



System operation in rail: What can we learn from other regulated networks?

Thank you for inviting me to speak today.

I am Chief Executive of ORR - an organisation which I know is familiar to many of you - but for those of you who haven't come across us, our aim is to protect the interests of rail and road users. As well as being the health and safety regulator for the rail and light rail industry and the economic regulator for the mainline railway – Network Rail and the train operating companies – since April 2015, we have also been the monitor of Highways England.

As I suspect with all regulators it can sometimes seem like a fairly big leap from our rather lofty aspirations of protecting the interests of consumers to detailed questions around regulation, supervision of wholesale markets, price controls, or the topic I have chosen to discuss today around the development of system operation in rail. But to be absolutely clear, the protection of consumer interests is the motivation for the work we are doing on system operation and I hope that will become clear as I talk:

- first I will speak about what has been happening in rail industry and Network Rail more specifically in recent years;
- the way Network Rail has started to restructure itself in response to those challenges and the opportunity it presents for us as regulator to use techniques already well tested in regulation; and
- finally to identify areas where I think there is more to do and I hope we will be able to learn from the experience of others in the room and welcome debate.

So, what has been happening?

There has been sustained growth in passenger numbers over many years, which is a success story. As a result, Network Rail's network is increasingly busy, with train kilometers up by nearly 25% since 2005-06. Capacity improvements have benefitted passengers and freight customers and allowed more services to run, but passenger numbers are forecast to continue to grow - albeit that any forecast of demand comes with uncertainty around the rate of growth in particular.

A busier network increases the challenge for Network Rail across its roles: there are more constraints on the time available to maintain and renew the infrastructure; timetabling additional services is more complex; greater passenger numbers need to be accommodated at stations and when boarding trains; and capacity constraints limit the expansion of services despite the strong demand for them.

Meanwhile, passengers are funding an increasing proportion of the costs of running the railway, with the balance met by taxpayers. Understandably, there is a very

public focus on fares, value for money and the level of service and performance that passengers expect in return.

At the same time Network Rail's debt has been reclassified by government and its status is now that of an arms length body of government, the implications of which are only now beginning to play out. It means that Network Rail competes much more directly for funding with hospitals, schools and defence and that the binding borrowing limit imposed on it provides a much harder constraint on Network Rail than previous arrangements, which rightly or wrongly allowed it to raise its own debt off the regulatory asset base.

When coupled with the constraints on public spending, this highlights the need to:

- make the best use of the current network, as opportunities for additional investment – beyond the major committed schemes – might be limited;
- identify alternative additional sources of funding for the railway which is at present almost exclusively limited to receipts from the farebox and from taxpayers, via central government.

Finally, there continue to be challenges on Network Rail's efficiency, where some costs have risen in the last couple of years, when we had expected them to fall. This has been discussed at length in the context of enhancements which resulted in a significant replanning of the enhancement programme. But it is also the case that the cost of renewals has increased.

Together the effect of this overspending on capital expenditure has been to place additional pressure on Network Rail's financial position, so that last year we estimated that this would lead to the deferral of £9.5 billion of enhancements expenditure and £2.5 billion of renewals expenditure from the current funding period to the next funding period. Those numbers have continued to get worse.

Because of these challenges, Network Rail is responding by devolving responsibility from a single centralised unit to eight geographical routes, alongside the introduction of a national System operator function responsible for working with all Network Rail routes, funders (such as the DfT and local authorities who also fund work on the network), and train companies to help ensure services run as a joined-up network.

The System operator's responsibilities include producing the national timetable and informing how the network should develop over the long-term, with individual routes increasingly working to develop tailored plans to meet the needs of stakeholders and – in a broad sense – communities in those areas.

We have a keen interest in this route devolution - it should allow us as the regulator to compare how the different routes perform, highlighting best practice and acting as a lever to drive improvement across Network Rail as a whole - as well as helping those local areas to work with Network Rail to agree better, more tailored priorities to meet their needs.

But these innovations, and the need to respond to the challenges I have described, have also increased the pace and importance of the performance of the system operator in rail.

We want a national system operator that excels at timetabling, capacity management and analysis and can effectively mitigate the risk that increased devolution to routes could undermine the quality of service to those operating across the routes.

We have said that as we set the periodic review, Network Rail will be required to prepare a separate business plan for the National System operator so that we can determine a separate settlement for it. Such an approach will:

- improve the transparency of the National System operator role so that funders and operators are better informed about the decisions it makes, their impact and rationale;
- sharpen the incentives to manage the network more effectively both in terms of optimising the performance of train services and improving the use of capacity; and
- support longer term investment in better data, processes and technology so that the National System operator has the tools and capability to deliver the benefits of a joined-up railway.

But the environment that Network Rail is operating in is changing at the same time and we need to reflect this in the creation of the system operator and its regulation.

The number and range of parties involved in delivering to consumers is typically increasing across sectors. In rail, more decisions about how the network should develop and what services should run are being determined by local decision-makers, both in response to and because of increasing route devolution.

For example, Transport for the North, Transport for the West Midlands— as well as devolved governments in Scotland and Wales - are playing an increasing role in this space. It strengthens the case for an authoritative body that is able to take decisions based on a whole-system perspective and to produce credible analysis to inform these others' decisions but at the same time it makes that task harder.

There is increasingly a need for regulated companies - often in the form of a system operator - to help deliver public objectives. In Network Rail's case, the System operator will need to take account of the services that the government specifies in the franchise process with train operators, similar to the role which the system operator in electricity has in ensuring longer-term security of supply.

And finally, I mentioned earlier the constraints around public funding which have strengthened interest in attracting alternative sources of financing. The system operator can play a key role supporting this, particularly by providing high-quality information about the network and how it needs to develop over time, as well as a perspective on the efficiency, performance and other assumptions underlying financial decisions.

These are some of the not insignificant challenges facing the rail industry and Network Rail, its reform programme and the establishment of the system operator which will also need to respond to changes happening around it. So all ORR now needs to do is put in place a regulatory regime which makes sure this happens.

We are well on the way to producing a regulatory settlement for the system operator with a revenue requirement and a set of outputs, transparently reported against which we and others can judge its delivery.

But we wonder whether this will be sufficient to generate the confidence in the system operator and the quality of its analysis which are so essential if it is to be successful. High quality analysis requires a broad range of technical knowledge some of which is more theoretical in nature and some of which is practical to do with the system. We see plenty of evidence that this expertise exists within Network Rail but on its own expertise is not sufficient to generate confidence in the quality of the analysis.

So in addition we are looking at the processes which are in place to allow the analysis to be challenged and for those who use the analysis to be confident that it has been prepared in a way which is fair minded. And that when we talk about transparency we are clear that this goes well beyond making information available on websites to taking responsibility for the understanding of stakeholders and ensuring their engagement throughout the planning processes so that the work of the system operator is not seen as a black box activity.

Practically this means adopting regulatory technology which we have seen elsewhere such as the operator fora used by energy system operators. But also given the public ownership of Network Rail looking at how we can use reputation of the company and its leaders to strengthen incentives to meet the needs of its stakeholders and ultimately rail passengers.

Railways are in an interesting place right now – at a point when Network Rail has been fully returned to public ownership and arguably we could see ourselves as its regulator having less in common with other regulators, we are actually seeing a restructuring of the business opening up opportunities which have been well exploited for the benefit of consumers by other regulators:

Through the introduction of comparative competition between its geographical route businesses and the establishment of a system operator.

This leads me to conclude that it is an interesting time for rail regulators as well – building on the experience of other regulators as we go.

Thank you for listening.