THE RAILWAYS ACT 2005
~ A NEW FRAMEWORK
POLICY AND PRACTICE FOR THE PERIODIC REVIEW 2008

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PREFACE

We are pleased to publish the proceedings of the CRI conference on *The Railways Act 2005, A New Framework ~ Policy and Practice for the Periodic Review 2008*, held on 29th June 2006. We wish to thank all of the contributors to this set of proceedings for their papers, but also those who spoke at the conference and participated in the debate, and who are not represented by papers in these proceedings.

The railway industry has been through a series of changes and crises in the last ten years, but the Railways Act 2005 has signalled a new beginning focused on stability and improving performance. The conference has examined these issues through the perspective of the periodic review to 2008, and increased partnership working. There seems to be a new mood of confidence and responsibility, but whilst this is to be welcomed, we should not lose sight of the fact that the arrangements put in place by the Railways Act 2005 still have to be proved to be fit for purpose. The Department for Transport, given the demise of the Strategic Rail Authority, is playing a role which is not commonly found in the regulated sectors, and it remains a consideration that one day, Network Rail, as the industry leader, should be responsible for franchising, in order to better manage the wheel to rail interface.

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1 THE GOVERNMENT’S RAIL STRATEGY

Adrian Lyons

Introduction

My talk covers the key issues arising from the government’s rail strategy that have developed over the past twenty four months. I believe there has been a major and historic change to the way in which the government views railways.

Before going further I would just like to look at one of the paradoxes of legislation since the privatisation of the railways. Before privatisation there were, every year, a considerable number of private acts of parliament dealing with railway business but relatively little public legislation. One of the interesting points to note is that since privatisation this trend has been reversed and public bills have appeared with considerable regularity.

But to turn to the last major piece of legislation, the Railways Act 2005. You all recall that this act was preceded by a Rail Review that occupied the first half of 2004. The government wanted the Rail Review to answer two major questions: how to get control of cost and performance and, equally importantly, how to rationalise the decision making structure into one in which railway and transport policies could be better managed. The experience of having the regulator literally just telling government what it needed to spend on the railways, coupled with the difficulty the Strategic Rail Authority (SRA) had in delivering real change and the obduracy of the Health and Safety Executive (HSE), engendered a real belief that there were major flaws in the policy structure.
THE GOVERNMENT’S RAIL STRATEGY

We are all aware of the outcomes:

- abolition of the SRA largely balanced by the creation of an enhanced railway group in the Department for Transport (DfT);

- possibly an even more important measure was rationalisation of economic and safety regulation;

- closer government control of the input to the regulator through the high level output specification (HLOS) process;

- Network Rail was given increasing operational responsibility for the network.

However, the focus very much remained on cost and performance as priorities; any form of railway expansion that required additional government investment support was to be, quite bluntly, discouraged. Demand could be managed. Additionally the Rail Review produced a number of other outcomes that were not foreseen at the initial stages. These included:

- the reform of the statutory passenger body, the Rail Passenger Council, which has now become Passenger Focus;

- a hands-off approach towards freight. Government would encourage but give very little in the way of support and certainly would not to attempt to manage it from the Department of Transport in anything like the way in which the franchises for passengers are managed;

- The Transport Act also included a huge element dealing with the revision of closures and discontinuation of service procedures which, although greeted with dismay at the time, has proved to be the least used part of the legislation;
it also recognised the significant regionalisation of transport policy which is still under development in Scotland, Wales, London and the passenger transport executive (PTE) regions. Although the scope of the latter groups was limited in the Railways Act 2005, this is being rebalanced by increasing regional responsibilities for the English regions as a consequence of a number of major government initiatives, such as Sir Michael Lyons’ local government finance review and the Kelly/Miliband study into Local Government;

finally there was also a rationalisation of franchises, which is still continuing.

So we came out of the rail review with a new organisation but absolutely no vision. A situation reinforced in the Railways Act 2005 where the secretary of state had his requirement to produce any formal railway strategy dropped from the bill even though, paradoxically, the Scottish Executive took on the responsibility for producing one for Scotland. However, as the title of my talk makes clear, railway strategy is one of the key issues in the overall government transport policy portfolio. What has changed the landscape?

The first, undoubtedly, is that there is much better control of costs, and performance continues to improve, but the second element is clearly growth. The Transport White Paper of 2004 maintained that growth in transport, that had always matched economic growth, was now in the process of being decoupled and would henceforth grow more slowly than the economy. This may be true, particularly for roads in the south east, but for those modes with smaller market shares this has not happened at all. Short haul air has increased dramatically as has rail. Rail passenger growth is now moving ahead at double the rate of economic growth and freight is seeing growth up to four times the rate of economic growth. With this comes the realisation that a forecast that assumed only 30% growth in traffic over the next 10 years already looks somewhat over-cautious.
In this debate I am always interested when people describe the railway market as a mature one. The huge growth in passenger and freight over the last ten years indicates to me the whole market is in fact very immature but also extremely dynamic and exciting. There is something fundamentally interesting going on that transcends traditional railway economics.

The next issue that changed the landscape has been sustainable development. A number of influences are at work here: the first is the declaration at the Gleneagles G8 summit to move away from Kyoto and look to technological solutions, and this is an area where the United States, China, Japan and other Asian countries are very active, although Europe tends to be moving rather more slowly. But much closer to home was the arrival of David Cameron and his championing of the sustainable development agenda with the memorable tag line: Vote Blue get Green.

The railway’s environmental credentials are a distinctive advantage over other modes of transport but technological change is not occurring as quickly on the railways as it is in other modes; clearly this is an issue that needs to be addressed if railways are to sustain their lead.

On regionalisation a huge number of distinctive policies are beginning to emerge but of most interest is the way in which the Transport Innovation Fund is developing. When the Treasury set up the Transport Innovation Fund it considered it as a way of discouraging investment in high capital-intensive projects and to encourage local authorities and regions to go for road pricing and additional buses. In fact exactly the opposite has happened and it was very interesting to note the first Transport Innovation Fund awards are very heavily skewed towards creating a national rail freight network as this is seen as a regional priority across the United Kingdom. So we have probably had the right policy instrument for the wrong reasons.
The finally piece of the jigsaw is that the railways have been performing well. Everywhere demand is very buoyant. The increasing number of franchises paying premiums is changing the balance of the operating grant and also the infrastructure costs are coming down. Punctuality performance is improving rapidly.

All this is led to government thinking about a strategy. Interestingly the high level output specification – which was going to specify the outputs for the next control period and avoid the Tom Winsor experience that preceded CP3 – has led to the realisation that the railways cannot be managed in five year chunks. The high levels of capital expenditure and the pressing need to handle long term growth needs a more comprehensive overview. A strategy paper will therefore be issued next year to complement HLOS. The DfT’s Business Plan 2006 identified the following key elements of the rail strategy:

- how to accommodate anticipated passenger (and by inference) freight growth;

- the role of high speed intercity trains, including the case for high speed rail in Britain;

- improving the environmental performance of the railway networks to ensure it maintains its advantage over other modes (a really important commitment);

- responding to the needs of passengers in the context of an ageing and more diverse population,;

- making sure that Eddington Study and the Comprehensive Spending Review (and also other reviews eg, the Sir Michael Lyons and the Kelly/Miliband work I mentioned earlier) is catered for in the emerging strategy.

There are a large number of mechanisms by which this will be achieved. The route utilisation strategy process, the parallel
Transport for London corridor studies and similar work in Scotland, Wales and the English regions is beginning to lay out a menu of what needs to be done to meet demand and make the network more efficient. Linked to this will be the capacity enhancement process in the successive Network Rail Business plans, which will demonstrate how the route utilisation strategy objectives are to be met. Then we come to the major strategic projects in the form of hybrid bills – there is one for Crossrail already and if we do move forward on high speed rail it will doubtless be one as well. The other salient issues relate to road pricing (and any form of hypothecation that may be created) and, finally of course, the Transport Innovation Fund that I have already mentioned which will grow to in excess of £10bn by the early years of the next decade.

The means by which these mechanisms can be activated are through: intelligent transport, electrification, improving the capacity of the network (longer platforms and trains and better signalling), new and updated lines and, finally, high-speed and strategic freight networks.

Looking back over the last two years, remarkable change has occurred. Railways were then identified as a problem that just needed to be sat on; now they are seen to be an increasing part of the solution. Despite initial misgivings the new structure has proved much more stable and has certainly facilitated the progress of cost reduction and improved performance. It has also improved short-term strategic management through such mechanisms as the route utilisation strategies. In addition the overarching combination of economic and safety regulation looks to be a successful move.

There are still two areas that need to be addressed however, and I think the most important of these is franchising. The problems of a lack of stability and the relatively short franchise periods can result in short term priorities overriding strategic interest. There is also over management and the expense of running a very complex process that ought to be much simpler. The outcome of
this has been poor management of public policy risk and I believe that the balance is not right in this area. It is a truism that public policy risk is best managed by government. It should not be passed on to the private sector. If it is, two things happen: either the private sector underprices the public policy risk and the contract collapses or the private sector overprices the public policy risk and makes a ‘shed-load’ of money. My view is that franchises should go out to at least ten years if not longer. The franchising process also needs to be made much simpler and less bureaucratic.

Finally, dealing with fares, this is of course always an easy populist target and I do not believe the way in which the Transport Select Committee addressed the issue in its report in May was helpful in any way at all. A major problem is that fares are a hybrid arrangement in which some fares are regulated and others are not, which creates all sorts of stresses between the two categories. On the railway industry side I do believe that we have probably not marketed the fares as aggressively as, say, the short haul airlines but there has been some significant progress ranging from the Oyster Card in London to the appearance of websites such as thetrainline.com which are beginning to revolutionise the market.

Of course the proof is in the numbers of customers. If fares were really putting people off travel we would not see anything like the growth in demand – across all areas of the railway but particularly in the InterCity, regional and off peak markets – that has occurred. We must be doing something right.

I think the government should try and deregulate as many fares as possible and allow the railway industry to provide value for money in the way in which the short haul airline industry are doing.

So, in essence, the conclusion is that we have a Railways Act 2005 that has been largely successful. But the government has realised there is a major transport capacity gap it has got to fill to
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meet rapidly rising demand. Finally, regulation that was seen almost as an integral to the problems of the industry has been reorganised with a much more focused and business-like outlook, and is certainly now becoming part of the solution.
Introduction

I would like to respond to Adrian Lyons’ presentation by putting it into a wider policy context. That context seems to be extraordinarily rich at the moment. There is the prime minister’s letter to the new secretary of state; the current development of the government’s policy on national road pricing as presaged in the 2004 transport white paper; Sir Michael Lyons’ review of local government finance; Sir Rod Eddington’s review on transport and its relationship with productivity, stability and growth for the chancellor of the exchequer and the secretary of state for transport; David Miliband and now Ruth Kelly’s discussion of policy towards city regions and their governance; major current policy reviews on energy and emissions; and reviews of policies on planning, land use and density.

That a prime minister should write a public letter to an incoming secretary of state setting out what is required of him is an interesting new development. Once the platitudes have been discarded the transport letter is quite short and pithy. It contains a good diagnosis of the reasons for anticipated growth in demand for roads and railways. But crucially this short letter has two separate mentions of the current constraints on public expenditure. There is an important steer here that the secretary of state should not expect to be able to solve his problems with large quantities of new Treasury resources. It may well be that in the background stalks the bogey of the sustainable investment
rule: and the fear that any new railway debt (or, indeed, the existing railway debt) might be added to the public balance sheet. Clear signals have also been given that the forthcoming spending review is unlikely to help much on the revenue side.

Given that there is currently very little budget for rail capacity enhancements this is an unhelpful context in which to consider such things as the new demand for: perhaps £10bn for Crossrail; Transport for London’s scheme to expand capacity on the commuter railways by up to 40% by spending a further £7 or £8bn; any number of further rail capacity enhancements (including high-speed line proposals).

I agree with Adrian Lyons’ diagnosis concerning the growth in railway demand in the future. This was essentially the argument that lay behind the defunct railway passenger and freight growth targets in the ten-year transport plan of 2000. But as far as London is concerned I would add the forces of population growth and its disposition in relation to the expected location of new jobs. One only has to look at a map of the anticipated growth in population in a ring of housing development areas circling London and compare it with the expected location of employment growth largely in inner London to understand that the peak capacity problem for the London commuter railways will get worse (see Transport for London’s June 2006 publication, Transport 2025: Transport Challenges for a Growing City).

The introduction of official policy to introduce national road pricing is very welcome. It is the only realistic way to deliver more efficient use of our very inefficiently used network. But also - and this has not yet been widely discussed - for the longer term it would provide both a much clearer signal about where it is worth investing in new road capacity and the wherewithal to build it. In other words it would bring a welcome new coherence to roads provision, considered, as it should be, like any other major piece of public or private infrastructure. It will bring together the consideration of the price to be charged by time-of-
day, the capacity to be provided and the revenues available to fund new capacity. These things need to be decided together, yet presently each of them is decided separately. The consequence has been a distorted road investment programme and inefficient use of what we have.

The development of thinking about national road pricing is relevant to railways policy for at least three distinct reasons. Most obviously there are the direct implications for modal transfer. At the national scale modal transfer from road to rail is not likely to be very important simply because there are few viable railway services available to compete with the priced road trips. But it could be significant in specific markets such as the commute into London where road charges would be relatively high and, as we have noted, rail capacity is already under severe pressure. And if it should be the case that part of the road pricing policy package is a substantial reduction in motoring taxes paid in rural areas, then the competitive position of railways serving such areas would be further weakened.

There are two indirect implications for railways policy. First, principles that are good for roads are equally good for railways. It is an inefficient use of the rail network to tolerate extreme crowding in the peaks and under-use of capacity at other times. If, as must be the case, expanding capacity in suburban London is very expensive - unfundable or physically infeasible - then the implication of the pricing principles is that we should have more aggressive pricing against the peak than we have now. That would reveal a meaningful signal showing willingness to pay for extra capacity which can be related to the costs of providing that capacity. Similarly it would provide more sensible signals to those planning new housing developments: presently much new housing is being planned on a presumption that fast, cheap and high-capacity rail services will be available to take the new residents to their employment; expectations that nobody will be willing to fulfil. Of course, as the Office of Rail Regulation well-recognises, these principles read across to the setting of charges for the use of scarce track capacity to more nearly reflect
both the value of that capacity to the marginal user and the long-term running costs of expanding it. All this is the same triad as for roads: price, capacity and funding to be simultaneously determined, thereby delivering a clearer signal on value for money. It would be welcome if arguments of this kind were reflected in Sir Rod Eddington’s report (now due to be published in the autumn): he said he was interested in pricing arguments when he appeared in front of the Commons Select Committee on Transport in autumn 2005.

Road pricing has another indirect implication for railways policy. It would involve public authorities handling and being accountable for large amounts of money. It seems unlikely that the public would accept all of this falling under the direct control of the exchequer as is presently the case with fuel duty and the vehicle excise duty. The policy seems much more likely to be acceptable if some authority corresponding to the natural local traffic area performs these functions, and if it has the powers and duties to spend a substantial portion of the money that is collected in their area. This is precisely what happens in the case of the London congestion charge.

But outside London there are no appropriate authorities. The passenger transport authorities, which no longer have the span envisaged for them when they were created in 1968, do relate to suitable geographical areas and they could be reinvigorated as an essential component of national road pricing. They would have to take over some of the powers that presently reside with their constituent local authorities. New bodies might need to be created to serve areas such as Bristol, Southampton and Portsmouth. Alternatively, the government appears to be reasonably content with the way that the new London government has worked so they might decide to replicate that structure in some other city regions. These are matters under active consideration, now by Ruth Kelly and before her by David Miliband. Whatever the outcome, if there were more devolution to powerful local transport authorities, then it is certain that they will expect to gain more control over local railway systems and
the budgets that go with them. Of course, this is already a live issue between the Mayor of London and the government. And government has made general noises about devolution of railway budgets but it is not yet clear what that might mean in practice.

That takes us to Sir Michael Lyons’ review of local government finance. He is due to report by the end of 2006. It seems inevitable that he will become involved in the issues of local taxation, central government grant, and local governance. The government’s response to Lyons will have its own implications for railways policy. For instance, the secretary of state for transport has already announced that the decision on government funding for Crossrail has been delayed pending the government's consideration of the Lyons report.

Then there is Sir Rod Eddington’s review of transport in relation to productivity, stability and growth for the chancellor of the exchequer and the secretary of state for transport. Some people are anticipating that he will recommend a substantial increase in public expenditure on transport, having made the argument to him that there has been significant under-investment in the past. We will have to await publication of his report, but even if he does make such a recommendation it might not help the railways very much in the short term because of the clear steer given in the prime minister’s letter. There is also the chancellor’s worry about allowing Railtrack’s debt to rise even further beyond the £21bn currently forecast and the risk that railway debt might appear on the public balance sheet.

In view of public sentiment it seems unlikely that major funds will be switched from health, education, defence and other public spending heads for the benefit of transport. The upshot may be that government acts to make more intelligent use of the levels of public expenditure already set out in the July 2004 transport white paper. After all, that is essentially what the developing guidance on the transport innovation fund is all about.
In turn that implies being willing to write down clearly what it is government is trying to achieve with public expenditure. In particular why is the nation spending more than £4bn a year of taxpayer money on railways? Currently it is surprisingly difficult to find any such statement. The public service agreements for railways contain a number of relatively low level management targets such as “make them more reliable”. They also contain what I would regard as secondary objectives such as “increase the use of public transport”. But there’s not much in a way of primary objectives stating “what we are trying to achieve”.

Once clear objectives have been settled we must develop matching operational criteria to guide us to make choices as to how to spend a restricted total budget. And then we must use these criteria: it is in this last step that we have failed in the past. We have good appraisal techniques and appraisals have often been carried out (though not so often published) but the nation has not been very good at using them in deciding how to spend its money. Rail schemes like all others will have genuinely to demonstrate good value for money (however that turns out to have been defined) against the alternatives. In other words one has to do to the sums even handedly at a scheme specific level. It is meaningless and misleading to claim generic superiority for railways. As we all know, the relative performance of any railway scheme depends critically on a number of factors including the load it is likely to carry, how much of the load it wins from competing alternatives - as distinct from generating anew - and what happens in gaining access to the railway at the railhead.

One consequence of these pressures may be renewed efforts to improve our existing appraisal methods. There is work to be done on classic value of time savings, including allowing local variation (to reflect local variations in productivity) and distinguishing between commuting time and leisure time savings. The prediction and evaluation of changes in reliability deserves more work, especially as networks become more congested. As
always, we need better scientific estimates of the costs of environmental damage.

I detect two new arguments that call for careful scrutiny lest they descend into mere fashions. One is a concentration on ‘productivity’, GDP and ‘competitiveness’. Some of this is already drafted into the guidance on the transport innovation fund. Of course such objectives are different from the traditional ‘economic welfare’ which is fundamentally based on private individuals’ willingness to pay. In certain circumstances these different criteria will lead to different decisions, most obviously for schemes that generate economic welfare through leisure time savings, or that will offer benefits to individuals in activities that are not recognised for GDP purposes.

The other argument relates to ‘agglomeration benefits’. There is no doubt that agglomeration effects are real. That is why cities exist. They should certainly be estimated. Interesting progress has been made recently on how these effects might be accounted for in scheme appraisals. But much more work is required to obtain robust quantitative estimates which can be used in an objective and scientific way to improve our appraisals of specific projects. Nor is the economics of how to incorporate them into appraisals straightforward.

There is a danger that ‘productivity’, ‘competitiveness’ and ‘agglomeration’ will join ‘sustainability’, ‘key stakeholders’ and ‘partnership’ as meaningless buzzwords. Should this happen it would devalue objective analysis and descend into special pleading.

Political scientists may be able to offer comment on what it says about the state of government to have so many policy concurrent policy reviews, several of them by ‘outsiders’ and with an unknown degree of recognition of each other’s work. But those interested in railways will have to do their best to follow it all, and to fashion a coherent policy from the bits and pieces that result.
3 SAFETY ON THE NATIONAL RAIL SYSTEM

Andrew Evans

Main line rail fatalities

Table 1 represents data on main-line railway fatalities in the four and three quarter years 2000/01 to 2004 (the odd time length is because reporting periods have been changed from fiscal to calendar years). Given the relatively small numbers, railway fatality data can be variable over short periods, but these data are reasonably representative of the current situation.

Table 1: Main line rail fatalities
2000/01 to 2004 (4¾ years)

<table>
<thead>
<tr>
<th>Category</th>
<th>Fatalities</th>
<th>Percent of all excluding T &amp; S</th>
<th>Average/year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Train accidents</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Train collisions, derailments etc</td>
<td>11</td>
<td>7%</td>
<td>2.3</td>
</tr>
<tr>
<td>Train/road vehicle collisions</td>
<td>37</td>
<td>24%</td>
<td>7.8</td>
</tr>
<tr>
<td>Other train accidents</td>
<td>2</td>
<td>1%</td>
<td>0.4</td>
</tr>
<tr>
<td>All train accidents</td>
<td>50</td>
<td>32%</td>
<td>10.5</td>
</tr>
<tr>
<td>Movement accidents</td>
<td>82</td>
<td>53%</td>
<td>17.3</td>
</tr>
<tr>
<td>Non-movement accidents</td>
<td>23</td>
<td>15%</td>
<td>4.8</td>
</tr>
<tr>
<td>All excl trespassers and suicides</td>
<td>155</td>
<td>100%</td>
<td>32.6</td>
</tr>
<tr>
<td>Trespassers and suicides (T &amp; S)</td>
<td>1,270</td>
<td></td>
<td>267.4</td>
</tr>
</tbody>
</table>

Railway fatalities are traditionally divided into train accidents, in which a train is damaged and there may be casualties, such as collisions and derailments; movement accidents, in which casualties occur due to the movement of a train, but the train itself is not damaged, such as people being struck by trains or
SAFETY ON THE NATIONAL RAIL SYSTEM

falling from them; and non-movement accidents, which are other casualties on railway property. Casualties to trespassers and suicides are usually separately accounted for.

Table 1 shows that in the four and three quarter years to 2004, there were just over 30 fatalities per year on the main line railway. Of these, 53% were in movement accidents, and 24% were in collisions between trains and road vehicles. Only 7% were in the high-profile class of train collisions and derailments (in this case, the accidents at Hatfield and Potters Bar). The number of fatalities to trespassers and suicides (T and S) is much larger than the number of other fatalities.

Trends in fatal accidents

The frequency of fatal railway accidents has fallen substantially over the long term in all the main categories of accident, though the rates of improvement have been different for different categories. For illustration, Figure 1 shows the numbers of fatal movement and non-movement accidents per million train-km from 1967 to 2005, and Figure 2 show the numbers of fatal collisions and derailments per billion train-km over the same period.

The solid points give the pre-privatisation data in the 27 years from 1967 to 1993. The solid lines show an exponential trend fitted to the BR-era data. The open points show the privatisation era data from 1994 to 2005, and the dotted lines are the extrapolation of the BR trend. Both Figure 1 and Figure 2 show that British Rail had achieved improving trends in these classes of accident in the 27 years before privatisation. However the privatised railway has generally bettered those trends. Thus there is no evidence that safety has deteriorated since privatisation, notwithstanding the high-profile accidents that have occurred.
Figure 1: Fatal movement and non-movement accidents: national railways: 1967-2005

Figure 2: Fatal train collisions and derailments per billion train-km: 1967-2005
Risk criteria

In my view, the general intellectual framework for safety decisions on the railway is fit for purpose. The basic criterion is that safety measures should be adopted if their benefits exceed their costs. The principal benefits of safety measures are the avoidance of the costs of accidents, including casualties, damage, disruption and accident investigation costs.

For the purposes of valuing the prevention of casualties, the railway uses the same valuations for the prevention of fatalities and injuries as are used for the appraisal of road safety measures. This is sensible, because the evidence is that people place the same valuations on the prevention of casualties on both modes. These are based on the ‘willingness-to-pay’ principle. The valuations are slowly rising in real terms over the long term, because it is presumed that we will be willing to pay more for safety as we become more wealthy.

In addition to the valuation criterion above, the railways also apply the individual risk criterion that no individual, or class of individuals, should be at a level of risk greater than a tolerable level of risk (generally taken to be a risk of death not greater than 1 in 1,000 per year for workers and not greater than 1 in 10,000 per year for passengers and the public). However, railways have a level of safety which is high enough to ensure that these limits do not generally bind. In passing, it may be noted that several classes of road users have risks above these limits.

However, there are two main concerns about the application of risk criteria to the railways. The first is the continuing requirement in the Office of Rail Regulation (ORR) 2005 safety policy statement for ‘gross disproportion’ between the costs and the benefits of safety measures. The phrase originated in the Edwards v National Coal Board Appeal Court judgement of 1949. It has been subsequently much discussed; one interpretation is that safety measures whose costs exceed their benefits must be adopted, up to the point at which the costs are
‘grossly disproportionate’ to the benefits. Precisely what the limit is has not been defined, but it is a more demanding criterion than the basic cost-benefit criterion.

The second concern is that although the cost-benefit criterion may formally be the same for the adoption of road and rail safety measures (disregarding the ‘gross disproportion’ argument), in practice they are applied in different ways. In the case of roads the value of the benefits of safety measures tends to be treated as the maximum that should be spent on them, but in the case of rail the value of the benefits of safety measures tends to be treated as the minimum that should be spent on them.

Thus there are examples of implemented rail safety measures whose costs far exceeded their estimated safety benefits, such as train protection measures. In the other direction, the most dramatic examples are of local road safety engineering measures whose benefits may exceed their costs by factors of about 20. Table 2 gives some examples of the estimated first-year rates of return from such schemes extracted from local authorities’ 2006 local transport plans.

| Table 2: Examples of local authority road safety engineering schemes implemented in 2000/01 |
|-----------------------------------|---------------------------------|---------------------------------|
| No of Schemes | Average 1st year rate of return |
| West Midlands LAs | 68 | 207% |
| Cambridgeshire CC | 16 | 213% |
| Bristol City Council | 45 | 223% |
| Bracknell Forest DC | | 361% |
| Hertfordshire CC | 30 | 332% |
| Suffolk CC | 18 | 218% |

The average first-year rates of return are all at least 200%; this implies that even if their effective life is only 10 years, their benefit/cost ratios are 20:1. Some caveats should be entered
before taking such figures fully at face value, but it appears that we tend to underspend on such safety measures. The House of Lord’s Economic Affairs Committee’s report of June 2006 on the government’s policy on the management of risk took up this argument.

Risk policy

At the time of rail privatisation the safety requirement was that current safety levels should be maintained. Given that BR had achieved improving trends over the long term, as shown in Figures 1 and 2, this was a modest requirement. It would have reasonable to require that BR’s trends continued.

The current requirement is that safety should be maintained or improved. It is now sensible to:

- remain vigilant on safety management;
- implement safety measures for which benefits are greater than the costs;
- take the safety benefits which come from new technology (for example, train control systems, rolling stock).

Level crossings are of leading concern at present.
4 REGULATION AND THE 2008 PERIODIC REVIEW

John Thomas

Introduction

This paper explains the Office of Rail Regulation’s (ORR) objectives for, and approach to, the 2008 periodic review (PR08). It describes the context for PR08 as being one of improvements in industry safety and performance, increased amounts of investment and costs being brought under control. But it is also one where significant challenges for the industry remain if increases in demand and expectations of improving service quality are to be met at an affordable price for fare-payers, freight users and taxpayers. In the light of these challenges and ORR’s vision for the industry, the paper sets out our objectives for PR08 and explains how we are approaching the review, given the new processes contained in the Railways Act 2005. Finally, the paper describes various proposals we are considering for enhancing incentives for continuous improvements in performance.

PR08 in context – industry performance

Within the framework of the high level output specifications (HLOSs) and the statements of public funds available (SOFAs) that will be provided to ORR by the Secretary of State for Transport and Scottish ministers, the PR08 will determine the outputs which Network Rail must deliver, its revenue requirement and access charges for control period 4 (from 1
April 2009 to 31 March 2014). The review is being progressed against a background of strong demand growth in both passenger and freight markets, improved safety and performance, and declining costs.

Figure 1 shows that safety has continued to improve over many years. Recent safety indicators reveal this trend to be continuing and there is evidence to suggest that the trend has improved since privatisation.

Punctuality also continues to improve since the collapse in performance following the Hatfield accident in October 2000. The public performance measure (PPM) which measures the percentage of trains arriving at destination on time has been close to 90% in recent periods, with the moving annual average currently at 85%. See Figure 2.

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Figure 2: Public performance measures

Improved punctuality is leading to higher customer satisfaction and fewer complaints (Figures 3 and 4).

Figure 3: Customer satisfaction
This improving safety and performance situation has been achieved with passenger demand at its highest level since 1946 and freight moved exceeding 20 billion net tonne kilometres for the first time since the late 1970s. It has also been achieved though at a significant cost, with huge investment in both rolling stock and the infrastructure in recent years, leading to higher public support (Figure 5).
Increased infrastructure related costs have arisen as a result of both higher volumes of asset renewal to address previous under investment and higher unit costs. However, costs are being brought under control as shown below in Figure 6.

**Figure 6: Infrastructure spend**

![Graph showing infrastructure spend from 1995/96 to 2007/08](image)

**ORR’s vision for the industry and future industry challenges**

Our long-term vision for the GB rail industry is a successful partnership of Network Rail, operators, suppliers and funders, working together to meet the needs of passengers and freight customers, and delivering a safe, high performing, efficient and developing railway.\(^2\) Ensuring that an appropriate framework is in place that aligns incentives between industry participants is crucial if this vision is to be realised.

The railway industry has made considerable progress in the last few years, with Network Rail making significant improvements

in both its cost efficiency and its operational performance. The current regulatory framework has facilitated this progress. Nevertheless, considerable challenges remain:

- **Cutting costs**: although Network Rail has worked hard to regain control of its cost base and is currently outperforming the efficiency assumptions made at the Access Charges Review 2003 (ACR2003), there is still a long way to go on efficiency. A study conducted for ORR at the end of last year, estimated that Network Rail may have scope for further improvements in efficiency of up to 8% per annum during CP4.³ In December 2005, we set out our initial views on a possible expenditure range in CP4, as illustrated below in Figure 7.⁴

**Figure 7: ORR’s initial assessment of expenditure**

- **Safety**: Network Rail needs to build on the general improvement in safety achieved over the last decade and to foster continuous improvement.


⁴ Network Rail has provided updated CP4 expenditure forecasts in its initial strategic business plan, published in July 2006.
• **Operational performance**: this has recovered well since Network Rail took over, but further and sustained improvement is necessary to meet customer and stakeholder expectations. In particular, Network Rail needs to engage with its partners to find ways of reducing disruptions to the network caused by engineering works. It also needs to address areas of local underperformance which are bucking the national trend.

• **Customer responsiveness**: Network Rail needs to continue to improve its customer focus and responsiveness, as well as its willingness to pursue innovative solutions. Network Rail needs to become more proactive in developing new partnerships to meet customer expectations and the rising demand for rail services.

• **Growing and developing the network**: there is a consensus that the strong growth in passenger and freight traffic recorded over the last ten years is likely to continue, requiring a much greater focus on making better use of existing capacity as well as developing the capacity and capability of the network. Network Rail will need to be more proactive in finding whole industry solutions to access planning and timetabling constraints; as well as identifying and undertaking beneficial incremental enhancements to the network and accommodating third-party schemes.

## Objectives and process for PR08

Our overarching objective for PR08 is to:

> “Ensure an outcome to the review which secures value for money for users and taxpayers, by determining Network Rail access charges and outputs in a way which balances the interests of all parties”.

Underpinning this are a number of more detailed objectives around the setting of cost-reflective access charges, improved
definition of the outputs Network Rail will have to deliver (for example in relation to the capability and availability of the network, and improving incentives.

The way in which PR08 is being conducted is different from previous periodic reviews, following the new statutory processes set out in the Railways Act 2005. The key difference is that government is now required to provide ORR with a specification of the outputs it wants to buy from the railway (HLOS) and the amount of public funds which it has available (SOFA) to buy those outputs. The output specification will cover only the franchised passenger railway and at present is envisaged to include high-level capacity, performance and safety outputs (although Scottish ministers, who have responsibility for specifying and funding outputs in Scotland, may want to specify additional measures). The HLOS will cover whole industry outputs and not simply those that Network Rail will be expected to deliver. For example, additional capacity could be provided by longer trains, additional tracks, or a combination of the two.

In order to inform the HLOS and SOFA, which are to be provided in July 2007, we will provide advice to government in February 2007 on our best estimates of the revenues that Network Rail will require to deliver a number of different output scenarios. Once the HLOS has been determined, Network Rail will then publish a strategic business plan, setting out its view, in collaboration with train operators, on the optimum way of delivering the HLOS along with the requirements of other customers and funders (Network Rail’s obligations are far more than simply delivering what government wishes to buy).

If our assessment is that the HLOS cannot be delivered within the public funds available, government has the opportunity to increase the available funding or re-specify the HLOS. If neither of these happens, then ultimately it is up to us to determine what outputs should be delivered, consistent with available funds. A significant amount of analysis is being undertaken to try to
ensure, as far as possible, that a mismatch between the HLOS and SOFA will not occur.

ORR’s periodic review final determination will be in October 2008 for implementation on 1 April 2009.

Enhancing incentives at PR08 for continuous improvements in performance

The complex structure of the GB rail industry brings challenges of coordinating production and investment decisions by the various players. Continuous and sustainable improvements in railway performance at an affordable cost will best be achieved if Network Rail and train operators work together in a true joint venture. Close cooperation has worked well in ensuring that performance has recovered to pre-Hatfield levels and more recently the development by Network Rail of route utilisation strategies has been bringing all stakeholders on key routes together to identify the best uses for the route and to identify options for improvement.

If closer cooperation can deliver benefits in these areas, why can it not go beyond that? Why cannot short to medium term planning of the railway, possessions, and development of stations benefit from a similar approach? And what would be the implications for incentives and franchising?

We believe that providing the right incentive framework in order to facilitate close partnership working to deliver a better railway is crucial. But the first task is to ensure that there is clarity about the outputs to be delivered. As the primary objective of the incentive framework is to align the company’s interests with those of funders and customers, Network Rail should be incentivised to deliver those outputs that are valued by its customers and funders, ie, final outputs, such as network capacity, and performance that customers and funders wish to
purchase. This is because customers and funders are more concerned about the delivery of these outputs than the delivery of, for example, the number of track kilometres renewed.

The outputs which we establish for Network Rail, working with its partners to deliver, need to reflect Network Rail’s wide-ranging role. There is a requirement for:

- better definition of some existing outputs (eg, capability of the network);
- effective coverage of Network Rail’s network management role (eg, availability of the network);
- consideration of other measures, such as customer satisfaction.

We believe that there is, however, a limit to the extent to which outputs can be specified appropriately *ex ante* and from a central position that is removed from the customer, particularly in relation to ‘softer’ outputs such as engagement with industry partners. Indeed, over-specification of outputs may lead to limited scope and incentives to innovate and respond to changing market conditions and may distort outcomes. Similarly, there is a limit to which specifying requirements to engage with partners can be expected to change mindsets or outcomes.

While government and funders clearly have an important role in the overall specification of outputs for rail, sole reliance on output specification to incentivise Network Rail delivery could be damaging. In particular, it could be expected to limit the company’s ability to innovate, to become increasingly customer focused and to be more pro-active in undertaking its whole industry role and meet customer needs beyond the HLOS; in conflict with our objectives for the review.

We see appropriate output specification as an essential starting point for incentivising Network Rail and its partners to achieving our vision, not the means in itself. Parties then need to face incentives to innovate, respond to changes in circumstance and work in partnership to achieve whole industry outcomes to
deliver more than just the outputs specified. We believe that there are amendments that could be made to the existing regulatory and financial framework for the rail industry that would enhance incentives and could have a marked impact on the extent to which, and speed at which, the long-term vision for the industry could be achieved.

While fundamental changes to the industry structure and/or Network Rail’s financial framework may well create incentives that are both stronger and better aligned, we recognise that no such changes are currently envisaged. Indeed, there is little appetite for such changes across the industry; the new structure and responsibilities that have resulted from the white paper still need to bed down fully. Nevertheless, we believe that there is benefit in exploring whether there are incremental changes, within the framework set out in the white paper, that can be made that could improve the incentives facing Network Rail and its partners to achieve our vision for the industry.

We believe that the main questions to be addressed in considering the adequacy of the current incentives framework and seeking options for improvement (recognising that we do not have all the levers to deliver change) are as follows:

• can it be right that train operating companies (TOCs) and Network Rail have no strong joint financial incentives to increase rail use and reduce whole railway costs?
• how should Network Rail balance the interests of different users?
• does protection against Network Rail cost changes (through insulation of changes to access charges) and cap and collar arrangements in franchise agreements, mean that incentives on TOCs to optimise their offer or to innovate in light of changing market conditions are eliminated? Do tight franchise specifications and their relatively short length compound this?
• how can incentives on Network Rail to increase capacity and performance and reduce costs be strengthened?
• what is the impact of the government indemnity on Network Rail’s borrowing, given that this effectively means there is no hard budget constraint for Network Rail and the usual monitoring role of creditors is non-existent?

We will be examining further over the coming months a number of ways in which incentives might be improved. These include:

• enhancing TOC pressure on Network Rail to improve efficiency by introducing some form of benefit sharing mechanism, whereby Network Rail and train operators (passenger and freight) would share any Network Rail cost savings achieved as a result of operator engagement;

• the merits in explicitly linking Network Rail’s revenues with those of passenger and freight operators and/or passenger/gross freight tonne miles. This would have the effect of aligning Network Rail’s incentives more closely with those of operators and making them more responsive to their needs;

• the desirability of incentivising Network Rail to under/over deliver its capacity target where actual demand turns out to be lower/higher than that envisaged in the HLOS, rather than leaving adjustments to be made in the output specification at subsequent periodic reviews, and to provide greater encouragement to move decisions on capacity closer to the customer;

• potential adjustments that could be made to franchise contracts that would sensitise TOCs to changes in the structure of access charges and therefore encourage them to respond to appropriate signals provided. Ideally, such adjustments would need to go hand in hand with a more flexible approach from government to specifying the services required in bidding documentation and subsequently. Without such flexibility, TOCs would have the incentive to respond to price signals but limited ability to do so;

• updating financial values of incentives, eg, variable access charges; the costs of taking possession of the network;

• the possibility of introducing scarcity/reservation fees to encourage optimal use of capacity;
• improving corporate financial incentives by restricting the use of the financial indemnity mechanism. Such a restriction would impose a hard budget constraint. This is because Network Rail would have to seek any additional debt on a non-guaranteed basis from the capital market. The introduction of risk capital would have the effect of strengthening the efficacy of corporate financial incentives by helping to restore the usual monitoring role of creditors, and the operational and financial discipline that brings; and
• ensuring that Network Rail’s management incentive plan reflects the full range of outputs that Network Rail has to deliver.
5 ORR’s PERIODIC REVIEW - A RESPONSE

John Dodgson

Introduction

John Thomas’s paper has provided a valuable overview of the process of the Office of Rail Regulation’s current review. I found the complex diagram showing the PR2008 timetable particularly interesting, but it shows how complex is the maze that has to be negotiated by all the parties in the industry to reach a successful conclusion. At the heart of the diagram is the box showing strategy, with the high level output statement (HLOS) and the statement of funds available (SOFA).

I thought John’s presentation was particularly useful in giving some insights into what the High Level Output Statement will contain, but the Department of Transport (DfT) must certainly be urged to come up with a realistic balance between what it wants and the funds that it will make available. What the industry should worry about is the Department in effect saying:

“We want pretty much the present railway system and network of services, but it must continue to meet targets such as for example a continuing reduction in the rate of fatalities from train accidents along the trend curve shown by Andrew Evans’ work, but with an expected big increase in demand for rail travel and rail freight movement, oh and, by the way, we want all this to be done with a reduction in the total funds available”.

Let me just pick out three things that I think are particularly important in the review.

John Dodgson, Director, NERA
ORR’s PERIODIC REVIEW

First, while I do believe incentives are important at the margin I think that the most important issue is to get Network Rail’s unit costs down. The Office of Rail Regulation (ORR) had commissioned a review by LEK and Oxera of the scope for efficiency gains which examined a wide range of experience and evidence from the rail and other sectors.¹ This concludes that for CP5 a plausible range for improvements in Network Rail’s unit cost efficiency is between 1.5% and 5% per annum. This might seem to be too wide a range to be of practical value, but the importance of the report is more to highlight the different methods available.

ORR will need to exercise judgement over results from different methods, which generally don’t yield neat consistent results. It is encouraging to hear that ORR have commissioned benchmarking work from ITS. I think there is a role both for international benchmarking (though NERA’s experience of this in the rail infrastructure sector shows how difficult it is to get consistent data sets, except for different US railroads) and for internal benchmarking of the type conducted on Railtrack regional data by Andrew Smith. But, ultimately’ regulation will require a careful balancing of the evidence to come up with a tough but attainable target for Network Rail to achieve.

Secondly, let me say something about short term incentives. At present incentives to use infrastructure involve relatively low prices at the margin but with some element of congestion charging. Generally the charges only cover a small proportion of infrastructure costs. Maybe the industry should look again at some form of long run marginal cost pricing that attempts to recover a higher proportion of total costs? NERA has suggested this in the past, but the problem was always to figure out how exactly to calculate these costs. Of course, private firms are used to adding mark-ups to cover total costs, and they may not always have sophisticated models to do this. But nevertheless they find

¹ LEK and Oxera (2005), Assessing Network Rail’s Scope for Efficiency Gains over CP4 and Beyond: A Preliminary Study, 12 December. A report for ORR
a way to do so in order that they are not left with overall deficits. Perhaps a first step is simply to acknowledge that infrastructure use charges on the rail system should be higher than they are now.

Finally, congestion, which Stephen Glaister talked about. We may yet see national systems of road congestion charging, and that would divert some traffic to the railway, though the main effect would be to reduce and re-distribute (to different roads and different parts of the day) road traffic. But the principle of congestion charging also applies to the railway, not only in scarcity charges for infrastructure, but also in pricing up peak-period travel where crowding is high. We might expect to see more of a reversion to former BR policies in pricing up peak services, and perhaps deregulation too of saver fares.

Also, I might add another point about road pricing: it is seen mainly as a device to improve use of existing road capacity – and that is certainly the case in London – but on inter-urban roads it would have some effect in reducing traffic, but traffic would likely then resume growth with continuously increasing prosperity. So road pricing should not be seen as an alternative to investment – it just means that capacity expansion should now be appraised using cost-benefit tools but with future benefits assessed on the basis of the traffic flows and user cost changes that would result from a move from one level of road capacity with congestion charges to a higher level of capacity with different levels of congestion charges.
6 THE PASSENGER PERSPECTIVE

Mike Hewitson

Introduction

How do we make sure that the passenger is not left out of what is a highly complex economic modelling process? Also, how do we ensure that the ‘consumer interest’ is fully understood and taken into account in the framing of economic regulation, and as clearly as is the voice of well resourced and powerful companies?

These are important points because we should not lose sight of the fact that the HLOS and the periodic review are ultimately about providing services for passengers – it is all about getting passengers between A and B or providing freight services.

How do we make sure the passenger voice is heard?

The starting point is to make sure we know what passengers want:

- what are their needs and expectations?
- what is an acceptable level of service and what is not?
- what are passengers’ priorities and which aspects of service are more important than others?

The way that the 2005 Act and the white paper were structured means that a lot of these issues are now addressed at the high level output specification (HLOS) stage.
High level output specification

High level output specification (HLOS) is looking at reliability. HLOS will set performance targets for the public performance measures (PPM) for the 3 main sectors:

- London commuters TOCs
- InterCity
- Regional

On capacity, HLOS will forecast demand and will establish the maximum level of crowding.

Punctuality and getting a seat are two fairly fundamental issues for passengers. So it is right and proper that the setting of the targets takes into account passengers’ expectations: what do we feel is an acceptable level of performance; what is an acceptable level of crowding; what are the priorities?

The process cannot be entirely driven by passenger needs – they will need to be tempered by reality and tempered even further by the availability of funds – but as a matter of principle if you are working out what to do on behalf of someone it makes sense to ask them what they want in the first place. There are aspects of HLOS which acknowledge this. For instance, Passenger Focus is working with the Department for Transport (DfT) on measuring the ‘passenger experience of delay’. PPM measures the delay to a train and this might not reflect the actual delay to a passenger. For example, the train may only be delayed by 15 minutes but if you miss a connection you may be over an hour late at your destination. We are looking to see if the NPS can be used to record ‘passenger experience of delay’ – which can then be used as a cross-check to see if improvements in PPM are actually bringing about improvements for passengers.

But there are other passenger issues that HLOS will not be taking forward at this stage, for instance, passenger information, stations and access for all. Decisions on these will have a huge
impact on passengers so it makes sense to ask them/involve them in determining future strategy.

This is something that Passenger Focus is working on. We have already published reports setting out passenger expectations on passenger information (what information is needed, when and what form it should take). We have also looked at what passengers want from stations – what is essential and what’s desirable at the different categories of stations. We are now turning our attention to overall passenger priorities on a route basis.

**Periodic review**

It is much harder to identify the passenger input into the periodic review itself. HLOS will feed directly into the review but much of it is simply too technical and too complex for the majority of passengers. But that is not to say that ORR should not try and there are areas where passengers do have a very real interest. For instance:

- asset condition and, particularly, the targets set on reducing points failures, broken rails etc. Passengers might not know what these things are but they do know the effect they have on them;

- efficiency targets: passengers do not know whether Network Rail’s costs need to be reduced by 1% or 10% but they do know that high costs have an impact – ultimately on fares but also in terms of subsidy that could otherwise be spent on additional benefits or services;

- they also know that not all decisions can be based on lowest cost eg, possessions. If we want better services and more investment then we have to accept that there are times when you have to dig up the track. But equally we have a real
interest in how the disruption is planned. The cheapest is presumably to shut the line down, do all the work and then re-open it but this ignores the impact on passengers. It cannot just be about financial cost, it must also be about cost/benefit to passengers.

It is difficult for passengers to have meaningful input to things like efficiency targets or specify what an acceptable level of delay attributable to broken rails is. To that end passengers are largely dependent on ORR’s judgement, which makes it important that ORR carries out the review in way that provides accountability and transparency. We might not be able to determine the adequacy of the targets but we can comment on progress towards achieving them.

On this issue ORR is to be congratulated for its willingness to consult. Importantly, ORR also provides progress reports (eg, the quarterly bulletins on Network Rail and now the data room/information network being developed). It is possible, though, to make this even more transparent. For instance, it could disaggregate information further. A company wide PPM performance figure is not too relevant to me as it may not reflect my own experiences. Performance on my line may be counterbalanced by other routes. The more relevant the information is to me, the better I can use it to hold the industry to account.

Conclusion

There is a role for passengers in the HLOS and periodic review process – it might not be easy but it is worthwhile.
7 DELIVERING OUTPUTS: COMPETITION, COOPERATION AND CONTRACTS

Paul Plummer

Introduction

To start it is useful to explain the rail industry and set out the relationships between the major players: the Department for Transport (DfT), the Office of Rail Regulation (ORR), the train and freight operating companies (TOCs and FOCs) and Network Rail. The relationships are illustrated in the following (Figures 1-3) which show the funding, contractual and partnership aspects of the rail industry. They are intended to be self-explanatory.

Figure 1: The flow of funds
Figure 2: The formal and contractual links

Stakeholder relationships

Franchise agreements (TOCs)
Freight grants (FOCs)
Operators’ licences

“Binding arrangement”
Railways Acts 1993/2005
Reporting requirement
Network licence

TOCs and FOCs

Track access contracts
Network Code

Figure 3: The philosophy of industry partnerships

Partnership with operators

TOCs and FOCs

Network Rail
There are a number of aspects of partnership working which have to be taken into account. These are, first, that the objective is system optimisation and efficiency and, ultimately, to make growth affordable. This requires a joint focus on final users even though operators have the direct relationship. So, we are accountable to operators but we are also expected to provide industry leadership. This can be achieved without formal integration but requires clear route-based plans, and the network code and charging regime needs to facilitate the right solution.

**Partnership working**

Examples of partnership working are set out in Figure 4.

**Figure 4: Integrated delivery of outputs**

![Diagram showing examples of partnership working](image-url)
DELIVERING OUTPUTS

Key aspects of these examples include:

**High level output specification (HLOS)**

Governments issue high level output specification (HLOS) and statement of funds available (SoFA), which will cover safety, performance and capacity. There will be a joint development of the network modelling framework to support HLOS options and selection. The infrastructure cost model developed by Network Rail forms part of this framework and will enable a more transparent and consistent tool to inform the debate about activities, costs, outputs and charges.

**Initial strategic business plan**

This business plan (published on 3 July 2007) articulates Network Rail’s emerging plans for operating, maintaining, renewing and developing the network, primarily in control period 4 (CP4) but it also includes high level projections over a longer period. It aims to inform Network Rail’s customers and stakeholders about the issues and strategic choices that the industry and funders face for CP4. Following publication of this plan Network Rail will work more closely with train operators and funders in the development of our longer term plans, in particular building on the broad range of work that is being carried out to understand better the strategic choices faced by the industry.

**Route utilisation strategies**

Network Rail is developing route utilisation strategies (RUSs) on behalf of the industry to cover the different routes across the rail network. RUSs seek to balance capacity, passenger and freight demand, operational performance and cost in order to address the requirements of funders and stakeholders. They will form the basis for the development and delivery of timetables, infrastructure maintenance and renewals for the Network, as well as underpin the development of the franchise specification. They
will also contribute to the HLOS. Integral to the development of each RUS is an extensive process of consultation with train operators and a wide group of industry stakeholders. Route plans state what Network Rail proposes to do with the network over a defined period of time and are appended to the business plan.

**Route Investment Review Group**

Key activities of the Route Investment Review Group are:

- individual groups for each of Network Rail’s eight routes each led by Network Rail’s principal route planners;
- it includes Network Rail plus all TOCs and FOCs with an interest in the route (and ATOC);
- they meet quarterly - but considerable activity between meetings (1:1s, sub groups, etc);
- it reviews forward renewals programme and identifies issues and opportunities;
- it proposes schemes contributes to prioritisation;
- it tracks scheme development and delivery and is now starting fourth round of meetings;
- it is working well because of specialist input from attendees and its key outputs are the route plans.

**Industry business case analysis, Network Rail discretionary fund and outperformance fund**

To get the best value for money for the industry we must all be aware of costs and benefits to each of us and to society. When Network Rail appraises enhancements these are undertaken using socio-economic appraisal. It is on this basis that Network Rail is the guardian of the Network Rail discretionary fund (NRDF). Our own outperformance fund will also be appraised in a similar way. Using our route enhancement teams as facilitators of funding ideas and funds we are trying to get the best deal for the industry based on sourcing funds from all parties including local and devolved government – ie, virtual team-working.
DELIVERING OUTPUTS

Rolling stock specification

Network Rail is working, through its rolling stock acceptance process, to improve its relationships with train operating customers in order to understand better their technical requirements in relation to the network and to ensure we are meeting their needs now and in the future. The longer term aim is to facilitate an increase in capacity and the introduction of new technologies on to the network.

Franchise specification

There is a planning and franchising steering group with representatives from DfT, Network Rail and ORR. Its aim is to facilitate greater alignment between franchise specifications, end franchise and resultant track access contracts. There is greater Network Rail involvement in reviewing and commenting on DfT’s proposed specification before issue, and Network Rail provides comments on submitted bids. ORR ensures consistency across the ‘industry triangle’.

Station development

Network Rail is proposing to engage with developers on three different levels in relation to station redevelopments: separate projects for main London termini eg, Victoria, Euston and Waterloo; important large stations eg, Guildford and Reading; and ‘Route Clusters’ which will channel money from stations with development opportunities to modernise those nearby with no development potential. Network Rail is establishing property development vehicles, primarily with developers, to act as joint venture vehicles and to share the risk and benefits of schemes on a long term basis. We are working with train operators to ensure joint understanding of their needs and drivers in relation to station development.
Timetable process

The introduction of integrated train planning systems will:

- improve efficiency of processes;
- increase focus on wider industry benefits;
- ensure greater integration between Network Rail and train operators.

Changes to Network Code Part D are taking place because a cross-industry working group identified changes required to Part D, eg, the introduction of constrained capacity into the decision criteria, the process for commenting on draft rules of the route, and the need to link Part D to refranchising and the decision criteria to RUSs etc. The proposed changes are to be submitted to class the representatives’ committee for approval.

A resilient timetable programme is underway which will identify timetable issues through regular consultation with drivers, signallers and planners, and aim to improve timetable quality across all areas and operators.

Joint performance improvement plans

These are a key action arising from the rail review, and deal with the cross-industry process for planning, delivering, monitoring and reviewing performance and performance improvement. They are based on targets and ambitions through recognition of the basic building blocks eg, Network Rail’s business plan, identification of improvement potential and agreement of joint targets and actions. It focuses on public performance measures (PPM) as the best measure of output to passengers. Activity is on a TOC by TOC basis with local teams owning individual performance improvement. It reflects the view that more joint challenge makes performance improvement easier and better, and the aim is to improve/stretch targets.
DELIVERING OUTPUTS

*Integrated control centres*

These are designed to improve real time management of planned and unplanned disruptive events, and will shorten the chain of command/decision-making by elimination of duplication and the reduction in the number of interfaces. The guiding principle is to recognise the primacy of the customer in the end delivery of the train service. It helps deliver route availability for both the operation of trains and for infrastructure maintenance, taking a balanced view and making the best decisions for the customer and the general good of the wider rail industry. It also encourages a more proactive approach to the management of incidents and service disruption, and provides a clearer and simpler structure for the industry, with the shortest possible communication lines relating to real-time decision-making.

*Railway operational code*

The industry railway operational code working group (reporting, ultimately, into the industry steering group) was set up to develop and produce the railway operational code (ROC). Whilst the obligation to produce the ROC lay with Network Rail, it was deemed crucial to get industry input and buy-in to the proposed sections of the ROC from the earliest development stage, hence the establishment of the working group. The approach has been highly successful and to date six ROC sections have been produced replacing the out-dated conditions contained in Part H of the network code. The final planned ROC section is under development.

The ‘binding arrangement’

Finally, it is necessary to reflect a little on the ‘binding arrangement’. This might best be illustrated as in Figure 5.
Key aspects of the binding arrangement are:

- two elements
  - regulatory contract
  - reporting requirement;
- towards lighter touch regulation?
- implications of partnership working?
- our initial strategic business plan
  - input to HLOS and regulatory contract
  - a big step forward but just the beginning.

Network Rail’s obligations are set out in a ‘regulatory contract’ with government (e.g., Railways Acts 1993 and 2005, network licence). Network Rail has also agreed a reporting requirement with the DfT. This ensures timely provision of information from Network Rail to the secretary of state to assist with statutory functions and rail-related activities and outlines six principles which comprise: constructive relationships, consistency, focus on output delivery, transparency, proportionate involvement,
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effective gateways. There is now an indication of ‘lighter touch’
regulation with the emphasis on the industry taking more
responsibility for resolving issues. Network Rail is being urged
to take a leadership role in many areas and these are also
potential implications of partnership working for our licence.

In addition, the periodic review process now requires
governments to publish an output specification and a funding
statement with the preparatory stage requiring Network Rail to
publish its initial strategic business plan. This is a big step
forward, for example, in relation to the inclusion of explicit route
strategies, the development of explicit asset policies and the
development of infrastructure costs model. But it is just the
beginning. We need to develop all of the above and we need to
engage much more with the rest of the industry to produce more
of an industry strategic business plan.
8 INCENTIVES AND THE ROLE OF THE TRAIN OPERATING COMPANIES

Chris Nash

Introduction

Many of the concerns of the Association of Train Operating Companies, and indeed much of the discussion during the day, has centred on two closely related issues – how to give the train operating companies (TOCs) a more positive role in the planning and development of the network, and how to provide appropriate incentives. These are the issues on which I will concentrate in my comments.

As has been explained, we now have a situation in which provision of both infrastructure and services is heavily determined by DfT through the high level output specification (HLOS) process and through tightly specified franchise agreements. The main leadership role in providing inputs to the process lies with Network Rail, through the route utilisation strategies (RUSs) and timetabling. This is slightly curious as neither organisation deals directly with rail customers. Moreover, whilst Network Rail may have strong reputational incentives to tackle the major issues of safety, performance and costs, it is not so clear that it has strong incentives to come up with better ways of providing services and using capacity. Indeed it might be very risk averse in examining such issues. To that extent it would be desirable to provide TOCs with a more positive role in these processes.

Yet we should remember that the reason the Department for Transport (DfT) and Network Rail took over such a strong
planning and specification role is that the previous system led to an unworkable timetable and to wasteful use of capacity. Clearly, this must mean that incentives were misaligned in that system, and that this issue must be tackled before TOCs can play a greater role.

On the demand side there are at least three sources of distortion:

- the incentive for ORCAT’s raiding (the computer programme which apportions revenue from ticket sales between train operating companies), or at the least, seeking to design services to take traffic from other operators rather than attracting new traffic for rail. Could the revenue sharing arrangements be modified to provide operators who improve services solely with the extra revenue those improvements bring to rail rather than a share of existing revenue as well?

- a failure to allow for external benefits. This would require the subsidy system to be modified to provide a payment per passenger kilometre, varying with the nature of the traffic according to the external benefits that traffic incurred.

- the risk sharing arrangements, which may mean that operators do not get all the extra revenue their efforts produce. Could this be modified to a situation where DfT bears the risk of external factors, according to the best evidence incorporated in the passenger demand forecasting handbook (PDFH), whilst TOCs receive all the revenue not attributed to factors outside their control?

However, it is on the infrastructure costs’ side that the distortions are greatest, due to the lack of adequate charges for the use of scarce capacity, and the fact that TOCs have no interest in the level of infrastructure costs, being completely shielded from them by the pass-through arrangements in the franchise agreement.
One solution to this might be to charge TOCs the long run marginal cost of providing paths, but given indivisibilities and long time scales for adjustment of capacity, this is likely to be arbitrary and to distort the use of existing capacity. A better solution is the continuation of the two part tariff, but with a ‘prime user’ franchisee responsible for agreeing the level of infrastructure and the corresponding fixed charge, and other users entering into access agreements with a fixed charge based on avoidable cost. All users would also pay a wear and tear related variable charge, and anyone seeking additional paths on the spot market would also pay a scarcity charge designed to equate demand and supply. This would be a reservation fee payable whether the slot was actually used or not.
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