

Network Rail's response to ORR's PR18 System Operator working papers

Working paper 2: Initial views on potential issues and opportunities in system operation

Working paper 3: Initial views on the regulatory framework for Network Rail's system operator function

24 August 2016

Executive Summary

This is our response to ORR's working papers on System Operation and the regulatory framework for Network Rail's System Operator function published on 7 June 2016.

We recognise that our response is detailed. Therefore, we set out, below, some of the main points that we raise in the rest of this response:

- we welcome ORR's recognition of the potential benefits of the System Operator approach
- most system operation activities are carried out within our Network Strategy and Capacity Planning function. There are also some system operation activities carried in other functions within Network Rail and other parts of the industry. This adds complexity to the regulation of the System Operator
- regulation should support the way the industry is structured, and the way it operates;
- ORR should be realistic about what can be achieved in CP6
- regulation of the System Operator should be proportionate and flexible, recognising the evolving nature of the System Operator
- ORR should align its System Operator work programme so that it can build on the outputs of Network Rail's 'Fit For The Future' programme
- there is little appetite within the industry for new System Operator charges or a separate revenue requirement as this would introduce undue complexity
- there is a need to use consistent language when referring to different aspects of System Operator to avoid unintended confusion
- the success of the System Operator should be assessed based on its own balanced scorecard, which is developed with customers

Structure of our response

The first part of this response provides our high-level views on the early thinking outlined by ORR in its working papers. The two annexes provide specific comments on more detailed options and issues explored in the working papers and during the working group discussions of system operation – including the potential regulatory developments in respect of the System Operator activity.

Our annexes address the following subject areas and specific working paper questions:

- **Annex A: Working Paper 2** - Issues and opportunities ORR has identified with the way system operation is currently undertaken (Questions A-D)
- **Annex B: Working Paper 3** - Network Rail's undertaking of system operation and ORR's focusing on how activities are split between the system operator business unit and the routes (Question A) and developing the regulatory framework for the System Operator (Questions B-C)

Context and challenges

We have already provided a full response to the initial PR18 consultation and many of the points made in that – especially around customer focus and regulatory frameworks – are

relevant to the separate response on Working Paper 1 on Route Regulation, and to this combined response for Working Papers 2 and 3.

There is industry recognition that the detail of many areas explored in Working Paper 2 and Working Paper 3 (and the other working papers) will be developed in consultation documents and further stages in the PR18 process. We envisage that the joint Network Rail and ORR working groups will continue to operate throughout the rest of the PR18 process as we believe they provide useful fora to work through the detailed issues. We welcome the whole tone and purpose of the ORR working papers which are intended to facilitate a more dynamic process of industry engagement to support an iterative approach to developing policy.

Whilst the System Operator's key customers will be the routes, as the ORR's previous work on the concept of system operation highlighted, there are also a wide range of direct relationships which the System Operator will have with other parties across the industry. With this in mind we welcome the ORR's open approach in progressing the system operation and System Operator elements of its work and its engagement with the RDG's System Operator Better Regulation Working Group.

We believe our working groups link well with this more collaborative approach and are pleased with the constructive engagement they have provided. Our discussions, shaped by the presentations and questions posed by the ORR, have naturally informed the content of this response alongside the questions contained within in the working papers.

Based on these discussions we anticipate that industry stakeholder responses will seek to argue the need for proportionate, efficient and flexible regulation in the area of system operation – an approach we would welcome.

We expect to work closely with industry and ORR over the next 18 months in order to identify a suite of measures that is appropriate to the activities that the System Operator and its customers consider are most important.

Summary of our response to Working Paper 2 (Annex A)

Working Paper 2's approach of effectively reviewing system operation end-to-end through the planning, contracting, allocation and operations - and seeking to identify opportunities to improve system operation - is both timely and welcome.

The paper also provides an opportunity for all parties to recognise the boundaries between the Network Rail System Operator function and in particular government, regulator and Network Rail's contributions to system operation.

In our response, we highlight where the opportunities and improvements identified by ORR are already being addressed. We agree with many of ORR's points. However, we think that the working paper contains a number of areas where we either do not recognise the issue that has been identified. We also think there are a number of unsubstantiated points.

We agree with the comments raised in industry working group sessions with the ORR that any regulatory reforms around the System Operator should have a clear rationale and be focused where there is a demonstrable need for change and where regulation will add value.

There are potential opportunities for the System Operator to take a stronger role in capacity allocation that could be further examined by Network Rail and the ORR following on from ORR's working paper.

Issues identified in these papers affecting matters outside of Network Rail and the ORR are ones that we would not anticipate being taken forward within the scope of PR18. There may be opportunities to address these through other relevant fora.

Summary of our response to Working Paper 3 (Annex B)

Understanding of how Network Rail fulfils its system operator responsibilities at the national level and the routes

Planning and managing the network fairly, in a way that is optimised for the benefit of the network as a whole, is the responsibility of the System Operator. At the core of this activity sit our responsibilities for fair allocation of capacity on routes, timetable planning and network planning.

In the past year, a series of reviews have looked at Network Rail's role in strategic planning, the planning and delivery of enhancements, and capacity allocation and timetabling. Whilst those reviews have all acknowledged our central role as the System Operator in these activities, we seek to continuously improve these activities.

Within Network Rail, Network Strategy and Capacity Planning has been carrying out much of our System Operator functions for some time but the changes in our external environment require us to strengthen our organisation, processes and tools.

The System Operator's outputs are also essential to support funders and the regulator in the discharge of a number of duties, and have a wider impact on funders, customers and the system as a whole. We therefore believe that the System Operator has additional responsibilities to:

- deliver a range of outputs direct to customers through industry planning, timetabling and management of industry and business codes and policies
- support national governments with the development of their transport strategies
- foster our relationships with devolved planning and funding bodies at the appropriate national, regional, and local level
- advise ORR in its role as capacity regulator with the quality information it needs to make allocation decisions
- support the high-performing devolved routes with a clear and transparent national framework for capacity allocation.

With the, above, responsibilities in mind, we believe that we need a System Operator function, which has the organisation, skills, processes, relationships and tools to make it fit for the future. We have provided you with initial details of our work programme 'System Operator: Fit for the Future' which seeks to put in place a structure to deliver these responsibilities. We will provide further details as they emerge to support the preparation of the final determination including relevant outputs. It is important that this programme concludes before final decisions are made.

Possible design of any settlement for the system operator functions

We think that it is important for the Network Rail System Operator to have its own regulated outputs. However, whilst the activity of the System Operator is crucial to the efficient operation of the network, the costs involved are relatively low (c.£25m per year) in

comparison to the size of a geographic route. The Network Rail System Operator is also asset light, i.e. it has very few physical assets. Therefore, we do not think that it needs to have its own revenue requirement, or a new charge.

Instead of a separate revenue requirement for the System Operator, we think that the most appropriate approach for CP6 is for it to recover its efficient costs through each route's revenue requirement. This will mean that System Operator costs will be recovered through access charging income through each of the routes. This approach could avoid the need to create a new RAB for the System Operator. Any capital costs incurred by the System Operator could be charged to each route (this could be allocated in proportion to traffic metrics or charging income).

We consider that the System Operator could be appropriately incentivised without the need for its own RAB. However, if it was concluded that the System Operator should have a RAB, we do not think that this means that there would need to be a separate System Operator charge to users. Instead, the System Operator's RAB costs (amortisation and return) could be recovered through cross-charges to routes.

The success of the System Operator would be likely to be judged by stakeholders by the extent to which it has delivered a range of outcomes, including cost efficiency although it is unlikely to be the most important measure of its success. Therefore, the System Operator could be incentivised to operate and invest efficiently through its balanced score card.

In Annex B, we consider the regulatory principles that Network Rail believes would support the System Operator. In summary, we think that the System Operator should have:

- its own plan (including outputs and expenditure) for delivery in CP6
- a scorecard developed with routes and other customers particularly focussing on the quality and customer responsiveness of the service provided
- capacity for its own supplementary sources of income from third parties (e.g. contracts to supply services to other infrastructure managers)
- a similar approach to routes in terms of flexibility of budgets and transparent reporting of outputs

We do not believe it necessary for the System Operator to have:

- a separate system operator RAB
- a separate charging mechanism
- a separate revenue requirement for CP6

If you would like to discuss the content of this response in more detail, please contact Matthew Lutz (email: matthew.lutz@networkrail.co.uk) or Garry White (garry.white@networkrail.co.uk).

ANNEX A: RESPONSE TO WORKING PAPER 2 INITIAL VIEWS ON POTENTIAL ISSUES AND OPPORTUNITIES IN SYSTEM OPERATION

There have, as ORR will be aware, been a number of helpful discussions on this topic already. We have not sought to capture all of those discussions. Our response focuses on the key issues that we have identified when considering ORR's consultation questions.

Related ORR questions

Question A: To what extent do you agree that the issues and opportunities we have identified with the way system operation is currently undertaken are the most material ones?

Question B: Are there other issues that you consider material that we haven't mentioned?

Question C: Does your experience, particularly of the system operation functions that Network Rail is currently responsible for, reflect our emerging views around issues / opportunities

Question D: Are there any examples you could provide of how Network Rail undertakes these activities that would either support or contradict our emerging views?

1. Background to ORR's system operation issues and opportunities work

Working Paper 2 progresses the discussions and consultation undertaken last year by the ORR and the parallel Consultation on System Operation Dashboard conducted by Network Rail at that time.

We agree with the relevance of the desirable outcomes of system operation, as set out in ORR's Figure 2.1. However, but would also add that an additional outcome of good system operation is 'Planning the future of the network'. These outcomes should serve as a base for discussion about the performance of the whole railway system.

The limitation of this approach (continuing the previous system-wide focus on System Operation) is that, while issues and opportunities do include the work of the System Operator functions in Network Rail, the outcomes identified are also driven by the decisions of other parties. These include areas associated with public transport strategy, specification of franchise requirements, capacity allocation and direction and operation of the infrastructure.

Below, we set out some observations in relation the outcomes in Figure 2.1 in Working Paper 2. We would welcome further discussions with ORR on the points we raise.

Outcome 1: Continued safe operation.

We agree that System operation activities delivered both by the System Operator and Technical Authority will have significant roles to contribute to continued safe operation of the network (e.g. standards, planning and timetabling). More broadly safe operation is also the role of the infrastructure operator and operators using the system.

Outcome 2: Getting more from the Network.

We agree that all parties to system operation have the potential to contribute to enabling different types of use from the system.

Under current arrangements, the System Operator can only process applications for access rights that train operators submit. This places a significant constraint on the System Operator's ability to optimise the use of network capacity. For example, franchising authorities decide many of the services that are applied for (93% of train km on our infrastructure are operated by franchised passenger TOCs to deliver their franchise agreements¹).

However, there has been recent progress to increase the flexibility of access rights, which has helped to mitigate some of the effect of this constraint.

ORR also has an important role to play in seeking to optimise the use of network capacity, given its role in approving access rights. This is particularly true, where there are complex choices to be made (e.g. the recent ECML capacity decision).

Outcome 3: Making the right trade-offs, and Outcome 4: The right services using the network.

We agree that identifying an appropriate balance of capacity, performance and cost is key to system operation. The complexity of balancing outcomes was addressed in our work on developing a System Operator Dashboard. However, we note that Working Paper 2 continues to use the term 'right' in relation to these decisions without any discussion or consultation on what 'right' might mean. It may be better for decision making to focus on the best outcome for the system, against a set of factors. In our response to ORR's August 2015 consultation we stated:

"It is hard to identify what "right" might mean – it is certain that it will mean different things to different parties affected by the system. Does it mean assessing every decision in terms of socio-economic value – and who would define how that value is assessed where the assumptions are contentious?"

Outcome 5: Helping Train Operators Deliver

All parties involved in system operation have a role in respect of this outcome. We believe that the primary relationship between the System Operator and train operators is through the routes. However, the network-wide role of the System Operator means it has the capability to support consistent expectations of customers in application of policy and process across routes. This should also mean that each train operator will have a single track access contract on our infrastructure rather than one for each route.

There are a number of specific relationships between the System Operator and operators. Given the relatively small proportion of operators that do not cross a route boundary, some customers will see the System Operator as a 'protector' of the access needs of their markets (cross-border, freight) even if there is a specific route managing our direct relationship with these customers. Points of direct interaction include:

- stakeholder engagement in the Long Term Planning Process
- agreeing access rights approaches to ORR
- potential specialist services such as timetabling activities

¹ 2015/2016 data from ORR data portal tables 12.13 and 13.25

The System Operator should be able to develop commercial opportunities in its service offering for a range of bodies including third-party investors, customers, other infrastructure managers and potential access applicants. A potential 'one-stop-shop' could enable potential quick wins for operators if they had a single place to go to for operational research.

Outcome 6: Choosing the right investment

Similarly to Outcomes 3 & 4, there is a difficulty in determining 'right' given the competing demands on the system. System investment in capability and capacity is not simply about projects – infrastructure alone delivers nothing without associated timetable, rolling stock and other interventions. Social benefits and other public priorities may lead funders to choose infrastructure investment in preference to more commercially viable options such as potentially sensitive train service alterations.

It is possible to be clearer in respect of the role to be performed by the System Operator function in respect of investment. The System Operator functions that could be regulated could include:

- supporting the development of transport strategies by funders
- developing a set of outputs capable of meeting these needs and the aspirations of customers
- making proposals to funders as to how the system / network could develop to deliver these outcomes needs in the medium / longer term

Root causes

The potential root causes of perceived system operation issues are widely drawn in the working paper. Given their generic nature, we have addressed these in specific comments on the examples in Section 3 of the working paper. We see particular relevance in the first two items around skewed incentives for Network Rail and franchisees. For example, we have seen this in Scotland where the franchise agreement has different requirements to those set for Network Rail.

We would, however, suggest that:

- Root Cause 1 (financial incentives) is a subset of number 2 (industry incentives)
- Root Cause 4 includes two potentially different issues (system capability includes physical factors)
- Root Cause 5 (risk aversion and industry culture) may in part be a consequence of underlying regulatory, franchising, and contractual framework and these root causes have consequently been omitted

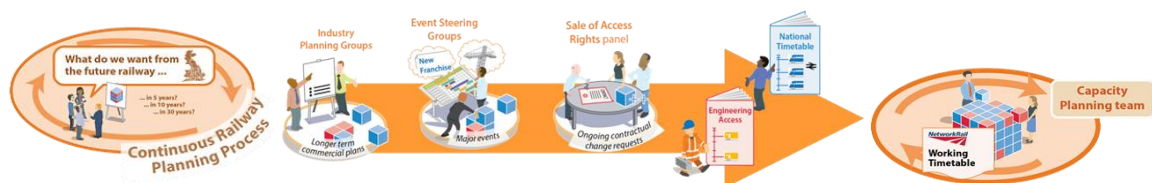
2. Potential issues and opportunities in system operation

The structure of part 3 of Working Paper 2, based on ORR's proposed definitions of short, medium and long term system operation, is one that we believe does not take a number of key activities and responsibilities into account.

Specifically, on-the-day operation is a markedly different activity to, and is delivered very differently from, requests for capacity outside of the bi-annual timetabling process (which begins 16 months prior to the start of the relevant timetable period). The wider process starts two years before the timetable period with the Engineering Access Statement and then Timetable Planning Rules consultation documents. However, the paper combines these two elements as a single area of 'short term system operation'. The key point discussed in this section of the paper (paragraph 3.5) is about decisions taken much earlier in the sequence of processes.

It may be helpful to refer back to established industry process, which shows the distinction between the definitions of short term, medium term and long term system operation (see Figure A.1 below). This was set out in our detailed in our response to ORR's August 2015 consultation.

Figure A.1: Industry capacity planning process diagram



Specific observations on the issues and opportunities identified in Section 3

Para 3.4

This should recognise the move towards more of a continuous planning and funding process, as well as recognising the strategic plans of devolved or regional funders (or sub national transport authorities).

Para 3.5

In summarising the example we are concerned that relevant details of this case have been overlooked. At a working level it was understood that the timetable would be less robust but it was considered that capacity was of a higher priority than performance in this case. However, we are not convinced that an overall system view was assessed appropriately.

We consider that the above point highlights the need for continued discussion about the trade-offs between capacity and performance.

Para 3.7b

In regards to the discussion that Timetable Planning Rules may limit capacity, there is a point (as noted above) about how decisions are made. We consider that more work is needed to understand what ORR means by 'optimised'.

Para 3.7c

We welcome the fact that ORR recognises the need for a balanced charging, incentives and outputs framework which provides sufficient flexibility for Network Rail to make appropriate trade-offs between cost, capacity and performance. The regulatory framework should support efforts to grow traffic on the network, where appropriate, and meeting the aspirations of customers and funders. Improvements could be made to the current regulatory regime to incentivise traffic growth. We would welcome further discussion with ORR in relation to this issue.

ORR correctly highlights that we face strong reputational and financial incentives to maintain train performance levels. These reputational and financial incentives are significant and closely linked to the outputs framework and our performance targets, which are reinforced by the actions of the regulator. Hence, the importance of getting the appropriate approach to train performance and ensuring that they incorporate sufficient flexibility for trade-offs to be made, where appropriate.

We also note that the additional income that Network Rail receives through charges for running an additional train is relatively modest, and does not cover the additional cost of maintaining train performance levels as the network gets busier. This may be one reason for the strength of reputational incentives associated with maintaining train performance levels.

In relation to the Volume Incentive, it is worth noting that the mechanism is quite complex which makes it difficult to forecast. Payments are relatively small because we are only rewarded for traffic growth above forecast levels, and are insufficiently large to fund additional investment in the (payments are made in the following control period). In order to address this issue, the charging, incentives and outputs frameworks should be considered together.

The Timetable Rules Improvement Programme was primarily performance-led and we would suggest that to widen the scope is outside of its remit. There is an opportunity that we are pursuing to embed the principles of the Timetable Rules Improvement Programme in our business as usual approach.

Para 3.9 e

When approaching medium-term capacity allocation, the requirements and expected outcomes of the timetable should be understood by this stage of the process. Radical options should be considered earlier within the process (i.e. the 'long term' part of the process), at Event Steering Groups.

Para 3.9 f

We do not support the use of the term 're-cast' as it is not defined and can be interpreted in different ways. Our view is that the term could refer to a significant change to sequence, interval, calling pattern, journey time or quantum within a timetable. As a timetable change of some scale can have geographically wide-reaching implications (e.g. a significant change of the WCML timetable could impact services to Cardiff, Portsmouth, Felixstowe etc.) we would not initiate working on something of this scale unless the following were true:

- a) we could not deliver what was required from the timetable without doing so; or
- b) we knew we could deliver a clear industry benefit from doing so

We agree that most timetable change is incremental. We also agree that more fundamental changes ('re-casts') can be controversial and prompt political interest. Therefore, we do not consider having regular 're-casts' would necessarily improve things.

Para 3.9 g

It is stated that currently capacity is mostly allocated using administrative processes. This approach reflects the obligation on Network Rail to comply with the Network Code. Most of the time, questions of choice related to commercial or social value are absent from such discussions and where they do arise the position that Network Rail is "agnostic to the operator of the train" means that the capacity allocation decision in question is effectively passed to ORR.

As part of our reform agenda, there is clearly scope to consider whether Network Rail could and should take a wider perspective in taking such decisions, indeed this could increase its effectiveness as a system operator.

We also note that ORR states that it will consider sending appropriate 'price signals' about making appropriate use of capacity as part of the structure of charges project and system operation work. We would urge ORR to ensure that these workstreams remain joined-up. We also consider that it would be helpful if ORR could provide further detail on how it might seek to send appropriate 'price signals', given it concluded in April 2016 that it would not be developing the value-based charging option further for CP6.

In our view, trade-offs between performance, cost and capacity are complex, partly because they are all measured in different ways. We also note that there is no industry established measure of 'capacity'. ORR should also bear in mind industry proposals to move away from a simplistic measure of performance, such as PPM, towards more situation specific measures which will vary by operator.

Para 3.10

In relation to the issues and opportunities in long-term system operation, identified by ORR, we think that an additional issue is that, as enhancements take many years to develop and deliver, the priorities or plans of funders may change which then leads to different outcomes.

Para 3.10b

In terms of opportunity for long-term system operation, we think that there should be reference to the opportunity to attract third-party capital into the industry. This will be important for the system operator and the industry in meeting growing demands for capacity, especially when government funding may be limited.

Para 3.10c

We agree that it is difficult for funders to specify enhancements in detail, well ahead of delivery. As a result of this, it is equally difficult for us to provide costs and programme estimates with certainty if the scope to deliver the outputs is so flexible and subject to change. It is important that funders should be clear on the outcomes they seek from the railway at all times.

Para 3.10d

With regards to the Long Term Planning Process (LTPP), it is important to recognise that this activity is not simply about investing in infrastructure projects – infrastructure alone

delivers nothing without associated timetable and rolling stock and other interventions. To reiterate, the purpose of the LTPP is to:

1. Understand and examine the longer term needs of customers and outcomes desired by funders and the potential demand for rail travel
2. To develop a set of outputs capable of meeting these needs
3. To develop longer term strategies to deliver these outputs
4. Make proposals to funders as to how the system / network could develop to deliver these outcomes / needs in the medium / longer term

The LTPP seeks to support the development and use of the existing network (with committed changes) and to understand what the trade-offs are between different competing requirements for capacity both within and between the different market sectors.

The LTPP will consider infrastructure enhancements to understand whether future demands. Options are assessed using governments' transport appraisal criteria however consideration will also be given to the wider economic benefits of a particular option, the strategic fit of options, and their likely affordability.

Para 3.10e

ORR states that Network Rail does not face significant revenue risk if projects do not deliver the improvements assumed. This is not necessarily true. For example, alliance arrangements may lead to revenue risk sharing. However, if we are exposed to revenue risk, it is important to be clear about what that risks we are exposed to. We should also be involved in development of the business case and subsequent decisions about whether to proceed with the project.

Para 3.10f

We note that in the case of Wales, the LTPP looks at a balance of different choices, many of which are lower cost and which are closely aligned to planned renewals.

ANNEX B: RESPONSE TO WORKING PAPER 3 – INITIAL VIEWS ON THE REGULATORY FRAMEWORK FOR NETWORK RAIL'S SYSTEM OPERATOR FUNCTION

There have, as ORR will be aware, been a number of helpful discussions on this topic already. We have not sought to capture all of those discussions. Our response focuses on the key issues that we have identified when considering ORR's consultation questions.

NETWORK RAIL'S UNDERTAKING OF SYSTEM OPERATION

Related ORR question

Question A: To what extent do you agree with our understanding of how Network Rail fulfils its system operator responsibilities at the national level (by the system operator) and the routes?

Requirements of Network Rail's System Operator function

Working Paper 3 discusses system operation within Network Rail.

We have recently published our transformation plan 'Delivering for our Customers' which sets out the overall transformation journey that Network Rail is undertaking and highlights the changes that we plan to make in the coming years – including the creation of a System Operator function that is fit for the future.

In it we make clear our commitment to a vision of a customer-focused business demonstrably meeting customer needs, both at route and network level with clear accountabilities, and able to make decisions quickly.

This need was reflected in the Shaw Report into the future financing and structure of Network Rail which observed that

“1.35: While the consultation responses and discussion sessions confirmed a general acceptance of further corporate devolution within Network Rail, there has still been a significant call for measures to ensure some form of national system co-ordination and coherence.”

Just as route-based regulation should support our efforts to become closer to our customers, through empowering our devolved businesses to build better and more effective relationships, regulation of the System Operator should support the need for the railway to operate as a single system – and enable continuous improvements in how this is achieved.

We note in Para 1.4 that the ORR's "ideas for regulating the system operator function are at a relatively early stage" and that "We are keen to get stakeholders' views to help develop our thinking. We are also interested in any alternative ideas to those that we set out in this paper."

We have, therefore, taken the opportunity to set out in this annex our emerging thoughts on the requirements for the System Operator function – these are being developed by our programme System Operator: Fit for the Future, which will conclude its work on this by July 2017. These requirements should enable it to have the organisation, skills, processes and tools to produce and maintain high quality long term plans, timetables and provide clienting services for enhancement schemes. These will:

- produce agreed outcomes for capacity, performance and journey times for each route and the system as a whole
- provide a long term sustainable strategy for the network
- maximise the benefits from network-wide planning in a devolved industry
- balance the needs of multiple operators when planning enhancements to the railway, to build a national timetable and coordinate the network access plan to build and maintain the railway
- identify the appropriate improvements to the railway at the appropriate time
- be based on consistent transparent decision making across geography and time ensure

The System Operator will:

- provide a framework of codes, rules and policies to support decisions about short term capacity allocation and arrangements during disruption
- provide a line of sight in the pipeline of strategic studies, enhancements and timetable production
- work with Network Rail routes and its other functions, operators and funders to understand their requirements
- work with the Technical Authority to provide plans that are consistent with, and where appropriate inform, standards and appropriate advances in technology.

We note the reference in Box 1.1.'The Shaw Report and System Operation' to the creation of the virtual freight route. For clarity we note that the freight route is on a par with our operating routes and not part of the system operator.

The Shaw Report did highlight additional areas that could be considered as we progress with establishing arrangements for the System Operator to work in CP6. Among these the Decision Criteria is a key opportunity for reform:

“these are embedded in the regulated track access contractual regime between train operators and Network Rail, and in theory give the System Operator and Technical Authority the tools it needs for dealing with complex trade-offs. They also provide a basis for routes as they consider conflicting requests for access. However, they, as with the network change process, were written for a much less congested network. Reconsideration of these criteria would be a sensible step to ensure that the System Operator and Technical Authority and the routes have the tools they require to balance trade-offs appropriately.”

If the System Operator were to assess competing requests to use the infrastructure (whether through access applications or the timetabling process) on these criteria, it may be preferable for it to apply a wider set of criteria that mirror ORR's Section 4 duties². In such cases, the System Operator could still undertake all work (e.g. including socio-economic modelling) and then handover to ORR to formalise the decision. It would also be necessary

² Section 4 duties are included in the Railways Act 1993 as amended

to articulate greater objectivity in the set of criteria and to consider weighting the criteria. At present the interpretation and application of the criteria is too subjective to support decision making.

The suitability of the criteria to be applied in making these decisions is of critical importance before any framework for measuring the success of the System Operator can be developed.

The System Operator offers a potentially more efficient and faster route, than is currently the case, for agreeing uncontested (i.e. non-contentious) sales of capacity between routes and customers (as ORR currently has to approve all changes to access contracts). We consider that this could be explored as a delegation of powers from the ORR.

We believe that ORR is correct in identifying trade-off relationships between the uses of capacity, performance and cost. However, we note that Working Paper 2 consistently uses the term 'right'. As we previously discussed in Annex A, we do not consider that there is likely to be a 'right' answer in most situations.

Working Paper 2 refers to opportunities for the System Operator to identify more efficient use of capacity. Under current arrangements, the System Operator can only process applications for access rights that train operators submit. This places a significant constraint on the System Operator's ability to optimise the use of network capacity. For example, franchising authorities decide many of the services that are applied for (93% of train km on our infrastructure are operated by franchised passenger TOCs to deliver their franchise agreements³).

ORR's focusing on how activities are split between the system operator business unit and the routes.

As the System Operator develops, its success will be as much about how we do things as it is about what we do. Promoting the right customer relationships is at the heart of our approach. To be clear:

- the relationship between the System Operator and train operators is through the routes and through specialist activities where the system operator will have direct relationships with its customer (e.g. timetable development). The System Operator will additionally seek to involve operators in the LTPP
- quality customer service, innovation/problem solving, and long-term, whole-network thinking should be central to the aims of the System Operator
- System Operator will also need to support the routes in developing their business plans.

The System Operator should have the capabilities to actively advise a number of external parties in the industry, such as:

- competent authorities in the development of transport strategies
- project developers and funders on the business cases with relevant asset costs
- the regulator in assessing the effective allocation of capacity

³ 2015/2016 data from ORR data portal tables 12.13 and 13.25

It should promote the upskilling of people, processes and technology in the functions it manages including the timetabling and capacity allocation process.

A strong System Operator is required to understand and balance the needs of multiple passenger and freight operators, identify and deliver appropriate enhancements to the network and coordinate access across the network to do so, allocate capacity and build a cohesive national timetable.

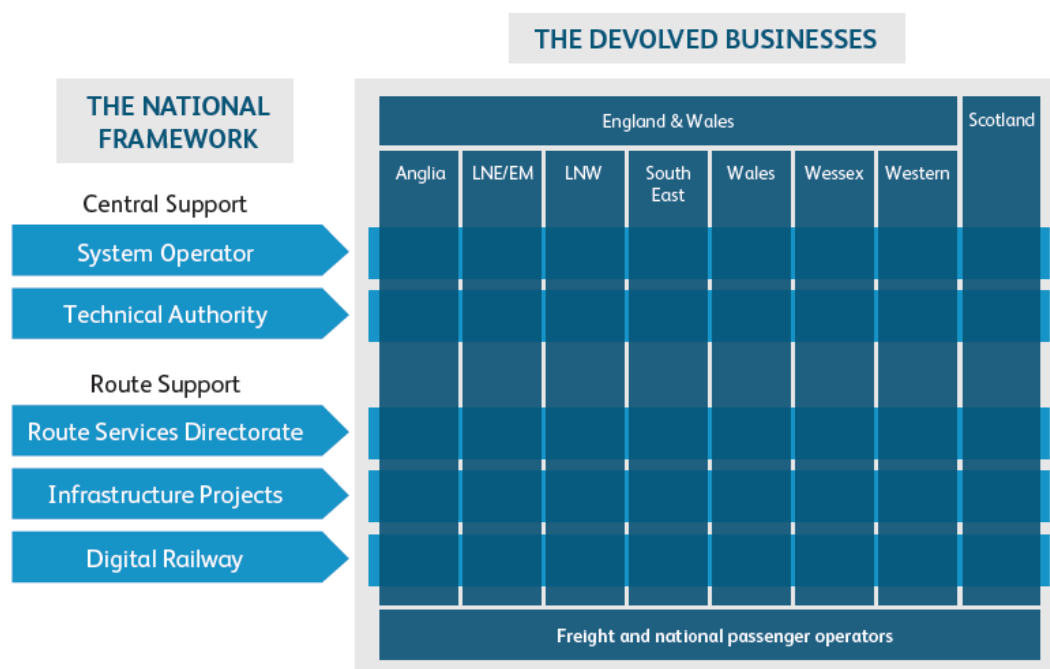
The role of the System Operator means it has the capability to consistently support the expectations of customers in applying policy and processes across routes and to enable a single track access contract for each operator on our infrastructure rather than the complexity of one for each route. We understand that train operators would strongly prefer to need only one track access contract to operate on our network.

The relationships between System Operator and operators require a clear level of customer service and expectations on both sides. The service requirements in some areas of activity are likely to be set out in contracts and codes and many already are. System Operator regulation should therefore focus on the right behaviours and effective incentives to drive quality customer relationships – but without directing operational decision making.

To retain the benefits of an integrated network we believe the System Operator should be able to offer services for all parts of the GB rail network that can be purchased by other IMs including HS1, HS2, Heathrow spur – as well as our devolved routes. Indeed this approach already operates effectively. We consider that this could be further clarified by classifying this as permitted business. In any event, managing the information flow across boundaries, both internal and external to Network Rail, will be an important part of the System Operator's activities.

We welcome ORR's support for route devolution, which is complemented by a System Operator. Figure A.2 below sets out how the System Operator should engage with Network Rail's routes. We refer to this operating model as our 'matrix'. The model could be extended so that the System Operator could work with other infrastructure managers.

Figure A.2: Network Rail’s devolved operating model



As we move towards further devolution, the routes will strengthen their relationships with our train operating customers. We will have a wider range of funders as central government also devolves powers and funding to the regions and as we seek funding from new sources to reduce our dependency on public funding for investments.

Whilst devolution to the routes is critical to meet customer and local funder needs, it is imperative to ensure that the network is planned and capacity is allocated and managed in a coordinated way to avoid the loss of network benefits that could otherwise occur in a more fragmented industry.

The System Operator’s role is not to make routes work in an identical way in all respects as this would be counter to the principles of devolution. Consistency is desirable but the System Operator’s role should be limited to setting some frameworks within which individual routes decide how to manage their activities.

Therefore, it follows that routes need to be engaged in System Operator customer touch points such as the process of agreeing access rights and timetabling conferences. Our routes also play an important (real time) role in system operation that must be recognised. This role will include local access planning for engineering work, as well as signalling and management of disruption.

Specific observations on the issues and opportunities identified in Working Paper 3, Section 2 – a case for a focused approach to regulation of Network Rail’s system operator function

Para 2.3

Our emerging policy position is that system operator will have its own plan and regulated outputs as will be the case for the routes. The system operator budget and outputs should

be treated in a similar way to route businesses including in terms of the transparent arrangements we will have in place to manage these.

It should also allow for flexibility which will enable the development and evolution of the system operator structure and responsibilities in CP6.

Paras 2.6-2.11

We agree with ORR's proposal to deploy a more focussed and risk-based approach to regulating the system operator. This will allow Network Rail to focus on delivery of the system operator's key priorities and milestones as determined by our customers and stakeholders.

We also agree that the system operator would complement the devolved routes. We too believe in investment in the capability of the system operator

Fig 2.1

Overall, we see the pros in figure 2.1 as outweighing the cons. We welcome increased focus on the system operator role and we also believe that a high performing system operator helps to facilitate high performing routes.

Para 2.14

The Shaw Report reinforced the need for clarity of roles within the rail industry and the definition of system operation is central to that. We have initiated the System Operator: Fit for the Future programme which will provide a clear vision of the role of the System Operator its name, structure, tools and processes and ensure that associated changes are in place. This will allow a focus on customers and support a more deeply devolved structure.

Box 2.1

We consider this is a narrow definition of the long term function of System Operator (i.e. 'recommending projects'). The work undertaken here is more complex in that infrastructure alone delivers nothing without associated timetable and rolling stock and other interventions. This activity concerns our role in planning the future of the network and identifying choices to meet the long term needs of funders and customers.

It is also the system operator's role to lead industry planning groups and events steering groups. We consider that the stated key function of the system operator as "Developing and recommending projects for changes to the network" is too narrow a statement of the purpose and output of the long term planning process. The purpose of the LTPP is to:

1. understand and examine the longer term needs of customers and outcomes desired by funders and the potential demand for rail travel
2. to develop a set of outputs capable of meeting these needs
3. to develop longer term strategies to deliver these outputs, which may involve timetable, technology or enhancement solutions (or a combination thereof)
4. make proposals to funders as to how the system / network could develop to deliver these outcomes / needs in the medium / longer term.

DEVELOPING THE REGULATORY FRAMEWORK FOR THE SYSTEM OPERATOR

Related ORR questions

Question B: What are your views on having a more focused approach to the system operator, possibly in the form of a discrete settlement that is part of an overall determination?

Question C: What are your views regarding our initial ideas relating to the form of Network Rail's system operator settlement? Specifically, what are your views regarding our proposed approach to: i) the system operator's outputs framework; ii) the system operator's revenue requirement; iii) the system operator's incentives; and iv) the monitoring and enforcement framework?

Please note: In our response below, we have used the term 'revenue requirement' to describe separate allowed revenues (i.e. made of up regulatory building blocks). We think that this has a more precise meaning than 'settlement'.

We would expect to work closely with industry and ORR over the next 18 months in order to identify a suite of measures that is appropriate to monitor the activities that the System Operator and its customers consider are most important. Initial discussions suggest that qualitative measures are likely to be of more practical use than quantitative.

Measures should be informed by what routes and customers want the System Operator to do. It would be premature to try to define these at this stage in the process when the programme to set the scope and remit of the System Operator has yet to be concluded. This approach could be made consistent with the scorecards recently introduced by each of our routes.

In developing more detailed proposals for the regulatory framework for the system operator, we believe that there are broad elements that should be consistent across the regulation of Network Rail.

Using the approach established in Working Paper 1, we have set out the key elements that we believe should guide the ORR's approach to regulation of the System Operator in CP6 alongside that for the routes:

- Financial framework: Determining the System Operator's funding
- Outputs framework: Approach to determining System Operator outputs for CP6
- PR18 process and interfaces: Implications of System Operator relationships
- Reporting and monitoring during CP6: Implications for the System Operator during CP6.

A potential financial framework for ORR's determination

In developing proposals for System Operator regulation, we hope that ORR seeks to avoid undue complexity.

We think that it is important for the Network Rail System Operator (NRSO) to have its own regulated outputs. However, whilst the activity of the NRSO is crucial to the efficient operation of the network, the costs involved are relatively low (c.£25m per year) in comparison to the size of a geographic route. The NRSO is also asset light, i.e. it has very

view physical assets. Therefore, we do not think that it needs to have its own revenue requirement.

Neither we nor our customers want a new charge to operators, which specifically recovers the costs of running the NRSO. An 'NRSO charge' would be complex and burdensome. The benefit from having a separately identified revenue stream to the NRSO could largely be achieved from having a transparent allocation of NRSO costs to the routes. However, this does not stop the NRSO from charging users outside of the traditional network for its services, e.g. HS1 or other rail networks.

Instead of a separate revenue requirement for the NRSO, we think that the most appropriate approach for CP6 is for the NRSO to recover its efficient costs through each routes' revenue requirement. This will mean that NRSO costs will be recovered through access charging income and booked to the routes. The costs of the NRSO would then be cross charged, in a transparent manner, to the geographic routes. This approach could avoid the need to create a new RAB for the NRSO. Any capital costs incurred by the NRSO could be charged to each route (this could be allocated in proportion to traffic metrics or charging income). This would provide routes with an opportunity to challenge the capital costs of the NRSO. It may also be appropriate to include a measure of capital expenditure performance in the System Operator balanced scorecard.

We consider that the NRSO could be appropriately incentivised without the need for an NRSO RAB. However, if it was concluded that the NRSO should have a RAB, we do not think that this means that there would need to be a separate NRSO charge to users. Instead, the NRSO's RAB costs (amortisation and return) could be recovered through cross-charges to routes.

Potential incentives for delivering additional capacity utilisation should be considered to drive growth if it can be effectively measured.

Within the financial framework, there need to be mechanisms to deal with variances in the System Operator's costs compared with its budget. Overspend should initially come from the System Operator's budget and then from a central reserve, only if necessary. Underspend by the System Operator should be returned to the centre.

Outputs framework

Network Rail considers that:

- Some of the System Operator's activity requires a clear level of delivery and customer service, however these requirements are, in many areas of activity, set out in contracts and codes and while compliance could be reported, the outputs themselves are relatively fixed. System Operator regulation could focus on encouraging the right behaviours, performance and process improvements, and effective incentives to drive quality customer relationships and efficient use of the infrastructure.
- Scorecard measures should be informed by customers (route and train operator). Details and potential areas of inclusion are still likely to evolve as work to clarify the scope and remit of the System Operator as part of our transformation strategy. We would expect to work closely with industry and ORR over the next 12 months in order to identify a suite of measures that is appropriate to the final suite of activities.

- Initial discussions suggest that qualitative measures are likely to be of more practical use than quantitative measures. We think that System Operator regulation should be capable of allowing the System Operator to evolve to meet the challenges in CP6 and beyond.
- Target KPIs may be difficult to set since it is not possible to identify specific system operator outputs that are not influenced in some way by the decisions or actions of other bodies in System Operation or operation of the network. The clear mapping of parties with the ability to influence system operation outcomes is useful in highlighting the limitations in setting targets for regulated outputs that are entirely within the control of the System Operator function.
- While we note, and will continue to collaboratively support, the work being carried out by TRL on the subject of capacity measures, we recognise the internationally accepted limitations of simple numerical attempts to define a concept as complex as capacity (UIC Leaflet 406).
- We are developing the proposed structure and outputs of the System Operator function in the 'System Operator: Fit for the Future' programme and will share these with ORR in due course.

PR18 processes and interfaces

Network Rail considers that:

- Our aim is to engage with customers and funders in order to develop their understanding and gain their support for our System Operator CP6 plan
- The SBP should include the business plans for the System Operator function, including its budget and scorecard, recognising these form part of Network Rail's overall plan
- The System Operator will be charged with the role to establish frameworks within which devolved route businesses (in relation to system operator functions) are able to collaborate with their customers
- The System Operator will have the ultimate decision making capability across the network for the contracting and allocation of capacity

Reporting and monitoring during CP6

Network Rail considers that:

- System Operator regulation should be capable of allowing the System Operator to evolve in CP6 and be flexible in size and shape. Just as Network Rail should be able to adjust the budgets of each route in light of emerging performance, it should also have flexibility to adjust the System Operator budget to reflect emerging performance. In the event that budget adjustments are made, the impact on outputs should be considered and be reported.
- As well as reporting system performance, the regulatory framework should facilitate evolution and innovation, and incentivise further use of the network through transparent incentive mechanisms.
- Further external and industry changes are inevitable and require a flexible regulatory framework that can respond to these when appropriate and to a proportionate level.

- The approach to System Operator reporting and ORR monitoring should be based on balanced scorecards that support customers, routes and funders in holding the System Operator to account
- System Operator expenditure (and 3rd party income) should be included as part of Network Rail's overall financial reporting
- The Network System Operator Dashboard provides a means of reporting overall performance of system operation by the parties engaged in System operation, whereas the Network Rail scorecard for the System Operator will be focused on the outputs of the function.
- Through publications such as the Dashboard, the System Operator should make available information to support discussions around the overall capability and performance of the Network. Network Rail's System Operator Dashboard provides a transparent way of reporting improvement indicators through its reporting on programmes to improve our abilities in these areas. These include Timetable Rules Improvement Programme which is validating the building blocks (rules) of the timetable, and Industry Access Planning Phase 2 which is improving industry planning processes, providing better timetables.

Specific observations on the issues and opportunities identified in Working Paper 3, Section 3 – a possible design of any settlement for the system operator functions

Para 3.3.-3.5

Whilst we recognise the difficulty in measuring performance with respect to medium- and long-term functions we do not believe there is a need for input-based measures in this area. Such an approach appears to conflict with the rationale set out in paras 2.6 – 2.11 for a more focussed and risk-based approach to regulating the System Operator. It should also be noted that Network Rail's network licence also sets a number of clear system operation obligations with which Network Rail is required to comply.

We believe that emphasis should be placed on the importance of customer and funder input into Network Rail's plans, from which scorecards are developed and that ORR sets outputs for the system operator on the basis of these customer and stakeholder-driven scorecards. One area that is not specifically mentioned in this paper is that there will be System Operator outputs that are delivered by routes and those that are delivered by the centre.

We would anticipate that those System Operator outputs delivered by routes would be included in route scorecards if appropriate and these would not form part of the System Operator determination. The system operator outputs delivered by the centre would be based on a central system operator scorecard or alternatively through the provision of a dashboard of information (i.e. the network system operator dashboard that has been developed and published in collaboration between Network Rail and ORR).

We also believe that outputs need to be flexible and respond to the possibility of changing customer requirements and other circumstances (e.g. growth) over the control period.

Regarding the measurement of the system operator's performance, and in line with our views on the outputs framework more broadly, we consider that there needs to be a more balanced scorecard approach, in which a basket of measures are determined, with assessment of them together (rather than individually) at a route-level. This would recognise

our achievements in meeting most (if not all) of our targets and avoid the perception that we are 'failing' because of one or two missed outputs.

Box 3.1

We consider that in regards for the business and for our people, getting meaningful measures is going to be absolutely critical for your described short, medium & long term system operation and the system operator.

A general concern in this area is about the measurement of capacity and how this would be done in a way that is straightforward (to measure and useful (so that the industry gets a benefit as a direct result of it being measured)). For example, a measurement around 'additional train paths' or 'creating paths that people may or may not wish to use' could be met but not be seen as useful if operators do not want to use them.

The paper suggests that there could be "measures that capture the SO's role in identifying and/or allocating additional train paths, including by considering their socio-economic value". If such measures are to be applied, we consider it essential that the ability of the system operator to duly discriminate on such a basis is clearly defined. In recognising societal benefits, if we used these ourselves to determine paths, in its own processes, we would welcome a discussion around whether ORR would retain the final approval for new access rights.

Para 3.14

Whilst the Railways Act 1993 continues to provide provision for financial penalties in the case of licence breach, we believe that following reclassification it no longer makes sense for enforcement policy to focus on financial penalties and that a broader suite of regulatory tools should be considered. We would welcome a more detailed conversation with ORR about this matter.