators, without recourse to Network Rail's RAB.

Network Rail desires that there is a clearer understanding for CP5 of the financial treatment of depot charges and how investment in, and charges for, these facilities should be assessed. Initial discussions have taken place with ORR on this matter, with a view to regularising the charging regime across the portfolio of depots, whilst ensuring that necessary investment is encouraged.

A proposal has been set out, below, that would see the conversion of current property rents to facility charges.

#### *Implications of GAF leasing arrangements*

ORR's consultation refers to the emerging policy of placing greater responsibility for station management and investment with station operators. To facilitate this change, a 99 year rent-free lease has been developed, which passes all responsibility for station assets to the operator, and also enables transfer of the asset at franchise change. Network Rail's interest in these stations will be of a nominal nature.

The implications of these changes on Network Rail's RAB and the ability to fund future station investment via the Investment Framework will need to be agreed.

Discussions are currently taking place with ORR to agree how facility charges in the GAF portfolio will be dealt with, following these changes.

#### *Potential for consolidation of stations and depots property rents as facility charges*

In relation to depots, we have referred, above, to the potential confusion between 'commercial' and 'railway' charging regimes. There is a similar split of the charging regime at stations, where the majority of income is received via LTCs (which is discussed in section 7.7, above) although an additional income is received as property rent.

The franchised station property rents were set at the time of privatisation and have not been revisited since then, other than to increase them on a RPI basis. They no longer reflect the current commercial value of the stations, therefore, nor the growth in property values over the intervening period. The effect of this has been to transfer, over time, an increasing share of the commercial income received at stations from Network Rail to the station operator.

#### **Network Rail position**

The GAF initiative is passing full responsibility for stations to operators, without rental or other charges by Network Rail. In addition, and of relevance to this discussion, the RVfM Study identified the need to reduce costs within the rail industry, remove misaligned incentives and develop whole-system mechanisms.

We consider that continuation of stations and depots property rent charging in its current form conflicts with these initiatives, and requires significant administrative resource (such as the need to undertake complex depot rent reviews, for example). The normal market outcomes for location pricing do not apply in this environment, since the stations and depots locations are fixed by operating requirements. Therefore, valuation assumptions need to be hypothetical in the absence of a true 'depot market'. We also believe that it creates an adversarial relationship with operators in relation to value sharing and exploitation of new opportunities. The payment of property rent to Network Rail reduces the benefit to operators of commercial exploitation of commercial sites, and may therefore be seen as a disincentive to their engagement in this activity.

We have been working with operators to simplify lease charging arrangements at both stations and depots, but believe that there is scope for a more radical approach.

We propose that property rental income is consolidated in PR13 as a facility charge for both depots and stations, which would then be dealt with as 'railway' facilities entirely. We would welcome the opportunity to develop this proposal with ORR, which we consider would offer significant benefits to station and depot operators alongside the other station and depot initiatives (such as GAF leases) currently being progressed.

In relation to the GAF leasing arrangements, as above, the implications of the changes on Network Rail's RAB and the ability to fund future stations investment through the Investment Framework will need to be agreed.

## 7.11. Fixed Track Access Charges

### Background

The aim of fixed track access charges (FTAC) is to recover the residual net revenue requirement, which is calculated as total network costs less government grant and single till income. In 2009/10 Network Rail's income in respect of FTAC was £782 million, 14.8 per cent of total access charge and grant income.

Currently only franchised passenger operators are eligible to pay the fixed charge. ORR determines the balance between the contributions that franchised passenger operators make and network grant.

### *PR08*

Considerable work was carried out during PR08 on the development of the ICM to identify and allocate costs on a much more disaggregated basis than had been possible in the past. ORR was particularly keen for FTAC in CP4 to:

- (i) Provide improved cost reflectivity in terms of the specific costs imposed on the network by operators; and
- (ii) Generate more accurate information to funders.

ORR commissioned AEA Technology (AEAT) to develop an avoidable-cost methodology. ORR's expectation in its June 2006 consultation on the structure of track access charges and station long term charges was that Network Rail should build on this methodology. At the time, although we considered that the avoidable-cost approach provided a number of insights into constructing the FTAC, it was not our preferred approach.

Instead we proposed that the FTAC calculation should be based on:

- directly attributable costs: these are costs modelled at the Strategic Route Section (SRS) level where the operator is the only one within that SRS and also includes any major TOC-specific costs;
- costs modelled at SRS level: these are allocated between operators where there is more than one operator operating in that SRS; and
- costs modelled at a more aggregated level than SRS: these are first allocated to the SRS level then split between the operators operating within that route as appropriate.

The chosen allocation metrics were based on our judgement and knowledge of cost causation within the company. The model capability was developed to be extremely flexible in terms of the choice of allocation metric.

In its PR08 Final Determination, ORR recognised that Network Rail had significantly improved its approach to fixed charge allocation, by increasing the disaggregation of the fixed maintenance and renewals costs to strategic route sections. ORR welcomed the improvements that were made, and considered that it was a reasonable basis for allocating the fixed charges in CP4.

### *PR13: ORR's first consultation*

ORR's consultation proposes that the methodology for allocating fixed track access charges will need to be reviewed and refined for PR13 in the light of developments in industry reform, notably with respect to accounting separation and possible changes to charging for open access passenger operators.

It also states that the current approach to allocating the charge between franchised passenger operators can be improved, in particular, that if it could be refined, it would improve transparency in terms of industry finances.

While there are no specific questions in ORR's consultation relating to the fixed charge, the next section discusses these statements particularly in the context of Network Rail devolution. We also propose some other points for consideration, in relation to the treatment of FTAC in PR13.

## **Discussion**

### *Industry reform and fixed charges*

This response, in particular Chapter 3, has already discussed Network Rail's devolution programme. Devolution will result in Network Rail's route teams having much greater accountability, and the opportunity to work in much closer partnership with their customers.

Network Rail has started to develop alliances with its customers (which are discussed in further detail in Chapter 5). As part of this work it is important that we are able to produce cost and income statements at the individual operator level.

In the last 12 months, Network Rail has introduced disaggregated accounting information showing its performance by each operating route. For 2010-11, the additional disaggregated accounting information was provided to ORR on a 'shadow' basis, although not audited or published in Network Rail's regulatory accounts. From 2011-12, the additional information will be audited and published.

### *Open access contributions to the fixed charge*

Our response to ORR's consideration of the charges that open access operators pay is discussed in section 7.6, above.

### *Freight contribution to network-wide fixed costs*

Network Rail believes that where segments of the freight market are deemed to be able to bear more than the marginal cost of operating on the network, consideration should be given to these segments contributing to network-wide fixed costs. A greater contribution from freight operators in this respect would serve to reduce the extent of Government support payable through the network grant. At present segments of the market (coal ESI and spent nuclear fuel) considered to be able to bear more than the marginal cost of operating on the network only contribute to the fixed costs of freight only lines. If this approach is adopted, consideration may need to be given to it being phased in. Freight only line charges are discussed in more detail in section 7.12, below.



## Schedule 4 ACS

As discussed in Chapter 5, we consider that there could be merit in rolling up the Schedule 4 ACS paid by train operators into the fixed charge and would welcome further discussion with the industry on this matter.

### Network Rail position

Clearly there is an important interaction between the methodologies for accounting separation and the allocation of fixed track access charges to our customers, and a priority for Network Rail during the PR13 charges work will be to ensure the approaches are consistent. This work will be developed over the coming months.

Having considered the possible work to be done in time for the start of CP5, Network Rail considers that the key policy discussion and decision that needs to be made in relation to the fixed charge is whether open access operators are to make a contribution, since this will have an impact on the allocation methodology. In addition, and as discussed, above, we believe that consideration should be given to freight operators contributing towards network-wide fixed costs, where the market is deemed able to bear it.

Network Rail intends to consult on an initial allocation of FTAC to operators in summer 2012. This consultation will include an overview of how the allocation methodology has been established for the relevant operators.

## 7.12. Freight Specific Charges

### Background

Freight and passenger operators do not pay the same range of track access charges. Although some charges are applicable to all operators, others are specific to either freight or passenger services. Freight specific track access charges comprise the following:

- The freight only line charge (FOLC);
- The coal spillage charge (CSC); and
- The coal spillage reduction investment charge (CSRIC).

### The Freight Only Line Charge

The FOLC is designed to recover the fixed costs of freight only lines. It is levied as a mark-up on the variable usage charge on a £/kgm basis. In 2009/10 Network Rail's income in respect of the FOLC was £2 million, 0.04 per cent of access charge and grant income.

### PR08

The charge was introduced in PR08 following a statement from Government that "*where lines carry only freight, and no passenger services, the freight operators will pay its full costs*"<sup>61</sup>. However, to be consistent with relevant legislation, the costs of

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<sup>61</sup> Department for Transport, (July 2004), 'The Future of Rail CM6233'.

freight only lines can only be charged where the freight market can bear the cost. In its Advice to Ministers in 2007, ORR concluded that only two market segments had the ability to bear the fixed costs of freight only lines: coal for the electricity supply industry (coal ESI); and spent nuclear fuel. Therefore, the mark-up only applies to traffic carrying these two commodities.

In PR08, following extensive consultation, a list of freight only lines carrying coal ESI and spent nuclear fuel was determined. Network Rail estimated the total cost attributable to these lines using the ICM. It then calculated the relevant fixed costs for each commodity by reducing these estimates to reflect the following:

- some lines carry commodities other than coal ESI and spent nuclear fuel; and
- Network Rail already recovers variable costs through the variable usage charge.

#### *PR13: ORR's first consultation*

In its consultation ORR proposes retaining the broad methodology used to calculate the FOLC but reviewing the ability of different market segments to pay a mark-up. It also proposes reviewing and re-calibrating the charges as part of PR13.

### **The Coal Spillage Charge**

The coal spillage charge is designed to recover the cost impact of coal spillage on the network and is levied as a mark-up on the variable usage charge. In 2009/10 Network Rail's income in respect of the CSC was £2 million (0.04 per cent of access charge and grant income).

#### *PR08*

In PR08 Network Rail calculated an estimate of the cost impact of coal spillage. This estimate was reviewed and refined by the independent reporter, Halcrow, before being reduced by ORR to reflect long-term steady state efficient costs. In PR08 Network Rail also consulted on various charging options in relation to the CSC. It initially proposed that the charge be levied as a mark-up on the variable usage charge with a rebate available to operators who can demonstrate that they have minimised coal spillage. However, it subsequently successfully proposed that the charge should be adjusted annually based on the number of points failures during the year due to coal spillage.

#### *PR13: ORR's first consultation*

In its consultation ORR does not discuss the CSC in detail. However, it does propose reviewing and re-calibrating the charge as part of PR13.

### **The coal spillage reduction investment charge**

The CSRIC is levied as a mark-up on the VUC on all coal traffic and finances a fund that can be used to invest in equipment at coal terminals that reduces coal spillage on the network. The charge is reviewed on an annual basis by Network Rail in consultation with the industry.

In the first 2 years of CP4 total fund receipts were £295,234. To date the fund has funded 7 schemes to install wagon cleaning equipment at coal loading terminals at a

cost of £153,269. Due to surplus funds available at the end of year 2 (£141,965), Network Rail has proposed that the charge should not be payable for the remainder of CP4. This proposal is currently subject to industry consultation.

#### *PR13: ORR's first consultation*

ORR does not discuss the CSRIC in its consultation. However, Network Rail would like to take this opportunity to set out its view in relation to the future direction of the charge.

### **Discussion**

#### **The Freight Only Line Charge**

##### *Market segments*

If ORR determines that segments of the freight market continue to be able to bear the fixed costs of freight only lines, a FOLC will be retained for CP5. To a large extent the work Network Rail will need to carry out in order to calculate FOLC rates is contingent upon the decision by ORR in respect of the ability of different segments of the market to pay a mark-up. In the extreme, if ORR determined that no segments of the market were able to bear the fixed cost of freight only lines, the charge would be discontinued. Network Rail therefore requests that ORR confirms what segments of the market it considers are able to pay a mark-up as early as is reasonably practical.

##### *Methodology*

The existing FOLC calculation and charging methodology is easy to understand and simple to administer. It was also consulted on in detail in PR08. However, one could argue that because it is designed to recover the fixed costs of freight only lines (i.e. those that do not vary with traffic), it should not be levied as a mark-up on the VUC.

##### *Re-calibration*

Re-calibration will result in the FOLC rates for CP5 being based on updated cost and traffic data. This will improve the cost reflectivity of the charge. As part of the re-calibration process a review of the existing list of freight only lines could be carried out in order to confirm whether it continues to be appropriate.

An alternative to re-calibration would be to roll forward the existing FOLC rates, adjusted by RPI. This approach would mean the charge is not based on updated cost and traffic data. It would also not reflect any changes to the current list of freight only lines. It would, however, provide certainty in relation to future FOLC rates and require less administration. Network Rail notes that if ORR determines further segments of the market are able to bear the fixed costs of freight only lines, a roll forward may not be possible because of the absence of existing rates, and lines.

##### *Freight contribution to network-wide fixed costs*

As noted in section 7.11, above, Network Rail believes that where segments of the freight market are deemed to be able to bear more than the marginal cost of operating on the network, consideration should be given to these segments contributing to network-wide fixed costs and not just the fixed costs of freight only lines. A greater contribution from freight operators in this respect would serve to reduce the extent of Government support payable through the network grant.

Network Rail notes that if operators were to contribute to network-wide fixed costs, it may no longer be appropriate to levy a separate charge to recover the fixed cost of freight only lines. If this approach is adopted, consideration may need to be given to it being phased in.

## **The coal spillage charge (CSC)**

### *Re-calibration*

Re-calibration of the CSC would result in it being refined to reflect updated cost and traffic data. It should also capture any improvement in relation to coal spillage resulting from projects financed by the coal spillage investment fund and other positive action taken by operators.

An alternative to re-calibration would be to roll forward the existing CSC, adjusted by RPI. This approach would mean the charge is not based on updated cost and traffic data. However, it would provide certainty in relation to future CSC rates and require less administration.

### *The annual adjustment methodology*

At present the CSC is adjusted on an annual basis depending on the number of points failures during the year due to coal spillage in comparison to the number of points failures during the base year (2007/08). This is designed to incentivise operators to reduce the level of coal spillage – less coal spillage should result in fewer points failures and therefore a lower CSC.

Although Network Rail supports the principal of incentivising operators to reduce the level of coal spillage, it considers the annual adjustment methodology is flawed because it is not normalised by coal traffic volumes. Network Rail's analysis shows that the number of points failures due to coal spillage has broadly tracked total coal traffic volumes, indicating that these are likely to be a major driver of points failures.

Because the relationship between points failures and coal traffic volumes is not taken into account in the annual adjustment methodology, the incentive that operators face to reduce coal spillage is blunted. At present, even if operators do not take any steps to protect against coal spillage, they are likely to pay a lower CSC due to fewer points failures, driven by declining coal traffic volumes.

The failure of the annual adjustment methodology to take into account coal traffic also results in Network Rail under recovering its costs. This occurs because operators pay a lower CSC rate due to the traffic driven reduction in points failures, whilst the propensity of the wagons that they operate which spill coal on the network is likely to have remained unchanged.

## **The coal spillage reduction investment charge**

### *Effectiveness*

Network Rail has observed that where wagons pass through cleaning equipment financed by the investment fund, approximately 90 per cent of coal is removed from the raves of the wagons. Network Rail has also been monitoring the trend in points failures due to coal spillage throughout CP4. Its records show that where cleaning equipment has been installed at coal terminals, there appears to be good correlation with improvements in the number of points failures due to coal spillage. Therefore,

Network Rail considers that the investment fund has contributed towards reducing the number of points failures due to coal spillage, although as previously discussed although coal traffic volumes are likely to be a major driver. It is difficult to disentangle the effect of improvement schemes and reducing traffic volumes on the number of points failures.

#### *Incentives*

In Network Rail's view, in the absence of the investment fund, the installation of wagon cleaning equipment at coal terminals would be likely to have been less extensive than it has been to date. It considers a key reason for this is the incentives that coal terminals face to install cleaning equipment. Research carried out in PR08 shows that one of primary drivers of coal spillage on the network is the poor loading of wagons at terminals. When wagons are over-filled or poorly loaded, this causes spillage onto couplings or other wagon surfaces that can subsequently slide off in transit.

Network Rail does not have a contractual relationship with coal terminals and therefore they are not subject to charges in respect of coal spillage. A consequence of this is that terminals are not incentivised through charges to install wagon cleaning equipment. The CSRIC seeks to remedy this issue by establishing a fund that can be accessed by terminals and used to finance cleaning equipment. The fund is financed by freight operators who theoretically should see any benefit reflected in future coal spillage charges.

Network Rail understands that in the future there is a potential for power generators to stipulate in supply contracts with coal terminals that wagon cleaning equipment must be installed at terminals. Network Rail would support this requirement being introduced and notes that if it is implemented sufficiently widely, the CSRIC would no longer be required. An additional consideration when assessing whether the CSRIC should be retained for CP5 will be the ongoing demand for access to the investment fund and the level of surplus funds that continue to be available at the end of CP4.

### **Network Rail position**

Network Rail recognises that rail freight operators face considerable competition from road hauliers. Road haulage enjoys simple charges and reasonable certainty about its costs. As far as possible, rail freight pricing should strive to be simple and give as much certainty as is feasible to allow it to compete with roads. In considering changes to the rail freight regime we should all be mindful that the freight community could view even discussions of changes as unsettling.

### **The Freight Only Line Charge**

#### *Market segments*

Network Rail requests that ORR makes a determination in respect of the segments of the market that can bear the fixed costs of freight only lines as early as is reasonably practical. To a large extent the calculation of FOLC rates is contingent upon this decision. We also believe that when carrying out this analysis ORR should also consider the extent to which these segments are able to contribute towards network-wide fixed costs.

### *Freight contribution to network-wide fixed costs*

Network Rail considers that where segments of the freight market are deemed to be able to bear more than the marginal cost of operating on the network, consideration should be given to these segments contributing to network-wide fixed costs and not just the fixed costs of freight only lines. If this approach is adopted, consideration may need to be given to it being phased in and it may no longer be appropriate to levy a separate FOLC.

### *Methodology*

Network Rail proposes that FOLC rates are calculated using broadly the same methodology as in PR08 on the basis that it is established, easy to understand and simple to administer.

### *Re-calibration*

Although there could be merit in a roll forward, Network Rail proposes re-calibrating FOLC rates to reflect updated cost and traffic data. As part of the re-calibration process Network Rail proposes reviewing, in consultation with the industry, the existing list of freight only lines. Network Rail proposes retaining the existing definition of a freight only line.

### *Communication plan*

Network Rail intends to engage with stakeholders in relation to the FOLC through issuing consultations and hosting workshops during PR13. It will also consult less formally with stakeholders. As noted above, a key issue on which Network Rail proposes working closely with the industry is establishing a revised list of freight only lines.

## **The coal spillage charge**

Coal spillage continues to have an adverse cost impact on the network and, therefore, Network Rail considers that it is still appropriate to recover these costs from those operators who cause them to be incurred.

### *Re-calibration*

Although there could be merit in a roll forward, Network Rail proposes that the CSC is recalibrated to reflect updated cost and traffic data. Re-calibration will mean that charges are based on robust cost and traffic data. It should also capture the impact of wagon cleaning equipment at coal terminals and other positive action taken by operators. When recalibrating the CSC Network Rail expects to draw heavily on the work it and Halcrow carried out in PR08.

### *The annual adjustment methodology*

Network Rail proposes refining the CSC so that the annual adjustment methodology is normalised according to coal traffic volumes. This will strengthen the incentive operators face to reduce coal spillage and help ensure that Network Rail recovers the cost impact of coal spillage on the network.

### *Communication plan*

Network Rail intends to engage with stakeholders in relation to the CSC through issuing consultations and hosting workshops during PR13. It will also consult less formally with stakeholders. A key issue on which Network Rail proposes consulting the industry is refining the annual adjustment methodology, such that it is normalised according to coal traffic volumes.

### **The coal spillage reduction investment charge**

Network Rail would prefer it if there was no coal spillage on the network and therefore supports initiatives such as the CSRIC that seek to reduce the level of coal spillage.

### *Incentives*

Network Rail considers that there is merit in retaining the CSRIC for CP5, if, in its absence, wagon cleaning equipment would not be installed at locations where there is a demand for it. To date, where wagon cleaning equipment has been installed it has proved effective at removing coal from the raves of wagons and thus will have reduced the extent of coal spillage on the network. Network Rail, therefore, supports its continued installation across the network.

Network Rail notes, however, that there are a range of factors that could influence the extent to which wagon cleaning equipment continues to be installed at terminals in the absence of a CSRIC. These include the future demand for cleaning equipment, changes to supply contracts between power generators and coal terminals, and the extent of any surplus funds. Network Rail proposes consulting with the industry on the impact of these factors during PR13. The consultation process will inform its subsequent proposal in respect of whether to retain the CSRIC for CP5.

### *Communication plan*

Network Rail intends to engage with stakeholders in relation to the CSRIC through issuing consultations and hosting workshops during PR13. It will also consult less formally with stakeholders. As noted above, a key issue on which Network Rail proposes consulting the industry is the extent to which wagon cleaning equipment would continue to be installed at terminals in the absence of a CSRIC.

## **7.13. Allowing businesses to plan with a reasonable degree of assurance**

### **Background**

#### *PR08*

In PR08 ORR agreed with the Department for Transport, Transport Scotland, the Rail Freight Operators Association and Network Rail that it would cap certain freight charges for CP4 in advance of its final determination. Providing certainty to freight operators in this respect is consistent with its statutory duty to allow operators to plan the future of their businesses with a reasonable degree of assurance.

Following consultation, ORR determined caps on the following freight charges:

- freight variable usage charges; and
- freight only line charges.

Freight variable usage charges were capped at £99 million per annum and it was determined that increases would be phased in over CP4. In 2009/10 Network Rail's income in respect of freight variable usage charges was £44 million, significantly below the cap set by ORR.

Freight only line charges for coal ESI and spent nuclear fuel were capped at £13.9 million and £1.4 million per annum respectively. Both charges were phased in over CP4 and as a result the rates payable by operators increased in the early years of the control period. In 2009/10 Network Rail's income in respect of freight only line charges was £2 million.

#### *PR13: ORR's first consultation*

In its consultation ORR discusses placing a cap on the level of certain freight charges well in advance of its determination. It highlights that this approach is consistent with the approach adopted in PR08 and provides greater certainty to freight operators who may have long-term agreements with customers.

ORR notes, however, that establishing caps potentially constrains both its own ability and Network Rail's ability to set charges at an appropriate level, in light of emerging evidence. It also suggests that the benefits associated with capping freight charges could be linked to commitments to reduce whole industry costs.

### **Discussion**

#### *Caps on freight charges*

Much of rail freight operates in a highly competitive market, which is dominated by road haulage. To compete in this market freight operators often enter into long-term contracts with customers. Where a contract straddles control periods (e.g. begins in CP4 but ends in CP5) the periodic review process results in operators facing uncertain track access charges during the life of the contract. A benefit of capping certain charges in advance of the final determination is that it provides operators with early certainty in relation to the maximum future value of those charges. Certainty in this respect will assist freight operators when planning the future of their business, including the negotiation of long-term contracts with customers. Capping charges could also support investment in long-lived freight assets and provide stability that encourages new entrants.

Placing an early cap on charges does, however, give rise to the possibility of freight operators not paying the full cost of using the network. For example, if the cap that establishes the maximum amount to be recovered through the charge is set below the final cost estimate. The likelihood of this situation occurring can be reduced by setting caps based on careful analysis and / or at a prudent level.

#### *Commitments to reduce whole industry costs*

Network Rail strongly supports the reduction of whole industry costs. The RVfM Study notes that freight operators can create value for money by making effective



use of the network. One means identified by the study is the removal of freight capability on some routes where there is no prospect of freight activity. This could give rise to potential cost saving opportunities from managing or maintaining these routes in a different way.

## **Network Rail position**

### *Caps on freight charges*

Network Rail is in favour of growing freight traffic and is currently investing heavily in the development of the freight network through the Strategic Freight Network programme. Moreover, it recognises that freight operators face significant competition from road haulage and often have long-term contracts with customers. Hence, certainty in respect of the maximum level of future charges will help operators to plan their businesses and support the growth of freight traffic. Therefore, Network Rail believes that there is considerable merit in placing a cap on certain freight charges in advance of the final determination. However, it considers that the analysis undertaken to establish caps should be proportionate to the overall value of the charges in question.

Subject to the receipt of responses to its first consultation, Network Rail understands that ORR is minded to place a cap on certain freight charges in its February 2012 Advice to Minister's document. An industry letter in relation to this issue is likely to be published shortly after this consultation closes.

### *Commitments to reduce whole industry costs*

Network Rail strongly supports the reduction of whole industry costs and believes that there is merit in exploring the potential cost savings that could be realised from the careful removal or degrading of freight capability on some routes. It is currently discussing this issue with the Rail Freight Operators' Association.

## 8. FURTHER ISSUES FOR CONSIDERATION

The purpose of this chapter is to cover issues not addressed elsewhere in our response.

### 8.1. ORR's objectives

ORR proposes that its overall objective for the review is *“to protect the interests of customers and taxpayers by ensuring our determination enables Network Rail and its industry partners to deliver or exceed all the specified outcome and output requirements, safely and sustainably, at the most efficient levels possible comparable with the best railways in the world by the end of the control period<sup>62</sup>.”* Its consultation seeks views on this objective.

We are content with this high-level objective. However, as we discuss in the foreword and introduction to this response, we consider that it is very important to consider PR13 in the context of wider industry change and the high-level objectives for the industry.

Our foreword highlights that CP5 should be mindful, in particular, of the following:

- the need to provide the necessary **shared incentives** to drive the right behaviours to deliver the full scale of cost savings identified in the RVfM Study;
- allowing the industry to operate in a **more commercial** way;
- delivering cost savings by **developing partnerships** built on mutual success; and
- giving **greater flexibility** to the train operators and Network to determine the most cost-effective way of driving up revenue.

In addition, we consider that there are aspects of the current regulatory framework that could hinder or ‘block’ the industry’s reform agenda. These should be removed or revised. We also consider that there are new features that could be introduced into the regulatory framework that could act as ‘enablers’ for change.

We consider that the key features of the current regulatory regime that may act as ‘blockers’ are:

- complexity;
- inflexibility; and
- the lack of incentives to create whole-industry decisions.

We consider that the key ‘enablers’ could be:

- cost / benefit sharing mechanisms between Network Rail and train operators;

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<sup>62</sup> ORR (May 2011), ‘Periodic Review 2013 First consultation’, paragraph 3.4.

- the ability to do bespoke deals between Network Rail and train operators; and
- allowing the industry to become more commercial.

These issues have been discussed further in this response.

## **8.2. Timetable for the review**

ORR's consultation seeks views on the proposed timetable for the review.

### *General timetable considerations*

ORR suggests a date of 7 Jan 2013 for publication of the SBP, which given the Christmas / New Year break will be challenging. We would propose pushing this back to the end of January 2013.

We also query whether ORR's proposed consultation on outputs will affect the SBP requirements. This consultation will close at the end of September 2012, which therefore appears to leave very little time to take account of the outcome of that consultation in the SBP.

Another timetable issue that we consider ORR should be mindful of is the need to provide as much certainty to the rail sector as soon as possible. There is a perception, by some stakeholders, that previous periodic reviews have led to undue pauses in contracts with suppliers being let.

Chapter 4 of this response highlights that Network Rail sees early expression of outputs as critical in providing certainty to the industry, particularly in allowing Network Rail and its suppliers to be able to plan for CP5 with a reasonable degree of assurance. We would propose that the timetable takes account of this, along with the approach to 'Early Start' for renewals and enhancements expenditure, also referred to in Chapters 4 and 6.

### *Competition Commission reference*

Finally, we suggest that ORR's timetable should provide time for a possible reference to the Competition Commission should this be necessary. We also consider that there would be merit in discussing and understanding, at this stage of the review, what Network Rail would be expected to deliver and what would happen to charges in the event of a Competition Commission reference.

## **8.3. Other issues**

### *On-rail Competition*

We note that ORR's consultation makes only limited reference to the role of on-rail competition. This is in spite of ORR stating that "*Competition, or the threat of competition, is likely to provide strong incentives to improve efficiency*<sup>63</sup>". It would be helpful if ORR could clarify its thinking in this area.

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<sup>63</sup> ORR (May 2011), 'Periodic Review 2013 First consultation – annexes', paragraph D.17.

### *Permitted Activities*

We consider that ORR's consultation does not fully explore the issues with regards to the current restrictions on Network Rail's activities beyond 'the core railway'. We discuss this in Chapters 5 and 6 of our response, but would reiterate that as part of PR13, the definition of 'Permitted Business' as set out in Condition 4 of the current licence, should be revisited.

Network Rail is keen to pursue new value-enhancing revenue opportunities which should reduce dependence on government subsidy. An important enabler to this is that the regulatory regime / financial ring-fence needs to be flexible to support such opportunities. Given that Network Rail is actively taking steps to open up much of its value chain to competition, we consider that there would be merit in ORR reviewing the ring-fence arrangements as part of PR13. We believe that changes to the financial ring-fence provisions are necessary to deliver the full benefits of competition, since being able to compete more freely will allow us to 'test' ourselves and learn from others.

We consider that the regulatory regime in this area should have a 'principles' focus, requiring Network Rail to provide assurances to the regulator that it is carrying out its activities appropriately and that the right processes are in place to manage risks etc.

### *Self Financing Investments*

ORR's consultation does not mention how the existing investment framework supports the ability of the industry to make investments which can be self-financing through creating extra revenue. These schemes operate by making additions to Network Rail's RAB which is then paid back by facility charges from the beneficiaries of the investment, over their economic life.

We consider that as the industry increasingly addresses the efficiency challenge, self-financing schemes will play an important role in providing network enhancements. We therefore strongly support the continued use of the investment framework for self-financing schemes.