Regulation of the railways: the British experience

Richard Price [1]

Lecture at the Centre for Competition, Economics of evaluation and Regulation (CER), Università degli Studi di Napoli Federico II
10 November 2014

Synopsis

Britain's railways are a great success story. The rail industry needs now to change to sustain the remarkable progress of the last decade. To get the best service for its customers and a good deal for the taxpayer, the industry needs the freedom to innovate, to deliver better value and to make rail more attractive for passengers and freight. Rail is unusual in that, since privatisation regulator and government have been drawn into operational detail instead of being focused on what matters – ensuring the industry serves its customers at the best price for the taxpayer. Funding and decision-making structures need to change so that it is clearer how public money is being used to improve public outcomes, and what it is buying; while leaving it to the industry – public and private - to find the best solutions to deliver what funders and customers want.

---

[1] Chief Executive, Office of Rail Regulation, 1 Kemble Street, London, WC2B 4AN. www.orr.gov.uk

This is an updated and expanded version of my 2012 Beesley lecture. I am grateful to a number of people for advice and comments on this and previous versions of this lecture, including: Luisa Affuso, Michael Beswick, Agnès Bonnet, Dan Brown, Ronan Devaney, Terry Gourvish, Paul Hadley, Brian Kogan, John Larkinson, Roger McDonald, Ian Prosser, Cathryn Ross, Adrian Shooter, Jon Stern, Bethan Thomas, Anna Walker, Matt Westlake, Joanna Whittington and Elise Weeder.
Any errors or omissions are my own.

Contents

Summary

Britain’s railways have made enormous progress over the last decade. They have undergone a remarkable recovery following a crisis in the early years of privatisation, with high levels of sustained growth in demand, a good recent safety record, and punctuality and customer satisfaction at near-record levels. But that has come at a cost. It has taken a decade to bring the railway’s costs under control, and there remains a significant efficiency penalty, substantially funded by taxpayers. Rail now faces a huge opportunity to consolidate its position and continue to grow; but to do so it will need to move to the next level of maturity as an industry, developing its commercialism, capabilities, culture and confidence.

The support of government and other funders is an important part of shaping what the railway delivers, and always will be. Government’s role is central, in assessing what the country wants from its railway, and the services and capacity which are in the interests of promoting growth, connectivity and environmental benefits but which it will never be profitable for the market to deliver. However, the dependence of rail on unfocused subsidy, as opposed to subsidy linked to clearly-specified outputs, is a significant impediment to this transformation. It undermines commercial decision-making throughout the system, with many decisions on the detail of delivery – as opposed to what society wants from the railway – taken in government. This contrasts with the potential, in the privatised railway, for rail businesses to shape solutions which reflect their expert understanding of how operations, planning, technology, innovation, customer satisfaction and growth come together.

I have drawn together the key lessons we have learned from 20 years of economic regulation of the railways in the box below – showing the importance of getting the right framework to encourage commercial behaviours which focus the industry on meeting the needs of consumers and being responsive to their changing expectations, effective management of safety risk and broader business risks, achieving efficiency in delivery and in the use of scarce capacity; and in achieving value for money across the system.

.

Key lessons from rail regulation in Britain

An efficient railway is a safe railway
Safety and efficiency are not substitutes – there is no trade-off. The maturity of risk management of railway businesses is essential to deliver safety, efficiency and customer service. Compromising safety will undermine all other objectives, and the cost of recovering an unsafe network will exceed any short-term benefit from cutting corners. A railway which does not manage safety effectively cannot be efficient.

Excellent asset management requires excellent asset information
A thorough understanding of asset condition, unit costs and use of predictive data is critical before rail managers can deliver safety, efficiency and service reliability.

To put customers first, treat rail businesses like businesses
Set the framework of competition, challenge, transparency and incentives in the industry so that you minimise reliance on bureaucratic intervention from regulator or government, and maximise the scope for the industry to innovate, invest and think creatively on how to serve customers.
Align funding to risk, even where subsidy is applied. Make sure the infrastructure operator has to earn its revenue by delivering for train operators and their customers; and that train operators pay the costs of the infrastructure they use. That way both sides have good commercial reasons to work together to improve services and value for customers.

Empower smart, informed customers…
Unbundle/deregulate services that do not require regional/local government funding and specify USO services lightly. Allow flexibility and competition wherever it is feasible.

…and smart, informed governments
Local or national governments need to be clear about the services that they want to buy or support, and what they cost to provide – avoid undifferentiated block subsidies to cover ill-defined costs.

Separation and subsidiarity, wherever it is possible…
Devolve decision-making to allow services to be more responsive to local needs; to allow PSO decisions to be taken closer to users; to develop comparative competition to shed more light on best practice in performance and efficiency. Risk transfer - avoid a single entity being 'too big to fail'.

…to promote competition and comparison
Separate out the natural infrastructure monopoly, and allow competition and/or contestability for train services (in and for market competition); and in the supply chain. Challenge and collaboration from train operators helps make the infrastructure operator commercial and efficient, and reduces reliance on the regulator.

Independent regulation ensures efficient, responsible outcomes
Empower an independent regulator with a strong focus on the interests of rail users/consumers and taxpayers. Structure the industry so that performance and efficiency are driven up by commercial incentives, reducing the information asymmetries and reducing reliance on the regulator as the sole source of pressure.

Over a long period, the industry's confidence and capability has suffered from an unhealthy symbiosis of decisions being taken out of the hands of rail businesses; together with financial arrangements which misalign costs and revenue so that commercial decisions are blurred or distorted. Behaviours are to a fair degree driven by subsidy and intervention by government and regulator rather than commercial decisions. That drives up the costs of delivering what funders and customers want. Bureaucratic, rather than commercial, decision-making is deeply embedded in large parts of the industry.

No one should get the impression that it is all gloom and doom. I meet committed, driven, innovative people everywhere I go on the railway, at all levels. Recent developments in the industry's leadership mean there is a growing commitment to change. But the current arrangements for delivering subsidy and regulating the industry make it an up-hill struggle.

There is an opportunity now, and in the next decade, to transform this so that rail becomes the dynamic, mature, efficient and customer-focused industry envisaged at privatisation.

If the industry can deliver on the efficiency challenge that now faces it, it will be possible to reduce its dependence on public subsidy, and to get much greater transparency on where public money goes and what it buys. I am sure national and local funders will want to continue to support rail, but the industry needs to give them better information for making choices over how their money is used and more clarity on what they get for it – specifying what is to be delivered, and looking to the industry to develop its creativity and innovation to shape how best to deliver.

As it becomes less <u>dependent</u> on subsidy, beyond the specific services and capacity funders choose to buy, the industry ought to become freer to take its own decisions on how best to meet its customers' expectations and grow demand. There is further to go on customer satisfaction, and rail businesses, whether publically or privately owned, need to focus on how they can meet rising expectations through better customer service, better information, and innovation - providing more of what people want to buy at better value – just as businesses do in other industries. This potential is all the greater now, given the scope for major changes in the way the railway operates through electrification and transformed signalling and information systems.

This is a real challenge in an industry where finances are opaque and decision-making byzantine in its complexity. That needs to change. As efficiency improves I believe we can move towards a railway in which public and private businesses can come together in a commercial way to deliver for their customers, potentially with less intervention from the regulator and government. We can transform the way the industry operates in the next decade, and all of us need to step up to make that a reality.

Introduction

I am grateful to the CER for inviting me to give this lecture, and for the opportunity to exchange views with colleagues from Italy. I am particularly grateful to Professor Alfredo del Monte, who was instrumental in establishing the much-respected Masters in competition, evaluation and regulation here in Naples.

The centre has made a major contribution to the development of economic regulation in (at least) two ways. First it has contributed skilled people: CER alumni can be found across the spectrum of regulation and competition authorities, regulated businesses and research institutions. And second, it has made a major contribution to the difficult problem of developing the theory of economic regulation, and working out how to apply the theory in the messy real world, to get the best outcomes for consumers. Alfredo's boundless enthusiasm, curiosity and energy have been a driving force behind this, and with colleagues at the CER he is been a real force for good.

This lecture is in four parts:

- in the first part, I will explain why rail matters; and consider how events over the last decades have shaped the industry, its performance, and its regulation;

- in the second, I will talk about why we regulate the railways, and the challenges the industry faces in meeting the expectations of its customers and funders;

- in the third part, I will describe some of the key elements of the way we regulate: how incentive regulation works in practice, the structure of the market for passenger services; and how these might be affected by potential European reforms;

- in the fourth part, I will consider how regulation can help to create the environment in which the industry can meet the challenges of the next decade.

PART 1: WHAT WE WANT FROM THE RAILWAYS, AND THE EVOLUTION OF THE INDUSTRY

1. What do we want from the railways?

The railway industry matters. Though it represents just 3 per cent of passenger journeys, or 8 per cent by distance travelled; and 9 per cent of freight movements across Britain[2], it plays an important role in facilitating sustainable economic growth, connecting people and communities and providing a means of transport for people and goods which is comparatively efficient in terms of its impact on the environment[3].

The engineering and economics of rail mean that it is particularly good at some things, and less good at others. It excels in transporting huge numbers of commuters into dense centres of employment. It has huge advantages over road on haulage of heavy bulk freight like coal and aggregates. It competes well with road and air on fast, long-distance passenger journeys; and it is competitive with road on the distribution of goods in the intermodal sector. It is less good at transporting people over very short distances, which represent the vast majority of journeys in Britain, where the car, bus, bicycles and walking generally win hands down – accounting for rail's very small share of the total number of passenger journeys.

Rail is central to several key components of our transport demands as an economy. So, in common with other regulated sectors, such as energy or water or telecoms, the output of the rail industry matters. It matters because both economic and social activity would be constrained without it. There are substantial social benefits from the railway and given the level of ongoing public subsidy – currently in Britain at a level of £4bn of taxpayers' money a

---

[2] Source: Department for Transport: Rail Trends 2010-11: 3 per cent includes London Underground and main line railway.

[3] Domestic transport accounts for around 20 percent of the UK's carbon emissions. Rail contributes to these emissions but is relatively environmentally friendly, in emissions per passenger mile, compared with road and air. Electric traction means that rail can use low-carbon sources of electricity as the electricity supply industry decarbonises production

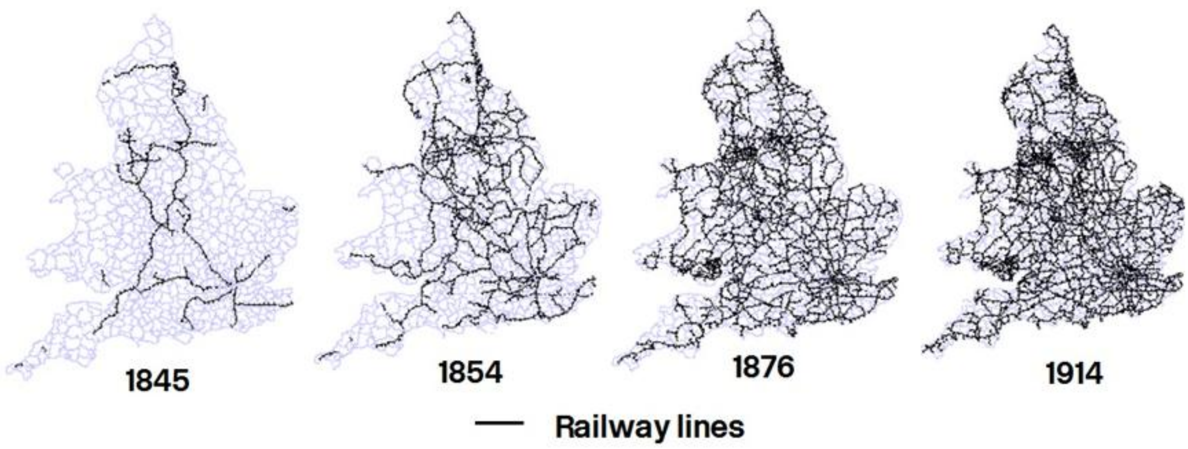
year, or one-third of its total costs – the efficient and effective operation of the railway industry is of significant public interest.

2. The origins of today's railway

I am going to argue that a significantly greater ability in the industry to understand costs and revenues, and to make commercial judgements, is key to sustaining progress in efficiency and in delivery for customers. To understand why this matters, it is worth taking a few minutes to look at how the industry developed, and what has happened since privatisation.

Britain led the world in railway technology, and the spread of the railways particularly in the period from 1840 to the end of the nineteenth century was both a driver and a facilitator of the later phases of Britain's industrial revolution, dramatically speeding up journey times, reducing the costs of transport and communications, opening up and connecting a wide range of markets in goods and services in ways which had not previously been possible.

Chart 1: Expansion of the railway network:
England and Wales, 1845 to 1914.



Source: S.G. Checkland (1964): The Rise of Industrial Society in England 1815-1885

Italy was not far behind. 1839 saw the inauguration of Italy's first railway line, the Napoli-Portici Railway. We sometimes think of European rail markets as a recent innovation, but the Napoli-Portici line was promoted by Armand Bayard de la Vingtrie from France with the backing of Ferdinando II. It was built to the standards established in Britain, but with Italian engineering and innovation, French and Italian finance – and powered by two British locomotives, named *Bayard* and *Vesuvio*.[4]

As we have seen in our own time with new technologies, investment in rail in its early decades was guided by a mix of commercial logic and heady exuberance. The shape of what later emerged as a national network was determined by a patchwork of individual decisions, with entrepreneurs and communities across Britain all wanting a piece of the action. So the geographic shape of the railway was a mix of rational and haphazard, with some lines never making a profit. Yet, in one of the most profound examples of path dependency, their effects on the distribution of economic activity and population were fundamental, and shaped the economic geography of Britain for a century, until the rise of lower-cost efficient road transport in the second half of the twentieth century.

The inability of the railway companies to make some routes pay, and the precarious financial engineering by which some routes were financed, meant that the stability of the 100 or so early rail companies was always in jeopardy. This was exacerbated by a shortage of investment both as a result of the First World War and a hiatus resulting from a government commitment made in 1914 to nationalise the railways at the war's end.

Though stopping short of nationalisation, the Lloyd George government's 1921 Railways Act forced a consolidation of the railway companies into four regional monopolies in an attempt to stabilise the situation. This allowed significant improvements in efficiency and a more commercial approach, with the new larger rail businesses marketing journeys across larger areas of the country. Nevertheless, from the 1920s rail saw the start of a decline in passenger demand, as buses began to compete with rail particularly outside larger cities. The problem of an extensive network – parts of which could not make a profit even if they were desirable for societal reasons, was not addressed, and the Big Four companies struggled financially.

[4] Valter Guadagno (1996): Ferrovie ed economia nell'Ottocento postunitario, Rome, Collegio amministrativo ferroviario italiano

In the Second World War, the railways suffered significant damage and renewals and maintenance were cut to a minimum – so in 1947 the Atlee government decided that the state should take responsibility for managing and funding the process of restoring and modernising the national railway, nationalising the private companies to form British Railways in 1948.

With the rise of road transport for both passengers and freight, the second half of the 20th century saw a steady and substantial decline in demand for rail, with a large rise in the railway's operating losses. Beeching's famous report of 1963 identified that one-third of the network carried only 1 per cent of passengers; and one-half of the network carried less than 5 per cent of passengers and freight combined.[5] This led to a very substantial reduction in the size of the network, and at the same time there was a deterioration in the ability of the railway to deliver quality and compete with road. Management in the nationalised railway remained regional and producer-led, with commercial alignment of railway outputs and what consumers wanted only at the margins.

With declining demand, the approach taken to rail generally by managers and policy makers alike was one of managed decline, within a public spending framework in which investment was constrained by operating losses. One Chairman of British Rail remarked in the 1970s that a large part of his role amounted to shoring up "the crumbling edge of quality".[6] There were nevertheless some bold commercially-led attempts to restore rail's fortunes – particularly to retain and grow market share in long-distance passenger and freight markets.

Under the Thatcher government from 1979 to 1990, while other privatisations were advanced, rail remained solidly in the public sector, the complexity of the industry and level of public subsidy thought to make privatisation too difficult. Instead British Rail underwent a major change in its structure to get a more profound commercial alignment between the planning and operation of the railway and its markets.

---

[5] British Railways Board: The Reshaping of British Railways (HMSO, London; 1963), Tables 1 – 3.

[6] Sir Peter Parker, British Railways Board Chairman's Report, 1976 (British Railways Board, London; 1976)

In 1982 British Rail focused its management on the key railway businesses or sectors – InterCity, Network South East, Regional, and freight businesses, with clear bottom-line accountability. This led to a focus on the individual markets, a good understanding of costs and a reduction of operating losses. But in the public sector the railways remained very much cash constrained, limiting the ability of the sectors to invest and renew in order to improve efficiency and to compete.

3. Privatisation and beyond

The 1992 White Paper "New opportunities for the Railways"[7] set out the John Major Government's privatisation agenda, with a key objective defined as *"harnessing of the management skills, flair and entrepreneurial spirit of the private sector to provide better services for the public" with the "introduction of competition through greater involvement of the private sector and the ending of BR's monopoly in the operation of services".*

The White Paper pointed to a focus on the sale of the freight businesses and the franchising of all passenger services. The plan was for Railtrack, as the infrastructure manager, to stay in public sector into the "medium term". Significant growth in demand or capacity was neither envisaged nor really on the agenda in the early 1990s, and this was reflected to a degree in the way privatisation was undertaken.

In practice, the privatisation of the hundreds of railway businesses split out of British Rail between 1992 and 1997 involved the sale of several freight operating companies, the franchising of all passenger services, the floatation of Railtrack, and the sale of supply businesses. This was rather more radical than the White Paper had envisaged – with early privatisation of the infrastructure, and the separation of maintenance and renewals companies from the natural monopoly component of infrastructure management and operation. This was an attempt to separate out markets along the value chain and to identify those in which competition could operate effectively – learning the lessons from previous 'monolithic' privatisations in gas and telecoms where too little had been made of the potential to develop competition by changing market

[7] HM Government: "New opportunities for the Railways: White Paper" (HMSO, London; 1992)

structure, and from electricity where there had been structural reforms at the time of privatisation and where competition had taken hold more quickly.

The years following privatisation saw accelerating growth in rail usage, partly attributable to private sector innovation in marketing, yield management and service delivery; but also reflecting road congestion and changing demographics, with for example growth in commuter traffic as the service sector developed and manufacturing employment fell. Railtrack however proved not to be up to the job: it failed to get a grip on its assets, lost a large proportion of the information it held on asset condition as the industry fragmented and people left it; and consequently failed to manage its maintenance and renewal contracts effectively. It also failed to work out how to accommodate growth or to work effectively with train operators.

Though safety has continued to improve on the privatised railway, a series of accidents – including Ladbroke Grove in 1999 and Hatfield in 2000 destroyed any remaining legitimacy and credibility of Railtrack. Railtrack ran out of money and the government refused to help.

Railtrack was in administration between 2001 and 2002. During this period "the discipline of the equity of the company in relation to the control of costs was lost"[8] and costs spiralled to manage ill-understood operational risks. Network Rail was created to take charge of the infrastructure as a statutory corporation, a not-for-profit company in the private sector. In 2003-04 Network Rail brought railway maintenance (though not renewals and project delivery) in house - effectively taking full control of railway assets and operations across the network.

In September 2014 – just over a month ago – following a process of reassessments by the UK's Office for National Statistics, Network Rail's dependence on public finance and government decisions meant that it was reclassified from the private to the public sector. In effect, this means that the company is renationalised: it is now government-owned, its spending is managed and accounted for as public expenditure; it borrows through the government; its plans have to be formally approved annually by the Secretary of State, though in practice we have maintained the integrity of the Company's five-year regulatory price control, funding settlement and outputs.

[8] Tom Winsor, Office of the Rail Regulator (2004).

4. The institutional structure: regulation and government

The institutional structure of regulation and policy delivery has also developed since privatisation, typically lagging behind real world events.

The initial regulatory structure consisted of a franchising authority – the Office of Passenger Rail Franchising (or Opraf), and the Rail Regulator. The Regulator focused on access to the network, and, with the privatisation of Railtrack, economic regulation of the infrastructure manager. But the Regulator also took responsibility for consumer protection, including in relation to the key consumer benefits of the railway as a network. There was quite a limited direct role for government.

From 2000, the government's Strategic Rail Authority (SRA) took on a much wider role of developing and implementing government strategy for the railways including franchising. ORR's role in economic regulation focused on Railtrack and later Network Rail. But, the SRA notwithstanding, the Regulator found it difficult to get a clear statement from government of what it wanted Network Rail to deliver and at what cost.

The experience of Railtrack in administration followed by Network Rail – a company limited by guarantee with no equity and no shareholders has been a key element in the way economic regulation has developed, and so as I will argue has the way it is funded. The status of Network Rail – and until the recent effective renationalisation, the absence of shareholders – has meant that the ORR has to ensure among other things that the company's remuneration schemes incentivise its executives to deliver, a remarkable difference with economic regulation in other sectors. The lack of private shareholders and equity discipline also affects the transmission mechanism for our incentives.

In 2005 the Government passed a further Railways Act, making clear government's responsibility for deciding how much money it wants to spend in the railway, and what it expects to get for it – avoiding the problem Tom Winsor, the previous rail regulator, had faced in which the government – confronted with a critical renewals backlog but also a large bill – had being unwilling to be drawn on either. Government also took direct responsibility for franchising, and increasingly got drawn into "how the railway is delivered".

2005 also saw the full devolution of rail responsibilities to Scotland, and to a lesser extent to Wales and to Greater London. We have since seen real changes in rail priorities in Scotland, with separate guidance for our Periodic Reviews from Transport Scotland. ORR's role remained focused on economic regulation of Network Rail and access to the network, but also took on the health and safety role and fuller consumer protection responsibilities.

So the current structure of regulation in this industry has evolved from that at privatisation:

The Office of Rail Regulation – formed between 2004 and 2006 from the merger of the economic regulator and the rail section of the Health and Safety Executive[9] - is a combined economic and safety regulator (see chart 2 below):

- Around half of ORR's activity is in safety regulation.[10] We are the safety regulator for all parts of the industry – the national railway, the Underground and metros, trams and light railways, and heritage lines.

- We are the economic regulator for the national rail infrastructure – regulating outputs, access to the network and access charges for Network Rail and the privately-owned, unsubsidised High Speed 1; and from 2015 for the Channel Tunnel, jointly with the French regulator, the Autorité de Regulation des Activités Ferroviaires (ARAF).

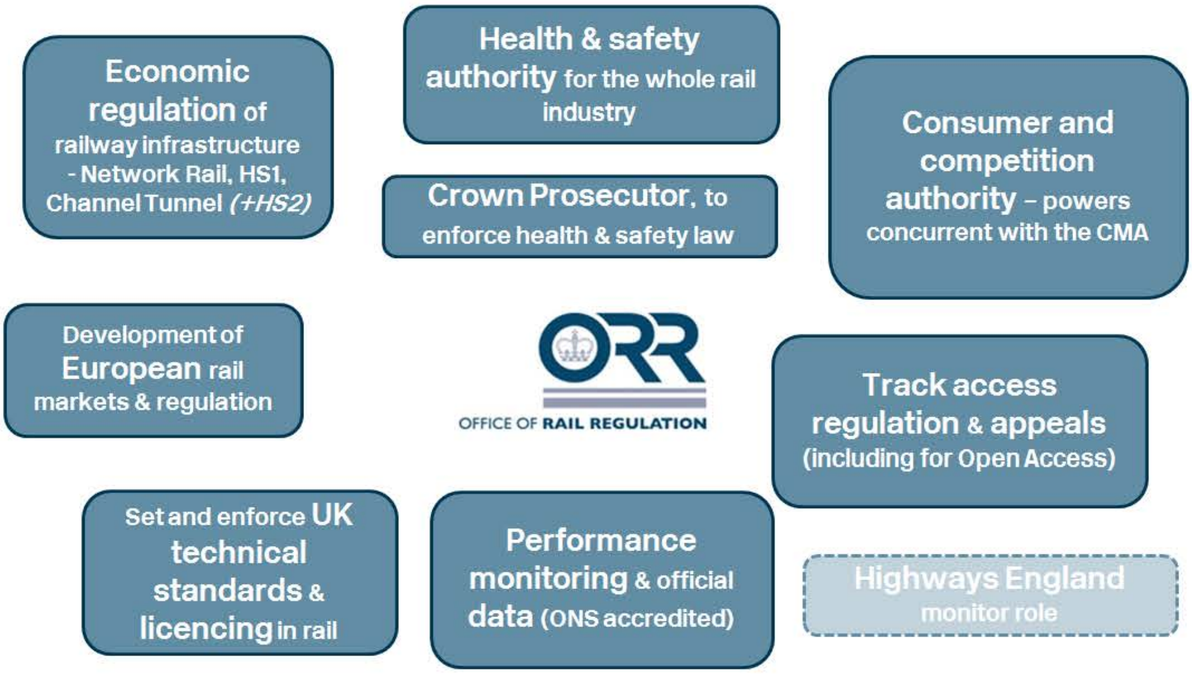
- We are the competition and consumer authority for the industry as a whole.

- Under new legislation currently in Parliament, the Government is proposing to expand our remit to become the independent monitor and quasi-regulator for England's strategic roads network, with many similarities in functions such as oversight of the performance and finance of a government-owned highways company.

[9] HSE Rail was, in turn, the successor to HM Railway Inspectorate.

[10] Office of Rail Regulation: A great deal from Britain's railways: safe, reliable, efficient. Our business plan for 2012-13. (Office of Rail Regulation, London; 2012), page 11.

Chart 2: A combined economic and safety regulator for the railway industry: Functions of the Office of Rail Regulation



Source: Office of Rail Regulation

The Department for Transport meanwhile is effectively the purchaser and regulator for passenger train services in England and Wales, and Transport Scotland similarly oversees the Scottish passenger franchise - determining the specification for a large proportion of train services through the franchising process in which train operators compete for the market in 18 regional route-based franchises; and regulating a portion of the fares to be charged. The Department and Transport Scotland have an important role as funders of rail services – in other words, determining what government on behalf of society wants to buy from the railway, and how much it is prepared to spend in doing so. That funding is channelled partly through train service franchises and also as a block annual Network Grant to Network Rail.

In addition to the lead roles of the Governments in Edinburgh and Westminster, major purchasing and funding decisions are also taken for their own areas by the Welsh Government, the five English Passenger Transport Executives, Transport for London and the Strathclyde Partnership for Transport effectively topping up the funding provided by the Governments to buy more or different services. There are debates currently about the devolution of train service franchising decisions to the Welsh Government, and to the local authority bodies in the north of England. In principle this should mean that decisions on specification and funding for local services are taken closer to their users.

5. The performance and efficiency of the railway

How has all this shaped the delivery and performance of the railway? In the last decade rail has been a real success on a number of measures. Looking at the data:

- passenger numbers are up 47 per cent - and passenger revenues up 52 per cent in real terms: stronger growth in the last decade than in any other country in Europe, and the longest period of sustained growth since the 1920s (see chart 3, at the end of this section);

- freight has held up and is growing, 26 per cent up on 2000-01, having endured a difficult recession: we have a highly competitive freight market, which has made huge strides in productivity and is an exemplar to the rest of the industry (chart 4);

- on a network which is more intensively used and closer to capacity than ever, passenger satisfaction is at record levels; and punctuality and reliability of the service, while not quite as good as what we've paid for, is also close to record levels (charts 5 and 6);

- the industry's recent safety record is good and underlying risks are reducing - though we can't be complacent, the industry is now among the safest in Europe (charts 7 and 8);

- compared to other countries, Britain has have a highly competitive and increasingly globalised rail supply market;

- Britain has a competitive market for passenger franchises and, at the margins, there is open access competition, which we continue to encourage wherever it is in the interests of customers and taxpayers.

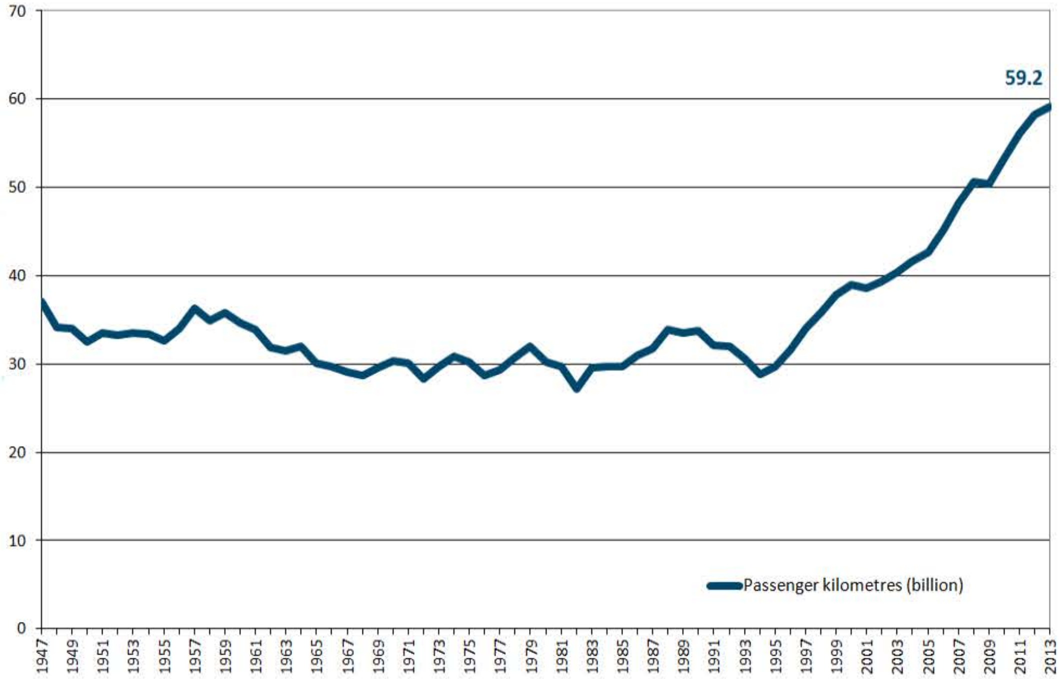
Cost, however, is the industry's Achilles heel (see chart 9). The cost of the railway to taxpayers increased markedly following the fatal derailment at Hatfield, as the need to remedy the backlog of renewals and maintenance had to be funded, and in administration Railtrack's costs ran out of control. As a result of Network Rail's meeting its cost-reduction targets, these costs have since returned gradually to more normal levels overall. Maintenance costs, in particular, have reduced considerably, though the cost and volume of renewals remains higher than before Hatfield – the volume is at something more like a sustainable level.

Research sponsored by ORR as part of Sir Roy McNulty's value for money study showed the unit costs of providing services have not fallen: indeed, the overall end result is that costs per passenger-km in 2009-10 were similar to those nearly 15 years earlier (see chart 10)[11]. However, ORR's benchmarking analysis conducted for our 2013 Periodic Review of access charges and outputs suggests that, if Network Rail meets the further efficiency challenge we have set it for 2019, it will be among the most efficient railway infrastructure providers in Europe.

You can see that both the challenges in operating and funding the railway, and approaches to its regulation, have changed over the period since privatisation. I'm now going to step back and look at the current structure of the industry and its regulation. I will then look at the respects in which the industry and regulation can step up to deliver better for customers and taxpayers in the next decade.

[11] McNulty (2011)

Chart 3: Rail passenger demand: since 1947:
sustained growth since the late 1990s

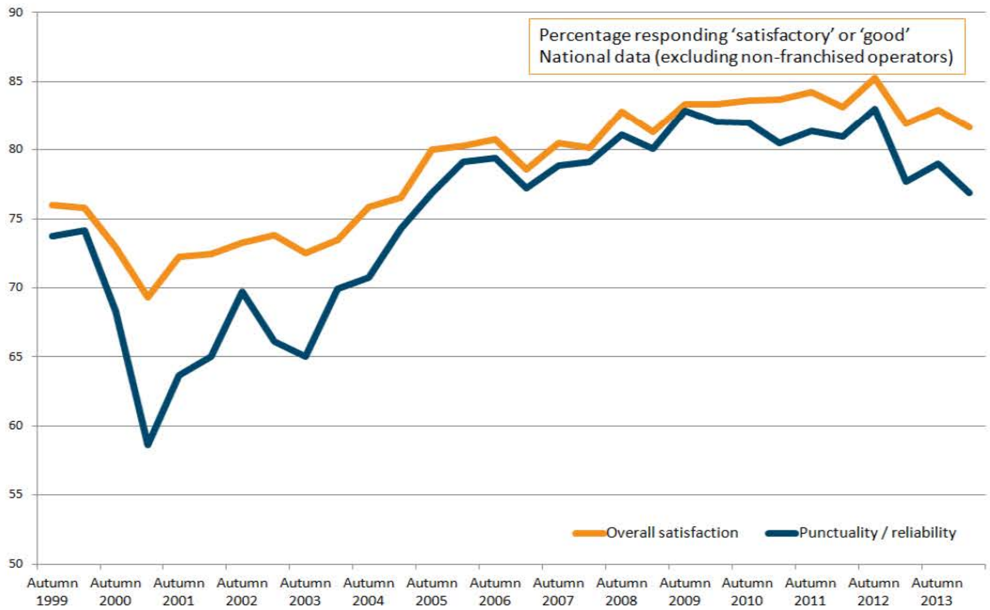


Source: Office of Rail Regulation

Chart 4: Rail freight since 1953:
recovery since the mid-1990s, and renewed growth post-recession

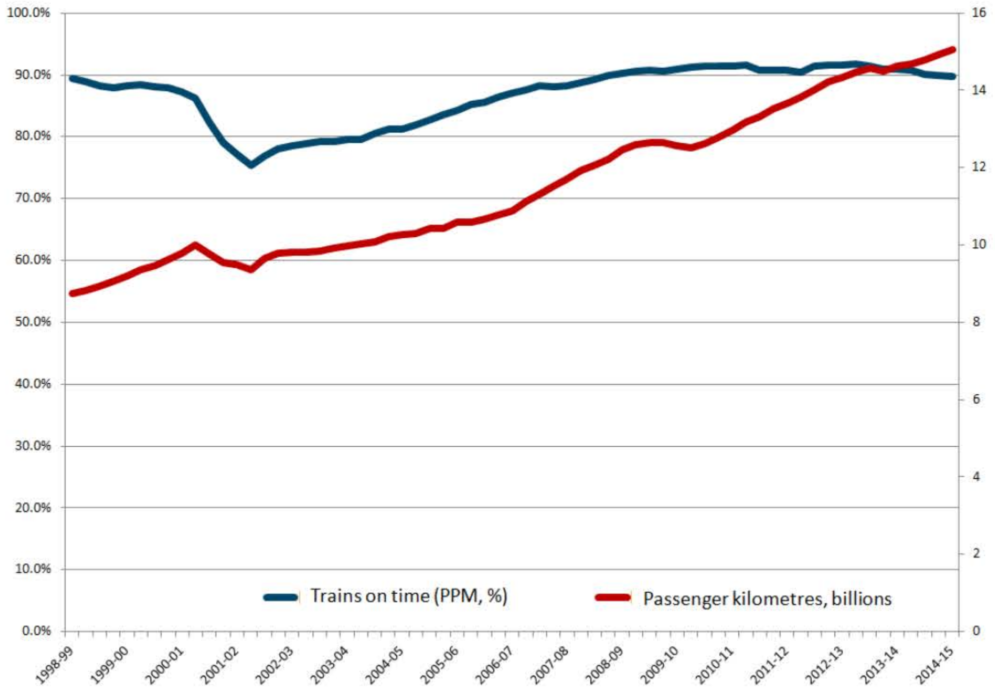
Source: Office of Rail Regulation

Chart 5: Passenger satisfaction, 1999-2011



Source: Passenger Focus's National Passenger Survey.

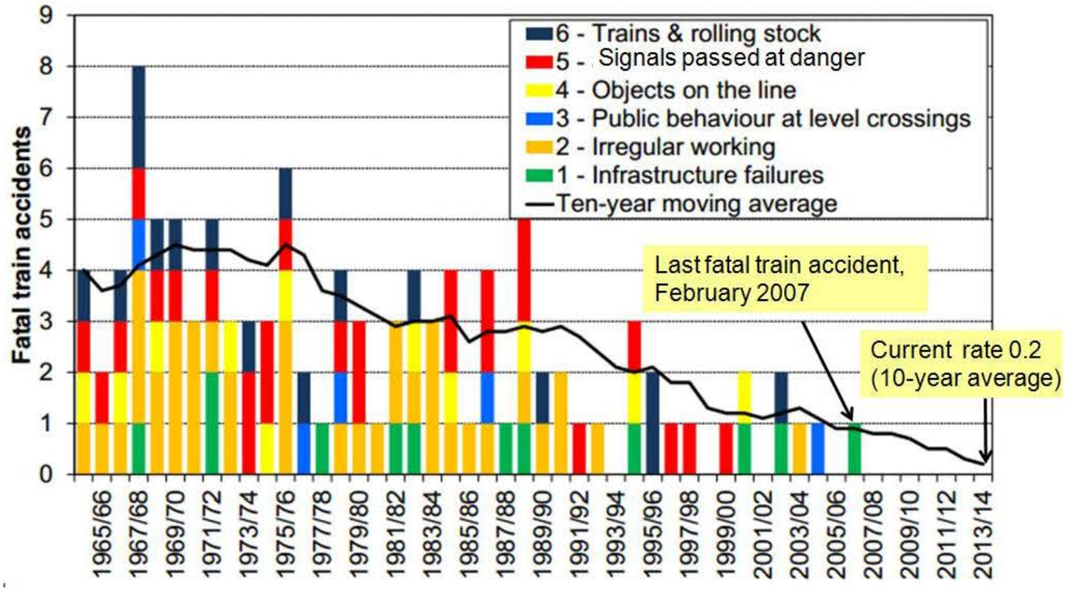
Chart 6: Passenger service reliability and punctuality since 1998



The chart shows the monthly annual average for the Public Performance Measure, the proportion of trains arriving at their destination within 5 minutes (10 minutes for long-distance trains) of the scheduled time.

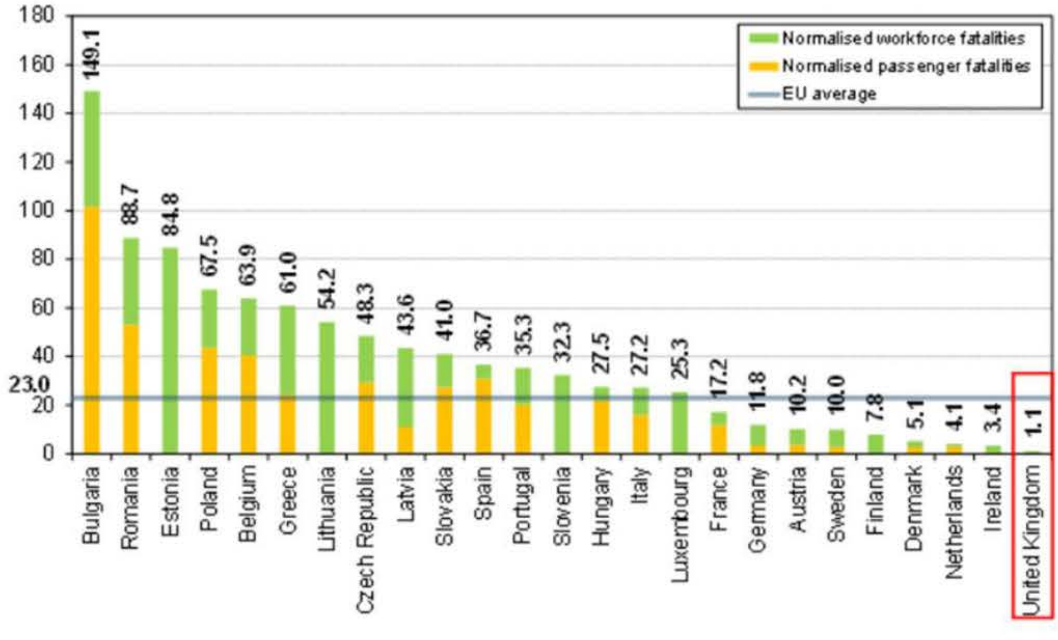
Source: Office of Rail Regulation and Network Rail

Chart 7: Long-term decline in fatal train accidents in Britain since 1950



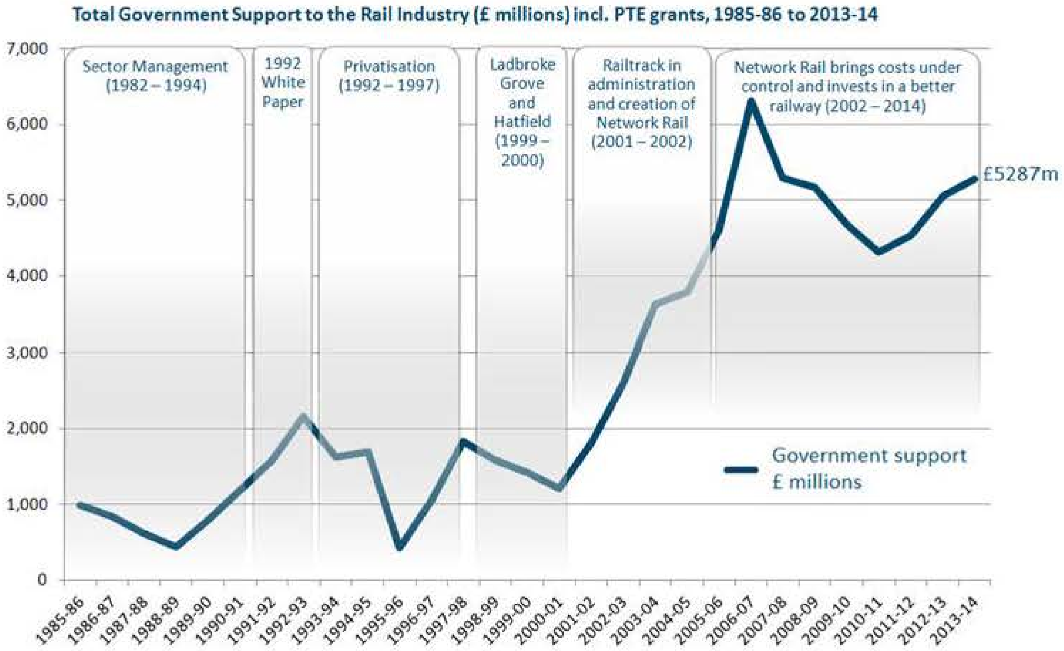
Source: RSSB annual safety performance report

Chart 8: Comparative safety across Europe fatalities per million train kilometres, 2008-2012



Source: Office of Rail Regulation, Health and safety annual report, 2013-14

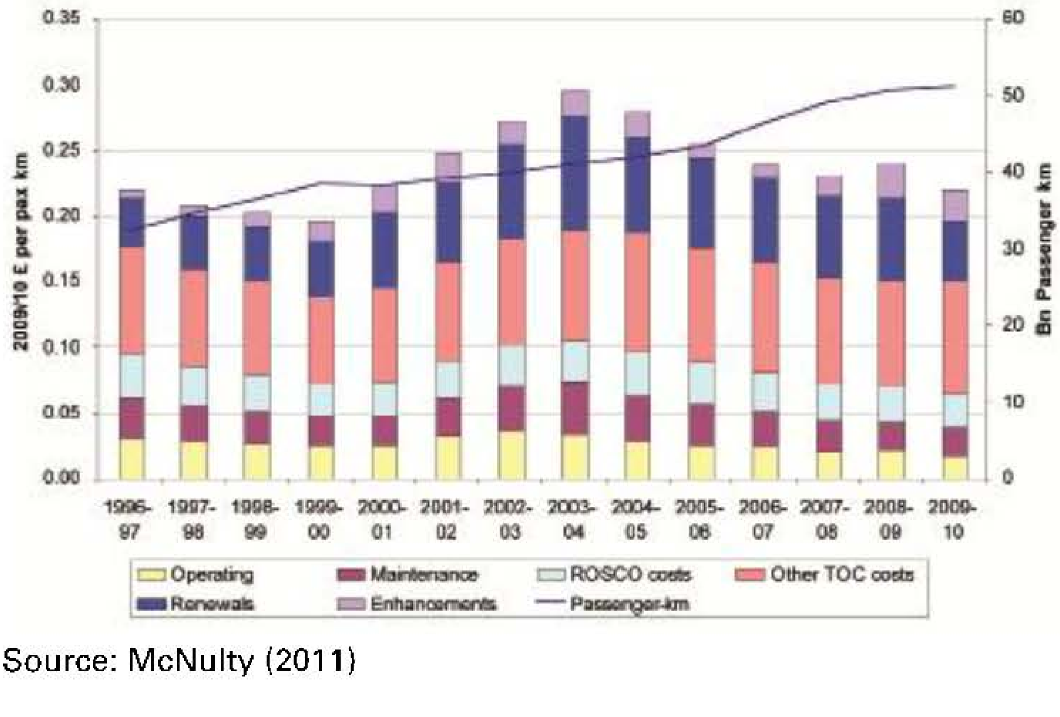
Chart 9: Total government support to the rail industry (£ millions), including Passenger Transport Executive grants, 1985-86 to 2013-14



Source: Department for Transport and Office of Rail Regulation

Chart 10: Whole-system unit costs, 1996-97 to 2009-10

Industry spend per passenger kilometre



Source: McNulty (2011)

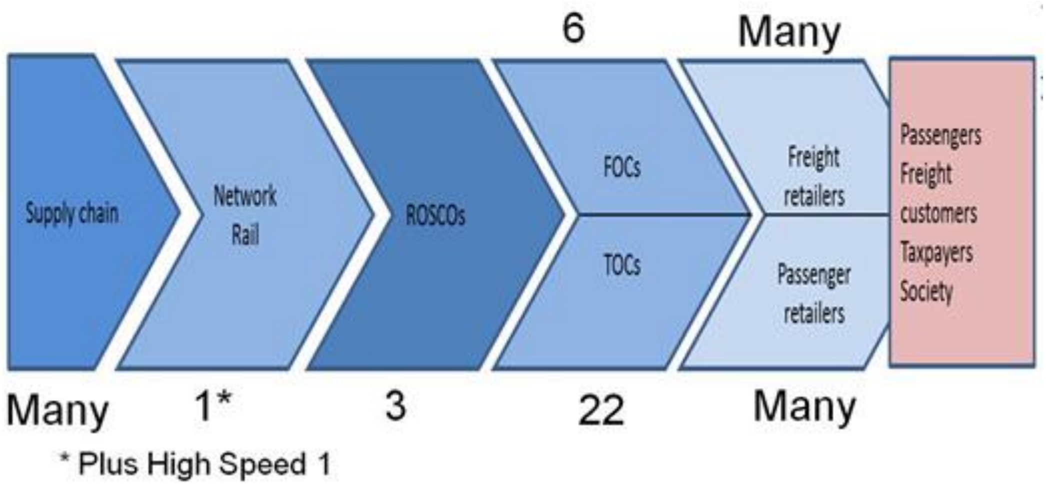
PART 2: REGULATION AND TODAY'S RAILWAY

6. Why do we regulate the railways?

Market structure

Why does the railway industry need any form of economic regulation? To answer this, let us first consider the industry's key characteristics. The rail industry value chain in Britain is highly fragmented - partly as a result of the way British Rail was subdivided at privatisation, structuring the industry so as to encourage the development of competitive markets where possible.

Chart 11: The rail industry's supply chain



There are multiple markets and companies serving them – many with multi-million pound turnovers – all along the value chain. As chart 11 shows, the number of suppliers and the level of competition varies hugely across the value chain. Network Rail has no competitors. We have three businesses leasing rolling stock. There are numerous train operating companies, though they are consolidated into a smaller number of groups such as First Group and Go Ahead - and during the course of their franchise contracts, there is very little competition between them. But there is very limited competition between passenger operators except through franchising, and we continue to champion open access entrants to the market – where it is in the interests of customers and taxpayers. There is significant competition in other parts of the value chain: there are many players in the globalised supply chain, as there are too in retail to passengers and freight customers.

The rationale for regulation

The need for regulation in the railway industry is easy to express.

First, regulation is needed to ensure that the industry is safely managed and operated, and that the safety and health of its employees is safeguarded. This is primarily the responsibility of the businesses operating in the industry, the 'duty-holders'. Regulation is there to ensure compliance and to make sure that the industry continues to manage risks downward in an industry with numerous complex interfaces between businesses and which faces substantial change.[12]

Second, the railway has significant monopolistic activities (for example providing track, signalling and stations) and many train service providers are also near-monopolies – that is, having competed for the right to run a franchise, operators face very little on-rail competition for the duration of their contract, and in some cases face weak competition from other modes. So the sector is regulated in the public interest:

- to protect consumers and businesses against monopolistic behaviours which can result in inefficiency and lead to higher prices and worse service, including by making markets work better and empowering consumers; and

- to safeguard the basic interests and expectations of consumers – for example to ensure that they get the information they need to make choices, and get the benefits of the railway as a network.

Third, as Michael Beesley discussed in 1997, there is a particular, defining characteristic of this industry, compared with other industries which are

[12] Our health and safety strategy explains our approach to ensuring that our regulatory activity is proportionate to risk and focused on management excellence as the key approach to ensuring rail businesses are in the best possible position to comply with the law and manage risk, while also getting better at other aspects of management which improve their overall business performance. Office of Rail Regulation: ORR's strategy for regulation of health and safety risks (Office of Rail Regulation, London, 2012)

subject to economic regulation.[13] Substantial amounts of public money are invested in the railway. There will always be a strong case for subsidy to secure services which deliver wider social, environmental and economic benefits but which would not be commercially viable without taxpayer support. So in the rail context, regulation also ensures that taxpayers are getting value for their money; and provides transparency on what that money is buying and where it is going.

Fourthly, as in many other regulated industries, rail is a long term business. Investments are large and lumpy, and long-lived. This means that in assessing what the industry needs to spend in each five-year control period, judgements need to be made about the capacity, quality and cost of the network decades ahead; and the regulator needs to create a framework in which long-term investments can be properly remunerated, notwithstanding that in Network Rail at least, they are currently financed through public rather than private investment.

7. How do we regulate? The incentive regulation of rail infrastructure

It is not surprising given the differences between the markets across the rail value chain that they are regulated differently – though general competition law applies at all stages of the value chain.

Table 1: The rail industry's value chain: a variety of approaches to regulation

	Approach to regulation
Supply chain	No ex ante regulation although have to comply with safety regulations
Network Rail	Economic regulation on the basis of a licence
HS1	Economic regulation on basis of a concession agreement and statute
ROSCOs	Small amount of pro-market regulation via the code of practice put in place following CC reference
FOCs	No ex ante regulation
TOCs	Regulation by contract (franchise agreement)

[13] M. E. Beesley: Rail: The role of subsidy in privatisation, in M. E. Beesley (ed): Regulating Utilities: Broadening the Debate (Institute of Economic Affairs, London; 1997)

As table 1 shows, this has led to a diversity of regulatory approaches across the industry, reflecting the different market structures in different parts of the value chain. In particular two of the largest parts of the industry, with the closest interfaces, are regulated in different ways – franchised train operating companies by contract, and Network Rail by licence. So in rail not only do we have real, operational interfaces to deal with, and the usual interfaces between regulation and the market, we have made life more complex for ourselves by creating an interface between two fundamentally different modes of regulation.[14] This is a real issue where decisions need to be coordinated – for example on infrastructure capacity and train capacity; on electrification and signalling, which require interdependent decisions on and investments in infrastructure and rolling stock, and the skills and training of staff across the industry.

ORR's role in infrastructure regulation

As the economic regulator, our main task is to regulate the infrastructure managers' stewardship of the rail network and ensure non-discriminatory access to the network. We are responsible for determining access charges and outputs which reflect the Governments' specification and funds available.[15] Like other utility regulators we conduct periodic reviews every five years to set the revenue framework for the infrastructure manager and the outputs that it has to deliver.

We concluded our 2013 Periodic Review for Network Rail last year, and it came into force in April 2014. We have just concluded our 2014 Periodic Review for the privately-owned and unsubsidised High Speed 1, with revised charges coming into force from 2015. Most of what I say in this talk refers to our regulation of Network Rail, but many aspects of the regime also apply to HS1.

Once we have set what the infrastructure manager must deliver, we monitor delivery of those outputs and can take enforcement action if delivery is at risk

[14] Stern (2012) sets out the difference and relative merits of regulation through contract and regulation though licence and agency.

[15] Two separate Periodic Reviews and price controls are undertaken for England and Wales; and for Scotland. Separate statements of outputs and funds available are made by the governments in London and Edinburgh.

or falls short of what was expected. While we have wide enforcement powers to back this up, incentive regulation is at the heart of our regulatory approach.

The incentive framework

As you know, the mainline railway sector in Britain is vertically separated. Within this structure, there has always been a risk that different players would face different and potentially contradictory incentives which might pull them in different directions with wasteful consequences. The main aim of the incentive framework in Britain is to ensure that the incentives facing the different parts of the sector are coherent and aligned in the interests of the railway's customers and funders, so that they encourage efficient behaviour and better performance from the infrastructure manager and train operators.

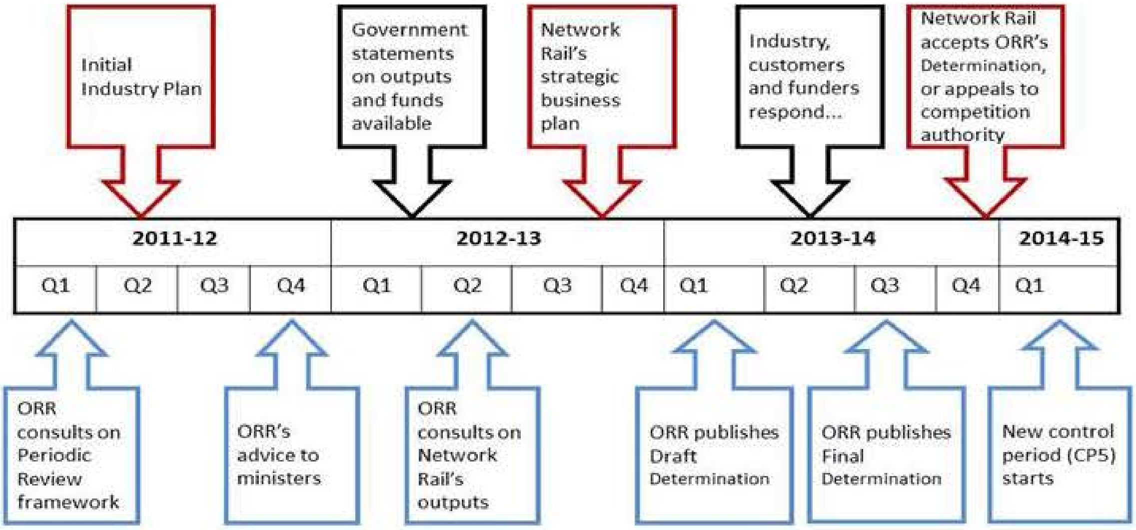
The periodic review process

The periodic review is the process through which, every five years, we determine the outputs that the infrastructure manager must deliver, the efficient cost of delivering those outputs and the income the company will receive from train operators and other funders for using the network. It also establishes the wider regulatory framework including the incentives that will act on the infrastructure manager, train operators and others in the industry to deliver and outperform the output and efficiency targets that have been set.

As economic regulator, one of our principal tasks is to determine what the infrastructure manager must achieve within the five years covered by each periodic review – known as the Control Period (because it is based on, but not limited to, a price control for access and other charges). We have just completed the process for the five years from 1 April 2014 to 31 March 2019 for Network Rail.[16]

[16] A short guide to the 2013 Periodic Review, along with the full documentation, can be found on the PR13 pages of ORR's website, www.orr.gov.uk

Chart 12: The process for the 2013 Periodic Review of Network Rail



Source: Office of Rail Regulation

As can be seen from chart 12, it is a highly consultative and iterative process involving the industry proposing what it thinks the railway needs, government deciding on priorities and the funding it wants to make available, and the regulator running the process and making the final determination of funding and outputs. It takes around two and a half years to complete.

The process is initiated by the ORR but the first step is an industry-led one, in which the businesses set out commercial proposals and options for the development of the network. This is known as the Initial Industry Plan.

Using this plan, ORR's advice and its own analysis, government (that is, the transport ministries for the UK and Scotland) then sets out the desired outputs - High Level Output Specifications. For example, for the last periodic review, these included a 92.5 per cent reliability target (trains on time), significant enhancements to the network - capacity for 20 per cent more passenger journeys, and extra capacity and tighter punctuality standards for freight services, and the funding available to do so.

Once the Governments have decided what they want and how much money is available, the industry led by Network Rail produces a plan setting out how it intends to deliver the required outputs.

ORR reviews this plan and determines if the High Level Output Specifications of the Governments are affordable given the public funds available and taking into account industry revenues and costs. This means that ORR works out how much money the infrastructure manager needs to deliver the outputs and how efficient it needs to be. Because Network Rail is a monopoly we look very critically at whether its plan is efficient.

Once we have done this, we formally set out the outputs and funding requirements, as well as a challenging efficiency target bearing in mind our duty not to make it unduly difficult for NR to finance its activities. For this periodic review, ORR has set a 19.5 per cent efficiency improvement target to NR (compared to the 13 per cent the company proposed). Network Rail has a right of appeal to the independent Competition and Markets Authority, but this is not to be used lightly as it is a double-edged sword, reopening all aspects of our determination, including those which work in the company's favour.

We make our determination, using a building block approach, summarised in chart 13, in which we carefully analyse the costs, outputs and timescales Network Rail proposed, drawing on a wide variety of evidence and comparative data, as well as the views of its customers, to establish challenging output and efficiency targets for the business to deliver over the five-year control period. The full shape of the financial and output requirements we established for Network Rail in our 2013 Periodic Review is summarised in chart 14.

Chart 13: ORR's building block approach for establishing revenue requirements and charges

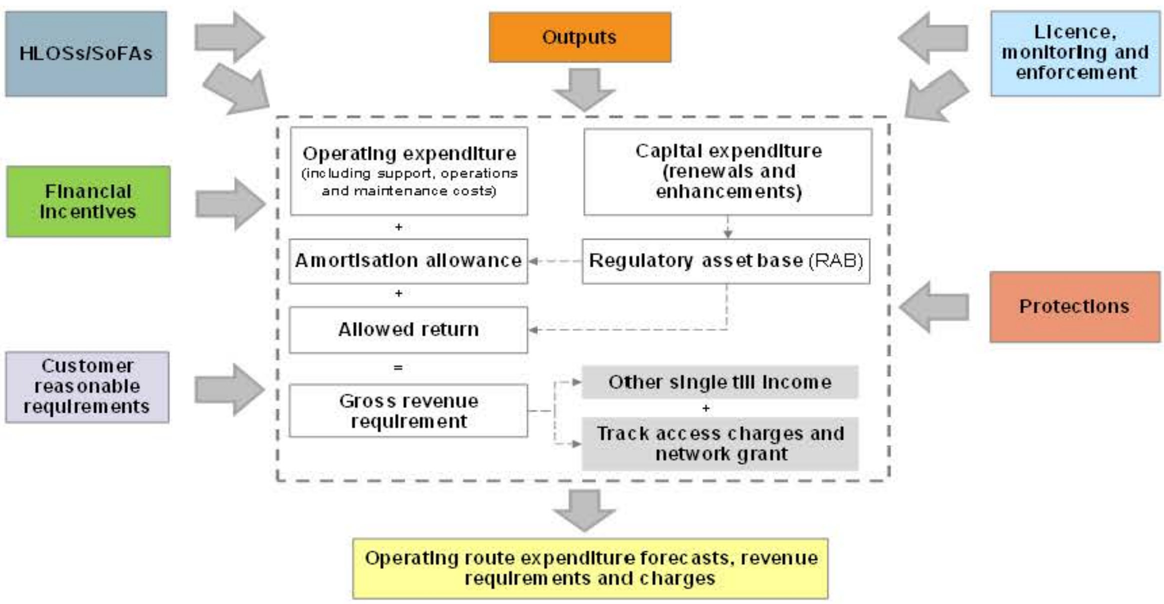
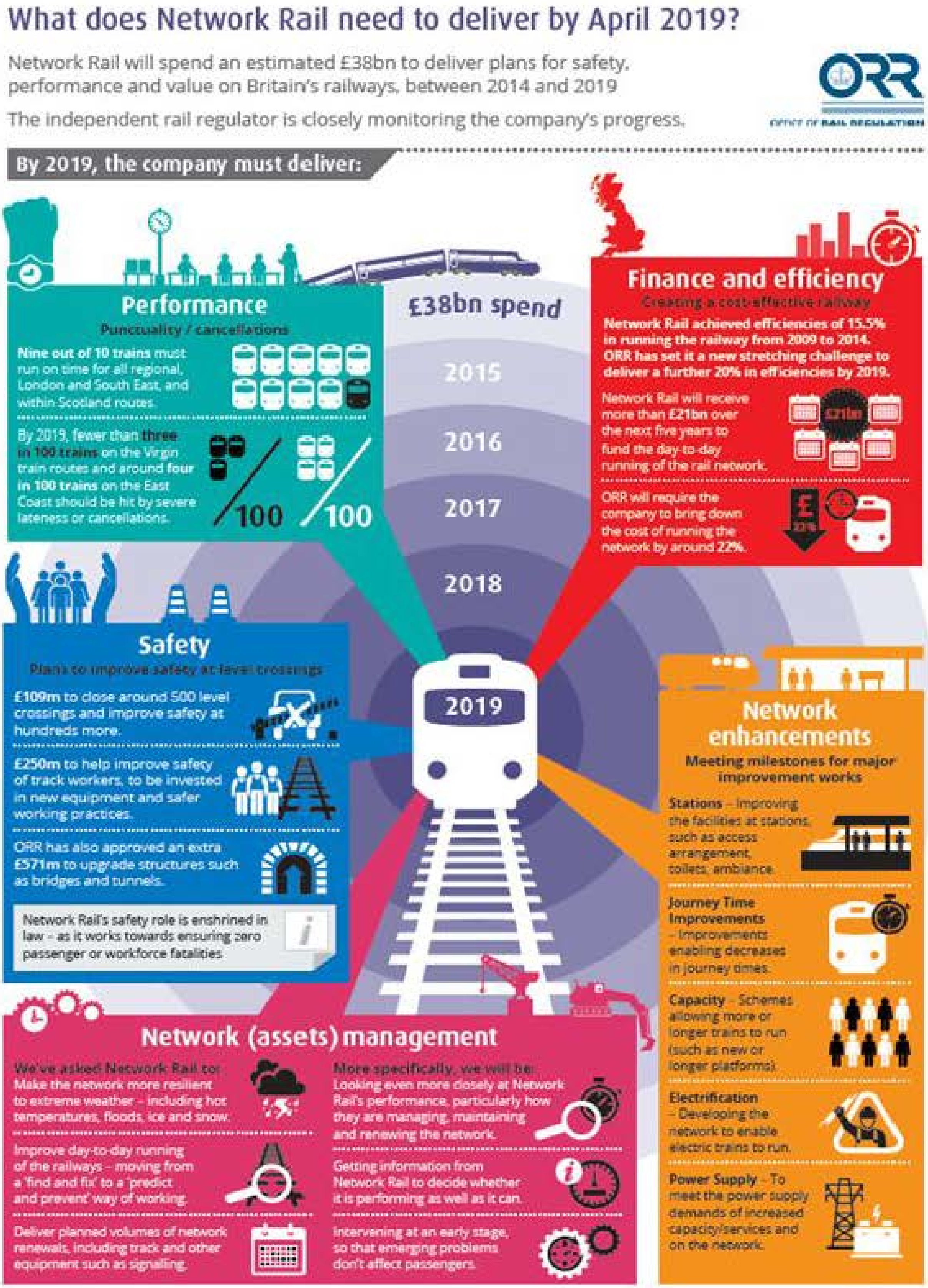


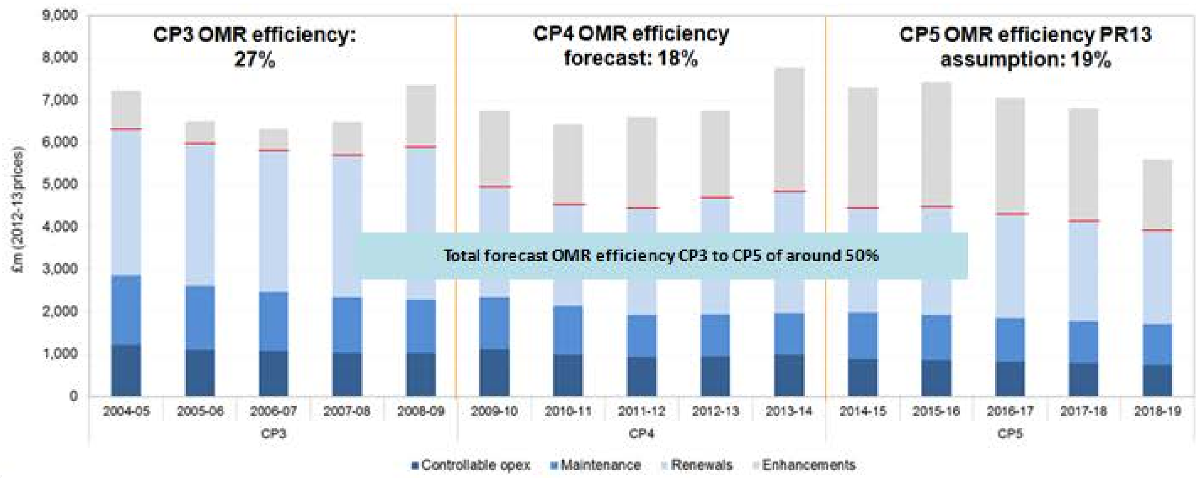
Chart 14: An overview of the output, finance and efficiency requirements established in ORR's 2013 Periodic Review



We aim to give Network Rail a challenging outcome to replicate the challenges the business would face to perform and deliver efficiently under competition. We do this by assessing robustly the level of costs the company could achieve in each of the building blocks if it were a fully efficient business, and how fast Network Rail could be expected to converge on the efficiency frontier, while giving them a high degree of flexibility to determine how in practice they choose to deliver and organise themselves to deliver the determination. We want to avoid detailed second-guessing in areas where the company should have the expertise to make the best judgements.

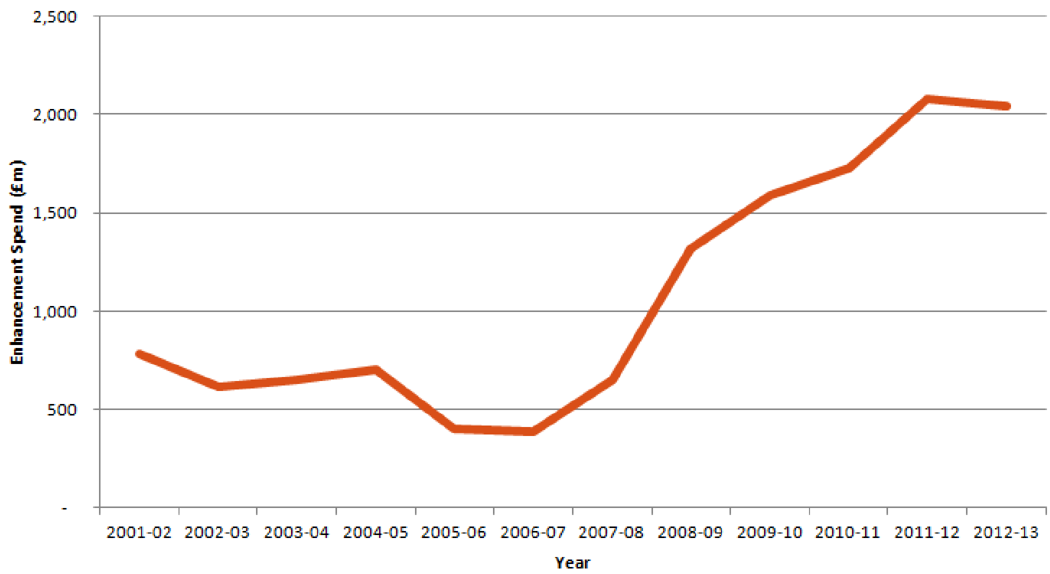
The overall impact of our framework and incentives over the last two control periods has been to reduce the day-to-day costs of Britain's rail industry by nearly 40 per cent over the last decade, and a further 19 per cent in the next five years; which closes the gap with the most efficient in Europe. As charts 15 and 16 show, this frees up funding to invest in a bigger, better and safer network. This is a critical point: annual government spending on rail has ranged between around £4 billion and £5.5 billion in recent years, but the share of that money used to finance new investment is rising.

Chart 15: Network Rail operating, maintenance and renewals costs; and enhancement spending, 2004-05 to 2018-19: improved efficiency frees up funding for network growth and improvement



Source: Office of Rail Regulation

Chart 16: Network Rail capital spending on network capacity growth and improvement ('enhancement'), 2001-02 to 2012-13. £ million, nominal prices. Enhancement spending will be sustained at this higher level for the five years of CP5, to 2018-19.



Source: Office of Rail Regulation

The framework of incentives

We are constantly encouraging the industry to work together to improve productivity, reduce costs and deliver better value to customers. We are doing this by strengthening and developing incentives to align better the interests of Network Rail and its customers, the train operators, and to make Network Rail more commercially responsive to the needs of its customers.

Our system contains a **mixture of incentives**, including contractual, financial, reputational and procedural incentives. These are reviewed every five years as part of the periodic review and are described in our determination document. It is worth noting that the contractual and some of the financial incentives I am going to describe are put in place through changes that we make to the framework agreements between Network Rail and all of the train operators as part of the Periodic Review. That is one of the reasons that we all (Network Rail, train operators and ORR) see those framework agreements as a key piece of the regulatory landscape.

Contractual incentives

Firstly, the main contractual incentives are the possessions regime, and the performance regime,[17] which operate as a liquidated damages regime.

The **possessions regime** is the part of the framework through which compensation is paid to operators when they are unable to use parts of the network, due to planned restrictions of use, such as those needed to carry out engineering/construction works

In planning its engineering work Network Rail is incentivised to take into account the financial impact on operators caused by engineering related disruption, and to develop efficient engineering access plans so that it does not incur additional costs beyond the efficient level for which it is funded. It can also keep costs to a minimum by advising operators of forthcoming disruption as far in advance as possible, and receives a discount for doing so.

Train operators incur costs and losses when disruptive engineering possessions are taken on the railway. The track access contracts (framework agreements) set out the arrangements by which Network Rail compensates train operators for those costs and losses. It is accepted that a certain level of engineering related disruption is inevitable on an operational railway. Network Rail is funded to pay compensation up to an efficient level agreed by ORR, through the payment of an Access Charge Supplement.

The **performance regime** is the part of the framework through which the infrastructure manager and train operators either pay compensation for poor performance or receive incentive payments for good performance.

Britain's rail industry operates a performance incentive scheme which encourages both Network Rail and train operators to improve their performance, by reducing average minutes of lateness and cancellations. Details of the regime are incorporated into track access contracts. This performance regime sets out a framework by which compensation is paid by either party if train or network performance fails to meet set benchmarks, which are set in line with regulated output targets.

[17] The possessions regime and the performance regime are contractualised in Schedules 4 and 8, respectively, or operators' track access agreements with Network Rail.

Financial incentives

We have introduced several financial incentives. We start from the principle that if Network Rail's income is set at a level which is equal to its costs and since it does not face competition, it has limited incentives to improve its productivity and control its costs. We have therefore developed incentives to align better the interests of Network Rail and its customers and to make it more commercially responsive to their needs, and to those of final consumers.

The financial incentives that exist include route-based efficiency benefit sharing; and a volume incentive.

Firstly, the **route level efficiency** benefit-sharing mechanism. This route level incentive encourages Network Rail and the operators to work together and allows train operators to share in the efficiency gains and or losses of the infrastructure manager on an annual basis.

This efficiency benefit sharing scheme is aimed at encouraging further savings to be made in the day-to-day running costs of the railway. It applies at the Network Rail route level. Network Rail is increasingly devolving responsibilities to Scotland and the nine operating routes in England and Wales (shown in chart 17), and our mechanism builds on this.

We expect operators to work closely with Network Rail and if Network Rail's costs are lower than we assumed the operators will share the savings but if they are higher, then operators will pay part of the increase.

Secondly, there is a **volume incentive** which is paid to Network Rail for accommodating additional traffic

The volume incentive is a payment to Network Rail which encourages it to be more responsive to unexpected demand for use of network capacity over and above an agreed level.

Chart 17: Devolution and comparators: Network Rail's route structure

Source: Network Rail

The volume incentive is important because it acts as a counterbalance to the service reliability and punctuality targets which Network Rail faces which might lead it to limit provision of network capacity to improve its chance of meeting them.

It places a value on the additional use of network capacity and so encourages Network Rail to consider the trade-off when deciding whether to meet unexpected demand from its customers.

But the marginal payments Network Rail receives for running additional trains are very small, as I discuss further below (and see chart 24 which illustrates the problem of weak incentives). For the future we are looking at how these incentives can be strengthened.

We are already seeking to strengthen the mechanism by adding a downside – Network Rail loses money if growth is below the baseline, and also by disaggregating the baseline to route level. This will give Network Rail more incentive to look for ways to increase passenger and freight travel by working more closely with train operators.

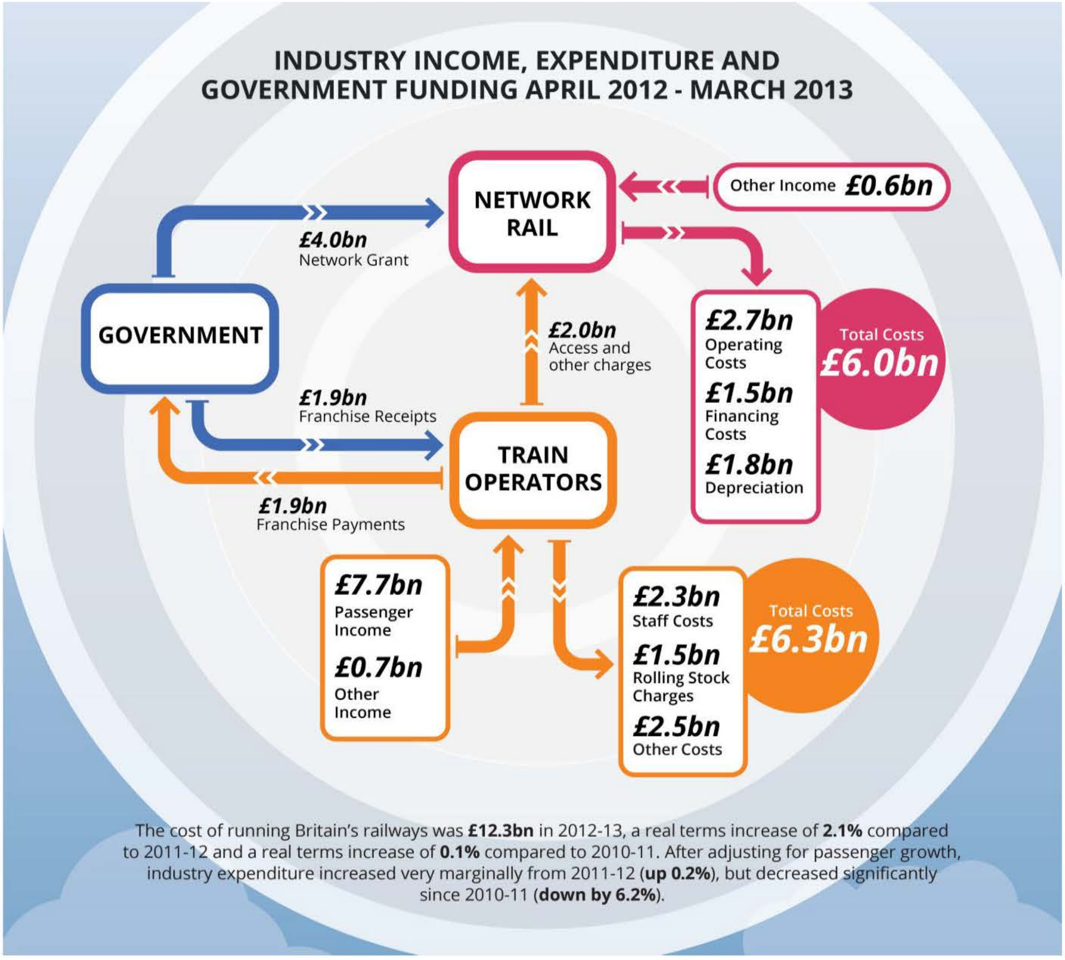
Reputational incentives and earned autonomy

So far, we have talked about the contractual and financial incentives facing Network Rail. But there are others. One of our regulatory levers is Network Rail's network licence which we oversee and can enforce if necessary, including the use of sanctions in some cases. This gives rise to reputational incentives, both for the business and for its executive directors.

When we make decisions as part of the periodic review, we also decide what outputs Network Rail should deliver over the next five years. Once we have set these outputs, if Network Rail fails to deliver them, we can investigate whether it has breached its network licence and, if so, what should be done to put that breach right. Depending on the seriousness of the breach, we can also impose a financial penalty.

Because Network Rail receives a large public grant, currently around £4 billion a year or around two-thirds of the company's costs (see chart 18), imposing a financial penalty is, in itself, of limited value. Indeed because the UK statistical authority has ruled that Network Rail is not independent of government, its reclassification as a public sector business from September this year, potentially further reduces the value of this incentive. However, it does affect two other types of incentives which we think are quite powerful.

Chart 18: British railway industry funding, expenditure and government funding, 2012-13



Firstly, both we and Network Rail attach enormous importance to the funding settlement and the regulatory outputs that go with it. It is, after all, fundamental to the long term commercial and financial sustainability of their business and is effectively the regulatory contract setting out what they are required to deliver for the money they are given or allowed to charge. Any failure to achieve those outputs is therefore highly visible and impacts on the reputation of both the company and its senior employees. Associated with this, there is also an impact on the level of remuneration for senior executives awarded by Network Rail's remuneration committee under their management incentive plan. The structure this plan, which has to be approved by the regulator, requires non-delivery of regulated outputs and sanctions imposed by the regulator to be taken into account by the company in both annual and long-term remuneration decisions.

Secondly, where ORR sees greater risks of non-delivery, we monitor the business much more closely. This is not to micro-manage Network Rail's decisions, but to seek assurance from the business that it understands the risks it faces and has coherent plans for managing them so that funders and fare-payers get the services and outputs they paid for.

A current example of this is punctuality, which along with customer satisfaction is at close to record high levels in Britain, but falls short of what Network Rail was funded to deliver. This has led us to monitor closely the factors driving punctuality – such as asset condition, maintenance and renewals; and to ask Network Rail for a detailed plan showing how they will recover punctuality over the next two years. Correspondingly, we will monitor and scrutinise in less detail where the company is on track to deliver the outputs it promised: earned autonomy in return for greater assurance and an improved record of dependable delivery. This is in itself a powerful incentive.

Network Rail therefore tries very hard to meet these regulatory requirements.

Setting incentives, not detailed specification

So, to summarise our approach to economic regulation, our general approach to the periodic review is firmly rooted in incentive regulation within a RPI-X format. This involves setting clear outputs for the regulated company and including financial rewards not just for meeting, but for <u>exceeding</u> these outputs and outperforming our assessment of the efficient level of spending.

Importantly, we do not decide how Network Rail should meet the periodic review requirements – that is their job, applying their expertise and commercial judgement. Our role as regulator focuses not on specifying the detail of how Network Rail should deliver, but on output-based incentive regulation, with the company incentivised effectively to deliver and outperform output and efficiency targets, which are stretching and achievable, and to meet the interests of funders and customers.

8. Serving passengers: public service and competition

It is worth considering the role and extent of competition for passenger services – looking at the difference between franchise or public service obligation models, and open access as two different approaches for competition in the rail market. The European Commission's vision for European rail markets, manifested in four packages of legislation, is based upon the same basic principle as the UK rail industry: that competition can bring benefits for rail users and funders.

We have seen many of these potential benefits in the UK experience. That is not to say that everything is perfect, that the journey has always been smooth, or that we offer a model that other countries should only aspire to. But we have seen unexpected and unparalleled sustained growth in passenger numbers, improving passenger satisfaction, and a strong record on safety in recent years.

There are, of course, different kinds of competition, notably competition in the market, and competition for the market. While UK freight operates on an open access, in-the-market basis, the market for rail passenger services in Britain has been based primarily on competition for the market.

When British Rail was privatised in the early 1990s, the original vision for the business model of passenger services was different from what has since evolved. Franchises were established as an interim measure, but were expected to diminish in scope over time as the railway became more efficient. Eventually, profitable services would run on an open-access basis, and franchises would focus on public service obligations, limited to where the market would not provide services which nevertheless offered wider social and economic benefits.

This is not what has happened. As it stands today, competition for the market is dominant. There are 18 franchises delivering 'public service obligation' services (both profitable and unprofitable), and these account for 99 per cent of passenger kilometres. These are awarded by government on both non-profitable routes, for which the Department of Transport and some other authorities pay, and an increasing number of profitable routes, for which they receive a premium from the operator. Open access exists only at the margins. We currently have just three operators, serving specialised or ancillary route patterns on a commercial basis.

Franchising has been the backdrop for continuous growth, and has brought several tangible benefits:

- Cost-savings and service improvements through a competitive tendering process
- It has attracted private investment into rail.
- It has helped to maintain a continuity and cohesion of service provision – the commercial arrangements and contract specifications are tailored differently by franchise, but there are through-ticketing and revenue allocation schemes to ensure that the passenger experience is smooth across routes.
- Within the term of the contract, the operator has some incentives to innovate and attract new customers. We have seen operators investing money in stations, and offering deals on tickets.

Needless to say, franchising has not been without its problems. I will not go into detail here, but we have learnt the importance of having a rigorous tendering process, that can assess whether bids are viable, and of having the government ready to step in as "operator of last resort" if necessary. Perhaps most importantly, once the contract has been awarded the rail user is usually, in effect, faced with a monopoly provider.

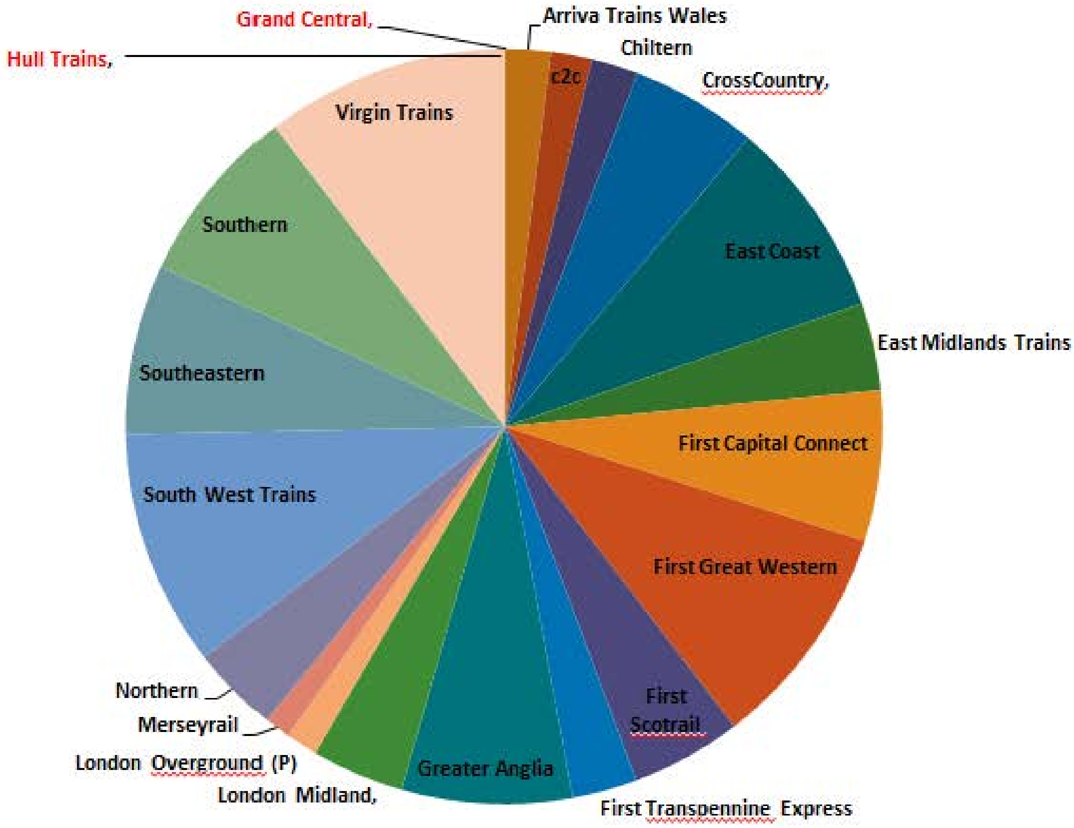
Competition 'for' and competition 'in' the market

Competition in the market in the UK is limited, but where it does exist - either in the few places where franchises overlap, or where there are open-access operators - there is strong evidence that the passenger can benefit. Satisfaction levels are often higher, and ticket prices are often lower.

Regulatory bodies have a role in balancing – and potentially reconciling the two forms of competition: competition for the market, through the government's franchising process; and competition in the market, through overlaps between franchises and through open access. I want to tell you about how we make decisions and the trade-offs we have to make.

The extent of franchising is a decision for Member State governments. As can been seen from chart 19, there are a large number of franchised operators in the British rail market – 18 at present - but the two open access operators (Hull Trains and Grand Central) marked in red, hold only a very small market share. This is barely visible in this pie chart.

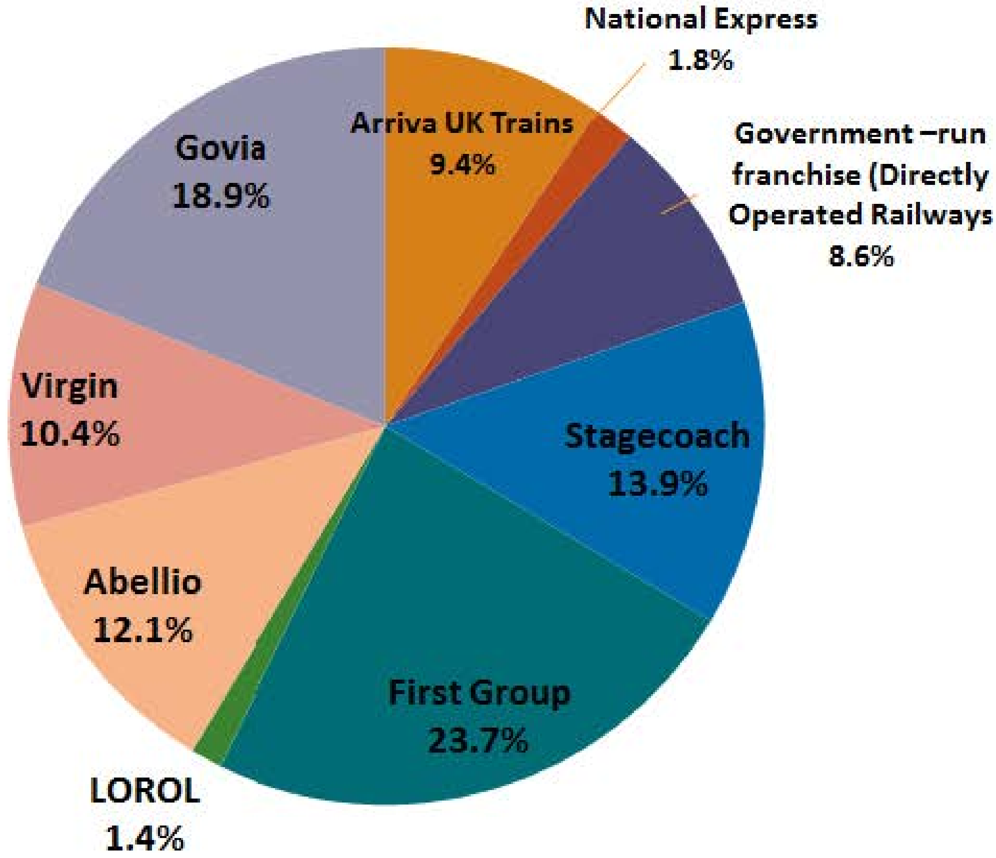
Chart 19: Rail passenger market shares in Great Britain by train operator. Franchised & open access operators. Shares of passenger kilometres, 2013-14.



Source: Office of Rail Regulation

Looking at competition for the market in Britain, Chart 20 shows the fairly strong competitive position, with a number of different owner groups holding a share of the market. Direct operation by government is limited in Britain to the role of Directly Operated Railways (DOR) as the 'operator of last resort'. DOR, a government-owned train operating company, entirely separate from Network Rail, step in to run services if a private franchised operator fails – and they currently account for just 8.6 per cent of the market, with eight private owing groups companies making up the rest.

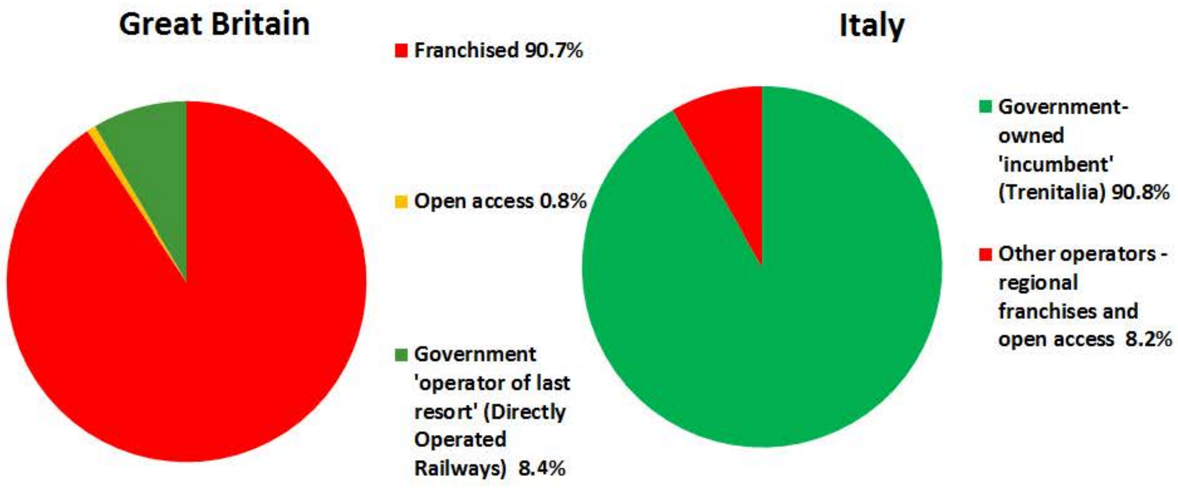
Chart 20: Rail passenger market shares in Great Britain by owner group.
Shares of passenger kilometres, 2013-14.



Source: Office of Rail Regulation

Chart 21 shows how the passenger market shares between open access and public services in Britain differs from passenger market shares in Italy. In fact they are almost opposites. In Britain, government-owned operation is reserved for the 'operator of last resort' – at the moment applying to a single franchise – East Coast, and the government has started the process of returning it to private operation through a new franchise. The rest of the market – more than 90 per cent - is served by private businesses – some admittedly subsidiaries of foreign-owned state businesses, but operating commercially in Britain. These are franchised operations representing competition 'for the market'. But for competition 'in the market' – open access operators represent just 1 per cent of the passenger market.

Chart 21: Rail passenger market shares in Great Britain and Italy: Shares of passenger kilometres, 2013-14 (Britain) and 2011 (Italy).



Sources: Great Britain: Office of Rail Regulation; Italy: Autorità di Regolazione dei Trasporti.

In Italy, this position is nearly reversed. Trenitalia represents 92 per cent of the passenger market, with just 8 per cent taken up by other operators – mainly regional franchises and a much smaller proportion of open access. However, open access represents a larger share – around 20 per cent – in the passenger market for high-speed services.

Incidentally it is worth noting that freight services in Britain are entirely commercial, including one small subsidiary of a state business. The freight sector is growing and, fully exposed to both on-rail and cross-modal competition, it is the sector of the British rail industry where productivity and service standards have most radically transformed for the better since privatisation.

Determining access to the network for passenger service operators

Returning to passenger services, in Britain franchised services are a mix of profitable and unprofitable services. Profitable franchises pay money to government, while unprofitable franchises receive government subsidy. Both contain implicit public service elements, while also allowing the operators some commercial freedom to innovate – not quite enough freedom in my view, but some flexibility nonetheless. So both taxpayers' money and the rail services upon which many customers rely, are at stake.

However, open-access and franchised services need not be mutually exclusive, and regulatory bodies have a key role in balancing (and potentially reconciling) the two forms of competition.

When open-access operators apply for capacity on the network, my colleagues and I at the ORR have a difficult decision to make about whether to grant access. This is not just a question of deciding whether there is space on the network, although the growth of traffic has made this an issue in many parts of the country. Instead this is a decision that gets to the core of our duties as a regulator, and which illustrates the tension that can sometimes exist between them.

One of our statutory duties as a regulator, from the 1993 Railways Act that created ORR, is to promote competition in the provision of railway services for the benefit of users of railway services. This suggests, prima facie, an obligation to promote on-rail competition and allow open-access.

That same piece of legislation also requires us to have regard to the funds available to the Secretary of State for the purposes of his functions in relation to railways or railways services. We must acknowledge the government's public stake in franchise contracts, and the future value of franchises that are awarded by government. Operators have submitted competitive bids for the right to operate franchises, and will bid again in the future, on the expectation of a certain level of revenue from the farebox. Taken in isolation, this duty would not permit us to grant access to open access operators where they overlap with franchises.

Clearly a tension exists. As a regulatory body we are required to balance, on one hand, the benefits of competition that are offered by open access. On the other hand is the potential cost to the taxpayer that such services can cause, through their impact on the payments franchised operators make to, or receive from, government.

We must assess the relative precedence of these duties on a case-by-case basis, in a manner that is both consistent and transparent. To do this, the ORR has developed a Not-Primarily-Abstractive Test, or 'NPA test'. In its purpose and intention, this is broadly equivalent to the 'economic equilibrium' test that is envisaged under the 4th Package proposals (although the specific details of that provision have not yet been finalised).

The test is designed to assess the extent to which the new, open-access service would generate additional rail passenger custom, and the extent to which they would simply 'abstract' revenue from franchised services – 'cherry picking' the most profitable markets and leaving the taxpayer to pick up the costs of unprofitable but socially-desirable services.

On the basis of the proposed stopping pattern, passenger demand forecasting models, and evidence on the potential for new and innovative services to increase demand by providing a new service offer, the NPA test produces a percentage figure, a prediction of the level of revenue that is not 'abstractive'. Above a certain threshold, the ORR will grant access. Below a certain threshold, access will be denied. Currently, this figure is set at around 30 per cent, with a margin of discretion depending on the potential benefits in terms of increased service quality, stopping frequency, or other factors.

This test has now been used many times. It has been refined and calibrated over time, it will doubtless be adapted further in the future. It is not a perfect test of the relative merits of alternative uses of capacity, and judgement is needed to balance our duties. Nevertheless, it offers us a tool that is consistent, transparent, and (to a certain extent) predictable. Franchise bidders and would-be market entrants can develop business cases, or plan to invest in rolling stock, on the basis of it.

Open access operators currently pay only variable track access charges while franchised operators pay both variable charges and a fixed track access charge. These charges are ultimately approved by the ORR, following consultation, and – in general terms – are based on analysis of how costs vary with train operator use of the network.

The difference in the charges paid by franchised operators and passenger open access operators reflects a range of issues including the different processes by which the train operators gain access to the network (and the differing risks that they face in doing so) and the restrictions on the stopping patterns of open access operators imposed by the NPA test. In 2013 we consulted on options to increase the opportunities available to open access operators but at the cost of their bearing additional charges.[18]

ORR reviews the total amount that Network Rail is allowed to recover from its charges every five years, following extensive analysis of the efficient level of Network Rail's costs and consultation with interested parties.

18 Office of Rail Regulation: On-rail competition: consultation on options for change in open access (London, June 2013) http://orr.gov.uk/consultations/policy-consultations/pr13-consultations/on-rail-competition-consultation-on-options-for-change-in-open-access

ORR also reviews the structure of charges periodically, which sets the overall approach to calculating charges, including the split between fixed and variable charges. It is also our objective as a regulator, to ensure charges – both the level and structure – are more reflective of the costs imposed on the network by those using the network. We do this so that incentives to improve efficiency and network use are better aligned across the infrastructure owner and the operators.

9. Looking ahead: the debate on the European Commission's Fourth Package

Passenger services: the economic equilibrium test

Turning to the ongoing debate around the Fourth Package, one of the key points of debate in the upcoming negotiations will be around the scope of PSO contracts: - can they be let for routes and service patterns that are profitable, or should they be limited to those where the market would not otherwise provide? Another question will be the form and nature of the proposed "Economic Equilibrium test". Will our NPA test meet the European requirements?

These are questions that have serious implications for the British model, and they are thrown into relief by several developments in the industry. If we continue to see the recent levels of growth in passenger rail travel (and I hope that we do) then more British franchises will run on a profitable basis. HS2, and Crossrail are just two major infrastructure enhancements that will hopefully help to alleviate the capacity issue, but will ask further questions in terms of how that capacity is allocated.

This is a good opportunity for us in Britain to look at the current underlying assumptions and structure of our rail market. If we want to adjust this then there are potentially changes that we can make, for example:

- a recalibrated NPA test, perhaps with the possibility for negotiating adjustments to the term of the franchise in marginal decisions.
- more loosely-defined franchises, with a clean-slate approach at the end of contracts, when open access operators could submit bids for capacity
- marginal capacity improvements being offered first to any willing open-access operators.

We could also consider whether very different models could apply in different passenger rail markets, for example:

- there may be more scope for open access competition for profitable high-speed and long-distance passenger services, which already compete to some extent with other modes; potentially reducing the scope and share of access of the franchises;
- the commuter networks – particularly around London and south-east England – are more utility-like in the sense that there is less scope for competition where the density of service and network benefits matter – and these could be franchised or regulated more like conventional utility businesses;
- local and regional services which are more heavily subsidised could be franchised but on a devolved basis, with more decisions taken locally on the use of public money to develop transport services and infrastructure to suit local labour markets, connectivity and economic development priorities.

These are not policy recommendations, but illustrate the potential for adjusting, rather than overhauling, a system that has brought many benefits.

We do not in my view need EU law that restricts the discretion of national governments in these matters. Throughout Europe rail is an industry that is shaped by the history, geography, legal system and public finances of member states. While there may be common principles, there are no one-size fits-all mechanisms. Instead we must continue to ask ourselves whether we have got the balance right between competition in the market, and competition for the market.

Other aspects of the Fourth Package: the technical pillar, and vertical separation

Continuing the theme of European reforms, I will discuss the other aspects of the Fourth Package. This ambitious set of legislative proposals goes well beyond the tendering of public service contracts.

The technical pillar

As the UK National Safety Authority, ORR is responsible for issuing safety certificates and technical authorisations. We therefore have a close interest in the “technical pillar” of the package, and we share the Commission’s basic aspiration: Certification and authorisation procedures should improve safety and performance, but without being a barrier to market entry, or causing unnecessary delay in deployment of new equipment.

The Commission's original proposal was a wholesale transfer of the responsibility for these functions to ERA. ORR opposed this – there was a danger of creating cost, uncertainty and increased safety risk in countries where these procedures already function well. Instead, ORR petitioned for choice: operators should have the option of applying either to ERA or the NSA for authorisation and certification. This proposal was taken up by MEPs in the European Parliament's first reading, and we are hopeful of securing a consensus during the Member State negotiations at transport council.

There will, of course, be plenty of work to do on the detail of how ERA and national NSAs cooperate, particularly in the award of safety certificates, but I am optimistic that we will secure a workable solution that makes things more straightforward for European operators.

Proposals on infrastructure governance

In their original proposals, and contrary to prior speculation, the Commission did not insist on full vertical separation of infrastructure and operators. Instead, the package focuses on, 'Chinese walls', accounting separation and transparency, and framework conditions required for a level-playing-field in the rail market, with the regulatory powers to guarantee them.

I know that there were many who were disappointed by the Commission's reluctance to push for full unbundling. Amongst them were several UK companies, both passenger and freight, who wish to enter European markets.

My own view is that vertical separation is an important step in the process of market opening. It is very difficult to ensure transparent and non-discriminatory decision-making on key issues including network access, cost allocation, access to retail and information systems, without separation. The British experience shows that even with vertical separation regulators need to remain hawkish to avoid discrimination against new entrants. The Commission is nevertheless right to focus its attention on the broad framework of conditions that are crucial for market opening to work. There are no doubt infrastructure managers who appear to take a positive stance towards competition, but where it is impossible for market entrants to sell their tickets in stations, or hire rolling stock, or secure access to service depots and refuelling facilities. These are the crucial details that matter – and these are the areas where clear, outcome-focused European legislation, and strong, independent regulation can make the biggest difference.

10. A normal industry?

Before moving on to look at the challenges of the next decade, let me elaborate a little on the challenges of the existing framework.

By any standards, rail is not a normal industry. And yet I believe it is very much in the interests of both rail users and rail businesses that becomes more subject to the commercial pressures and relationships we see in other markets.

The peculiarities of rail markets are clear by comparison with other regulated markets such as energy and water. In particular

- the challenges of value for money and financing in rail are greater than and different from other regulated industries. Across the industry as a whole, commercial revenues are much lower than costs (see chart 22);

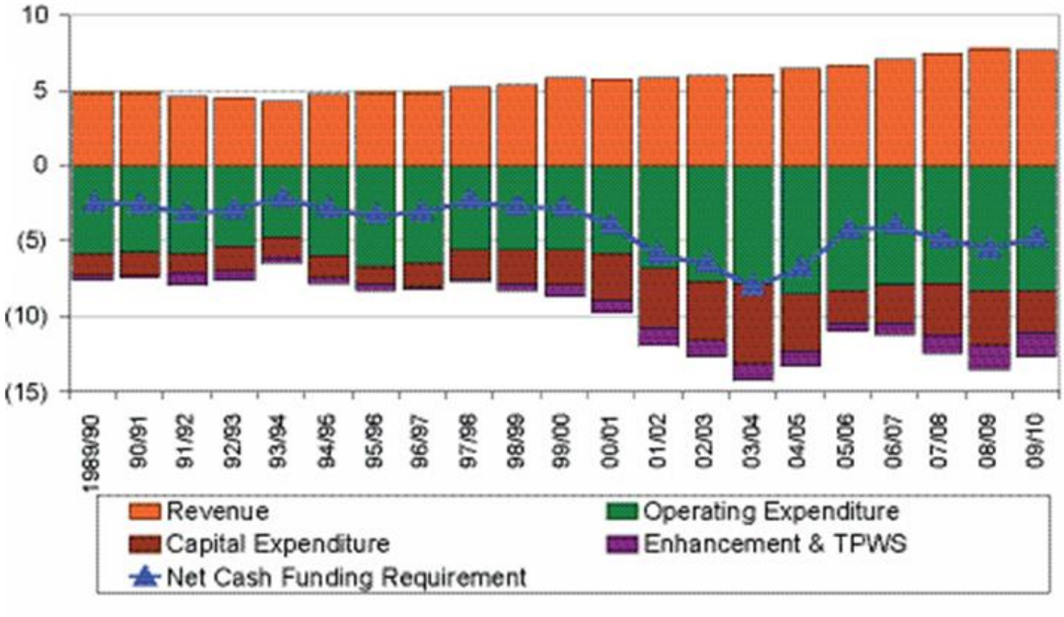
- there is consequently a large funding gap - £4 bn in 2013-14 – which is funded by taxpayers; this funds the level and quality of service, finances investment, and subsidises fares;

- the mismatch of revenues and costs means that the industry is heavily dependent on public investment – at least in the infrastructure;

- the combination of public subsidy and public investment has led to high levels of government involvement and intervention;

- behaviours in the industry are thus to an unhealthy degree driven or conditioned by subsidy and intervention by government and the regulator, rather than commercial decisions;

Chart 22: Industry real net cash position, 1989-90 to 2009-10
£bn, 2009-10 prices



Source: McNulty (2011)

- there are significant monopoly elements in the sector – especially the ownership of the bulk of Britain's national rail infrastructure by a single company, Network Rail; and franchised train companies which operate as near-monopolists during the period of their franchise;

- retail competition is limited by the structure of franchised passenger services, judged at the time of privatisation to be the most efficient way – *in the short term*[19] - of procuring a socially-desirable level of train services which the market would not provide. Franchisees are regulated by the Department for Transport, acting as both economic regulator and procurement agency;

- the passenger railway has been increasingly subject to "political" regulation with the breakdown of the clear separation of franchise letting and management from government in the initial model. Ministers have become much more involved in very detailed decision making. Detailed government specification, which can act as a barrier to change, inevitably increases the overall cost of the railway, at any level of outputs government (quite legitimately) chooses;

[19] Swift (2000), p220, is particularly entertaining on this point.

- the infrastructure is provided and managed by a monopoly business, now publically owned, which is complex, cumbersome in its delivery though striving to do better;

- there have also been concerns about the structure of the rolling-stock market and the behaviour of the rolling stock companies, which the ORR previously referred to the Competition Commission, and with informational remedies being put in place following a market investigation which concluded in 2009.[20]

All of this means that over the last decade, the rail industry has been missing, for the most part, the commercial relationships and drivers which are present in most regulated utilities; it has been prone to detailed decision-making and intervention by government, by which I mean particularly civil servants and occasionally ministers; and it has been susceptible to over-detailed regulation – from both the ORR and the Department for Transport. As a consequence of these factors, much of the industry has been subject to bureaucratic rather than commercial management and decision-making.

As I have set out, I believe that the industry has been a remarkable success through the last decade, but the factors I have described above now jeopardise the next leap forward in quality, capacity, customer service and value for money, and need to be addressed.

[20] Competition Commission (2009)

PART 3: MEETING THE CHALLENGES OF THE NEXT DECADE

11. What are the challenges for the next decade?

What are the next steps that are expected of the railway – by its customers and funders? I will now consider what needs to be achieved in the next decade.

Recent successes notwithstanding, there is a growing sense that the industry is reaching the limits of what can be achieved with current approaches and capabilities – the strains are starting to show. I do not accept that the system's existing achievement of punctuality and reliability cannot be improved at current levels of investment: there is much that the industry can do before it reaches the frontier of what is reasonably practical. It is nevertheless true that the next substantial advances in the quality and efficiency of the industry will be very hard to achieve without

- a stronger focus on delivering for customers;
- significant advances in asset management and information;
- greater transparency on how public money is being used , and what the railway is delivering with it;
- greater simplification of the standards and rules which in many cases are so bureaucratic and prescriptive that they undermine the management of the risks they are supposedly there to support;
- improvements in maintenance and renewals productivity;
- a move away from the traditional one-size-fits all approach to delivering infrastructure regardless of user needs;
- tackling barriers which inhibit collaboration between the infrastructure provider and train operators to improve whole-system performance and efficiency for customers.

A number of challenges face the industry over the next 5 to 10 years, and the industry itself needs to develop a clear sense of how it is going to meet them.

In summary the key challenges, set out by various bodies tasked with defining railway outputs[21], are:

- the challenge of achieving value for money across the industry as a whole, including across the boundary between track and train operation[22];
- getting more out of the railway's existing capacity;
- building on the good recent safety record, as the industry goes through a period of change, and ensuring the industry moves closer to excellence in health and safety management as its management maturity improves;
- enhancing the network without inconveniencing today's customers;
- improving customer satisfaction: meeting rising expectations on the quality of the passenger experience and better information; better responsiveness and accountability to customers, and better accessibility to stations and trains;
- serving the changing demands of freight to help the economy to grow;
- improving the reliability of assets so that customers experience better reliability; and
- raising rail's environmental performance.

12. The challenges of efficiency and delivery

Efficiency is the key to so much else, so I am going to focus on it. Serious amounts of public money are going into the industry. This is in itself a signal of confidence in the railway's ability to deliver. And at a time when fiscal consolidation means that public spending is under massive pressure across all budgets, Government's commitment to rail is rising, not falling. As a hardened public spending watcher, I find this level of commitment genuinely remarkable. Politicians are convinced that the railways have a big contribution to make to

[21] Broadly speaking this means the Department for Transport, Transport Scotland, the Welsh Assembly Government, the English Passenger Transport Executives, the Strathclyde Partnership for Transport, Transport for London, the ORR and Passenger Focus; as well as customers themselves and their representative bodies, in both passenger and freight markets.

[22] McNulty (2011)

economic growth and social wellbeing, and they are backing that conviction with cash.[23]

A key question, and one highlighted by Sir Roy McNulty in his 2011 value for money study, is whether this level of public subsidy is sustainable and whether future governments will continue to invest in rail infrastructure. That is why value for money really matters. Value for money is the industry's licence to grow.

Let us consider this in terms of productive, allocative and dynamic efficiency.

Firstly, productive efficiency. The costs of delivering the railway's current outputs are too high across the industry. Sir Roy McNulty's Rail Value for Money study identified potential industry-wide annual cost savings on a 2008-09 base of between £2.7bn and £3.8bn by 2018-19, using a combination of top-down and bottom-up cost comparator approaches to estimate what the railway would cost if it was operating efficiently.[24] McNulty estimated that around 70 per cent of these savings could come from Network Rail, with the other 30 per cent coming from the rest of the industry. This included, for example, estimates of productivity improvements in maintenance and renewals, gains from better procurement, and collaboration to reduce the costs that Network Rail and the train operators impose on each other.

ORR's determination of 2008 closed around half of the efficiency gap identified for Network Rail by 2014, and our determination last year set Network Rail the achievable challenge closing the remaining gap within the next five years to 2019. [25]

Secondly, allocative efficiency. Is the industry using the scarce resources available to it to produce what its customers and society value most? Of course priorities for the railway come from a number of sources, including its customers and importantly its funders. Government has a particular role on behalf of society in making sure that the railway delivers outputs which the market would not provide.

---

[23] HM Government (2012)

[24] Office of Rail Regulation (2013): Final determination for Network Rail for Control Period 5, 2014-15 to 2019-20. (Office of Rail Regulation, London; 2012)

[25] McNulty (2011). Values expressed in 2011-12 prices.

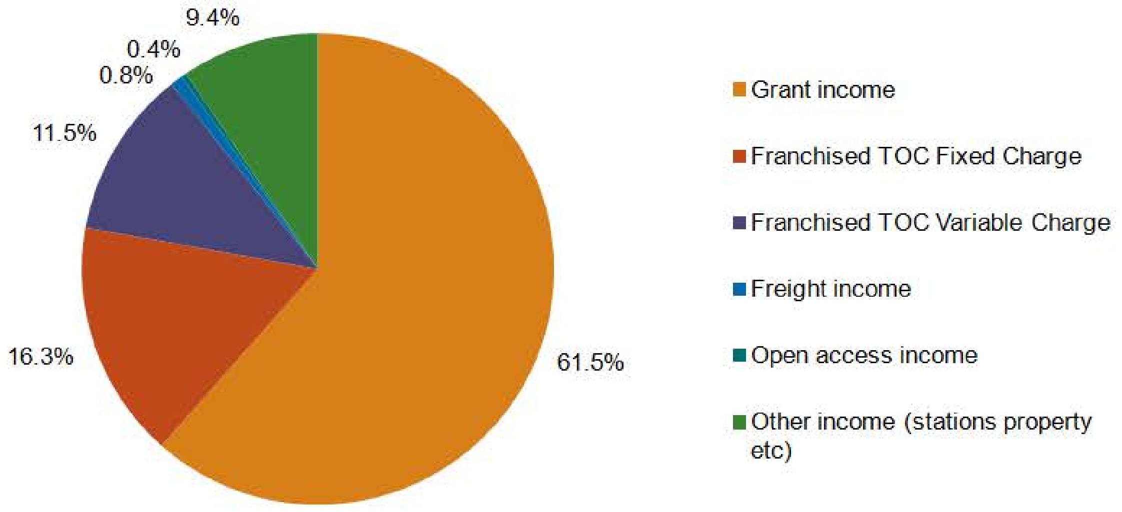
But even a cursory examination of what would need to be in place to facilitate allocative efficiency gives cause for concern. On a railway which is carrying as many people as in the 1920s, but on a much smaller network, it is not surprising that parts of the network are getting very close to capacity. So one of the scarcest resources of all is network capacity. And yet it is not priced! The Variable Usage Charge which Network Rail is currently allowed to charge operators reflects short-run marginal cost, but has no element to reflect the scarcity of the capacity or its value in competing uses. Of course it is always hard to reconcile short-run network use incentives with long-run investment incentives: but I am convinced that we can do it better.

Chart 23 shows the current position in terms of Network Rail's revenue. User charges earned by running trains account for a small proportion – around a quarter – of Network rail's revenues. The bulk of the rest – the large blue segment - is made up by a block payment to Network Rail from the government known as Network Grant. A part of Network Grant finances investment. But in practice a significant part simply makes up the shortfall between costs and revenue from charges without differentiating what Government and other funders want to buy.

Chart 24 illustrates the incentive effects of the current structure of funding. It shows how Network Rail's efforts to accommodate more trains on its crowded network over the last few years have generated more revenue for the business over the last few years. The unfortunate truth is – they haven't! Though it has allowed more trains to run, the chart shows that as the number of train miles run and scarce capacity used rises, there has been almost no impact on revenue. The gain from running 10 per cent more trains is the tiny red sliver on the small variable income block for each year.

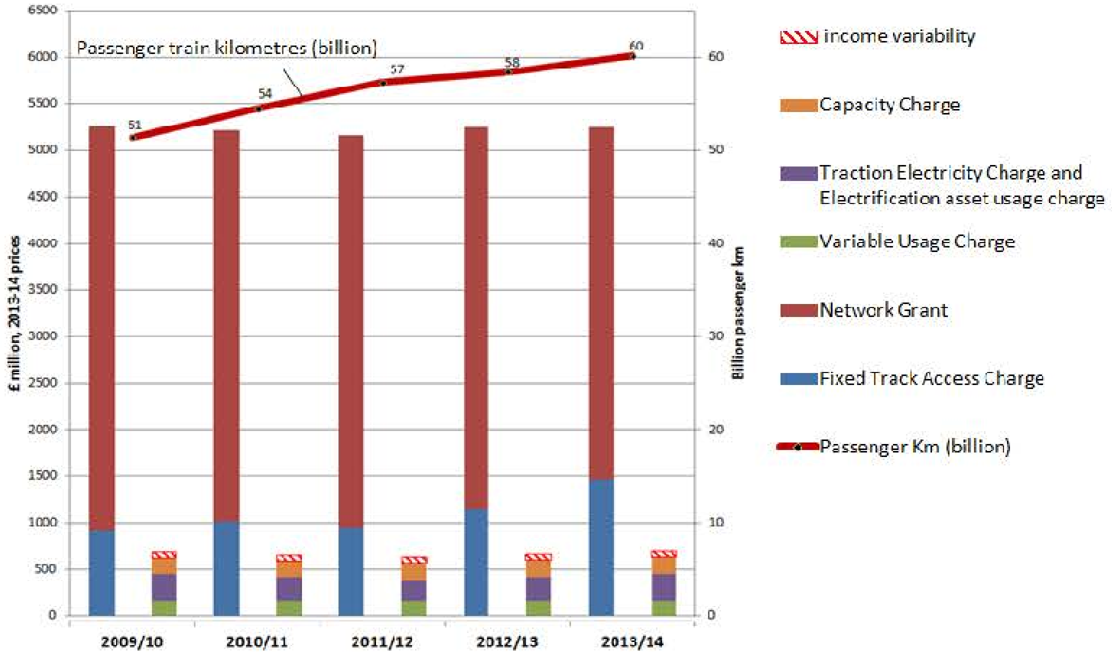
Not surprisingly, therefore, price signals are very weak and play almost no role in decisions on allocating, planning or expanding capacity.

Chart 23: Network Rail's sources of revenue: Network Rail's revenue requirement for CP4 (2008-09 to 2013-14) is £31.7bn (in 2011-12 prices).



Source: Office of Rail Regulation

Chart 24: What happens to Network Rail's income as volume increases? (Answer: almost nothing). Network Rail's income in respect of passenger trains, 2009-10 to 2013-14, at 2013-14 prices.



Source: Office of Rail Regulation, and Network Rail Regulatory Accounts

The franchising system determines a large part of what the industry delivers, both in train services and in the infrastructure to support them. Government is therefore a large and important customer of the railway industry. But I would like to see much more direct accountability of the industry to its actual customers – passengers in particular. We see this already in freight, where operators are wholly driven by the needs of their customers, competing for many of them with road.

Network Grant exists for good reasons. As Tom Winsor noted in his final report as Rail Regulator,

> *"simply raising access charges by [£7bn over the 5 years to 2009, in the wake of Hatfield] would have caused very significant difficulties for the public finances... Accordingly, whilst maintaining the integrity of the settlement and therefore the overall amounts which Network Rail is entitled to receive... I accepted a proposal from Network Rail, supported by government, that a higher proportion of Network Rail's income should come in the form of [government] grants ... and that the money should not have to be passed through the passenger train operators."*[26]

My view is that Network Rail's ability to rely on Network Grant since 2004, and the correspondingly small portion of its revenue earned directly from its customers in the train operating companies, has undermined its incentives to respond to train operators and to think commercially. That in turn has weakened the whole industry's ability to focus on its final customers – passengers and freight users.

Network Rail is doing many of the right things to get closer to its customers – the devolution of decision-making to directors for each of its ten routes being a major step in the right direction (the geographic route structure is shown in see figure 5 above). Devolution is potentially a major step forward, allowing route directors much more discretion in how they provide infrastructure services to the train companies; to assess how best to raise performance and improve efficiency. Importantly it creates a kind of market for management within Network Rail, with the opportunity to draw comparisons and lessons from different approaches, and ultimately to benchmark.

---

[26] Tom Winsor, in Office of the Rail Regulator (2004).

We already have in place separate regulatory accounts at the route level and are refining these in the current control period to 2019, building on them with route level performance data, and potentially in due course, disaggregated revenues reflecting disaggregated charges. In this way it will become clear what customers and taxpayers are paying for the different parts of the network and what they are getting in return.

Network Rail and the UK Government have both shown an interest in varying degrees of <u>extra</u> freedom for the routes – including developing infrastructure concessions, which could help to bring equity and private investment into the rail infrastructure market. And Network Rail and train operators are exploring the scope for further formal allowancing – the first alliance between South West Trains and the Wessex Route of Network Rail is already resulting in different approaches to working and prioritising to improve efficiency, performance and revenue growth. In our Periodic Review, we are considering incentives to encourage further route-level collaboration.

There is certainly the potential for the routes to be powerfully incentivised to strike commercial deals with their customers, and in the process to make sure they make the best returns from the scarce network capacity they have at their disposal by providing what customers want and improving their own efficiency. This also gives the train companies the incentive to act more commercially with Network Rail, brokering different options for the delivery and use of infrastructure services, pressing the routes to improve efficiency, and considering their own use of the network to identify ways in which they can reduce the infrastructure costs they end up paying.

But as long as the bulk of its income is received by Network Rail as a block, without bearing any direct relationship with the infrastructure service the routes provide to their customers, the routes will essentially remain cost centres, rather than profit centres. And it will be harder to achieve the cultural shift within Network Rail and in its relationships with its customers, from the bureaucratic and towards the commercial. This in my view is at the heart of the change we need to see to unlock the potential of the railway for the next decade.

There is a solution to this. We are looking at the scope for adjusting variable charges to reflect capacity and scarcity; and to better reflect the structure of costs, including at a route level. If Network Rail can improve its efficiency between now and 2019, in the way we envisage, there is the opportunity for a substantial rebalancing in the sources of the company's revenue, from block grant to usage- and capacity-related prices for the infrastructure services it provides.

That will allow the governments' Network Grant to be focussed on the finance of network enhancements (as opposed to more general capex and other spending). It will also help to align costs and revenues within Network Rail at route level, so that route directors are able to make genuinely commercial propositions to their customers, in full knowledge of what their different options cost and what they will earn from them, and with bottom line accountability. This would, in other words, help Network Rail and its routes to become much more like a real business. A move in this direction seems to me to have huge advantages for the railway and its funders and customers.

In principle, if we can get these incentives right, then **the third element of efficiency - dynamic efficiency** - ought to follow. But things are never so simple. Dynamic efficiency is always difficult to measure. There is a great temptation to say that innovation is good and so more of it must be better. The railway has innovated but there appears to be more that could be done, in the application of technology to improve costs and performance, but also in developing the offer to the customer, and in developing the use of scarce capacity. Our efficiency challenge in the Periodic Review will help to drive dynamic efficiency in Network Rail, and to an extent through the value chain.

Most of what I have said so far focuses on Network Rail's efficiency. Indeed in recent years most of the pressure has been on Network Rail to reduce its own costs. But McNulty showed that if the industry is to achieve its full efficiency potential, it will need to look across the railway as a system. McNulty estimated that around 30 per cent of the industry-wide efficiency he identified was to come from the rest of the industry, that's £0.8bn-£1.3bn a year - including from the train operators.

Decisions made now on franchising are critical to driving efficiencies from passenger service provision. For example our benchmarking analysis of train operating company costs[27] shows that the savings identified by McNulty are to

[27] Office of Rail Regulation: Costs and Revenues of Franchised Passenger Train Operators in the UK (Office of Rail Regulation, London; 2012)

some extent locked-in by the relatively detailed specification of the current franchise agreements.

Ensuring value for money may also mean that it makes sense to look at different models to reflect the different rail passenger markets – long-distance, London & South East commuter and regional – each of which has very different characteristics in terms of patterns of demand, operation and risks, as well as infrastructure requirements.

Efficiency – productive, allocative and dynamic – together with the need for a more commercial culture in the industry, are at the heart of the problem we are trying to solve. How, then, can we make best use of the array of regulatory tools we have to solve them? Perhaps counter-intuitively I suspect that the answer, at least in the medium to long term, lies in <u>less</u> regulation rather than more. In the final few minutes I want to develop that theme.

13. Releasing the railway's potential

The key question for me as a regulator is – how can the industry make the next strides forward, in delivering for its customers, efficiency, quality and capacity, and do so in a way which keeps both private and public investors willing to invest?

My view is that commercial incentives are a key way in which this will be delivered – and this is true incidentally regardless of the ownership model chosen. As efficiency improves, so the industry will become less dependent on generalised subsidy. The transparency of the industry's costs is improving, and we want to get to the point where government and other funders are able to focus the subsidy they choose to put in, on the specific services and capacity they are buying for society that the market will not deliver, rather than the current approach which is simply to keep topping up a bucket labelled 'aggregate costs minus aggregate revenues'. That should mean government can step back from its detailed involvement right across the railway.

Notwithstanding the fact that I have worked in and around government for a long time, I have been genuinely amazed in my time in the railways at the amount of detailed government involvement in specifying and managing what the industry delivers. Of course government is free to intervene as it chooses wherever it is paying – and as we have seen, it is committing very substantial resources to rail, and now also owns most of the infrastructure through Network Rail. But excessive specification and intervention drives up the cost of delivering what it wants, and more widely undermines the ability of the industry's leaders and managers to take a commercial approach.

The industry itself has a key role in achieving change. Firstly, it needs to demonstrate that the costs of the railway can be reduced. Our Periodic Review for the five years to 2019 identified big opportunities, but they increasingly require the industry to work together across business (and regulatory) boundaries – including but not limited to collaboration across track and train. Commercial relationships, tensions and collaboration across the track/train boundary provide an opportunity rather than a barrier to better innovation, more responsiveness to customers , and better efficiency – provided we get the flows of funds and the incentives right.

Secondly the industry needs to demonstrate to government that it is on top of how the railway is delivered. It's up to government and users to say what they want from the railway; it's up to the industry to have a credible story about how it will deliver. The more the industry can show it is able to do that, the more likely it is that government will give it more space.

Independent regulation can and should play a significant role in this through our periodic reviews, by creating the framework for better alignment of incentives, costs and charges, helping to focus the industry on the outputs that really matter to rail users; as well as through the power of greater transparency. Through the current control period, and in readiness for our 2018 Periodic Review, ORR is exploring with people across the railway how we best create a climate that genuinely aligns incentives across the industry, and encourages the further development of alliances and partnerships.

Beyond all that, we should increasingly think of rail becoming more of a "normal" sector. Greater efficiency will reduce the railway's dependence on subsidy, and whatever levels of subsidy funders choose to provide in the future, their funds can be more focused on the specific things they want to buy. With the railway less dependent on subsidy, government can be less involved in the detail, leaving how the railway is delivered to the industry. And if – as I have suggested, the industry can operate increasingly on the basis of proper, transparent and sensible commercial arrangements, then I believe that the role of regulation should become less interventionist too.

Government will still want assurance that it is getting value for money, that longer term objectives will be delivered and that market failures be addressed. In other sectors this is the role of the independent regulator. Effective economic regulation allows a reduction in the amount of detailed intervention, and helps to create an environment in which businesses can plan ahead, invest, innovate and grow.

This industry could be much more business-led, and much less driven by government and regulation, with clearer accountability and greater transparency to users and taxpayers of what the industry is delivering and how much it costs, which is a central part of the industry's legitimacy with its funders and users. [28]

That does not mean undermining the franchising business model, though there is much that needs to change to make sure that franchising delivers both value for money and what customers want. I can well see alternative methods of provision being introduced in time for some types of services - including through open access competition, as envisaged at the time of privatisation. But it does mean that independent regulation, working to a defined set of rules, can help separate more clearly the political decisions that are for government and the delivery decisions that are for the industry – a confusion that currently bedevils the railway.

Other sectors have shown that, properly targeted, independent regulation can be of value to companies in the sector, as well as to users and government. We could move in this industry to a very different type of regulation, which gives more flexibility and freedom to rail businesses. If commercial relationships and the market are working well the role of regulation can and should be significantly reduced. This is our approach on both safety and economic regulation. On safety we take a risk-based approach, which assesses the management competencies of businesses in the industry to manage safety

---

[28] The UK government has indicated that it wants over time to see an evolution to a more industry-led approach – see HM Government: Reforming our railways - Putting the customer first. Command paper. March 2012.

and other risks, and we intervene less where businesses can show that their own systems and staff have risks well understood and managed.

14. Conclusion

If the industry can deliver on efficiency between now and 2019, it will be possible to reduce its dependence on public subsidy, and to get much greater transparency on where public money goes and what it buys. National and local funders should have better choices over how their money is used and what they get for it. The industry ought then to become freer to take its own decisions on how best to meet its customers' expectations and grow demand.

There is further to go on customer satisfaction, and rail businesses need to focus on how they can meet rising expectations through better customer service, better information, improved services and value, and innovation – just as they do in other sectors. This potential is all the greater given the scope for major changes in the way the railway operates through electrification and transformed signalling and information systems, as well as more devolved decision-making. It requires a much stronger focus on the industry's customers, a whole-system approach to delivery and efficiency, and ultimately, proper bottom-line accountability.

This is a real challenge in an industry where finances are opaque and decision-making byzantine in its complexity. That needs to change. As efficiency improves, and costs, revenues and incentives become better aligned, I believe we can move towards a railway in which businesses can shape business propositions and come together in a commercial way to deliver for their customers, with less intervention from ORR and government. We can transform the way the industry operates in the next decade, and all of us need to step up to make that a reality.

Richard Price

Office of Rail Regulation
November 2014

Bibliography

Affuso, Luisa and David M G Newbery: Investment, Reprocurement and Franchise Contract Length in the British Railway Industry; CEPR Discussion Paper 2619. (Centre for Economic Policy Research, London; 2000)

Affuso, Luisa: 'Auctions of rail capacity?', Utilities Policy 11, pp 43-47 (2003)

Affuso, Luisa and David M G Newbery: 'The provision of rail services' in Maarten C. W. Janssen (ed.): Auctioning Public Assets, Cambridge University Press, Cambridge; 2000)

Bartle, Ian: Britain's railway crisis: A review of the arguments in comparative perspective, Centre for the Study of Regulated Industries Occasional Paper 20, (Centre for the Study of Regulated Industries, Bath; 2004)

Beesley, M. E.: Rail: The role of subsidy in privatisation in: M.E. Beesley (ed.), Regulating the Utilities: Broadening the Debate, IEA Readings, 46 (London; 1997)

Bolt, Chris: Developing the framework of rail regulation, Beesley regulation lecture (Office of Rail Regulation, London; 2005)

British Railways Board: The Reshaping of British Railways (HMSO, London; 1963)

British Railways Board: Railway Privatisation: Some questions answered. The Government's White Paper 'New Opportunities for the Railways' (British Railways Board, London; 1992)

Competition Commission: Rolling Stock Leasing Market Investigation – Final Report (Competition Commission, London; 2009)

Cousins, James: British Rail Design (Danish Design Council, Copenhagen; 1986)

Evans, Andrew W.: Fatal train accidents on Britain's main line railways: end of 2010 analysis (Imperial College, London; 2011)

Finnes, G. F.: I tried to run a railway (Ian Allan, Shepperton; 1967)

Glaister, S., and T. Travers: New Directions for British Railways? The Political Economy of Privatisation and Regulation (Institute of Economic Affairs, London; 1993)

Glaister, Stephen: British Rail Privatisation: Competition destroyed by politics, Centre for the Study of Regulated Industries Occasional Paper 23, (Centre for the Study of Regulated Industries, Bath; 2004)

Gourvish, T. R.: Railways and the British Economy, 1830-1914. (Macmillan, London; 1980).

Gourvish, T. R.: British Rail 1974-1997: From Integration to Privatisation (Oxford University Press, Oxford; 2004)

Gourvish, T. R.: Britain's Railways, 1997-2005: Labour's Strategic Experiment (Oxford University Press, Oxford; 2008)

Helm, Dieter: A Critique of Rail Regulation, in C. Robinson (ed): Utility Regulation and Competition Policy, pp19-41, (IEA, Elgar, Cheltenham; 2002)

HM Government: New Opportunities for the Railways: The privatisation of British Rail (HMSO, London; 1992)

HM Government: Reforming our railways - Putting the customer first. Command paper (Department for Transport, London; 2012).

Jack, Ian: The Crash that Stopped Britain (Granta, London; 2001)

Jones, Ian, Phillipa Marks and Carole Willis: Franchising Passenger Railway Services, NERA Topics No 11, (National Economic Research Associates, London; 1993)

McNulty, Sir Roy: Realising the Potential of GB Rail: Report of the Rail Value for Money Study (Department for Transport and Office of Rail Regulation, London; 2011)

Office of the Rail Regulator: Report of the Rail Regulator To the Secretary of State for Transport and the Scottish Ministers, Annual Report 2003-04 (Office of the Rail Regulator, London; 2004)

Office of Rail Regulation: A great deal from Britain's railways: safe, reliable, efficient. Our business plan for 2012-13 (Office of Rail Regulation, London; 2012)

Office of Rail Regulation: Health and Safety Report 2012 (Office of Rail Regulation, London; 2012)

Office of Rail Regulation: ORR's strategy for regulation of health and safety risks (Office of Rail Regulation, London; 2012)

Office of Rail Regulation: Network Rail's output framework for 2014-19 (Office of Rail Regulation, London; 2012)

Office of Rail Regulation: Costs and Revenues of Franchised Passenger Train Operators in the UK (Office of Rail Regulation, London; 2012, forthcoming)

Parker, Sir Peter: British Railways Board Chairman's Report, 1976 (British Railways Board, London; 1976)

Pollitt, M G and A S J Smith: The Restructuring and Privatisation of British Rail: Was it really that bad?, Fiscal Studies, 23:4, pp463-502. (10) (2002)

Price, Richard: Regulation: When less is more (Speech to Rail Industry event, Office of Rail Regulation, London; 2012)

Price, Richard: Risk-based health and safety regulation: our strategy for Britain's railways (Speech to the International Rail Safety Conference, Office of Rail Regulation, London; 2012)

Prideaux, John: The Rolling-stock companies, in Roger Freeman, and Jon Shaw (eds): All Change: British Railway Privatisation; (McGraw-Hill, London; 2000)

Schwartz, Robert M.: Railways and Population Change in Industrializing England (Mount Holyoke College, South Hadley, Massachusetts; 1999)

Shaw, Jon: Designing a Method of Rail Privatisation, in Roger Freeman, and Jon Shaw (eds): All Change: British Railway Privatisation; (McGraw-Hill, London; 2000)

Stern, Jon: What the Littlechild report actually said, Regulation Initiative Working Paper No 55, (London Business School, London; 2003)

Stern, Jon: Regulation and Contracts for Utility Services: Substitutes or Complements? Lessons from UK Railway and Electricity History, Journal of Economic Policy Reform, Vol 6, Number 4, pp 193-215 (2003)

Stern, Jon: Regulation and Contracts in Infrastructure Industries: Regulation as Ordered Renegotiation (Presentation to the ORR Expert Advisery Panel; 2012)

Swift, John: The Role of the Rail Regulator, in Roger Freeman, and Jon Shaw (eds): All Change: British Railway Privatisation; (McGraw-Hill, London; 2000)

Winsor, Tom: The new regulatory agenda (Office of the Rail Regulator, London; 1999)

Winsor, Tom: Office of the Rail Regulator, Annual Report 2003-04 (HMSO, London; 2004)

Winsor, Tom: The future of the Railway: Sir Robert Reid Memorial Lecture 2004 (Office of the Rail Regulator, London; 2004)

Winsor, Tom: The Future of the Railway Industry through Effective Independent Regulation, CRI Occasional Lecture 10, 21 January, (Centre for the study of Regulated Industries, University of Bath, Bath; 2004)

Wolmar, Christian: Creating the Passenger Rail Franchises, in Roger Freeman, and Jon Shaw (eds): All Change: British Railway Privatisation; (McGraw-Hill, London; 2000)

Wolmar Christian: On the Wrong Line: How Ideology and Incompetence Wrecked Britain's Railways (Aurum Press, London; 2005)

Wolmar, Christian and Roger Ford: Selling the Passenger Railway, in Roger Freeman, and Jon Shaw (eds): All Change: British Railway Privatisation; (McGraw-Hill, London; 2000)