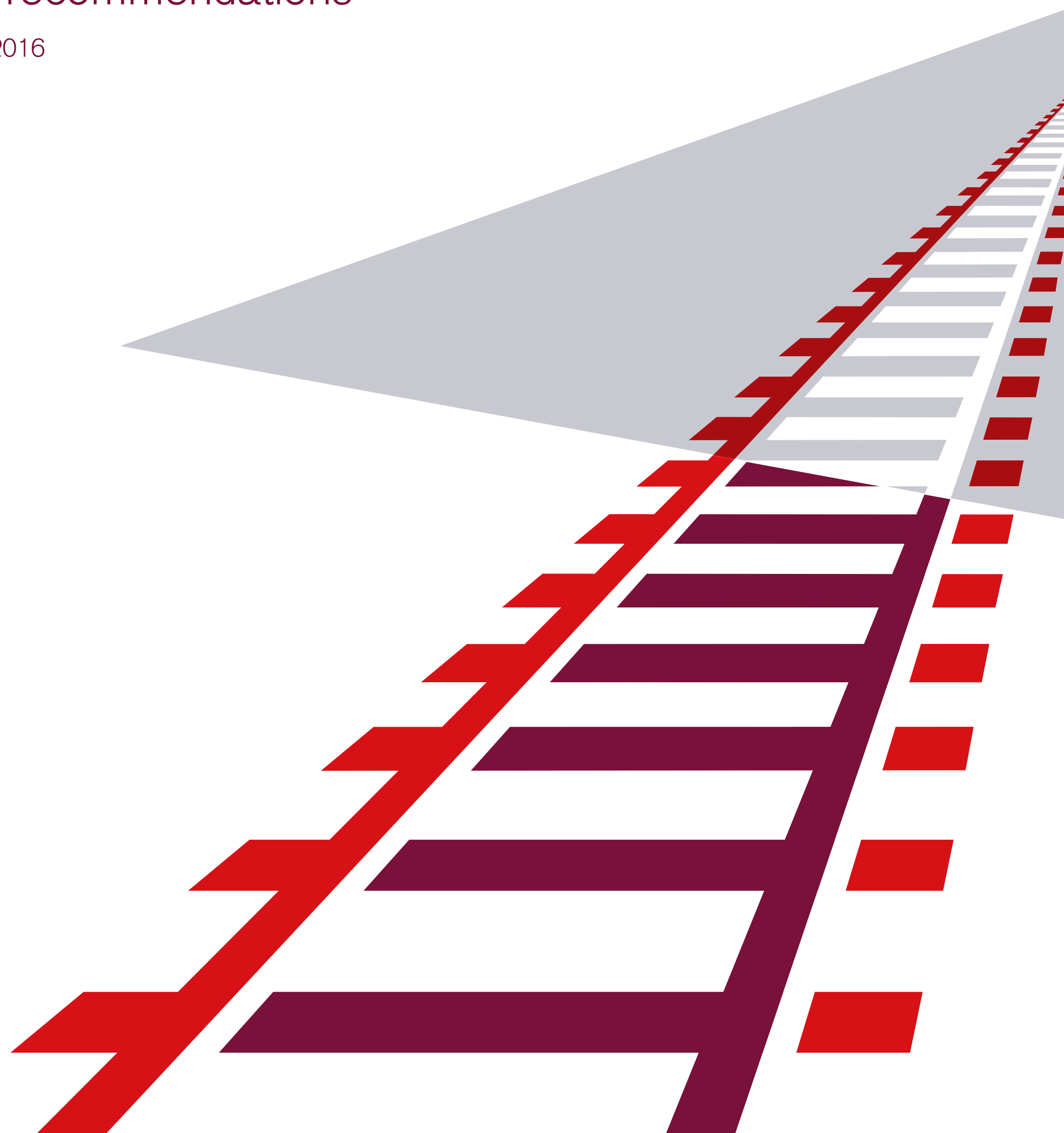
THE SHAW REPORT

The future shape and financing of Network Rail

The recommendations

March 2016



The Summer Budget on 8 July 2015 set out that the government had asked Nicola Shaw to advise the government on how it should approach the longer term future shape and financing of Network Rail.

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ISBN: 978-1-84864-177-8

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Foreword

The recommendations in this document will help Britain to develop economically and socially, to better meet the needs of the ever-increasing number of passengers and freight shippers who use the railway, and to showcase a safe and cost-efficient rail system delivered in collaboration with highly skilled staff.

The rail network is complex, and no approach to the question of the future structure and financing of infrastructure delivery will resolve all the existing issues, nor endure forever. There aren't any silver bullets here just waiting to be found and used. My recommendations therefore focus on current issues and objectives – they offer a contemporary blueprint for growth – in a way that should enable the industry to step up and deliver better for customers. The recommendations focus on three core areas – customers, devolution and growth.

Nicola Shaw

Customers

Recommendation 1: Place the needs of passengers and freight shippers at the heart of rail infrastructure management. Train operators should drive this customer focus into Network Rail through scorecards and agreed action plans, recognising they are sharing use of the network with others and operating within a national (and international) system.

Devolution

Recommendation 2: Focus on the customer through deeper route devolution, supported by independent regulation. Building on the current Network Rail move to greater devolution to its routes, there should be a step-change in the degree of autonomy of these routes to deliver more flexibly and responsively for their customers, passengers and freight shippers. This change should be supported by regulation by the independent Office of Rail and Road (ORR).

Recommendation 3: Create a route for the North. This new route will work closely with the customers there and in particular the new regional government body, Transport for the North. Network Rail should also work closely with other integrated transport authorities, city regions, and London, as funding and delivery models evolve. HS2 will remain a separate organisation but be able to draw on the System Operator and Technical Authority for access planning and timetabling in particular.

Growth

Recommendation 4: Clarify the government's role in the railway and Network Rail. In particular, the roles of the Department for Transport (DfT) – as funder, client and owner of Network Rail – should be considered and clarified. As the body responsible for transport in England and Wales, the DfT should also develop a visible longer-term strategy for rail travel, co-ordinating as appropriate with the governments of Scotland and Wales.

Recommendation 5: Plan the railway based on customer, passenger and freight needs. Enhancement planning should be generated from passenger and freight shipper requirements. Routes should be given the freedom to build up their plans based on these needs and recognising the role of the railway in the wider transport, economic and social objectives of the area.

Recommendation 6: Explore new ways of paying for the growth in passengers and freight on the railway. Further options for involving private sector finance – for example, from letting a concession, or involving suppliers in technological investment – should be explored to release government capital, encourage innovation, and speed up delivery of improvements for passengers. Routes should also be required and empowered to find local sources of funding and financing, including from those (such as local businesses or housing developers, for example) who stand to benefit from new or additional rail capacity.

I am also making a cross-cutting recommendation to support each of these and help modernise the industry by focusing on its people:

Recommendation 7: Develop industry-wide plans to develop skills and improve diversity. People are one of the railway's greatest assets. But the industry as a whole needs to support and grow the pool of skilled and talented people working in the railway better and encourage more diversity.

We received over 10,000 responses to the scoping document consultation. Thank you, all, for taking the time to contribute. Many of you made the point that you highly – and rightly – value the safety record that we have as one of the safest railways in Europe. However, there was also a strong message that, for too many people, the quality of service doesn't meet expectations, fares are too high, and there is a need for greater accountability and answerability of the companies and organisations who deliver rail services.

The recommendations I make seek to enable the industry – and government – over time, to address these issues. It will ultimately be for Network Rail and the Department for Transport, as the organisations most directly affected by my proposals, to take responsibility for their implementation, working with the ORR, Transport for the North, and the industry more widely. Some respondents to our consultation noted the risk associated with rushed implementation. On the other hand, introducing change too slowly also carries risk (including, for example, uncertainty for people about their future role, or the potential for some change to be forgotten as immediate priorities change) and therefore a fine balance needs to be struck. It should be achievable for my proposals to have been implemented by 2019, and for the next regulatory settlement for Control Period 6 to have been made on the basis of autonomous routes, delivering for their customers, supported by transparent benchmarking by the ORR.

Acknowledgements

My thanks to all the report team – in particular Emil Levendoglu, who led the team from October 2015, and Sarah Gannaway, who joined me in July to get things up and running. The team is: Stephen Bond, Michael Colella, Peter Grzeszczak, Daniela Guzzardo, Andrew Hillin, Ruth Hobbs, Catherine Jones, Tamira Mander-Lynskey, Rohit Rai, David Steele and Cameron Woodrow. They have all been very strong, challenging and informing my thinking. Fred Maroudas provided invaluable expertise from Infrastructure UK. We were also helped immensely by our advisory panel, whose members were Steve Allen, Sir Brendan Barber, Professor David Begg, Dame Deirdre Hutton and Anton Valk, and who read early drafts and entered into discussion with us about key themes and how best to consider them.

The report has also benefited greatly from the input of our consultants, who have pushed the envelope of our thinking forward and provided detailed knowledge and skills where and when we particularly needed it: Wayne Jenner, who helped the team with an early briefing on how the rail industry works today; Belden Menkus, who facilitated the discussion sessions so elegantly; Steer Davies Gleave and KPMG who provided technical and financial input; and our legal advisers from Linklaters and Allen & Overy. Thanks also go to DVLA Creative Services and Katy Scott, who designed and typeset the scoping document and final report, respectively.

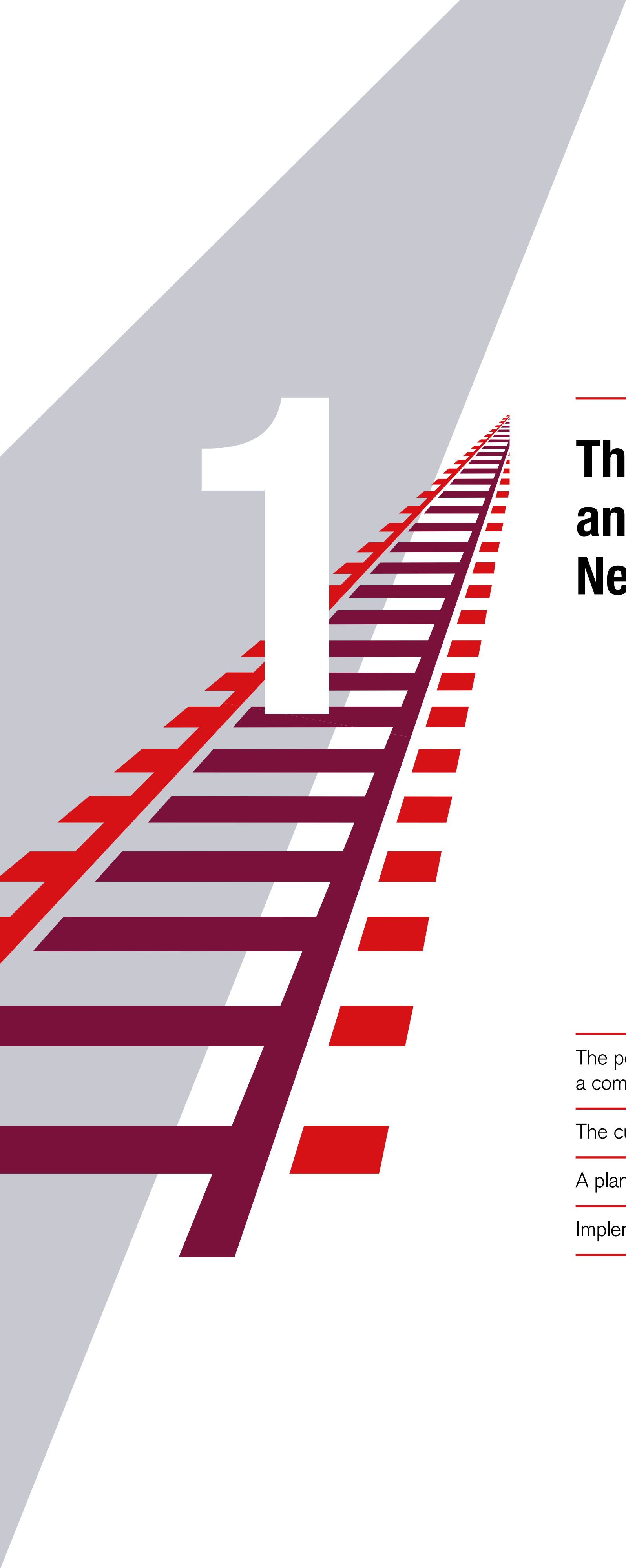
My thanks also to all the team and my Board at HS1 – their strength has given me the time and space to prepare this report whilst delivery for our customers has continued.

Sir Peter Hendy, Mark Carne and the whole team at Network Rail (led by Susan Cooklin) have been open and strongly positive towards the report team. It can't have been easy at times and I am deeply grateful for the advice, the conversations, and the detailed information. On top of that the staff, management, and board at Network Rail have continued to operate and enhance the infrastructure and deliver on a range of challenging change initiatives. Without them and their hard work there would be nothing to build on. Thank you all.

Thanks, too, to all the others who have supported and contributed in the wider industry, trade unions and the TUC, the civil service, the utility sector, and amongst our stakeholders and the public.

Despite all this help, all errors and omissions remain all mine.

Nicola Shaw
March 2016



The future shape and financing of Network Rail

The post reform railway: a compelling vision for growth

1.1 The Shaw Report scoping document – published in November 2015 – set out a view of the railway as a vital national asset; driving economic growth, increasing social and economic cohesiveness, and occupying a unique place in the national consciousness as something that both exists for everybody and belongs to everybody.

1.2 Since then, the report team has consulted widely, touring the country for a popular series of discussion events, meeting stakeholders, and reading the views of the more than 10,000 members of the public, industry experts, the supply chain, and passenger groups who responded to the consultation. Everything the report team has read and heard supports the initial view set out in the scoping document that:

"…the railway acts as an important force in national social integration. It is this role of the railway as a part of the fabric of national life that helps to explain the strong positive feelings it evokes…"[1]

1.3 In fact, if anything, the report team has arrived at an even greater appreciation of the ways in which the railway – throughout its history, but particularly in the last 15 years – has transformed itself to respond effectively to its role as a key artery of economic growth for this country. It is, therefore, worth reflecting again on the recent success story of rail in Britain, and in particular the role Network Rail has played in that success:

- passenger journeys have more than doubled, from 735 million in 1995 to 1.6 billion in 2014;[2]
- the industry responded to the tragic events of the accidents in the early 2000s by working together to create one of the safest railways in Europe;[3]
- Network Rail has delivered a series of major infrastructure upgrades, including the major works in and around Reading station, Crossrail on-network works as well as upgraded stations at Birmingham New Street and London King's Cross;
- responsiveness to local demands and requirements has increased, with new services, such as the Borders Railway, and stations used as catalysts for regeneration and renewal in cities; and
- Network Rail copes admirably in times of crisis – the collapse of the Dawlish sea wall saw Network Rail at its best, working tirelessly to bring the line back to use.

1 The Shaw Report (November 2015): The future shape and financing of Network Rail - The scope www.bit.ly/ShawScoping

2 Department for Transport (2015): Rail Trends Factsheet, Great Britain 2014/15 http://bit.ly/Shaw012

3 Office of Rail and Road (21st July 2015): Press release http://bit.ly/Shaw002

1.4 It is particularly important to acknowledge the commitment and hard work put in – at all levels – by the people who work across the industry and in rail infrastructure in particular. Many industries boast of the passion of their workforce, but few, if any, can compare to rail on this dimension. However, it is important to recognise that the workforce's commitment to the railway is not enough, on its own, to operate, maintain, renew and enhance around 22,000 miles[4] of infrastructure and to keep pace with growing demand.

1.5 In this context, a strong, clear framework, which puts customer and end user needs at the front and centre of infrastructure management, is needed to inspire and channel the enthusiasm and expertise of the industry to best effect. The challenge for rail, then, is to build from its position of strength to continue to act as a catalyst and enabler for the national good.

1.6 And while there are many strengths to build on, it is also important to avoid complacency; the starting point of the report team's analysis remains – as spelled out in the scoping document – the challenge of continuing to deliver growth in the railway. The assumptions of Beeching and the pre-privatisation period – that the UK was moving into an era of less, not more, rail – are well and truly in the past. For the foreseeable future, the key questions for the industry will be ones of growth: how can more people and more goods travel on the current network? How can the network affordably meet the needs for further capacity increases and improved connectivity and quality?

1.7 But neither the complexity of the railway system, nor the way that responsibilities are currently organised, encourage or enable the industry to focus directly on customer, passenger and freight shippers' needs. Growth must therefore be delivered in a way that not just meets, but positively engages with the needs of these customers, passengers and freight shippers and must occur within a political context in which more and more public responsibility and accountability for rail policy is being devolved away from central government.

1.8 There are also wider challenges, which will lead to significant changes to Great Britain's railway infrastructure. The current programme of enhancements will be delivered, bringing greater connectivity and new rolling-stock – and driving local demand for additional changes; 2026 will bring the opening of HS2, the first new north-south mainline since Victorian times, a step change in the British railway network. The pace of change is, if anything, likely to increase.

1.9 The shape and structure of infrastructure management in the UK is clearly a central part of rising to this challenge, but innovation and culture are both also vitally important. And, of course, all of this has to happen in a way that starts and ends with the requirements of a safe railway.

4 Network Rail (2014), as provided to the Shaw Report

The current situation

Network Rail from 2001 to 2016

1.10 Before considering the Shaw Report's principal task – making recommendations as to the future shape and financing of Network Rail – it is worth reflecting on the journey that Network Rail has been on in the 15 years since it was created in 2001.

1.11 Network Rail was established in a different strategic context, informed by the failure of Railtrack and the aftermath of the Hatfield and Potters Bar rail crashes. The railway was suffering from a backlog of maintenance work and significant numbers of speed restrictions were in place causing substantial delay to journeys. It had lost both political and public confidence.

1.12 In such a context, the creation of Network Rail and the steps taken by its management constituted the right response at the right time. Through the actions of Network Rail's staff, its management, and those in the wider industry to keep the system operating safely, Britain's railway recovered and entered an impressive period of growth.

1.13 But solutions designed for one set of circumstances are not necessarily applicable to the next. Since the early 2000s, the world has changed at a rapid pace, and the heavily centralised and 'top-down' planning model of the early Network Rail is no longer appropriate in a world in which the safety concerns post-Hatfield have been overcome, where there is ongoing political devolution, where passenger and freight customer expectations continue to increase, and in which individuals expect a far greater degree of accountability and answerability from the companies and institutions that exist to serve them.

1.14 Both Mark Carne (Chief Executive of Network Rail) and Sir Peter Hendy (Chair) have acknowledged this fundamental shift, and have taken steps to reform the organisation from one that is highly centralised to one that balances power and accountability between the corporate centre and the routes, whilst protecting the safety record. As part of the analysis in this report, the report team considers where Network Rail's management needs to go further or faster in order to continue this trend of positive, safe, reform.

Through the actions of Network Rail's staff, its management, and those in the wider industry to keep the system operating safely, Britain's railway recovered and entered an impressive period of growth

The short-term policy context

1.15 In September 2015 the Office for National Statistics reclassified Network Rail to the public sector, as an arm's length central government body. As a result, Network Rail has been subject to much more direct public scrutiny and control, since its borrowing and debt now add to measures of public sector borrowing and debt. Against this backdrop, in June 2015 the Office of Rail and Road (ORR) reported that, amongst other issues, Network Rail was behind on the enhancements programme for Control Period 5 (CP5). It was later found that Network Rail had overspent its regulatory determination for operations maintenance and renewals (OMR) by around £230 million in the second half of 2014-5.[5]

1.16 In response, the government temporarily paused the Trans-Pennine and Midland Mainline electrification projects (which were restarted in September 2015 but to a longer timetable), appointed Richard Brown and Sir Peter Hendy to the Board of Network Rail as a Special Director and Chair respectively, and commissioned two reviews, both of which reported in November 2015:

- Dame Colette Bowe considered lessons learned from the planning process undertaken for CP5, making recommendations for better investment planning in future; and
- Sir Peter Hendy published his plan to get the rail investment programme back onto a sustainable footing.

1.17 The July 2015 Budget also announced three further actions to improve incentives and drive improvements in Network Rail and the wider rail industry.

1.18 These were:

- to change the flow of public money so that more is channelled through the train operating companies (TOCs);
- to call for Network Rail to further devolve responsibility to routes; and
- to establish a dedicated body focused on pursuing opportunities to realise value from public land and property assets in the rail network, to both maximise the benefit to local communities and reduce the burden of public debt.

1.19 At the same time, Nicola Shaw was asked by the Secretary of State for Transport and the Chancellor of the Exchequer to consider options for the longer-term shape and financing of Network Rail. The Shaw Report's terms of reference called for the report team to work with Sir Peter Hendy and Network Rail in formulating its recommendations. As Mark Carne and Sir Peter have been refining their proposals for further devolution in Network Rail, the report team has been collaborating closely with them to formulate and test emerging conclusions.

1.20 Finally, following on from the publication of Collette Bowe's recommendations, in December 2015 the Secretary of State launched a consultation inviting evidence and views on the effectiveness of the current regulatory regime for the railway.

1.21 This changing policy and regulatory environment may seem a long way removed from the significant programme of enhancements and other on the ground works which Network Rail is currently delivering under its existing regulatory settlement for 2014-19 (CP5). It is important however, that this dynamic policy environment is understood in the context of safe reliable everyday railway operations. It is for this reason that the recommendations set out here focus on the period from 2019, to allow the railway to safely prepare these changes so that, where appropriate new models are in place for the beginning of Control Period 6 (CP6) in 2019.

5 Office of Rail and Road (2015): Efficiency and finance assessment of Network Rail 2014/15 http://bit.ly/Shaw003

Shaw Report consultation findings

1.22 On 12th November 2015 the Shaw Report published its scoping document[6] and asked a set of questions.

1.23 The response was positive, with many stakeholders commenting that the document presented a coherent view of the current state of play in rail infrastructure and the railway more generally – including both strengths and weaknesses – and that the proposed direction of inquiry should continue to be pursued.

1.24 The report team received the views of over 10,000 people in response to the consultation, and also undertook a nationwide programme of discussion events with industry leaders and other interested parties. The vast majority of responses were from members of the public responding as part of co-ordinated campaigns or petitions.

1.25 Most individual responses were focused on a small number of consistently expressed themes:

- a **rejection of the wholesale break-up** of Network Rail which would further complicate an already fragmented industry;
- **opposition to privatisation** of Network Rail; and
- a desire to maintain the historically **high current levels of investment** in the railway.

BOX 1

CONSULTATION AND DISCUSSION SESSIONS: LEVEL OF INTEREST

The report team received the following responses between publication of the scoping document on 12 November and the closing date of 24 December 2015.

A total of **10,765** people or organisations expressed a view, made up of:

3441 individual submissions (including at least two organised campaigns – one through the Campaign for Better Transport with **619** respondents, and one through We Own It with **2482** respondents);

One petition from Bring Back British Rail, signed by **7231** people; and

91 responses from organisations.

9 discussion sessions held around the country with approximately **135** attendees.

These views are set out in more detail in a companion document – *The Future Shape and Financing of Network Rail: Consultation Analysis and Summary*. This document will be available on GOV.UK by the end of March 2016

6 The Shaw Report (November 2015): The future shape and financing of Network Rail - The scope www.bit.ly/ShawScoping

1.26 While by no means universally raised, there were also a number of other themes arising, both explicitly and implicitly:

- **frustration with the quality or reliability** of passenger railway services, and in some places a sense that private train operators abstract profit that could otherwise be reinvested into the railway;
- a perceived **lack of accountability** or answerability in the railway: with many respondents asking who is accountable for the railway – the government, Network Rail, the regulator, train operators, or a combination of all or none of these; and
- a **sense of disempowerment** whereby customers, passengers and freight shippers expressed frustration that decisions are taken in places where they do not have a say and where they feel that the railway operates in spite of them – not for them. Many responses suggest a deep scepticism with the status quo and that passengers' needs are not best represented in the current structure.

1.27 The consultation process also yielded a consistent – if differently pitched – set of messages from the railway industry and the supply chain, many of which were also raised by members of the public. These centred around a number of themes which have been summarised in box 2.

1.28 The report team has used these findings from consultation with the information gathered from the discussion events[7] as well as its own analysis, to develop a core problem statement for rail infrastructure management in the UK.

While by no means universally raised, there were also a number of other themes arising, both explicitly and implicitly:

- frustration with the quality or reliability of passenger railway services...
- a perceived lack of accountability or answerability in the railway...
- a sense of disempowerment

7 The discussion events were held on a non-attributable, confidential basis. The report team did, however, publish a blog outlining key themes from each session: http://bit.ly/ShawReportBlog

BOX 2

CONSULTATION RESPONSES: SUMMARY OF KEY THEMES

People: Responses that mentioned the railway's workforce were almost exclusively supportive of the commitment and professionalism shown by Network Rail's people. They were highlighted as a vital resource for which more needed to be done in terms of workforce planning and investment. There was also a general concern over capability development, particularly ensuring that sufficient specialist rail and engineering skills are available to execute industry plans.

Safety: As one might expect from a safety-critical industry, maintaining the high level of safety inherent in Great Britain's railway was a near-universal theme.

This came with an implied challenge: that any changes arising as a result of this report should either increase safety or, at the very least, not decrease the high level of safety in the industry.

Corporate devolution: Of those who commented on this theme, the majority of respondents believed that Network Rail is moving in the right direction to devolve power from the corporate centre to the routes.

There were some issues raised around local implementation of devolution – for example some respondents suggested that having two different routes either side of the Pennines is a barrier to, rather than an enabler of, the benefits of devolution. Moreover, there were questions over how more devolution within Network Rail would work in practice, and how it would relate (if at all) to political devolution.

Responses also heavily varied depending on the type of organisation. Local bodies were more likely to embrace devolution (and indeed ask for more of it) whereas national operators (in particular freight companies) were inclined to support national structures that reduce the number of organisational interfaces or that had mitigations in place to ensure national operators were supported.

Customer focus and accountability: Of the responses that talked about customers, almost all felt that Network Rail could have a greater focus on this group.

Local authorities and regional transport bodies generally supported more accountability of Network Rail at a local level, whereas other organisations (in general) spoke about the need for Network Rail to focus more on its customers and end users.

In many cases, it was unclear whether respondents were defining "customer" as the report team did in the scoping document (those who pay Network Rail for services, so primarily train and freight operating customers) or the ultimate end users (freight shippers and passengers). The point still stands, however, that Network Rail is not seen as a particularly 'customer-friendly' organisation, with many groups (such as local authorities, train operating companies and passenger groups) looking for ways to make Network Rail more responsive to their needs.

Growth: In this context growth includes planning for the future of the railway, making better use of the existing network as well as delivering enhancements. The importance of the railway being a growth industry was underlined by most respondents who touched on the topic, with many of the responses looking wider than Network Rail itself.

In particular, respondents were worried that recent high levels of investment in the railway may not continue in the future, that longer-term planning is not as effective as it might be (or that any changes to Network Rail may harm industry planning), and that the ability for third-parties to more easily suggest smaller initiatives that may make a significant local difference is inhibited.

The problem statement

1.29 The Shaw Report team has concluded that there are four core problems with the way infrastructure services are delivered by Network Rail today:

- there is a **lack of local flexibility and autonomy** in what has become a very large and complex system with a monopoly provider of rail infrastructure at its heart. This inflexibility and the lack of competitive pressure means that there is limited responsiveness (and accountability) to customer and end-user needs;
- local flexibility and autonomy is necessary but not sufficient for the railway. As a national asset, the railway also needs to function as **an interoperable system**, and it needs to be planned and developed to meet national as well as local economic and social needs;
- the arrangements for **Network Rail's financial control, incentives, accountability and governance are no longer fit for purpose** for a public-sector infrastructure manager operating in a resource constrained environment, and do not provide sufficient focus on financial discipline; and
- the railway fundamentally depends on its people, but there is evidence that **the industry is struggling to be sufficiently attractive to a new generation from across all backgrounds.** Moreover, Network Rail's culture needs to change if it is going to become a truly customer-focused organisation, with an eye on its contribution to economic growth and national prosperity.

Lack of local flexibility and autonomy

1.30 As outlined above, the conditions under which Network Rail was created led to a highly centralised organisation with a strong hierarchy. But the world has changed, particularly in terms of political devolution. For example:

- the Scottish Government now exercises most of the Secretary of State's railway-related functions within Scotland;
- the creation of Transport for the North (TfN) is the latest step on the journey to greater local autonomy over the planning and delivery of rail in the north of England, particularly to facilitate cross-Pennine travel;
- similarly, Midlands Connect (in the east and west Midlands) provides a focus on the transport in that area; and
- in early 2016, Transport for London (TfL) and the Department for Transport (DfT) agreed in principle to give TfL greater control over London suburban passenger services.

1.31 With this level of political devolution, there are growing calls for it to be more closely mirrored in the structure of the railway. TfN's submission to the scoping document for example, includes the following:

"we believe that Network Rail's organisational structure should recognise the existence of Transport for the North as a Sub-Regional Statutory Transport Body. We therefore consider the suggestion of a route structure which mirrors transport geography as essential … We note that Network Rail has established Scotland and Wales routes which mirror Devolved Administrations, and expect the same in the North."

1.32 But it is not only political devolution that respondents noted. There is also the question of size, and whether big organisations are less agile or responsive to environmental change or customer need. For example, the response from Arriva includes the following:

"We consider Great Britain too large for efficient and effective management of railway infrastructure through a single centralised management structure and that a decentralised or plural structure is preferable. However, we recognise there is no simple answer to the question of the best form of disaggregation and this must represent a compromise between markets, political boundaries, technological features, history and geography. We also recognise that the cost of change and corporate inertia has created a structure still showing strong traces of management structures going back decades".

1.33 Respondents were also concerned about flexibility in planning. The railway attracts a large number of potential schemes for new lines, re-openings or other ways of increasing capacity, but the current planning process is centralised, time-bound and process heavy. Third parties struggle to engage with Network Rail and the industry to discuss new schemes, and those that do manage are subject to Network Rail's benign (but sometimes unhelpful) oversight.

1.34 In a fast-paced, increasingly immediate and digitally-enabled world, this approach to planning with lead times of years to make decisions, let alone to undertake the work, has been a significant concern to many with whom the report team has spoken.

The railway needs to function as an interoperable system

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

1.36 Freight operators have been particularly vocal in their requirements to balance devolution (which, in their view favours regional operators) with national system operation which would provide balance to truly national operators, such as freight operating companies (FOCs).

1.37 For example, in its submission to the Shaw Report, the Rail Delivery Group Freight Group, says:

"To act as the organisational solution, to [the risks of] greater devolution a strong, national Network Rail freight team is required – this could either be part of, or alongside, the System Operator. In order to have the ability to ensure that the Routes take on responsibility for servicing the requirements of freight operators and their customers, the freight team must have strong and effective leadership of this team, at Director/Executive level".

1.38 It is not just for freight companies operating across multiple routes that an interoperable, nationally co-ordinated and coherent railway is important. It is important for passengers and passenger train operating companies too. The railway is a system, so a problem in one part of the UK can have knock-on effects in other parts of the country. For the network to be truly resilient, it was felt that there needs to be some form of national co-ordination to deal with, for example, the problems that befell the west coast mainline in December 2015 when the Lamington Viaduct was closed following storm damage.[8] This resulted in the closure of the west coast mainline north of Carlisle until the viaduct reopened in February 2016.

Financial control, incentives, accountability and governance are no longer fit for purpose

1.39 Prior to reclassification, Network Rail was considered a private sector company and raised finance from debt markets against its regulated asset base (RAB). In simple terms, this effectively meant that it used the value of its assets (for example tracks and signals) to borrow money.

1.40 Because debt was cheap, in part thanks to the government's guarantee of Network Rail's debt, the company had little incentive to improve its financial discipline. If it overspent on capital it was simple, with the agreement of the regulator, to add most of any overspend to the RAB – colloquially known in the industry as the 'credit card' – and government paid the additional costs over time. But like adding to any debt, this was unsustainable in the longer term – something brought into sharp relief after the reclassification of the company to the public sector and the introduction of a borrowing limit for Network Rail.

1.41 This lack of financial controls, and discipline between government and Network Rail, is not only evident in the large programmes that have gone significantly over their initial estimates (such as the Great Western Electrification Programme – or GWEP). In addition in 2014-15, Network Rail also overspent on its core functions of the railway (operations, maintenance and renewals) by £200 million.[9]

The railway is struggling to be sufficiently attractive to a new generation of people

1.42 The railway runs on the strength and commitment of its people. But having a motivated workforce for today's railway is not enough: there need to be workforce plans in place to ensure a continual supply of people with the right skills who want to work for Network Rail (and the wider industry) in the future too.

1.43 In many ways, Network Rail has a positive story to tell. It has a graduate programme, which attracts a diverse range of high calibre candidates, and an apprenticeship programme, each of which take on around 200 people each year. As an organisation, it has recognised that it has some way to go to better represent the diversity of modern Britain, and has made great strides by setting up champions for under-represented groups and establishing staff networks and programmes.

1.44 But there is much further to go. Network Rail struggles to attract women to the workplace – particularly for engineering or technical roles. The percentage of women employees at Network Rail is just 15.3% (and across the industry is just 16%).

8 Network Rail (2016): Lamington Viaduct to reopen in March following storm repairs http://bit.ly/Shaw004

9 Office of Rail and Road (2015): Efficiency and finance assessment of Network Rail 2014/15 http://bit.ly/Shaw003

1.45 Having a wide range of people from a variety of backgrounds is important because if the railway is to thrive it needs the best people – regardless of gender, race, sexuality or any other characteristic. For whatever reason, a large number of good people are choosing not to work in Network Rail or in the industry.

1.46 The report team has observed that the identity of "belonging" to the railway is very important to people who work for Network Rail and in the wider industry. This is often epitomised by people wanting to "do the right thing" for the railway – but without (through any fault of their own) any great sense as to what the railway brings to the country and what the railway should be striving for. If the industry can harness this enthusiasm and power – particularly linking staff actions to positive outcomes for customers, the economy and society – then the future will be very bright indeed.

As an organisation, Network Rail has recognised that it has some way to go to better represent the diversity of modern Britain and has made great strides by setting up champions for under-represented groups and establishing staff networks and programmes

Objectives

1.47 Based on the core problems identified above, the report team has identified the following key objectives for its proposed programme of action:

- to establish **a more local focus for safe delivery of increased capacity** in rail infrastructure, to bring accountability closer to customers and end users;
- to **protect the safety and integrity of the system**, and ensure the railway is meeting the country's needs;
- to **improve financial discipline** and reduce the call made on the public finances; and
- to ensure Network Rail and the industry has the **people needed to deliver growth and safety**, and a culture that attracts and retains them.

A plan for the future

1.48 This report sets out seven main recommendations for change within Network Rail and the wider industry which, if accepted, will go a long way to addressing the challenges identified above, and meet the objectives underpinning this drive for reform. These recommendations have been carefully designed to work together as a package, and in many cases the success of one recommendation is dependent on effective delivery of one or more other elements. Each of these recommendations is discussed in more detail in section 2.

1.49 These recommendations have been developed through careful review and analysis of the consultation responses, the discussion sessions and other information available to the report team. After identifying the broad recommendations, the report team worked closely with Network Rail, the ORR, the DfT and HM Treasury (HMT) to refine and develop them. These are the principal organisations who will need to own and implement change.

1.50 The report team has sought to ensure that, taken together, this package of recommendations is realistically deliverable, given the breadth of the issues already faced by Network Rail and the industry at present. It is important not to forget the scale of the enhancement programme already underway – nearly £15 billion[10] for CP5 (2014-2019) – and the scope of the challenges Network Rail already faces in delivering on that programme.

1.51 The recommendations are focused on the key concepts referred to in the terms of reference of the Shaw Report: the structure and finance of Network Rail, whilst also considering the three key perspectives discussed in the scoping document: meeting the needs of customers; alignment with devolution; and catering for the planned growth of the railway.

1.52 The report team has taken a pragmatic approach, starting with an assumption that no structure can ever be perfect. There will always be issues in any organisation, however it is structured, especially one as large as Network Rail that operates in such a complex environment. That said, the report team is confident that these seven recommendations, if properly implemented, will enable the rail industry to take a significant step forward in delivering for its customers and funders over the period from 2019 to 2029, thereby ensuring that the railway is equipped to meet increasing demand.

This report sets out seven main recommendations for change within Network Rail and the wider industry which, if accepted, will go a long way to addressing the challenges identified

10 Network Rail (2015) – Comprised of the £11.8 billion figure from PR13 and an additional £2.5 billion as identified in Peter's Hendy's re-planning of CP5 investment. http://bit.ly/Shaw005

Recommendation 1: Place the needs of passengers and freight shippers at the heart of rail infrastructure management

1.53 Through the course of its work, the report team has found that Network Rail has some way to go to reposition itself as a customer-centred organisation. Mark Carne and Sir Peter Hendy have recognised this and are taking steps to address it.

1.54 The report team's view, expressed in the scoping document, that Network Rail's customers are train and freight operating companies (including open access operators) has not changed. But the consultation revealed significant concern that the passenger's voice was missing, and that they felt disempowered to effect change on the railway. The same was true for freight customers.

1.55 Each Network Rail route should have an obligation to provide a clear line-of-sight action planning and reporting mechanism, agreed with its customers, to set targets for the improvement of the passenger or freight journey. By aligning objectives in a collective, collaborative and transparent way, the report team expects that focus on customers, passengers and freight shippers will thereby improve.

1.56 This action plan should contain short, medium and long-term measures and cover both day-to-day operations, maintenance and renewals work as well as enhancements planning. It is intended to ensure that where a small, short-term, piece of investment can yield significant benefit that this is captured, as well as long-term strategic or large-scale projects.

1.57 Section R1 of this report outlines, in more detail, the considerations behind this approach and sets out how this might be put into practice – through establishing a transparent route scorecard system.

Recommendation 2: Focus on the customer through deeper route devolution, supported by independent regulation

1.58 Network Rail is currently implementing a new operating model, which will devolve power to the routes. These routes will be better placed to respond positively to the needs of customers – whether that is passenger and freight train operating companies, their customers, or those funding enhancements.

1.59 The Shaw Report team supports this trajectory of devolution, but this approach should go deeper and faster to enable the organisation to fully respond to the needs its customers particularly at a local level.

1.60 Decentralisation and route autonomy should be pushed further: routes should be empowered to operate as independent divisions within the overall business and assessed individually against their ability to meet customer needs and expectations.

1.61 Network co-ordination and integrity will be provided by a System Operator and Technical Authority. Other infrastructure managers such as HS1 and HS2 will also be able to use these co-ordinating functions.

1.62 This autonomy will allow the routes to act to meet the needs of their customers, passengers and freight shippers. Separate route-based accounts and regulatory settlements will allow the regulator to benchmark the performance of each route on standard regulatory metrics (such as safety, performance and financial efficiency), and encourage routes to improve their performance. Transparency over this process will help drive continuous improvement and efficiency across the network.

1.63 The background to, and detail of, these recommendations is outlined in section R2.

Recommendation 3: Create a route for the North

1.64 Having concluded that greater devolution to routes is required, it is important that routes represent the right geographies.

1.65 The geographical span of routes has evolved gradually over time, and no longer aligns well with the changing political or economic geography of the UK. Many consultation respondents were therefore supportive of the idea of reassessing route boundaries to ensure rail geography remains relevant.

1.66 In the absence of a perfect geographic fit it will be important to assess competing interests robustly and coherently.

1.67 On this basis, the Shaw Report team recommends establishing a new route for the North, aligned with the political and economic geography and supported by institutional structures such as TfN.

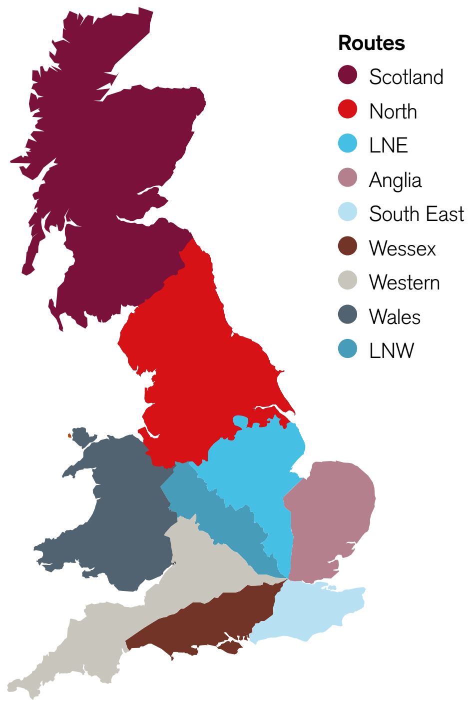
1.68 This new route would be formed from the northern sections of the current London North East (LNE) and London North West (LNW) routes.

1.69 The report team does not believe that other changes to the current Network Rail route map are warranted at this time. A dedicated route for London, for example, is not currently a deliverable proposition.

1.70 The rationale and detail behind this recommendation is set out in section R3 of this report.

The Shaw Report team recommends establishing a new route for the North, aligned with the political and economic geography emerging through the concept of the Northern Powerhouse

Figure 1: Proposed new route structure



Recommendation 4: Clarify the government's role in the railway and in Network Rail

1.71 Government's involvement in the railway is a matter of basic economics: the railway is a vehicle for economic growth and social mobility, in which there is broad public interest that cannot, in all cases, be met through the operation of a competitive market.

1.72 Since privatisation, the government's involvement in the railway has been constantly changing and adjusting to events. It is therefore vitally important that the government has clarity about its various roles and objectives for the railway and – more specifically – Network Rail, if it is to have any hope of aligning its interventions with what it actually wants to achieve.

The Department for Transport should formulate a long-term vision for the railway over the next 30 years, providing a long-term context for political decisions

1.73 In particular, many consultation respondents noted the need for the government to have a strategic vision for the railway from government. The report team therefore recommends that the DfT should formulate a long-term vision for the railway based on the views of the National Infrastructure Commission (NIC), train and freight operating companies, Network Rail, local government, the supply chain and end-users (such as freight shippers and passengers) – which will set clear, deliverable priorities for the industry over the next 30 years, providing a long-term context for political decisions.

1.74 The government's role with respect to Network Rail should also be updated to reflect the involvement of UK Government Investments[11] to advise the Secretary of State in his role as sole member of Network Rail, the need to strengthen the DfT's position as client for enhancements (as recommended by Bowe), and the changes to the processes for determining and delivering funding for enhancements and OMR as recommended in this report.

1.75 The rationale and detail behind this recommendation is set out in section R4 of this report.

11 UK Government Investments will be established on 1 April 2016 and will take on the role currently played by the Shareholder Executive. Its role will be to advise government on its ownership or other holdings of assets.

Recommendation 5: Plan the railway based on customer, passenger and freight needs

1.76 The Bowe Review, published in November 2015, made a number of recommendations relating to the rail enhancements planning process, including reviewing the role of the ORR, resetting the relationship between Network Rail and the DfT, and separating out large and complex projects from the periodic review process. The government accepted all of the Bowe Review recommendations, and the DfT has already made considerable progress with implementation.

1.77 To build on this work, and consistent with its recommendations for infrastructure operations, the Shaw Report team recommends that the future planning and delivery of enhancements should be refocused on the needs and priorities of customers, passengers and freight shippers, although of course the role of the railway in supporting national objectives must be safeguarded. To achieve this, and to ensure those using the railway have a voice in planning for its future, enhancements planning should be led locally and agreed at route level by route boards working with key stakeholders.

1.78 Where possible, competition should also be introduced to the planning and delivery of enhancements in order to improve efficiency and encourage innovation.

1.79 Finally, government should move to a rolling programme of enhancements, with the appropriate funding allocated at spending reviews, budgets and autumn statements.

1.80 The rationale and detail behind this recommendation is set out in section R5 of this report.

Recommendation 6: Explore new ways of paying for the growth in passengers and freight on the railway

1.81 The railway remains a growing and dynamic industry. However, in a fiscally constrained environment, the government has to make difficult decisions about what railway schemes it can afford to fund. The private sector therefore has a part to play in supplementing the resources available to invest and grow the railway to meet social and economic needs.

1.82 It is in this context that the report team has reviewed alternative sources of funding and financing. The report team has dismissed privatisation of the whole company, and instead has focused on solutions that may be appropriate for certain parts of Network Rail as well as for specific enhancement projects.

1.83 Options to introduce private sector capital in parts of Network Rail focus on either concessions or time limited licences. The proposed model would yield benefits not only in terms of the impact on the public purse, but also greater autonomy, a different approach to management of the assets, innovation, efficiency and a focus on cost management.

1.84 The report team recognises, of course, that there will be inherent tensions in structuring a transaction that represents value for money for the taxpayer, maintains the long-term flexibility of the railway to meet the evolving needs of its users (operators, passengers and freight shippers) and is an attractive investment for the private sector. The report team is clear, therefore, that before going to market a public interest test should be undertaken to fully assess these variables.

1.85 Opportunities to introduce private sector funding and financing for specific infrastructure projects are much more varied (such as design-build-finance-transfer, support from local developers, as well as more innovative approaches to procurement). There are also options to access additional project funding from other parts of the public sector, away from central government (including, but not limited to, local authorities, devolved administrations or European funds).

1.86 Accessing any, all, or a combination of these sources of alternative funding and financing could generate significant benefits, unlock substantial sums for future projects, and help ensure the sustainability of investment in the railway for many years to come.

1.87 The rationale and detail behind this recommendation is set out in section R6 of this report.

Recommendation 7: Develop industry-wide plans to develop skills and improve diversity

1.88 People are a significant asset to both Network Rail and the industry, and one that is all too easy to sometimes overlook.

1.89 Network Rail has a positive story to tell in terms of its people. It has a diversity and inclusion strategy in place, comprehensive staff networks to support people from a range of backgrounds and it invests in the development of its people.

1.90 But there are some clear areas for improvement, both across Network Rail and the industry:

- there is a lack of breadth of skills in Network Rail, including insufficient sponsorship, programme and project management, collaboration and digital skills;
- there is a gap in the pipeline of industry skills; and finally
- there is a lack of diversity across both Network Rail and the industry as a whole.

1.91 To address this, the report team recommends that representatives from groups such as the trade unions, the Rail Delivery Group (RDG), the Rail Supply Group (RSG), the Rail Safety and Standards Board (RSSB) and the National Skills Academy for Rail (NSAR) come together and appoint someone to co-ordinate and drive a holistic approach to skills planning for the industry.

1.92 The plan also needs to drive an industry-wide approach to diversity and put in place a shared action plan with clear targets for 2020 and 2025. An independent report should be published each year showing each participant's progress against these targets. Building on the targets for black, Asian and minority ethnic as well as gender diversity at apprentice level, the action plan should consider setting targets for these and other groups at all levels.

Implementation

1.93 The background to, and detail of, these recommendations can be found in section R7.

1.94 This chapter has outlined the recommendations that are necessary to support the journey that Network Rail is already on, led by Mark Carne and Sir Peter Hendy, to becoming a customer-centred, world-class, infrastructure manager.

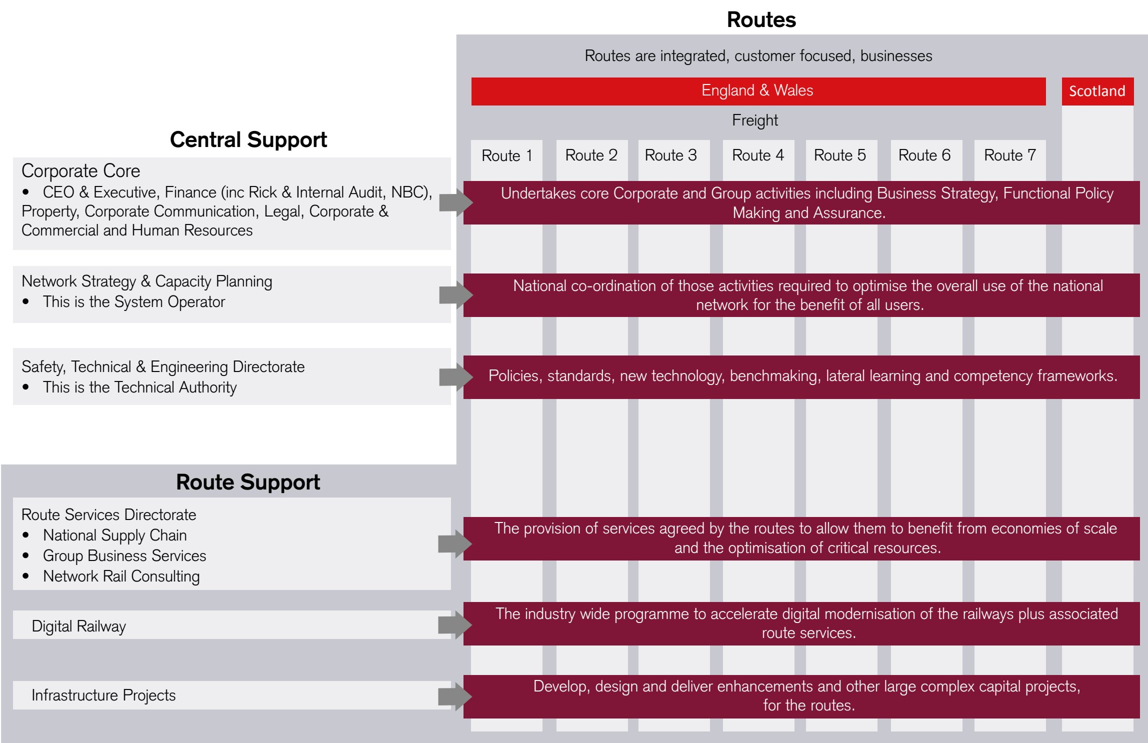
1.95 This brief section sets out how the report team suggests its recommendations should be taken forward.

Actions already underway

1.96 As outlined in the scoping document, Network Rail is currently implementing a new operating model following the appointment of Mark Carne as CEO. This model was published in October 2015 and was outlined on page 29 of the scoping document. It is reproduced below in figure 2.

1.97 The matrix sets out the functions that Network Rail intends to devolve to its routes (the verticals) and which it intends to keep as cross-cutting or group functions (the horizontals), as announced by Network Rail.

Figure 2: Network Rail operating model



1.98 The deeper approach to devolution set out by the report team in detail in section R2 builds on these changes. The report team's proposed approach is also complementary to the other reforms that Sir Peter Hendy set out in his report into CP5, such as asset disposals to raise additional funds.

Network Rail's role

1.99 As the organisation principally affected by these recommendations, Network Rail will need to develop its own change plans and lead its own changes. It is therefore important that the organisation should start planning quickly, building on the progress already made and integrating other work ongoing into its plan to deliver recommendations.

1.100 As such, Network Rail should develop (in collaboration with other affected organisations as well as its workforce and trade unions) an implementation plan within the next few months. This plan should reflect what they are already doing and the scale of the challenges across the organisation, as well as the recommendations from this report. It is likely that a team will be required to help Mark Carne and Sir Peter Hendy to drive this through in an organisation that has not previously found organisational and behavioural change easy to embrace. Risk assessment of the changes may well also be required to ensure that the whole programme can be delivered effectively.

Specific notable changes

Route devolution

1.101 Deeper devolution will depend on Network Rail pushing responsibility away from the centre and into the routes. This will require significant investment in capacity building in the routes. It will also depend on the centre being prepared to let go and let the routes really thrive.

Regulation

1.102 To effectively deliver deeper devolution underpinned by separate regulatory settlements and financial accounts by route, there will need to be both regulatory and licence changes and the regulator will need to consult on these and the changes in the approach to the periodic review and regulatory accounting which are necessary for route based regulatory settlements.

1.103 The regulator may also need to take a view on what regulatory benchmarking measures are required and how these will interact (if at all) with the customer driven metrics (the scorecard) outlined in section R1.

1.104 These regulatory changes, coupled with internal preparations at Network Rail, will need to be in place for the beginning of CP6 in 2019.

Route for the North

1.105 This is largely an operational issue for Network Rail to deliver, drawing on previous experience of creating new, or redrawing old, routes.

1.106 This is a potentially transformative recommendation, and an opportunity for Network Rail to demonstrate its ability to work collaboratively with external bodies (such as TfN and local train operating companies) as well as with staff representatives to deliver this important change.

1.107 TfN needs to collaborate closely with Network Rail as it works through the issues here and indeed help Network Rail to drive them forward. The two organisations will want to identify together the synergies that can be delivered and TfN will need to agree and negotiate with Network Rail its required contribution if there remain implementation costs.

Wales and Essex Thameside

1.108 There is lots of work currently ongoing to assist the Welsh Assembly as it considers changes to the Welsh Valleys and in preparation for the new Wales and Borders franchise. This together with any work on the potential infrastructure changes for the Essex Thameside franchise infrastructure will need detailed implementation plans to be developed. The Welsh Assembly is leading on the former but Network Rail would need to lead on the latter working very closely with DfT and with c2c (the operator of the Essex Thameside franchise).

Routes in concession

1.109 The government will also need to consider when and whether it wishes to pursue a concession or time-limited licence for a whole route. This would involve a number of stages, not least significant preparatory work to develop the business case, after which a public interest test (as detailed in section R6) would be applied to determine whether the concession or time-limited licence should be pursued. If this test were passed subsequent stages would involve separation of the selected route into a separate legal entity, running the selected route as a stand alone business for a period of time to allow it to build its own track record and, finally, taking the concession to market. Further value for money tests would be carried out at each stage.

Skills and diversity

1.110 Bringing these two vital strands on cross-industry talent together, the report team recommends that a group comprised of representatives from trade unions (who have significant expertise in this area, see box 23), the RDG, RSG, RSSB and NSAR comes together and appoints someone to co-ordinate and drive a holistic approach to skills planning for the industry.

An action plan

1.111 The timing and pacing of this report's recommendations will be essential to their effective delivery. The report team has been asked by DfT and Network Rail to allow them the space to create that plan. Since they are the key organisations responsible for delivery it makes sense for them to own the timescales. However if these recommendations are to be a success, work on implementation should start immediately, and involve all players. The key structural recommendations – specifically the new route for the North, further devolution of powers to routes with separate regulatory settlements and financial accounts – need to be in place for the beginning of CP6 in 2019 to avoid protracted and unnecessary uncertainty and to deliver the benefits for the travelling public as soon as possible.

As the organisation principally affected by these recommendations, Network Rail will need to develop its own change plans and lead its own changes. It is therefore important that the organisation should start planning quickly, building on the progress already made and integrating other work ongoing into its plan to deliver recommendations

The recommendations

R1

RECOMMENDATION 1

Place the needs of passengers and freight shippers at the heart of rail infrastructure management

A more transparent focus on the needs of railway users

R1

R1.1 The Shaw Report scoping document posed the following question: is Network Rail sufficiently responsive to its customers in the way that it delivers infrastructure services to the rail industry? The clear response received was that more could be done.

R1.2 Changes are therefore needed to enable Network Rail to become more customer focused. The scoping document defined Network Rail's customers as those organisations who directly pay it for services: for access to infrastructure, in the case of passenger and freight train operators; and for the delivery of enhancements, in the case of investors in new infrastructure (primarily central, devolved or local government). While Network Rail's primary focus must be on these direct, paying customers, it has also become clear through consultation that those customers must step up to the plate and better describe their passengers' and freight shippers' requirements and concerns to Network Rail.

Network Rail would benefit from greater customer focus and accountability, particularly at local level, and by giving greater consideration to the needs of those ultimately using the railway

R1.3 Only with clarity on the issues, and agreement on how the train operators and Network Rail as their supplier will jointly seek to resolve these, can Network Rail deliver. Similarly, given the possibility of network complexities, it may be that certain issues need to be prioritised. Train operators will better understand and accept how those decisions are reached if they have been party to joint discussions with Network Rail.

R1.4 The importance of the availability of better information for Network Rail about the needs of passengers and freight customers was supported by strong representation made during consultation.

R1.5 Individual respondents conveyed a clear sense of disempowerment, with customers, passengers and freight shippers expressing frustration that decisions are taken in their absence, in a way that makes them feel that the railway operates **in spite of** them rather than **for** them. Organisational responses also picked up this theme, noting that Network Rail would benefit from greater customer focus and accountability, particularly at local level, and by giving greater consideration to the needs of those ultimately using the railway.

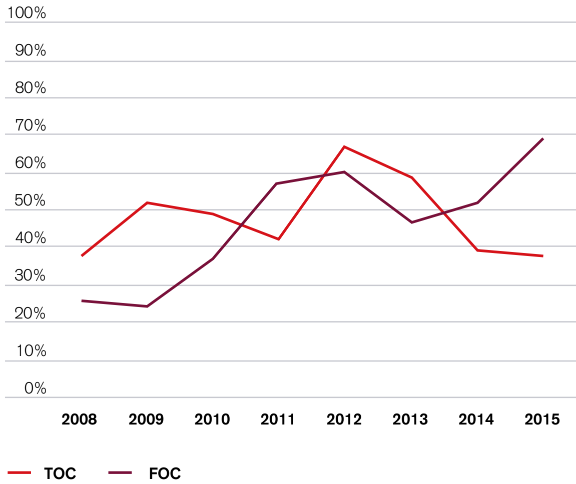
R1

R1.6 This is borne out by Network Rail's own customer satisfaction scores, which are measured through an annual survey of senior management in train operating companies (TOCs) and freight operating companies (FOCs). Since 2008, this survey data has shown an average satisfaction rate of 48% for TOCs and 46.5% for FOCs.

R1.7 The most recent results (autumn 2015) showed that overall satisfaction with Network Rail over the previous 12 month period was 41%. There is a significant variance between operators, who score Network Rail from between 5% and 100%. Dissatisfaction levels are trending upwards and stood at 37% in autumn 2015, significantly above the 10% 'red line' set by Network Rail themselves.

R1.8 The qualitative and quantitative survey response data is helping Network Rail focus on key areas for improvement over the year ahead, and this is recognised as good practice. Greater transparency over the survey, its results, and the consequential actions would be helpful to show customers that their concerns are being listened to and addressed.

Figure 3: % of customers 'satisfied' with Network Rail 2008-2015



Source: Network Rail

R1.9 In 2014/15, Network Rail introduced a new corporate reporting mechanism, based on a detailed scorecard and quarterly reports. As set out below, this provides an 'at-a-glance' snapshot of Network Rail's delivery against key indicators and areas flagged for improvement, and includes reference to the satisfaction score described above. Bonuses are tied directly to these metrics.

R1.10 This scorecard was particularly helpful in developing agreement between Network Rail, the Office of Rail and Road (ORR) and the government about what would be perceived as successful delivery by Network Rail during 2014/15. Network Rail reflected this corporate level scorecard in similar route metrics so that each Route Managing Director knew how they and their teams were contributing to the whole.

Figure 4: Network Rail's corporate scorecard (new from 2014/15)[1]

Area	Bonus weighting	Full-year outturn		
Safety		Worse than target	Target	Better than target
Workforce safety – lost time injury frequency rate	5.0%	0.568 0.515	0.486	0.458
Workforce safety – close calls	3.0%	35,000	40,000	45,000 71,237
Workforce safety – close calls closed within 28 days (%)	2.0%	40%	47% 50%	60%
Passenger safety	5.0%	2.206	2.158	2.110 1.866
Level crossing risk reduction	5.0%	11.99 11.62	11.36	10.73
Train performance		Worse than target	Target	Better than target
Public performance measure	12.0%	89.7% 90.0%	91.1%	91.6%
Freight delivery	2.0%	92.0%	92.5%	94.5% 95.0%
Financial performance		Worse than target	Target	Better than target
Financial performance measure	20.0%	-234 £157m	0	+£157m
Investment		Worse than target	Target	Better than target
Top 10 IP renewals and enhancement milestones	7.5%	6	8	10
All delivery plan enhancement milestones (%)	7.5%	60% 65%	80%	100%
Asset management		Worse than target	Target	Better than target
Composite reliability index	7.5%	1%	6% 7.52%	10%
Renewals (7 key volumes)	7.5%	X ✓✓✓	✓✓✓✓✓	✓✓✓✓✓✓✓
Satisfaction		Worse than target	Target	Better than target
Customer	5.0%	3.00 3.15	3.32	3.49
Passenger	5.0%	81.0% 81.4%	83.3%	86.0%

Key to performance colours
● Below 'worse than target' ● Between 'worse than target' and 'target' ● Between 'target' and 'better than target' ● Above 'better than target'

1 Network Rail (2015): Annual Report and Accounts 2015 http://bit.ly/Shaw006

Giving voice to local priorities: customer driven, route-based scorecards

R1.11 Encouraged by the Shaw Report, Network Rail has moved to individual route-based scorecards. In future, the Shaw Report team recommends that this goes further still, so that the scorecards are used regularly to report on performance against key areas of focus and specific actions at route level. This will enable operators and Network Rail to work together better to develop short, medium and long-term action plans to deliver against local priorities and meet the needs of passengers and freight shippers. This should entail compiling a six-monthly scorecard that reports on progress against agreed deliverables, and should harness the power of public accountability and competitive pressure between routes by being published bi-annually.

R1.12 In order to make this process manageable, the main TOCs and FOCs in each route need to act as a reasonable proxy, or spokesperson, for their own customers, and should act on behalf of those customers in setting specific deliverables in various areas. By way of suggestion, these may include: performance; safety; passenger or customer experience; stewardship of the asset portfolio; stakeholder relations with adjacent infrastructure managers; asset availability (possessions); and train planning and peripheral infrastructure (i.e. stations/car parks). It would not be mandatory to have an action under each heading: it would be for the customers to determine their own priorities. Given the complexity of the flow of funds in the industry, the scorecard should also include a route-level profit and loss account that captures the finances of the overall industry, not just Network Rail in isolation. This could be synthesised from ORR reports, rather than created from sensitive commercial information of the separate organisations.

R1.13 To ensure that the actual voices of the passengers and freight shippers are not lost in determining the priorities, these deliverables must demonstrably be set in consultation with local passenger groups and freight shippers. This may be channelled through the routes' stakeholder panels, held regularly to bring together a wide range of interested parties.

R1.14 Of course, the routes will still have a railway to run, and as such not all individual requests can be accommodated. Decisions will require trade-offs to be made, with a joint understanding of operating within a wider system.

R1.15 In practice, this would be achieved by each route meeting with its main TOCs and FOCs twice a year (for example in February and July), following publication of Transport Focus' National Rail Passenger Survey (NRPS).

R1.16 The train operators would come prepared with the relevant data, for example:

- **TOCs:** NRPS results and, where relevant, agreed franchise requirements; and
- **FOCs:** Customer feedback and potential future customer needs.

R1.17 In addition, the route would need to come prepared to explain its existing plans, proposals from other customers and routes, and any regulatory requirements.

R1.18 On occasion, it may be appropriate for local authorities, with their own transport plans and budget availability, to join these meetings.

BOX 3

NATIONAL RAIL PASSENGER SURVEY

Run by Transport Focus, the National Rail Passenger Survey (NRPS) provides a network-wide picture of customers' satisfaction with rail travel. Passenger opinions of train services are collected twice a year from a representative sample of passenger journeys, and the full results are published.

The main report measures passengers' overall satisfaction (headline result) as well as satisfaction with the station, with the train, and 33 specific aspects of the service. The results are broken down by each TOC as well as by service type (London and South East, long-distance and regional). The continuity of the survey allows different elements to be compared over time.

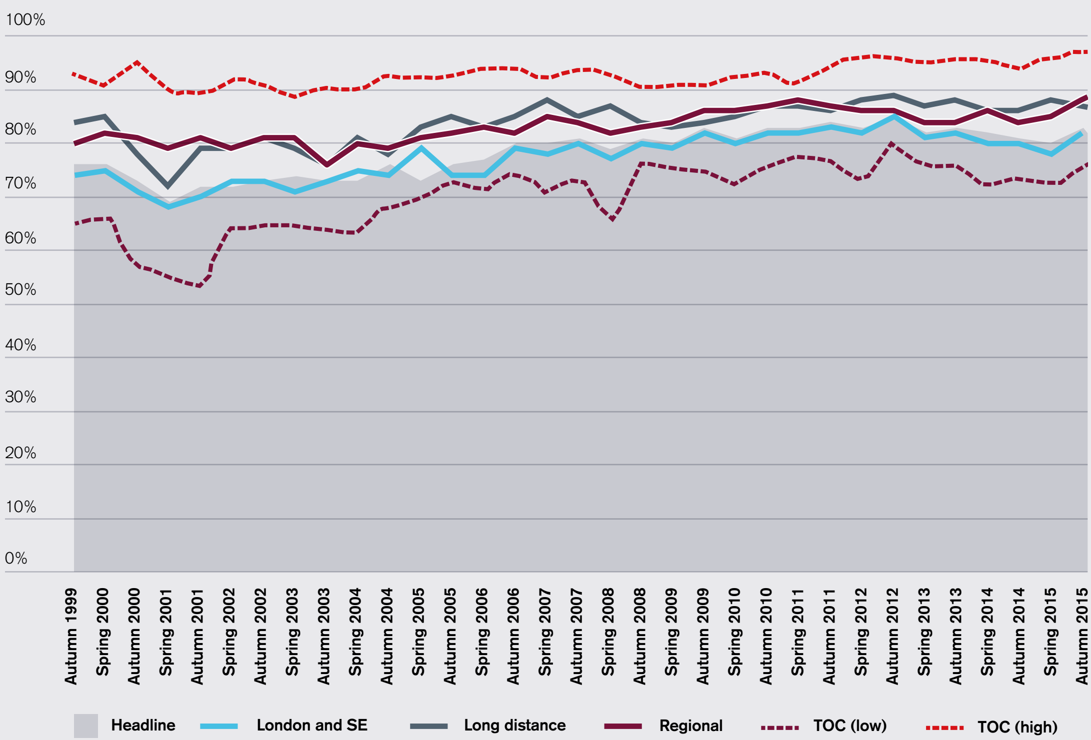
The graph below shows some of the historic data captured by the NRPS. Over the 15 years of data shown, overall satisfaction has averaged around 78%.

Overall, business and leisure travellers are significantly more satisfied with their journey than commuters (who recorded a 72% satisfaction rate in spring 2015).

Overwhelmingly, analysis shows that punctuality and reliability, and cleanliness inside train are the dominant drivers (52%) of satisfaction, while dissatisfaction is largely driven by how the train company deals with delays (58%) (spring and autumn 2015 data).

As such, the wealth of data available through the NRPS – including this detailed breakdown of the end-to-end elements of the journey – is a useful analytical tool and should provide input to the customer-led scorecard discussions and decisions, allowing TOCs to seek to address targeted areas for improvement. Of course, not all of these will be within Network Rail's gift alone. But by driving an enhanced understanding of what matters to passengers, TOCs and Network Rail should be able to work together to secure better outcomes.

Figure 5: Passenger satisfaction, National Rail Passenger Survey data



Source: Transport Focus

R1.19 Working together, the route and its operators should agree a set of short-term (six month to one year) deliverables. Specific actions with clear deadlines should be identified and committed to, for review at the next six-month meeting, at which feedback and scores are determined and published. Ongoing transparency over this process will help ensure the accountability of TOCs and FOCs to passengers and freight shippers, respectively, as well as that of the routes in delivery.

R1.20 Although the routes are smaller than Network Rail itself, they still cover large areas and have multiple customers so the plans will necessarily be focussed on "big ticket" items. Over time, it is expected that the various businesses will empower staff at local levels to mirror these route level processes, to develop action plans for local delivery which will both feed into and be informed by route plans.

R1.21 Of course, deliverables need to balance realistic and stretching outcomes, and should drive cost effective and technically innovative solutions. There may be a role for the regulator and/or the System Operator and Technical Authority to ensure consistency of a single route's plans with wider network considerations. Similarly, while the emphasis is on a customer-focused approach, decisions or views from the National Infrastructure Commission (NIC) and Department for Transport (DfT), among others, should also feed into the customer dialogue in order to ensure a clear, end-to-end line of sight that does not overlook the needs of passengers and freight shippers.

R1.22 There may be real reasons why customer-specified actions cannot, or should not, be taken forward – particularly when considered against the overall network outlook, but also on the basis of relative cost-benefit analysis, availability of scarce resource, or competing inter- or intra-route priorities.

R1.23 By fostering a more open and collaborative dialogue between Network Rail and its customers, these decisions would be more transparently communicated. Greater understanding of passengers' and freight shippers' requirements will help inform decision-making in order to justify actions taken by Network Rail, and manage customer expectations against the wider context.

R1.24 Given the immediacy of the NRPS impact, the time-limited franchise periods of TOCs and the fluid market of freight shippers (between operators and paths), there may be an inclination towards 'short-termism' to be overcome, in setting tangible deliverables.

R1.25 Therefore, in aligning interests across the whole railway industry, it will be vital for these parties to also look forward to the future needs of the railway, not just the near-term priorities. The action plan provides an opportunity to capture those requirements in the round, and should also stipulate actions to explore longer-term solutions (over the next 5, 10, 20 years). This may be in the form of a SWOT analysis (such as anticipating future pinch points on particular paths and identifying the need for additional capacity), and actions may include completion of feasibility studies, funding bids, progression through GRIP and so on. This should then feed into the development of route enhancement strategies.

R1.26 A strong and open dialogue, and separate routes that can agree actions and priorities directly with their customers – and who are held directly accountable for delivery against those actions – will help redress the imbalance of a single national monopoly being pitched against much smaller counterparties, and should drive better behaviour as a result.

R1.27 The process should be reviewed again after a few cycles to ensure that the collaborative intent is being honoured, to reflect on whether the level of stretch is appropriate, and to assess whether other incentives changes would reinforce and improve it.

R1.28 The approach recommended by the Shaw Report places the customer – and, through them, passengers and freight shippers – at the heart of infrastructure planning and delivery. Routes should work together with their customers in a shared aim of driving continuous improvement across those areas that matter most to the users of the railway.

Figure 6: Route-based action plan and scorecard – process

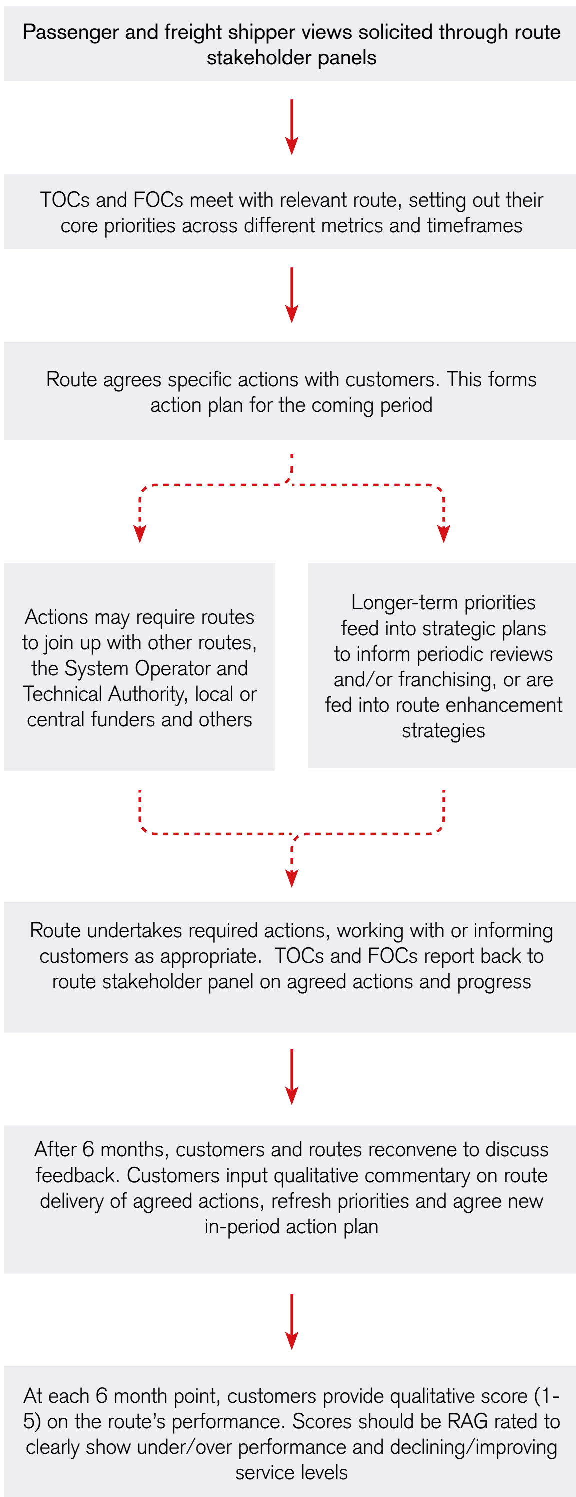


Figure 7: Route-based action plan and scorecard – illustrative examples

ACTION PLAN

	PRIORITIES	ACTION		FEEDBACK
MEASURE	**CUSTOMER-DRIVEN PRIORITIES**	**LAST 6 MONTH KEY DELIVERABLES**	**NEXT 6 MONTH KEY DELIVERABLES**	**COMMENTS AND CONCERNS**
Performance	*eg. Seamless introduction of new rolling stock*		*eg. Route to speak to access rights panel re: recast timetable*	
Safety		*eg. Upgrade level crossing new rolling stock*		*eg. Upgrade successfully completed*
Passenger or customer experience				
Stewardship of the asset portfolio				
Stakeholder relations with adjacent infrastructure managers	*eg. Multi-jurisdictional freight upgrade*		*eg. Route to engage with freight route to convene working group*	
Asset availability (possessions)				
Efficiency				
Train planning				
Peripheral infrastructure (i.e. stations/car parks)	*eg. Station upgrade to cope with increasing passenger traffic - ticket barriers and platform extension*	*eg. Prepare business case*	*eg. Progress project to GRIP 4*	*eg. Excellent. Business case completed ahead of time, agreed with TOC to bid for and secured funding*
Medium-term (1-5 years)	*eg. Successful completion of station upgrade*	*eg. Information campaign to keep passengers and neighbours updated*		*eg. Website updated in a timely manner although leaflets were delayed*
Long-term (5, 10, 15, 20 years)	*eg. Meeting capacity growth*	*eg. Complete SWOT analysis to identify possible candidates for new path*	*eg. Route to complete feasibility study of taking forward short-listed options*	*eg. SWOT completed satisfactarily.Feasibility study should involve early engagement of supply chaininclude making use of a particular new technology*

CUSTOMER SATISFACTION

MEASURE	JUL 2016	JAN 2017	JUL 2017	JAN 2018	JUL 2018
National Rail Passenger Survey satisfaction (local TOC scores)					
Network Rail customer satisfaction survey (by route)					

ROUTE-BASED CUSTOMER SCORES

MEASURE	JUL 2016	JAN 2017	JUL 2017	JAN 2018	JUL 2018
Performance	*eg. 3* ●				
Safety		*eg. 5* ●			
Passenger or customer experience					
Stewardship of the asset portfolio					
Stakeholder relations with adjacent infrastructure managers					
Asset availability (possessions)					
Efficiency	*eg. 4* ●				
Train planning					
Peripheral infrastructure (i.e. stations/car parks)					

FINANCIAL PERFORMANCE

MEASURE	JUL 2016	JAN 2016	JUL 2017	JAN 2016	JUL 2018
Whole industry, route-level profit and loss					

SCORING

1= Unacceptable
2= Poor
3= Satisfactory
4= Good
5= Excellent

RAG

● = Up
● = Down
● = Same

R2

RECOMMENDATION 2

Focus on the customer through deeper route devolution supported by independent regulation

Significant and substantive route devolution

R2

R2.1 Throughout the report team's consultation many of Network Rail's customers expressed their frustration at the organisation's lack of focus on their needs. They spoke of a lack of agreement between different functions in Network Rail, poor communication and layers of bureaucracy between different individuals and teams, and a continuously moving appraisal and funding framework. The experience of the Wessex alliance, which was dissolved in June 2015, was just one (albeit high profile) example of this.

R2.2 There are a number of reasons why Network Rail's customers have such experiences of dealing with the organisation. These include:

- the size and complexity of the delivery requirements;
- natural monopoly characteristics which insulate Network Rail from competitive pressure;
- central government ownership and funding hence very close political involvement in a very high profile and emotive industry;
- the bureaucracy inherent in an organisation the size of Network Rail; and
- input based economic regulation that has evolved over time to become more central to funding flows than Network Rail's customers.

R2.3 What is clear is that structurally, Network Rail could be, and should be, more agile in how it responds to the changing wants and needs of its customers. The Shaw Report team recommends further and faster devolution to Network Rail routes, building on the work done to date.

R2.4 There is of course an inherent tension between devolving powers to the routes in a meaningful way, and retaining a network-wide perspective across a national system. Clear governance arrangements, accountabilities and reporting lines will be key to embedding the functional and behavioural changes that will support the new structure, and allow Network Rail to enjoy the benefits of both local engagement and national oversight.

R2.5 The role of regulation is clearly linked to Network Rail's organisation and customer focus. As a result, it is clear that changes to the way in which the ORR regulates Network Rail will be necessary in order to complement changes to Network Rail's structure. In particular the ORR will need to focus on the routes to which responsibility is being devolved as the main unit of their regulatory attention, using public benchmarking and other transparent regulatory mechanics to drive improved outputs and efficiency

R2.6 Network Rail itself has recognised that it needs to be more flexible and agile in meeting the needs of its customers, and has already taken steps to adjust this delicate balance. The new operating model that Chief Executive Mark Carne unveiled in October 2015[1] (which continues to be implemented), is intended to devolve more responsibility to Network Rail's routes; the geographic business units around which delivery of infrastructure is organised.

1 The Shaw Report (November 2015): The future shape and financing of Network Rail – The scope http://bit.ly/ShawScoping

R2.7 The primary elements of this model include:

- a rebalancing of operational responsibility from the centre, with greater devolved autonomy for the routes;
- a corresponding reduction of responsibility for the centre, focused on "system operator" functions, such as network capacity planning, and "technical authority" functions, such as the setting of high-level technical standards;
- the creation of a Route Services Directorate to act as a provider to the routes of services for which economies of scale or scope might be retained through centralised delivery, or for which a degree of network-wide co-ordination is needed;
- the formation of Infrastructure Projects and Digital Railway directorates; and
- the maintenance of a central executive function to manage the business as a whole, in particular to make trade-offs and resource allocation decisions between and across different routes, and into which the routes ultimately report.

R2.8 The report team has worked closely with Mark Carne and Network Rail Chair, Sir Peter Hendy, to consider how the programme of devolution already being carried out within the company can be further extended to drive out even greater benefits for customers and taxpayers alike. The proposals contained in this chapter, therefore, represent an evolution, extension and validation of a direction of travel already set in motion by the company's leadership.

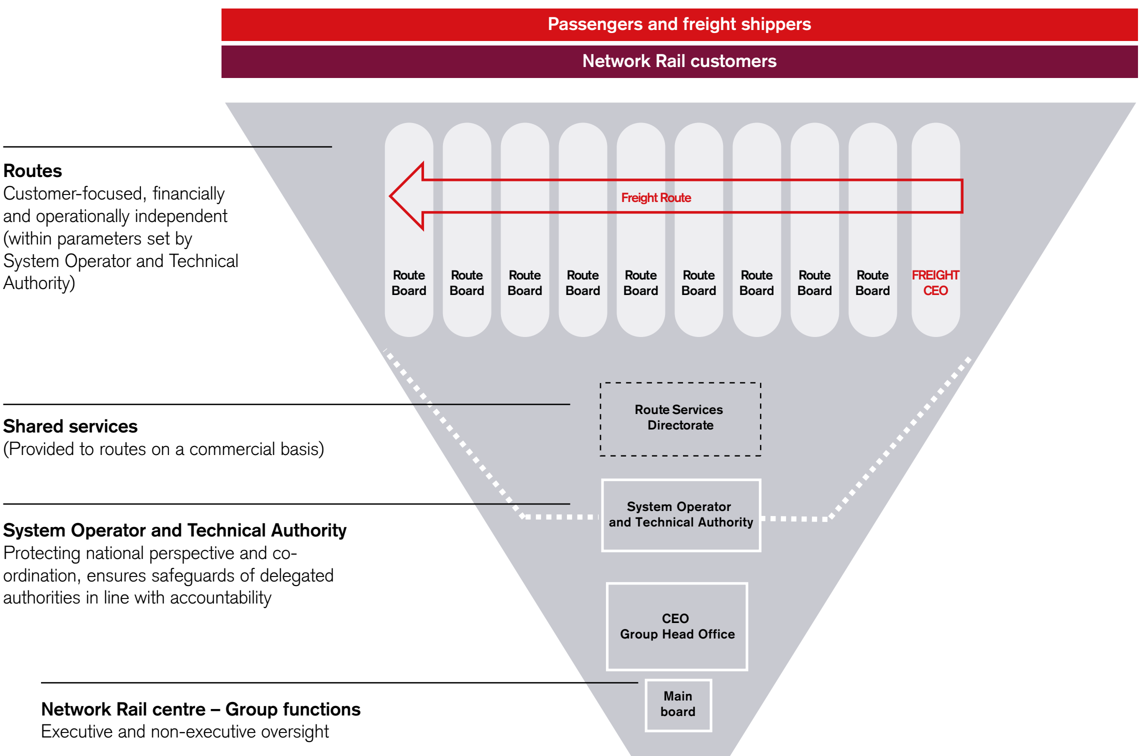
R2.9 Ultimately this will require a rebalancing of operational responsibilities, based on a 'route-led' approach, coupled with routes being given a greater degree of control over their own finances.

R2.10 Alongside this premise of more operationally and financially autonomous routes, there is a need to preserve a national outlook and co-ordination function. The revised division of responsibilities also needs clear governance and accountability arrangements in place to support and embed this change.

A new shape for Network Rail

R2.11 Figure 8 illustrates the proposed model of operation for Network Rail, clearly showing the routes closer to their customers and more autonomous from the direct input of the centre.

Figure 8: New shape for Network Rail



R2.12 At a minimum these autonomous routes will need to carry out the following functions:

- **asset management policy, strategy, and planning**: it will be for the routes to decide how best to maintain and renew their assets, within a framework set by the System Operator and Technical Authority, in order to minimise the whole life cost of those assets, deliver for customers and live within their means;
- **optimisation of engineering works**: as a consequence of being responsible for operations, maintenance and renewals, and subject to making consequential performance-related payments, the routes will, in consultation with customers, best balance the needs of operating and maintaining the railway;
- **contracting for development and delivery of minor enhancements:** enhancements with limited national impact should be specified, planned and delivered at a route level. In addition to allowing these minor enhancements to be aligned with the programmed maintenance and renewals, the routes will prioritise the needs of the customer in how they choose to deliver the enhancements. Some tensions currently exist between locally desired innovation and the centralised technical teams; in the new, more autonomous route model, route chief executives will need to champion and drive innovation. They will need to be innovative to be able to deliver effectively for customers given growing demand and limited budget;
- **sale of access rights and timetabling:** in order to be responsive to customer needs, each route will engage with the sale of access rights process for passenger and freight operating companies. Also, the routes will attend the timetabling conference run by the System Operator and Technical Authority to ensure that the timetable is one that they can deliver locally;
- **performance:** the routes will be responsible for train performance on their sections of the network, and will benefit or feel the pain from the performance regime depending on how they perform. In addition, through their close relationships with customers, they can define specific localised response plans which better reflect the priorities of the customers in the area; and
- **property:** the Shaw Report team has not commented on Network Rail's property portfolio as work is still ongoing to take forward the asset disposal recommendations in the Hendy Review. Following these disposals, any remaining assets should be aligned with the routes in which they are based and be supported by the property management expertise in the Route Services Directorate.

R2.13 The ORR may need to reflect these changes to the ways in which the routes carry out their duties in the Network Code, so as to formalise the customer relationships that the routes will be responsible for managing.

Governance and corporate structure

R2.14 One way of giving routes this autonomy, in line with governance best practice, would be for each route to have oversight from a sub-committee of Network Rail's main board – a route management board. As sub-committees of the main board, the route management boards should be able to have delegated authority for the majority of the company's activities for their route and assume responsibility and accountability for the route's finances and operations. Network Rail should also consider having route management boards independently chaired.

R2.15 Network Rail will remain one company, and so the governance should also be arranged in order to satisfy its directors that they are retaining the appropriate level of central oversight of the routes. However, this should not interfere with the principle of delegating authority to the routes in a meaningful way.

R2.16 Additional local and customer focus could be provided by a quarterly route stakeholder panel attended by further local stakeholders, such as local government, devolved bodies, unions, lineside neighbours or passenger representatives. The views of these panels will feed into route-level action plans, scorecards and enhancement strategies.

Freight focus

R2.17 The rail freight industry has a positive environmental impact by reducing the number of lorries and heavy goods vehicles on the roads. This is in addition to the significant economic benefit (over £1.6 billion every year[2]) that rail freight brings to UK plc.

R2.18 However, despite the importance of rail freight, and an improving overall satisfaction score, just 47% of the FOCs that responded to Network Rail's customer satisfaction survey[3] feel that Network Rail is doing its best for the freight industry.

R2.19 A virtual freight route, sharing some of the properties of the geographical routes in terms of autonomy and local policy-setting, and subject to the same network-wide considerations, will ensure that the realities of rail freight transport are recognised in the new arrangements. The nature of rail freight businesses means that trains will cross several route boundaries, and these operators typically have lean management teams who need to understand the full national network in order to deliver for their customers. The role of the freight route will therefore be outward facing and primarily tasked with managing the relationships between freight operators and the other routes.

2 Rail Delivery Group: Freight Britain – Continuity and certainty for rail freight 2015 http://bit.ly/Shaw007
3 Network Rail (November 2015): customer satisfaction survey

R2.20 This builds on the current Network Rail model, but the Shaw Report team intends that the role of the freight team is protected and enhanced, rather than diluted in a further devolved organisation. The role of this route should include identifying opportunities for freight, helping develop and implement freight policy, managing freight performance and acting as overall champion to ensure that freight operators are not overlooked in what is a primarily passenger-dominated railway.

R2.21 The freight route will give freight companies and customers a single point of contact through which to arrange access to multiple routes and engage in very short-term train planning, mitigating any unintended adverse consequences of devolution. This is particularly important given that freight flows are more variable than passenger flows and can be required at very short notice. This does not preclude the option that freight operators would have of engaging individually with the relevant routes should freight operators find this preferable.

R2.22 The freight route will clearly not be identical to the other routes, as it will not be operating infrastructure. However, it should be headed by a freight CEO who is on equal standing to route CEOs and has the authority to act in the best interests of freight customers in the same way a route CEO would do for their geographical customers. Additional network-wide focus on freight can be provided by the freight CEO (or a freight representative) attending the route management boards, to communicate the freight perspective, including the views of local freight customers.

The freight route will give freight companies and customers a single point of contact through which to arrange access to multiple routes and continue to engage in very short-term train planning, mitigating any unintended adverse consequences

Cross-cutting fora

R2.23 Of course, routes cannot – and should not – be expected to operate autonomously in isolation from each other. The reality of the railway network is that traffic frequently crosses artificial route boundaries and those managing the infrastructure must collaborate accordingly to allow this to happen seamlessly.

R2.24 In support of a route-led approach to meeting customer needs, it will be advisable to create fora at which specific issues can be debated and addressed. This is not with a view to instilling additional burdens or bureaucracy, but rather to facilitate a joined up and cohesive approach to drive customer-oriented solutions in a way that balances routes' competing needs.

The reality of the railway network is that traffic frequently crosses artificial route boundaries and those managing the infrastructure must collaborate accordingly to allow this to happen seamlessly

R2.25 The Shaw Report team recommends that routes consider what fora are required and work together to set them up whilst minimising bureaucracy. It is essential that these fora evolve to reflect the issues and priorities facing the railway over time.

R2.26 Additionally, routes will be expected to reach agreement on how they will deal with:

- **co-ordination of response staff for network-wide incidents:** a desirable characteristic of the current model is the sharing of staff and resources across routes in times of network perturbations, and this should not be lost. In other industries this has been formalised in specific agreements (as in electricity and water) where the regulatory requirements are suspended to ensure that there is no disincentive to assist during times of national need; and
- **network-wide 'gold command':** there will inevitably be instances where perturbations are so severe or critical that one route will have to take the lead role in co-ordinating the response of the railway. All routes will need to work together under this arrangement until normal service can be resumed.

A national network

R2.27 This chapter has focused on more localised customer delivery and planning at route level. However, the railway is a national network, greater than the sum of its component route parts. The routes must therefore operate within an overarching framework, which protects the integrity and coherence of the national network, without being subject to undue 'command and control' influence.

R2.28 With the weight of responsibility for operating, maintaining and renewing the railway being shifted to the routes, the national role will become more tightly focused on co-ordinating cross-network activities. In doing so, stewardship of the network will be retained, setting the parameters within which routes can safely act, and preserving the benefits of those activities best provided centrally (i.e. for reasons of economies of scale or scarcity of resource).

R2.29 The directorates operating at national level within Network Rail should therefore be set out in future as follows:

- Group Head Office (corporate core);
- System Operator and Technical Authority (co-ordination of network-wide activities and standards); and
- Route Services Directorate (providing those functions which have an economy of scale).

Group Head Office functions

R2.30 As a single company, Network Rail will continue to need to perform corporate functions such as those of the Chief Finance Officer to consolidate all route accounts and oversee the budget for central operations and group HR.

With the weight of responsibility for operating, maintaining and renewing the railway being shifted to the routes, the national role will become more tightly focussed on co-ordinating cross network activities

System Operator and Technical Authority

R2.31 Network Rail's October 2015 operating model shows the separation of a 'System Operator' that carries out functions on a cross-route basis, and in particular protects the network-wide focus that may otherwise get lost if all focus is solely on local priorities. Similarly the ORR consulted on the concept of the System Operator in 2015. The Shaw Report team agrees with the importance of focusing on these functions in the manner in which Network Rail has proposed, and recommends that the following functions are within the scope of the System Operator and Technical Authority:

- **health and safety**: providing health and safety direction and guidance, and benchmarking for the routes;
- **setting standards**: setting standards which must be consistent, or reach a minimum standard across the network such as company standards and train planning rules;
- **issue high-level guidelines**: setting general, high level guidelines on dealing with specific events or cross-network issues;
- **information consolidation:** requiring routes to provide information in order to deliver certain national requirements, such as the production of the network statement;
- **sale of access rights**: co-ordinating the sale of access rights using a panel. Access proposals brought to this panel, with representatives from the routes and customers involved, in order for a decision to be made. This is important for understanding what capacity has been sold on the network and for turning access rights into a working timetable; and
- **timetabling**: writing the national timetable, providing the timetabling systems and hosting the timetabling conference.

Route Services

R2.32 In line with Network Rail's model of devolution, the Route Services Directorate will continue to provide services to routes on the basis that it can use its bulk purchasing power to deliver cost savings and provide a single purchasing authority for routes should they wish to make use of it.

R2.33 The Route Services Directorate will also continue to co-ordinate and provide those activities which require the utilisation of scarce resources, for example Network Rail's yellow plant. This is because it is unlikely that there will be another provider that can match the capacity of route services scarce resources, and routes are not likely to seek to have their own dedicated resource due to the associated costs.

R2.34 Additionally, the national buying power of Route Services Directorate can allow for better alignment of the supply chain in meeting all of the requirements of routes in an efficient manner.

R2.35 There will be some services – for example mobile flash butt welders or generic back office functions – that could be provided competitively by other companies outside of Network Rail. In order for these to continue to be viable elements of the Route Services Directorate they will need to remain competitive or cease operation. Routes will test this over time.

R2.36 The System Operator and Technical Authority and Route Services Directorate functions must be open to any route (either Network Rail-owned or in concession) or infrastructure manager (such as HS1 and HS2).

R2.37 The Infrastructure Projects team should either move into the Route Services Directorate or be made very much more clearly an organisation which exists only to deliver services to the routes.

The need for effective, independent regulation

R2.38 This chapter has so far illustrated how substantial route devolution will deliver a greater focus on responding to customer needs. However, the proposals set out above will require that effective, independent regulation supports and guarantees that autonomy.

R2.39 As the monopoly provider of the railway infrastructure, Network Rail does not face the full commercial and competitive incentives that normal businesses face. If the recommendations in this chapter are implemented, passenger and freight operators will be working at route level with Network Rail to agree how best to meet passengers' and freight shippers' needs.

R2.40 Routes will therefore be likely to focus on the issues of importance to customers in the shorter term. Independent and effective regulation will be required in order to balance that with the longer-term need to manage assets efficiently and in a way that minimises whole life costs. Regulation will also need to ensure that routes have financial autonomy alongside their operational autonomy, and ensure all customers are treated fairly.

R2.41 However the public ownership of Network Rail does make the role of independent regulation more difficult. Any comments on Network Rail (covering its management, its approach, its delivery, its spending and so on) by the independent regulator could be perceived as a criticism of the government as the owner of Network Rail. Making the various roles clearer and recognising the points of potential conflict are necessary in order to allow each organisation to play its proper role.

Network Rail's financial performance

R2.42 Network Rail's financial performance is a key driver of the costs that passenger and freight operators face, as well as the level of government subsidy that is required to run a safe and sustainable railway. A key role of independent regulation will be to ensure that Network Rail delivers value for money to its customers.

R2.43 Box 4 sets out Network Rail's financial performance since 2003. Network Rail has achieved considerable improvements in efficiency which have reduced the railway's call on the public purse. Despite these improvements, financial performance has slipped in recent years. In response, Network Rail has set out revised plans to deliver efficiencies of 16% over Control Period 5 (CP5).

R2.44 Regulatory changes could support the proposals set out earlier in this chapter in delivering further efficiency. In particular, comparative transparency and competition in a world with substantial operational devolution should drive further efficiency and cost reduction.

BOX 4

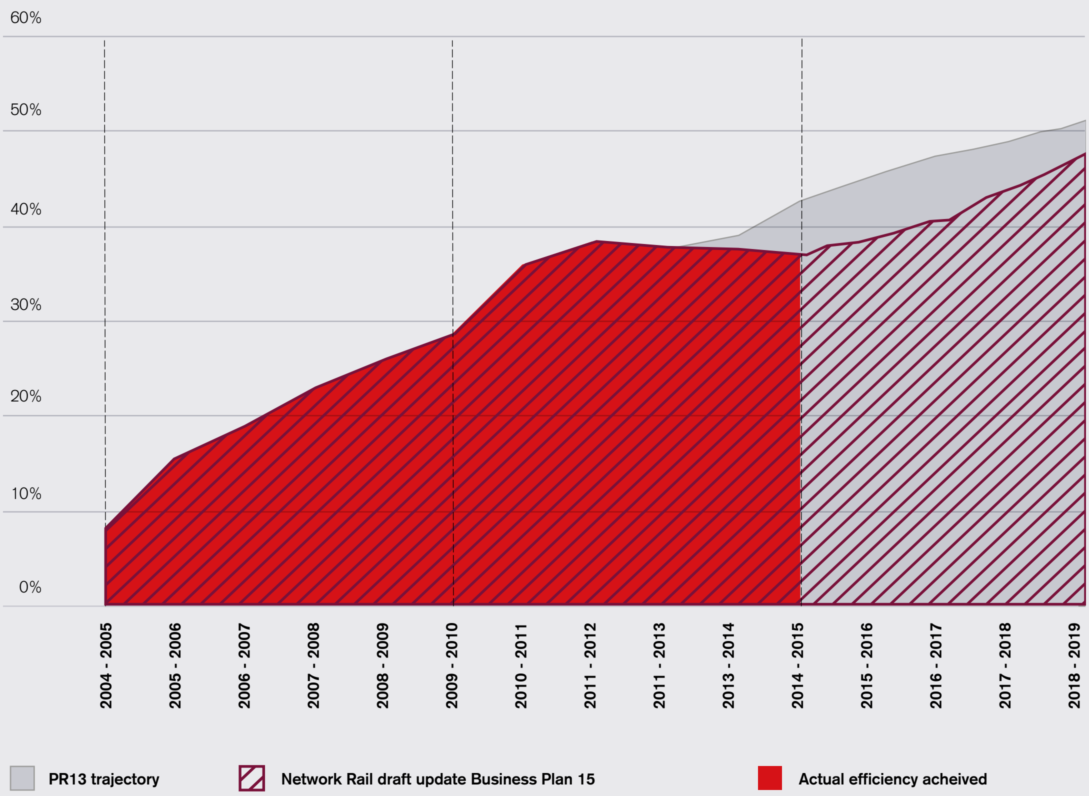
NETWORK RAIL'S FINANCIAL PERFORMANCE SINCE 2003

Network Rail has achieved a considerable improvement in the financial performance of the core business of operating, maintaining, and renewing the railway infrastructure since it took over the task in 2002. Since 2003/04, Network Rail has achieved efficiencies in its core OMR business of around 37%, which has reduced the burden of running the railway on the taxpayer.

However, as figure 9 shows, while Network Rail has achieved considerable efficiencies, progress has stalled. In 2014/15 efficiency fell by 2.3%, the third successive annual fall. Network Rail faces a considerable challenge if it is to meet the ORR's CP5 efficiency target of 19.4%. In its draft update business plan, Network Rail set out plans to deliver 16% of efficiency over CP5.

Shortfalls in efficiency have, inevitably, driven overspends against the ORR's regulatory determinations. In 2014/15, Network Rail overspent on OMR by £200 million against the PR13 determination, despite record low interest rates leading to a £250 million financing underspend and the deferral of £400 million of renewals work[4].

Figure 9: Network Rail OMR cumulative efficiency improvement since 2003/04



4 Office of Rail and Road (2015): Efficiency and finance assessment of Network Rail 2014/15 http://bit.ly/Shaw003

Comparative competition in a national network

R2.45 The report team recommends that the determination of Network Rail's operations, maintenance and renewals (OMR) expenditure should continue to be set by a periodic review process, run by the ORR with input from industry and government. Retaining this regulatory model – while relatively unique within the public sector – will allow independent, expert benchmarking and comparative competition of the kind that has driven efficiency and performance in other regulated utilities.

R2.46 The ORR has already made it clear that it intends to move to a more decentralised form of regulation, setting its regulatory settlements on the basis of route data and route outputs. The recommendations set out earlier in this chapter provide a unique opportunity to further support Network Rail's efforts to improve efficiency.

R2.47 The report team therefore recommends that the ORR should, for the next periodic review, regulate Network Rail on a route level, setting regulated outputs, expenditure and revenue by route. This will require that the routes have sufficient independence to pursue regulated outputs and financial performance.

R2.48 Separate regulatory settlements will mean that the ORR can use route-level benchmarking to inform and enforce distinct outputs and efficiency targets, aligned to what individual routes are able to achieve. Benchmarking can identify best practice across the network, and be used to hold routes to account for their performance. This will help motivate good performance with public success being a strong driver for individual delivery.

R2.49 Where economic regulation based on benchmarking of geographic entities has been introduced elsewhere it has played a vital role in driving efficiency. Box 5 sets out the example of Scottish Water – the publicly owned water company in Scotland – where the introduction of benchmarking-based economic regulation drove significant efficiency gains.

BOX 5

BENCHMARKING IN THE PUBLIC SECTOR: SCOTTISH WATER

Economic regulation in the public sector is rare, but not unheard of. Scottish Water – the monopoly domestic and sewerage water service provider in Scotland – is regulated by the Water Industry Commission for Scotland. Prior to the introduction of economic regulation in the early 2000s, Scottish water faced a substantial efficiency gap in comparison to the private water companies in England and Wales.

Comparative competition and benchmarking against the privately owned water companies in England and Wales has supported the regulator and Scottish Water in driving considerable efficiency. Since economic regulation was introduced, Scottish Water has achieved a reduction in operating costs of 40%.[5]

In its latest final determination, the Water Industry Commission for Scotland continued to use comparisons to other regional water companies in England and Wales to drive higher financial and service performance. In doing so, it set out that Scottish Water should improve its service performance to match the best performing water companies in England and Wales, while achieving further, albeit smaller, cost reductions between 2015 and 2021. In order to do this, the Water Industry Commission for Scotland estimated that Scottish Water would have to deliver further efficiency of 11% on top of annual unit cost reductions of 0.6%.

5 Water Industry Commission for Scotland (2014): Strategic Review of Charges 2015-2021: The draft determination http://bit.ly/Shaw008

R2.50 In order for the ORR to be able to set, monitor, and enforce separate regulatory settlements for routes effectively, it will be important for each route to produce and to publish full, separate regulatory accounts.

R2.51 To maximise the benefits of this approach, it will be important for there to be a clear ring fence around these route accounts.

R2.52 This will mean that routes should be incentivised to outperform their regulatory settlement, with ‘cross-subsidy’ limited to circumstances set out later in this chapter. This creates a genuine financial incentive for routes to outperform, and for local staff and customers to contribute to the effective and efficient functioning of the railway.

R2.53 While no two models are identical, similar arrangements have existed in other regulated utilities such as in airports, gas, and air traffic control, as set out in box 6.

R2.54 In order for this ring fence to be effective, the routes will have to receive the track access charges and single till income that they generate. Currently, track access charges are paid to Network Rail. Network Rail, the ORR, and the DfT will have to design an automatic and formulaic mechanism through which routes automatically receive the income associated with the access they manage. Because all income will go to the routes, there will have to be a subsequent flow of funds to the centre, based on a central regulatory settlement to pay for head office functions and System Operator and Technical Authority functions and a similar flow of funds to the freight route. Routes will pay for services from the Route Services Directorate on a commercial basis.

BOX 6

RING FENCING IN OTHER REGULATED UTILITIES

While no model is identical, there are a number of examples where regulated companies have been subject to forms of ring fencing.

Gatwick, Heathrow, and Stanstead airports were, prior to 2008, all owned by the British Airports Authority (BAA) and regulated by the Civil Aviation Authority (CAA). Initially, the CAA regulated BAA as one company, but it was recognised that the regulatory model was stifling competition, innovation and efficiency, in particular at Stansted Airport. This led to changes to regulate each airport separately and promote a more competitive environment between the three London airports. In 2008, the Competition Commission ultimately determined that the changes did not go far enough and required BAA to sell Gatwick, Stansted and Edinburgh airports.

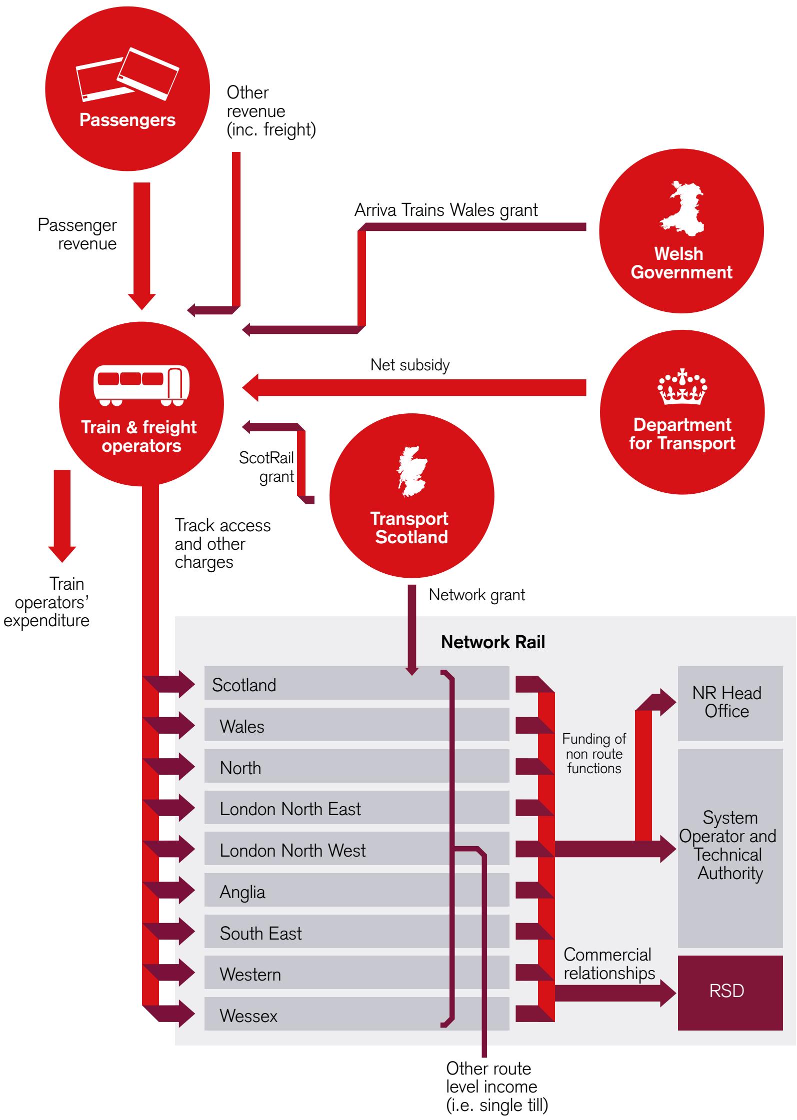
National Grid, as owner of several gas distribution assets, is subject to a broadly framed (and absolute) prohibition on the giving or receiving of cross subsidy from the licensee to any other businesses. This ensures that the profits from one distribution network cannot be used to offset the losses from another distribution network.

There have been alternative means of achieving such a financial ring fence: In British Gas plc’s (now defunct) transporter licence, it was obliged to appoint a Managing Director for Transco, responsible for the conduct of the transportation and storage businesses, ensuring appropriate ring fencing within the company and ensuring that there were no unjustified cross-subsidies applied across the group.

Under its current Air Traffic Services Licence, NATS, the main air navigation service provider in the UK, is subject to a prohibition on cross-subsidies where these have, are intended to have, or are likely to have the effect of preventing, restricting or distorting competition in any market for the provision of air traffic services. The CAA recently consulted on changes to this arrangement which would allow cross-subsidies only “justified for objective reasons”.

R2.55 Figure 10 below sets out the effective flow of funds in the industry from CP6 onwards as the result of introducing separate regulatory settlements in a ring fenced model.

Figure 10: Funding flows in a ring fenced model



R2.56 As in other regulated industries, there will be an incentive for routes to 'under-bid' achievable efficiency in their submission to the regulator. This can either be in the expectation of achieving larger underspends, or as insurance against the risk of overspending. Proposals set out in this report for a clear process by which routes can manage risk will reduce this incentive.

R2.57 In rail, given the public sector ownership and the new route level management recommended in this chapter, there are at least two additional challenges for regulation:

- **the transition process,** while routes become more capable asset managers with distinct approaches to their parts of the national network. This will require information provision to be standardised as far as possible (information being the oxygen of regulation), and the ORR should consider what mechanisms may be necessary to deal with financial uncertainty in early years. In relation to information standards and provision, the ORR will need to draw on its existing powers and the learning from other industries such as water, energy and airports. Further recommendations are made below about dealing with uncertainty during transition; and
- **the ORR's independence from government,** which will inevitably be more difficult to guarantee given Network Rail's public ownership. Independent regulation needs to be seen to be such for it to have the appropriate authority. Any doubt around independence can have long-term repercussions. For example, each of the routes within Network Rail will need to have a clear understanding that government will not unduly intervene in the process of the ORR's periodic review. Detail is set out below on cases in which there may be particular tensions and therefore where greater transparency is required in order to protect that independence.

Independent regulation needs to be seen to be such for it to have the appropriate authority. Any doubt around independence can have long term repercussions

Apportioning assets and liabilities between Network Rail routes

R2.58 The apportionment of Network Rail's assets (in the form of its regulatory asset base (RAB)) and debt will be a vital component of separate regulatory settlements.

R2.59 Routes will not be able to hold debt independently, as the company as a whole will continue to hold Network Rail debt. Nonetheless, it will be important for debt to be apportioned to routes in practice, if not in legal fact (as is already the case for Scotland). Debt will ultimately remain the debt of Network Rail, but routes will be accountable in a regulatory sense for the practice of issuance, the payment of interest, and repayment. This will ensure that they are responsible for their financial decisions, and will support a focus on financial efficiency.

R2.60 The report team has considered whether it remains appropriate for Network Rail, which will remain a public sector body, to have a RAB. In the public sector, the RAB inevitably has a different role; nevertheless, the report team recommends that the RAB should be retained. Although its role in determining Network Rail's revenue requirement, charges, and in managing financial risk will be different in some respects to other regulated utilities, retaining the RAB will help to leave the option of private sector capital in the future open, maintain a transparent record of efficient capital expenditure, and help to keep Network Rail's routes on a level regulatory playing field to any routes let in concession (or time-limited licence). It also helps to provide transparency on the reasons for changes in Network Rail's debt by showing the value of asset debt that has been purchased.

R2.61 This means that the ORR will have to assign a level of RAB and debt to each route, and from that point onwards record additions to both on a route-level basis. A similar apportionment exercise will have to take place for any routes let in concession or licence (see section R6) although with the distinction that they will raise debt in their own right.

R2.62 The ORR has developed a methodology for apportioning both the RAB and the debt of Network Rail into regional components, based on the geographical distribution of physical assets.[6] This methodology was used in order to split Network Rail's RAB and its debt into its Scottish and England and Wales components in 2005.

R2.63 The scoping document identified that there has been a debate on the size of the RAB. The report team has ultimately concluded that it is not necessary for it to make a recommendation either way on the current size of the RAB in order to support the implementation of its recommendations. The report team has not identified any strong reasons that it would need to recommend a reduction in the RAB: given that the report is recommending that Network Rail remains in the public sector, the size of Network Rail's RAB (and debt) has no material impact on Network Rail's finances, operation, or the government's overall fiscal position. Nonetheless, it is in the government's gift to judge whether the RAB should be resized if it takes the view that its current level is unsustainable or undesirable.

R2.64 Should the government wish to limit the future growth of Network Rail's debt or RAB, then it would need to switch a share of the financing of enhancements to grant funding with appropriate ORR oversight.

6 Office of Rail and Road (2005): ORR's approach to regulation in Scotland: Conclusions http://bit.ly/Shaw009

Risk pooling across the network

R2.65 It is, of course, reasonable that a single company should seek to move resources from one area to another when looking to the overall financial sustainability of the company. For Network Rail, such transfers might also be needed to maintain network coherence. Thus, there is clearly a potential need for a central function to pool network-wide risk and to deal with underperformance as and when it occurs. So while, for the reasons set out above, it will be important to preserve the integrity of the ring fence between routes as far as possible, there should also be mechanics in place to allow such risk pooling.

R2.66 Before reclassification, Network Rail managed its financial risk through RAB-based mechanics (as set out in detail in the scoping document). Briefly, these included a 'balance sheet buffer', with borrowing against the RAB authorised up to a regulatory limit; and the opportunity to add capital expenditure overspends to the RAB. Since reclassification, these mechanisms have continued to exist but have effectively been replaced by a risk buffer in the DfT loan facility, initially set at £1.8 billion,[7] which has capped the degree to which Network Rail can overspend.

R2.67 In the future, routes will require a mechanism through which they can manage financial risk against their regulatory settlement. This is particularly true given that routes will have a smaller revenue base than Network Rail as a whole within which to absorb risk, and in early years will still be building up local asset knowledge.

R2.68 Returning to unhindered RAB-based mechanics at a route level would potentially expose the government to more uncertainty than it would want to bear in the wider public spending context. In addition, individual route-level risk buffers may individually be too small in scale to be effective or credible, because an individual route may require flexibility in excess of a disaggregated cap while others may require none. In either case, there is a clear argument that Network Rail should not be able to simply pass on financial underperformance to the taxpayer without any conditionality.

R2.69 This strongly suggests that a new mechanism will be required that will permit routes sufficient financial flexibility, but with effective conditions which ensure both that routes improve, and that there is a reputational cost attached to underperformance.

R2.70 In order to tackle these issues, the report team recommends that, in place of the mechanisms currently available to Network Rail, there is instead a route reserve mechanism. This would create a clear process by which routes could manage financial risk over the course of a control period. Through this mechanism, resources could be allocated effectively across the network, while genuine overspends would bear a reputational cost and come with clear conditions for improvement.

7 Parliament UK (2015): Network Rail: Written question – 5695 http://bit.ly/Shaw010

R2.71 The reserve would be set for the whole of Network Rail per regulatory control period, and could be in the form of either repayable loans or grants. Routes would be permitted to access the route reserve in order to cover shortfalls in income against expenditure that they could not cover by other means, and would have to inform the ORR of the overspend. A condition of accessing the reserve, other than to facilitate a genuine reprofiling of expenditure over a control period, should be that the route is required to agree a performance improvement plan with the ORR to prevent further or future overspends. A similar process exists for Crossrail which, if it overspends, has to agree on an improvement plan with its sponsors.

R2.72 In the event that Network Rail as a whole overspends and runs out of its route reserve, it would be required to seek access to the government's reserve through the DfT.

R2.73 In the event that a concession or licence is let, as set out in section R6, the ORR will have to ensure that regulatory settlements across the concession and Network Rail are structured in such a way that they do not represent a distortion of competition.

Transition for early year uncertainty

R2.74 The report team recognises that only as routes become stronger independent units, with their own asset management approaches and better knowledge and understanding of their assets, will the cost of operating, maintaining and renewing the network become more certain. However, in the shorter term, for the periodic review in 2018, the model will be in its infancy. The ORR will therefore need to give thought to how flexibility is permitted between routes during CP6 (2019-2024) beyond that proposed in this chapter.

Guaranteeing independent regulation

R2.75 Network Rail is a unique corporate entity. It is owned by government, but not directly controlled by government; its board – largely not appointed by government – has independent fiduciary duties, while its income is effectively set by the regulator. The regulator is independent but its role is currently under review by the government.

R2.76 There are particular times when the ORR, the DfT, and Network Rail disagree – at times in the past this has included public disagreements. This is inevitable given rail's high political profile and the scale of government subsidy. Misunderstandings can easily develop, and it is possible for organisations with different responsibilities to have different perceptions of the same situation. Language, the method of communication, and changing priorities can all play a role in this even without differing incentives which do also exist.

R2.77 Key areas in which tension can arise include:

- the government's high-level output statement for rail and statement of funds available, and the ORR's determination at the end of the periodic review;
- the preparation and publication of regulatory accounts;
- the threshold between renewal and enhancement;
- ORR reports on Network Rail's performance;
- overspends by Network Rail requiring an interim review;
- underspends and how Network Rail uses these; and
- the degree of risk associated with franchise specification and the implications for network management and resilience.

R2.78 These points of tension cannot and should not be removed. The report team is alive to the need for healthy, challenging, and constructive dialogue between Network Rail, the ORR and the DfT. Nonetheless, they should collectively consider how they will engage constructively to deal with such instances in advance of these times of potential tension. Transparency of communication and publication will be an important factor in preventing any possibility that the ORR is viewed as lacking in independence.

R2.79 Some of these points of tension may also arise for the Scottish Government, Network Rail and the ORR. The DfT and Scottish ministers may wish to review their guidance to the ORR to acknowledge these tensions

Transparency of communication and publication will be an important factor in preventing any possibility that the ORR is viewed as lacking in independence

Financial levers to support customers – performance and charging regimes

R2.80 Throughout the course of this report, ongoing stakeholder engagement, consultation responses, discussion sessions, and the report team's own analysis have frequently raised the question of incentives.

R2.81 Conceptually, the term "incentives" is a catch-all for the numerous different levers that are meant to embed – or in some cases enforce – required behaviour. As set out in the scoping document, the main types of incentive operating on Network Rail are financial and reputational. Spanning across these two main categories are a series of performance metrics and regulatory targets.

R2.82 The chief performance metric within the rail industry (PPM, or the "public performance measure") relates to the on-time arrival of trains. Recently, Network Rail has been regulated against a PPM target, and yet it is only responsible for part of the underlying performance that goes into this measure. TOCs, for example, are responsible for managing their staff and rolling stock, which also contributes significantly to PPM results. The TOCs are set PPM targets on a franchise-by-franchise basis, rather than on a periodic basis aligned with control periods, as is the case for Network Rail. This has meant that, over time, none of the franchised TOCs have the same PPM target as Network Rail. The ORR, DfT, Network Rail and the TOCs have been discussing how to correct this misalignment of incentives. Efforts to establish collaborative working in the interests of customers, passengers and freight will be more effective the sooner this is resolved.

R2.83 Incentives in the rail industry often have multiple functions – influencing as they do the behaviours of both Network Rail and the TOCs. They are embedded in the regulatory regime, in contractual arrangements, both between train operators and Network Rail, and between franchised train operators and the government. Hence, any changes are complex and need careful consideration before changes are made. Nevertheless the recommended structural changes in this report mean that some incentives would benefit from further review by the industry to determine whether they remain appropriate. This should include ensuring that they operate at route level in keeping with other recommendations in this chapter.

R2.84 The ORR, as part of ongoing and/or future work, should consider the following list of possible areas for review. Together with the industry, the ORR should establish a review timetable – too many moving parts at once can sometimes be an enemy of effective incentives.

R2.85 The areas that may require particular review are:

- **the mechanics of agreeing possessions and Schedule 4 on the maintenance and renewal of the railway:** given that routes are working more closely with train operators under the arrangements proposed in this chapter, the method for agreeing possessions for maintenance and renewal might change;
- **the mechanics of agreeing possessions and Schedule 4 payments for enhancement projects:** as cost estimates through the GRIP process include a forecast of likely Schedule 4 payments and plans are worked up together at local level, it may be that compensation should be based on the estimated rather than emerging costs, which would give all players an incentive to plan effectively;
- **the volume incentive and capacity charge:** with Network Rail routes and operators working more closely together, whether these marginal incentives are required or will be effective would benefit from review. It is important that routes feel the benefit of additional services where these are financially viable, in order for them to want to accommodate the additional operational complexity;
- **the network and station change process:** this was established at a time when the railway was not expected to grow, rather to decline, and therefore was arranged to protect operators from potential reductions in the operating capability of the network. Instead the network is seeing substantial growth, with changes to facilitate this – and therefore it is important that the regime works to minimise the transaction cost whilst also leaving the protections in place; and
- **the Decision Criteria[8]:** these are embedded in the regulated track access contractual regime between train operators and Network Rail, and in theory give the System Operator and Technical Authority the tools it needs for dealing with complex trade-offs. They also provide a basis for routes as they consider conflicting requests for access. However, they, as with the network change process, were written for a much less congested network. Reconsideration of these criteria would be a sensible step to ensure that the System Operator and Technical Authority and the routes have the tools they require to balance trade-offs appropriately.

8 The decision criteria are criteria in the Network Code by which Network Rail determines allocation of capacity in the timetabling process, amongst other things

An effective and focused regulator

R2.86 This chapter has so far set out that the regulator will need to take on additional responsibilities to support and enforce distinct regulatory settlements. However, on a broader level, in order to realise the benefits of the Shaw Report's recommendations, the ORR will need to –

- be focused on providing effective, independent regulation in a challenging period of change, moving past the perception that it is acting as the customer; and
- work with the DfT (and Transport Scotland where appropriate) to ensure it has the correct tools with which to enforce its decisions and drive high performance across the network.

In order to realise the benefits of the Shaw Report's recommendations, the ORR will need to be focused on providing effective, independent regulation in a challenging period of change

A focused regulator

R2.87 Ensuring that the ORR has a clear focus on its core responsibilities will help tackle the perception that the regulator is Network Rail's customer, as well as allowing it to effectively undertake the additional responsibilities it will have in the new model.

R2.88 In particular, in addition to its crucial role in safety regulation, the ORR's role in economic regulation will change, moving to – effectively – regulation of nine different routes.

R2.89 As a result, the report team suggests that the ORR, along with the DfT, considers the following in line with the DfT's review of the ORR:

- whether there are functions that currently sit within the ORR – statutory or otherwise – that distract from its core regulatory role. The government is already considering this question in the round for all economic regulators through the Department for Business, Innovation and Skills' review;
- whether the ORR has sufficient tools to balance the needs of the parts of the network and wider industry that are in private and public ownership, and to effectively protect those parts in the private sector from public sector control or distortion of competition; and
- whether the implementation of the report's recommendations will require or benefit from a clearer statement of the roles of the ORR, the DfT, the Scottish government (or Transport Scotland), other subnational transport bodies and other organisations such as the Rail Safety and Standards Board, Transport Focus and the Rail Delivery Group (see box 7).

BOX 7

SYSTEMIC COMPLEXITY

A clear statement of roles and responsibilities across the industry is important not only for regulation, but also for the effective functioning of the railway more widely.

During its work, the report team has noted that the industry landscape includes a number of organisations with a range of cross-cutting interests. These have come into being over time; as far as the report team is aware, the overlapping roles, responsibilities and accountabilities of these organisations has never been reviewed in the round. A number of consultation respondents noted the potential lack of clarity this has given rise to.

While this question is not a core part of the remit of this report, the Shaw Report team considers that it would be appropriate for the industry to consider the wide range of organisations (including the Rail Safety and Standards Board, the Rail Delivery Group, the Rail Supply Group, the National Skills Academy for Rail and the National Technical Academy for Rail), with a view to clarifying and streamlining responsibilities. Given the statutory basis of some of these organisations, it would be appropriate for such a review to be conducted under the sponsorship of the Secretary of State for Transport.

The Shaw Report team suggests the terms of reference for this review should include:

- reviewing their membership to ensure appropriate representation;
- confirming the statutory, legal or licence-condition basis for organisations;
- ensuring clear lines of responsibility and accountability without overlap; and
- ensuring the long-term sustainability of funding for organisations.

This should develop a view, ideally, towards delivering a more streamlined set of focused organisations whose roles are clearly understandable, rather than adding to the general perception of industry complexity.

The industry landscape includes a number of organisations with a range of cross-cutting interests. The overlapping roles, responsibilities and accountabilities of these organisations has never been reviewed in the round

Effective tools for enforcement

R2.90 At the moment, the ORR has limited tools with which to enforce its regulatory determinations and the network licence. These tools were set out in some detail in the scoping document.

R2.91 The ORR's primary mechanism for enforcement – other than through accountability – has been through fines. However, these have proven ineffective other than as a reputational tool, particularly now that Network Rail has been reclassified as public sector body. Fines are particularly ineffective for dealing with financial underperformance, as they impose an additional cost at a time of financial distress.

R2.92 As a result, the report team actively encourages efforts by the ORR to develop a wider range and more effective set of reputational tools through which Network Rail, and the devolved route units, can be held to account for poor performance – or, on the other hand, be openly praised for outperformance. This should be in addition to the ORR's existing tools, and should exist on an escalating scale. Box 8 sets out possible tools that the ORR could consider, based on evidence from other sectors.

R2.93 It may be that in the course of considering additional reputational tools, changes to the ORR's statutory powers, Secretary of State or Scottish Government guidance, or licence conditions become necessary.

BOX 8

NON-FINANCIAL AND REPUTATIONAL TOOLS FOR REGULATION

Non-financial tools are increasingly used both by economic regulators and elsewhere, particularly where financial penalties are unavailable or ineffective. While often referred to as "reputational" tools, they encompass powers to draw attention to poor or good performance, to impose penalties on responsible individuals, and to hold organisations directly accountable to a higher body (such as Parliament).

These tools could include:

- public ranking based on route-level data;
- agreed public performance improvement plan(s), for example as a condition of accessing reserve funds;
- open letters, either to responsible individuals or their seniors, for both poor and good performance;
- recommending the non-payment of bonuses or performance pay;
- appointment of temporary Special Director(s) to the board;
- appearance before a relevant Parliamentary committee; and
- recommending the removal of management.

R3

RECOMMENDATION 3

Create a route for the North

The changing political and economic geography of the railway

R3.1 Network Rail is geographically organised on the basis of eight different routes, which include Scotland, Wales and, in England, the key mainline routes that radiate from central London stations. The scoping document questioned whether there was a case for changing Network Rail's geographical route structure on the basis of political or economic geography, or based on service type. It is clear that different approaches for disaggregating the network will suit different sets of customers and provide a number of different advantages and disadvantages. It is also important to consider whether the geographical span of each route covers the appropriate scope to make the task of a route CEO manageable.

R3.2 One of the fundamental drivers for considering change is that greater political devolution is putting more power in the hands of local communities, cities and regions, as well as reshaping the political and economic geography of the United Kingdom. Since the publication of the scoping document, the Cities and Local Governmet Devolution Bill (the Devolution Bill) has gained Royal Assent, providing statutory powers for the government to create sub-national transport bodies via secondary legislation. In addition, the growth in passenger and freight use of the railway is driving a significant level of enhancement activity, which has the potential to radically alter the markets and dynamics of the existing rail network. For example, HS2 will free up many of the long-distance inter-city journeys currently operating on the west coast mainline; the released capacity could enable more frequent commuter, local, regional and freight services to a range of different destinations.

R3.3 It is also important that the geographical structure does not unduly complicate the ability of the railway to operate seamlessly as one network. This is of particular importance to freight operating companies (FOCs) and open access operators, as well as other multi-route operators.

R3.4 There is unlikely to be a perfect geography that will ideally fit the diverse nature of Network Rail's customers; so any proposed changes to geography will have to carefully weigh these different interests against each other, and factor in operational constraints. In order to test whether there is a case for change, the report team recommends that the structure should be tested against the objectives set out below. Within an appropriate structure each route should:

- enable political accountability and support economic growth:
  - » directly align with one body or a small number of bodies that are responsible for transport and/or wider economic planning in the region;
- enable effective co-ordination between the route and train operators:
  - » the route directly aligns with a small number of train operators; and
- remain of a manageable size and scale for the route CEO and top team to effectively and efficiently operate the network:
  - » correspond to the underlying operational boundaries of the rail infrastructure manager represented by Network Rail areas and delivery units.

Enabling political accountability and supporting economic growth

R3.5 Currently there are few ways in which local and regional government can hold Network Rail to account as customers; often these bodies do not have a single point of contact within the organisation and have to interact with multiple teams straddling different functions, some based in the centre and others at route level. This can make it difficult to co-ordinate activity between local bodies and Network Rail, and, from the perspective of local and regional government, can make the organisation seem unresponsive and bureaucratic.

R3.6 However, as regions and local areas become more empowered they are likely to desire greater influence over rail infrastructure and services within their boundaries, and will want to make sure that what happens on the rail network takes account of their aspirations for wider economic development. In this changing environment, local and regional governments are beginning to resemble the role of customer more formally – particularly where they are sharing responsibilities with central government on franchising, or directly funding enhancements on the network.

R3.7 This is already largely the case in Scotland where there is a significant degree of rail devolution and a separate Network Rail route. Scottish ministers are responsible for setting a strategy for passenger and freight services in Scotland; being the franchising authority; and through a separate High Level Output Specification (HLOS), specifying and funding the outputs for enhancements and performance of the rail network within Scotland. This means that the Scottish Government's interest spans a wide scope of the infrastructure manager's functions, including day-to-day operations, maintenance, renewals as well as short, medium and long-term planning. Through the consultation responses, stakeholders have highlighted that the alignment of the operating route in Scotland – along with the associated devolved powers and the ScotRail alliance – has helped facilitate a much closer working relationship between Network Rail and Scottish ministers (via Transport Scotland), and created more coherent decision-making processes.

R3.8 Wales also has its own separate Network Rail route and the Welsh Government will formally become the rail franchising authority for Wales in 2017 – a role that has, until now, been held by the Secretary of State for Transport. Wales has begun preparations to take over the new Wales and Border franchise in 2018, and is working closely with the current Network Rail route to consider different models of partnership working.

R3

R3.9 Other bodies that may be on this trajectory include Transport for the North (TfN), Midlands Connect and Transport for London (TfL):

Transport for the North: TfN is aiming to become the first statutory sub-national transport body in 2017, following Royal Assent of the Devolution Bill, and is looking to obtain further powers including more formal responsibilities to commission organisations such as Network Rail and Highways England in partnership with central government.[1] In partnership with Rail North, it will be a joint client for Network Rail's current North of England enhancement programme – providing an opportunity to better influence and align enhancement planning with the longer-term objectives in the region. Similarly, Rail North might be granted more formal responsibilities relating to the specification and management of future rail franchising in the region. As a result, it is likely that TfN and Rail North will also take a greater interest in the operational performance of the regional network.

Midlands Connect: Midlands Connect are on a similar trajectory to TfN, and received funding in the 2015 Summer Budget to develop a transport strategy for the region by 2017. The focus of the strategy is to boost connections between cities in the East and West Midlands, and to maximise the benefit to the Midlands from the significant enhancement activity in the region including from projects such as HS2. West Midlands Rail – a consortium of local authorities in the region – may also become more involved in the specification, procurement and management of the London Midland franchise.

Transport for London: TfL already has significant powers and responsibilities over the commissioning, specification, management and operation of transport networks within London. In January this year, TfL and the Department for Transport (DfT) published a prospectus proposing a new approach to specifying and managing rail passenger services in London and the South East. The proposal would see the transfer of responsibility for inner suburban rail services within the Greater London boundary to TfL, while franchising for outer suburban rail services will remain the responsibility of the DfT. This could mean that TfL will be responsible for over 35% of all rail passenger journeys in the UK by 2021, compared to 17% today.

R3.10 Each of these regions currently straddles a number of different Network Rail routes; the North and Midlands are each split between London North West and London North East while London is split between six different routes. As they take greater responsibility for the rail network in their regions, under the current structure the accountability gap between the route and these regions is likely to grow in the coming years. Other regions in England, including the South West, East of England and the South East already have a close alignment with the Western, Anglia and South East routes.

1 Transport for the North (March 2015): Northern Transport Strategy – spring 2016 http://bit.ly/Shaw011

Enabling effective co-ordination between train operators and the route

R3.11 There are a number of benefits of having routes more closely aligned with a small number of train operators:

- greater geographical alignment can facilitate closer partnership working between the route and train operating companies (TOCs), by simplifying operational interfaces;
- a shared understanding of incentives, which may encourage both parties to share risks – the Paisley line electrification mentioned in the scoping report was a good example of this; and
- formal models of co-operation could become more viable, including alliancing, which could lead to more collective accountability for the rail industry in the region.

R3.12 However given that TOCs and FOCs operate nationally, and the demand for travel does not follow geographical or governmental structures, the alignment between operators and routes will never be perfect – each route will always have several different operators as its customers.

R3.13 Franchise boundaries are routinely reviewed by DfT when franchises are coming up for renewal, to ensure they match the changing patterns of railway markets and economic geography as well as the efficient operation of the railway. The current structure includes operators of a varied size and scale, and most TOCs currently have at least 85% of their total vehicle kilometres concentrated within one Network Rail route.[2]

R3.14 While most Network Rail routes deal with multiple TOCs, many have at least one TOC that covers at least 60% of the total vehicle kilometres in the route. Some regions are even more concentrated, with 91% of Wessex's vehicle kilometres belonging to South West trains and 81% of Western's belonging to Great Western Railway. The exceptions to this are the London North East (LNE) and the London North West (LNW) route, which have a large number of different operators on the route, with Virgin West Coast and East Coast having the largest – but not majority – share of vehicle kilometres respectively. The South East route on the other hand, is split more evenly between the Govia Thameslink Railway and South Eastern franchises.[3]

2 Report team analysis based on Network Rail Strategic Route Sections data

3 Report team analysis based on Network Rail Strategic Route Sections data

A manageable size and scale for the route CEO and top team to effectively and efficiently operate the network

R3.15 It is important that Network Rail's route structure ensures that the job of the route CEO and the top executive team remains manageable. To achieve this, changes to route structures should work from existing management building blocks within a route.

R3.16 Network Rail's routes are sub-divided into operational 'areas' led by an area director. Areas were created in 2013 to align maintenance and operation teams across geographical substructures, in order to improve co-ordination between these functions. Network Rail is currently in the process of transitioning to this structure across the different routes.

R3.17 Any changes to Network Rail's geographical structure that also changed the boundaries of areas could therefore have operational and transitional cost implications – particularly since areas contain a large proportion of Network Rail's staff in terms of headcount. This would come with significant potential transition costs, and so any proposed changes should look to minimise the implications of these, or at least attempt to achieve efficiencies or synergies from the change in route structure. Changes to route boundaries should therefore look to work within the current area structure (although as discussed below, there would still be costs associated with such a change).

R3.18 Given that organisational change can be disruptive by having implications for the workforce, it is important that any changes to geographical boundaries of the rail network are tested for their longevity. While boundaries may need to be fluid over time to match changing external circumstances, it would be inefficient and unsettling to change them frequently, and it is important that the industry is given some time to adjust to the changes.

Redrawing the map

R3.19 On the basis of the objectives set out above the report team considers that there is a strong case for creating a dedicated route for the North with the residual LNE and LNW routes more closely aligned to the East and West Midlands.

R3.20 This view is shared by many consultation respondents who supported better alignment of route boundaries with political and economic geography. In particular, many stakeholders from the North of England expressed strong preferences for the creation of a dedicated route for the North, given that the geographical boundaries of the region currently straddle the LNE and LNW routes. Other respondents felt that there was a similar gap for London, which currently straddles six routes; while some suggested creating a dedicated London route, others felt that internal organisational changes to enable Network Rail to better interface with TfL could suffice.

R3.21 Many respondents thought that there would be significant complexity associated with wholescale realignment on the basis of service type. Across different geographies, many of the same lines on the UK rail network carry commuter, regional and intercity traffic, and so it would be difficult to geographically isolate rail infrastructure to match specific service types.

R3.22 As highlighted above, Transport for the North is emerging as a political body that will be more involved in the short, medium and long-term planning of the rail network – with the objective of creating a single economic agglomeration in the region. Through Rail North, the region will also have a greater interest in its day-to-day operational performance.

R3.23 In terms of alignment with franchising, a dedicated route for the North would have a close alignment with the Northern and Transpennine franchises. These franchises collectively handle around 125 million passenger journeys per year.[4] The region will also be closely involved in the specification of these franchises in the future, following the formation of Rail North, which will work in partnership with the government on franchising.

R3.24 Furthermore, LNE and LNW currently have dedicated Network Rail areas that cover the geography of the North: LNE North, LNW North and LNE Central – so there would not need to be significant operational changes to accommodate a dedicated Northern route. The three existing areas could be preserved, reporting to a dedicated Northern route CEO, with a new team to cover the key posts required. The report team estimate that the transition costs associated with this could be in the single figure millions – to support the additional roles required at the top level of the route.

R3.25 As many of the benefits from the creation of a route for the North are likely to accrue to TfN and other stakeholders in the region – particularly from the simplification of interfaces – it is reasonable that these bodies should provide a contribution to these transition costs.

R3.26 TfN have expressed a willingness to work together with Network Rail to identify potential synergies between the organisations which could mitigate these costs and if there are any remaining shortfalls should agree and negotiate a contribution from within their budget.

4 Department for Transport (December 2015): Rail Trends factsheet – 2014/15, http://bit.ly/Shaw012

R3.27 Given the significant focus on strategic transport planning, and the alignment with franchising, a dedicated route for the North could simplify the channels for engaging with the infrastructure manager for both political and operational stakeholders in the region.

R3.28 A northern route with a dedicated CEO would work closely with train operators in the route. This would enable a more holistic operational focus on regional services providing a greater incentive to improve performance on the East-West lines, whilst intercity operators would be protected by the System Operator and Technical Authority and obligations on the route (as with other operators that cross multiple route boundaries).

R3.29 Under this arrangement, the new route for the North would become one of the largest routes in terms of track kilometres. The residual parts of LNE and LNW routes would become more regionally focused on the East and West Midlands respectively.

Alternative options

R3.30 On the basis of the accountability gaps highlighted above, the report team also considered whether the creation of a Midlands or London route was warranted.

R3.31 In the Midlands, the political trajectory is following a similar path to TfN, with the creation of Midlands Connect. At the moment, Midlands Connect is primarily focused on the strategic planning side and has less interest in the day-to-day operation and maintenance of the network in the region – which would be the primary benefit of a dedicated route. Furthermore, the alignment of existing franchises is very much focused on the geography of the East and West Midlands as opposed to the Midlands as a whole. As Midlands Connect continues to build its vision, capability and capacity in the region, it may be worth reviewing whether the region could benefit from a dedicated route. At the moment, however, the residual LNE and LNW routes will provide better and more focused alignment with the East and West Midlands respectively, aligning with existing political bodies in the region.

R3.32 London straddles six routes, and there is a significant level of political accountability and interest in the region, alongside recent proposals for TfL involvement in operating the commuter rail services. As they take over train operations, it is likely that TfL will take a greater interest in the track infrastructure in order to monitor and improve operational performance on these suburban services. However, the operational implications of a route for London would be extremely complex, since it would involve transferring ownership of relatively small but dense part of the network from a large number of the existing routes to a London route. The routes and TfL should be able to ensure co-ordination across the London area without the creation of a single route; for example, through TfL involvement in cross-route fora such as those discussed in R2.

R4

RECOMMENDATION 4

Clarify the government's role in the railway and in Network Rail

R4.1 The railway in Great Britain is made up of many different organisations and institutions, from both the public and private sector, operating within a complex and interwoven system. As discussed in the scoping document, the government is one of the most important players in this system, occupying various different roles. Fundamentally, the government's involvement is a matter of basic economics: the railway is a vehicle for economic growth and social mobility, in which there is broad public interest that cannot, in all cases, be met through the operation of a competitive market. In other words, rail delivers public benefits, requiring the support of government to realise the wider economic benefits it has the potential to deliver.

R4.2 That said, since privatisation the government's involvement in the railway has been constantly changing and adjusting to events, without, so far, ever quite settling into a happy equilibrium. A recent example of this is the reclassification of Network Rail into the public sector, which fundamentally changed the government's relationship with the company responsible for operating a core element of the railway. For example, Network Rail is a company limited by guarantee, with members rather than shareholders; following reclassification the government dismissed the public members and the Secretary of State for Transport became the sole member. Another example is the continuing process of political devolution, which has seen various degrees of responsibility for rail transport policy and spending devolved to different levels of government across the UK. Over time, this will result in a smaller role for central government.

R4.3 These are positive developments. Indeed, the current context of devolution to regional and local government, and the creation of devolved bodies such as Transport for the North (TfN) as a locus for this, is aligned with one of the report team's central principles: that planning and delivery of public rail functions should be more aligned with, and responsive to, customer needs in the local area.

R4.4 However, given these multiple sources of dynamism and complexity, it is vitally important that the government has clarity about its various roles and objectives for the railway and – more specifically – Network Rail, if it is to have any hope of aligning its interventions with what it actually wants to achieve.

R4.5 It is important to distinguish between the roles of central government specifically with respect to Network Rail, and those it plays in relation to the railway more widely. As described in the scoping document:

- the government is Network Rail's owner and funder, including through:
  - the Secretary of State for Transport's role as Network Rail's sole member,
  - the role of the Permanent Secretary of the Department for Transport (DfT) as Principal Accounting Officer,[1]
  - the government guarantee of Network Rail's existing debt, and
  - direct lending post-reclassification;
- the government is Network Rail's direct client for most new rail infrastructure delivery (enhancements), specifying and purchasing outputs for the rail network, to help deliver policy objectives; and

1 With responsibility to Parliament for the taxpayers' funds provided to Network Rail and its stewardship of public assets

- the government is Network Rail's indirect client for operations, maintenance and renewals, specifying outputs for the rail network, and channelling funding for these through train operating companies (TOCs), with the remaining funding coming from passenger fares.[2]

R4.6 But the government also has many important parts to play in other aspects of the railway system; for example, it specifies the services that TOCs must provide and many of the fares they are allowed to charge, through its franchising process, and provides the subsidies needed for many train services to run; it sets the rules of the rail industry through the legislative and regulatory frameworks; and it determines the relative importance of rail in the overall portfolio of government's transport – and indeed wider public policy – priorities.

R4.7 This chapter recommends the following changes to the current situation:

- to establish a long-term, DfT-owned, vision for the railway – based on the views of the National Infrastructure Commission (NIC), supply chain, TOCs, freight operating companies (FOCs), unions, local government, end-users and Network Rail's routes and central team – which will set clear, deliverable and affordable priorities for the industry over the next 30 years, providing a long-term context for political, financial and operational decisions; and

- to update the government's role with respect to Network Rail, by providing additional expert support to the Secretary of State for Transport in his role as sole member for Network Rail, and strengthening the DfT's position as client and funder for enhancements.

BOX 9

SCOTLAND AND WALES

There is already a significant degree of rail devolution to Scottish ministers, and a separate Network Rail route for Scotland.

Following reclassification in 2014, a Memorandum of Understanding was agreed between the DfT and Scottish Ministers setting out the functions devolved to Scottish Ministers with regard to Network Rail.

Scottish Ministers are responsible for:

- setting a strategy for passenger and freight services in Scotland;
- being the franchising authority; and
- specifying and funding outputs for the railway in Scotland through a separate High Level Output Specification (HLOS).

This devolution of authority to Scottish Ministers has created a close working relationship between Network Rail Scotland, Transport Scotland and Scottish Ministers, and more streamlined decision-making processes. Consultation respondents noted the benefits of this arrangement.

Although responsibility is not devolved in the same way to Welsh Ministers at present, the Welsh Government is working closely with Network Rail's Wales route to explore different models of partnership working.

2 Once the changes to the government grant that were initiated in the July Budget are made then funding for operations, maintenance and renewals will be channelled through TOCs' track access charges

The need for a long-term government vision

R4.8 Following consultation, the report team has concluded that, as part of its wider responsibilities for the railway, the government should set a long-term vision for the entire rail industry, which will set the context for future decisions.

R4.9 Part of the challenge of any infrastructure planning is being able to look far enough ahead and to use available forecasts to make sensible decisions to meet the expected increasing demand. However, at present, outside the five-yearly periodic review process (which is in any case focused primarily on infrastructure, rather than the whole system), there is no clear, public, long-term strategic vision for the railway from government.

R4.10 In 2012 the DfT published a command paper 'Reforming our Railways: Putting the Customer First', which set out the government's longer-term priorities at that point. However, for a variety of reasons, this document failed to get the traction necessary to establish it as an industry-wide vision for rail.

R4.11 The absence of a government long-term vision has been noted either directly or indirectly by many stakeholders responding to the consultation, including industry bodies such as the RDG Freight Group, engineering firms such as Hitachi, trade unions such as the RMT, local government bodies such as TfN, and train operators such as Eurostar. This issue also came up repeatedly at a number of the discussion events organised by the report team, prompting vigorous debate about the importance of having some form of guiding strategic plan.

R4.12 There are a number of compelling reasons for setting out a public vision or strategy for rail over the next 30 years:

- to describe the network-wide priorities for rail, allowing different players to get behind shared objectives;
- to provide the context for how transport implications of future growth in the UK (regionally and nationally) can be met by rail and its importance in enabling this growth;
- to provide a framework to manage political interest and intervention in the railway: new proposals for enhancements from ministers, routes, or other stakeholders would be set in the context of the high-level vision (as well as the funds available), and trade-offs could be more easily exposed; and
- to set out long-term rail policy as is much desired by industry, particularly for those who make up Network Rail's supply chain (and SMEs), helping them to plan for the future and shape their business accordingly. This is particularly relevant when it comes to skills, since a longer-term understanding of political priorities (knowing, for example, timescales of plans to digitise signalling) will give the supply chain sufficient lead time to train delivery staff.

R4.13 Box 10 sets out the current policy context in rail. It is clear that there is some 'change-fatigue' in the rail industry and discussion session attendees also noted that it was important that delivery of existing projects should be protected during any change processes. Although some of these evolutionary and cyclical changes are inevitable, the government's role should be to help provide a stable context on long-term rail policy, mitigating some of the problems caused by constant adjustment within the industry. In particular, the process of formulating a long-term vision should not add to this issue – the government should give the rail industry some time to deliver the vision, and the other changes in the industry – and so the vision should not be updated too frequently.

The government should set a long-term vision for the entire rail industry, which will set the context for future decisions

BOX 10

A DYNAMIC POLICY CONTEXT

The scoping report highlighted the dynamic context within which both the government and Network Rail are operating. Following the publication of both the Bowe and Hendy reviews, this significant programme of change is continuing across the industry:

- the ORR has an open consultation on its approach to the enforcement of competition law in the railways sector, and has just closed its consultation on Network Charges;
- the next periodic review (PR18) process for Control Period 6 is in its early stages;
- three franchise competitions are currently under way – for East Anglia, South Western and West Midlands – with six more due to be let by 2020;
- DfT is consulting jointly with the Mayor of London on a new approach to rail passenger services in London and the South East;
- on 8 March 2016, the Competition and Markets Authority published a policy document outlining how greater competition could benefit rail passengers on Great Britain's major intercity routes;
- plans for High Speed 2 continue at pace, with phase one scheduled to open in 2026;
- the National Infrastructure Commission (NIC) has just published its reports on critical infrastructure challenges; and
- internationally, the EU 'fourth railway package' which seeks to promote the completion of a 'single European railway area', is nearing the final stages of negotiation.

The Department for Transport is also concluding an additional three pieces of work that will interact with the recommendations of this report:

- updating the Memorandum of Understanding between Network Rail and the Department, to reflect Colette Bowe's recommendations on the enhancements process; this is for the interim period until 2019, and will be reviewed to reflect the recommendations of this report in due course;
- updating the Framework Agreement between Network Rail and the Department; this will be reviewed in three years' time; and
- reviewing the roles and responsibilities of the ORR, as recommended by Bowe.

Government's strategic vision for rail

R4.14 The strategic vision should consider all aspects of the government's involvement in the railway, bringing together different areas of rail policy such as franchising, regulation and enhancements. Inevitably, given the long-term horizons, it will need to major on infrastructure planning, delivery and management, as it may not be possible to specify a clear vision for some of these issues to the same 30 year time horizon. Extending this logic one step further, the primary focus of the long-term vision will most likely be on enhancements, given these represent long-term changes to the status quo. But there is no reason why the strategy could not describe a nested set of priorities ranging from the shorter to the longer term as appropriate, in line with route-based scorecards and action plans. The strategic vision should be relatively high level, focussing on outcomes rather than specific projects, and should be for a considerable length of time – around 30 years, although it should be updated periodically.

R4.15 The vision/strategy would need to balance a number of potentially conflicting objectives:

- the need to take into account passenger, freight shipper, and customer priorities;
- the need to set clear, deliverable priorities over a suitably long period (around 30 years);
- the need to be realistic and credible, based on reasonably confident forecasts for rail usage;
- the need to align with long-term plans for other modes of transport;
- the need to be supportive of innovation as well as react to it; and
- the need to take into account political and economic priorities.

R4.16 A number of industry bodies, think tanks and passenger groups already produce thinking along these lines, and it is important to retain these insights and perspectives in the process of developing the strategic vision. But if it is to be effective in its main role of providing a unified and certain view of the likely direction of the industry over the medium to long term, it has to be produced and owned by the government. This would ensure ministers are committed to the vision, which would provide a long-term context for political decisions.

R4.17 The DfT would be best-placed to lead in setting this vision for England and Wales. But the strategic vision cannot be developed in a vacuum, and, as noted, would also need to incorporate industry and other stakeholder views. Any kind of vision or strategy therefore must be based on evidence from industry players, customers and end users, and to this end the report team recommends that the DfT carry out extensive consultation with the supply chain, TOCs, FOCs, trade unions, the Trades Union Congress (TUC), rolling stock companies (ROSCOs), local government, the Welsh Government, other devolved bodies, passenger representatives, freight customer representatives and Network Rail's routes and central team to inform this work. The DfT and Transport Scotland should also co-ordinate with Scottish ministers on the long-term vision for rail in Scotland. Further details on Scottish ministers' responsibilities for rail are set out in box 9.

R4.18 Although it is still in the early stages of its development, and its precise roles and responsibilities have yet to be finalised, it seems likely that the NIC will also have an important role to play in future, both in determining infrastructure needs of the country, and in providing specific advice on specific projects. It will be important, therefore, for the DfT to align its strategic vision for rail with the work of the NIC, particularly with respect to its plans for new rail infrastructure.

Government's roles with respect to Network Rail

R4.19 The government, and in particular the Secretary of State for Transport, plays several roles with respect to Network Rail. This relationship has been adjusting since reclassification 18 months ago and the roles are not always clearly defined.[3]

R4.20 A number of consultation respondents and attendees at discussions sessions expressed concerns about the undefined nature of government's – and politicians' – role in the railway. Many stakeholders noted the need for absolute clarity over the government's roles and responsibilities in the system, and clear mechanisms for accountability across the industry. In addition, the Bowe Review showed that government needs to be a better client for enhancements.

R4.21 To provide clearer focus on each of the government's roles, and following the Bowe recommendations, the Shaw Report recommends that government involvement in the railway in England and Wales should be updated to separate its distinct roles of owner, funder, and client for enhancements, and operations, maintenance and renewals:

- UK Government Investments (UKGI) – the HM Treasury-owned company to be formed in April 2016 from the Shareholder Executive and UK Financial Investments, and the government's shareholder arm – should manage the government's owner relationship with Network Rail jointly with DfT's Corporate Finance team, carrying out this role on behalf of the Secretary of State for Transport as sole member;
- DfT's position as client for enhancements should be strengthened, in line with the Bowe recommendations;
- the government will continue as Network Rail's funder, however the process for determining and delivering funding for enhancements, and OMR, will change as set out in R5 and R2 respectively; and
- the DfT should continue to be the indirect client for operations, maintenance and renewals, specifying outputs for the rail network through the regulatory process, and channelling funding for these through franchised TOCs (with the remaining funding coming from passenger fares). The consultation responses and discussion groups did not suggest that this aspect of the planning process should be changed, and retaining this regulatory model will allow independent, expert benchmarking and comparative competition of the kind that has driven efficiency and performance in other regulated utilities.

To provide clearer focus, government involvement in the railway should be updated to separate its distinct roles

3 In Scotland, some of the responsibilities of the Secretary of State for Transport have been devolved to Scottish ministers, see box 9

Updating government's role as owner

R4.22 The government's ownership role is currently carried out jointly by the DfT's Corporate Finance team and the Shareholder Executive (soon to be UKGI) who manage the government's role as sole member of Network Rail on behalf of the Secretary for State for Transport. Their role includes:

- implementing the Secretary of State for Transport's duties under the Network Rail/ DfT Framework Agreement, such as:
  - » appointing the Chair and Special Director;
  - » approving appointments of CEO and non-executive directors,
  - » approving the remuneration policy for executive directors and the incentives within it, and
  - » setting pay for the Chair and non-executive directors;
- ensuring that Network Rail complies with coporate governance best practice;
- monitoring the board's management of Network Rail's performance, delivery of objectives, and management of risk; and
- retaining oversight of Network Rail's accounting, budgeting and assurance, including through:
  - » receiving annual accounts, monthly expenditure returns, and monthly and daily cashflow forecasts from Network Rail, and
  - » exercising oversight of pay arrangements and major financial transactions.

R4.23 It is best practice for the roles of client and owner to be separated, to avoid conflicts of interest. Although ultimately the Secretary of State will continue to be accountable for both roles (of owner and client), the responsibility within government of advising on these two roles can and should be separated.

R4.24 The government's Shareholder Executive (soon to be UKGI) acts as custodian of vital publicly-owned assets, ensuring their effective and efficient management. The report recommends the Shareholder Executive should have a clear remit in relation to Network Rail. The report welcomes the recent changes within DfT that separated out its shareholder function from other roles, while ensuring the shareholder function was carried out jointly with Shareholder Executive. The Shareholder Executive must be an equal partner in this function, providing objective and informed advice to the Secretary of State for Transport. These changes should ensure full use of the government's expertise to secure the best outcomes and the best value for the public sector as a whole. It also would align with the approach adopted by the DfT to manage its shareholding in Highways England, and with the normal working methods of the Shareholder Executive.

R4.25 In addition to the role outlined above, and further responsibilities as outlined in the Framework Agreement between DfT and Network Rail, under the new structure the shareholder team should:

- ensure the implementation of the recommendations of this report as far as they relate to the structure and governance of Network Rail; and
- ensure the appropriate processes and resources are in place for the company to achieve its objectives and targets.

R4.26 The joint shareholder team will not have any role in providing additional funds if Network Rail overspends, or benefitting from any of its profits if it is efficient but will provide advice to the Secretary of State on the reasons for and possible consequences of such a request or efficiency. More detail on the financial consequences of over- or underspending by Network Rail is set out in R2.

R4.27 The sponsorship role is separate from the roles of Network Rail strategy and funding, which should continue to be performed within DfT. The DfT's Permanent Secretary is, and should continue to be, the Principal Accounting Officer for the Department and its arm's-length bodies, including Network Rail, although the DfT may also benefit from the expertise within the Shareholder Executive in carrying out this role. The responsibilities of the Principal Accounting Officer are set out in the Framework Agreement between DfT and Network Rail and in Chapter 3 of *Managing Public Money.*[4]

Strengthening DfT's position as client for enhancements

R4.28 Evidence from the consultation and from previous reviews has shown that government needs to be a better client for enhancements, in order to provide ministers with the right advice to inform decisions about how to spend taxpayer's money and make the right strategic decisions for the railway over both the long and short term.

R4.29 Proposals for how to strengthen the DfT's position as Network Rail's client for enhancements are set out in R5.

> These changes should ensure full use of the government's expertise to secure the best outcomes and the best value

4 HM Treasury (2015): Managing Public Money http://bit.ly/Shaw013

R5

RECOMMENDATION 5

Plan the railway based on customer, passenger and freight needs

R5.1 The scoping document set out a number of headline issues with the current enhancements planning process which were broadly agreed across the industry: role definition; political involvement; Network Rail's ability to work with the supply chain; capacity and technical ability within different organisations; and the balance of risk and reward between different parties. It also referenced concerns raised by customers and suppliers relating to cumbersome processes (particularly when applied to smaller scale projects), and Network Rail's reputation for being an unresponsive delivery agent.

R5.2 Since then Colette Bowe's review into the planning of Network Rail's 2014-19 enhancements programme has been published, picking up on some of these issues and making six main recommendations:

- "*The role and responsibilities of the ORR in respect of enhancements planning should be reviewed. This should include, but not be confined to, its role in providing assurance in respect of affordability and deliverability.*
- *In light of reclassification, the Department and Network Rail should reset the formal framework of rail enhancements planning, implementation and oversight.*
- *Major and especially complex route enhancement schemes should be subject to integrated governance frameworks, such as those already used on Crossrail and Thameslink, which are contractual and reflect the whole-system requirements of such upgrades (including greater involvement of operators).*
- *Leading project, programme and portfolio management practices should be introduced throughout the process; noting in particular the key issues of assurance, integration, and risk management.*
- *A more strategic, long-term approach to managing the availability of the right people both within the three organisations and throughout the supply chain is required. This should include in particular identifying long-term demands across the entire industry and emphasising opportunities for improved skills development in these areas.*
- *In planning how schemes are delivered and in focussing future investment there should be more consideration of passenger and operator priorities, with regard to both passenger and freight needs. Network Rail should be challenged to prioritise consistently users' needs when delivering enhancement works.*"[1]

R5.3 The government accepted all of the Bowe Review recommendations in November 2015, and the Department for Transport (DfT) has already made considerable progress with implementation, including undertaking a review of the role of the rail regulator, updating the Framework Agreement and revising the Memorandum of Understanding between the Department and Network Rail. The DfT has implemented a customer-centred approach to planning within Network Rail's existing organisational structure. This report now aims to apply this approach to a structure based on extensive route devolution, focusing on the period from 2019 through to 2029.

R5.4 Although recent improvements have been recognised by stakeholders, the consultation process demonstrated that there is appetite across the industry to go further still when considering how best to plan and fund enhancements to the rail network. The recommendations made in this report therefore follow the trajectory set out by the Bowe Review and the DfT, taking an evolutionary approach and building on the principles underpinning recent work: focusing on customer and end user priorities, clarifying roles and implementing strong, effective governance.

1 The Bowe Review (November 2015): Report into the Planning of Network Rail's Enhancements Programme 2014-2019 http://bit.ly/Shaw014

The challenge of long-term planning

R5.5 The Bowe Review identified five main issues with the enhancements planning process for Control Period 5 (CP5):

- planning processes were "inadequate in the face of the scale and complexity of the CP5 programme";
- departmental, Network Rail and regulatory responsibilities were unclear and lacked focus;
- the scope of this complex portfolio of schemes was poorly defined and subject to 'scope creep' which drove up costs;
- there was a lack of effective internal programme and portfolio management, particularly within Network Rail, obscuring lines of accountability for efficiency and delivery; and
- delivery was undermined by "early costing errors, unanticipated interdependencies, lower than expected productivity and the failure to ensure agreed front end scope definition".

R5.6 The Shaw Report team's formal consultation process and stakeholder engagement endorsed these findings, while also exposing a number of additional challenges inherent in Network Rail's approach to long-term planning and enhancements. Successful implementation of the Bowe Review recommendations should help resolve some of the headline issues relating to discipline between the government and Network Rail, cost overruns, early cost estimation and delayed delivery of enhancements projects.

R5.7 The Shaw Report team has therefore focused on a separate but complementary set of issues raised by stakeholders relating to enhancements, which can be roughly grouped as follows:

- a lack of local control over planning and decision making;
- a lack of customer and end user focus in planning and delivery;
- a lack of transparency around how planning decisions are made; and
- a short-term approach to planning and funding.

R5.8 **Lack of local control:** recent devolution announcements notwithstanding, many stakeholders feel that decision making is still too centralised in Network Rail, particularly when it comes to planning enhancements. Those working centrally in Network Rail's Infrastructure Projects (IP) team are not perceived to have a proper understanding of the quality of local assets, or the capacity to engage effectively with local stakeholders and end users to deliver on long-term plans developed elsewhere. Addressing this issue will be essential if the benefits of greater route autonomy and customer focus, as set out earlier in the report, are to be realised in relation to enhancement planning and delivery.

R5.9 **Lack of customer and end user focus:** related to the centralised approach described above, it is apparent that small-scale or locally-driven enhancement projects, which can have comparatively large economic or social benefits, can be easily lost among the excitement and glamour of large-scale projects undertaken by Network Rail. According to Network Rail's 2015 customer survey, only 19% of respondents described the organisation as customer driven, and only 22% believe

Network Rail cares about passengers and customers. Indeed, it is particularly challenging for customers, passengers and freight shippers to secure Network Rail support for ideas developed and championed outside the organisation. Network Rail has a number of grant funds available to support delivery of schemes proposed and developed by third parties – for example the Network Rail Discretionary Fund – but in practice the majority of schemes delivered using these funds are designed and developed internally. One of Network Rail's current internal KPIs – the Financial Performance measure – actually incentivises the routes to focus on projects specified internally or by the DfT, instead of on work proposed by train operating companies (TOCs) to improve passenger experience.

R5.10 **Lack of transparency:** a number of stakeholders, particularly local government bodies, feel that Network Rail's current approach to planning and delivering enhancements lacks transparency; it is not clear how key decisions are made, and how local parties can feed into the process. Third parties, including TOCs and owning groups, would also welcome greater transparency and collaboration in this space, to increase understanding of how Network Rail makes trade-offs between capacity, performance and cost, and to support greater third party investment in the railway.

R5.11 **Short-term approach:** in addition, a number of stakeholders, particularly those in the supply chain, have told the report team that five year control periods are too short and artificial a time period for serious enhancement projects. Many projects take more than five years to plan and deliver, and the industry needs to understand longer-term priorities so they can plan ahead.

BOX 11

BRISTOL PARKWAY AND STANSTED AIRPORT

The report team's stakeholder engagement has indicated that the experience third parties have had when working with Network Rail has been mixed.

There have been some notable successes; the Bristol Parkway station multi-storey car park, for example, is a third party funded project that was delivered on time and budget. The scheme was delivered by First Great Western (FGW), but Network Rail played a significant role in supporting the train operator with development, and monitoring the design and construction. There was close collaboration between all parties, and Network Rail commercial and legal expertise was instrumental in overcoming the key project risks related to FGW's franchise renewal date.

However, as heard from respondents, there are many instances of ineffective joint working between Network Rail and third parties, such as the plan to improve journey times between central London and Stansted Airport, promoted by Manchester Airports Group (MAG) and endorsed by the Airports Commission. Network Rail and MAG differed over the preferred option, with MAG favouring proposals to reduce journey times during the off-peak period while Network Rail was more focused on peak-period reductions. There were also a variety of opinions on funding sources, with Network Rail seeking greater contributions from MAG as one of the principal commercial beneficiaries. While the scheme is now being considered as part of the delayed Anglia Route Study, it has been over two years since it was originally put forward.

A customer and end user-centred approach to planning and funding enhancements

R5.12 The Shaw Report has recommended empowering routes to operate, maintain and renew the railway in a way which reflects and responds to the needs and priorities of customers, passengers and freight shippers. This same principle is also applied to the planning, funding and delivery of rail enhancement projects. To continue to build on work begun by Colette Bowe and the DfT in the new world of infrastructure management described in this report, customers and end users should be far more involved in planning and delivering enhancements in the future. Where they are contributing funding, their role and degree of influence should reflect this. Of course, the role of the railway in supporting national (as well as local) objectives must also be safeguarded, alongside improved financial discipline across the industry.

R5.13 The Shaw Report team supports the recommendation set out in the Bowe Review that "major and especially complex route enhancement schemes should be subject to integrated governance frameworks, such as those already used on Crossrail and Thameslink, which are contractual and reflect the whole-system requirements of such upgrades (including greater involvement of operators)". It is right that projects on a national scale, such as the roll out of the European Rail Traffic Management System (ERTMS), would reasonably require centralised, network-wide co-ordination to ensure successful delivery.

R5.14 However, stakeholder's responses to the scoping document suggested that more could be done to improve the process for medium and small enhancements, and to really put routes and third parties in control of these. Defining the boundary between 'major' and other enhancements will be a task for the government, but it will be important that the Department avoids drawing too many enhancements into central control if local voices are to be strengthened effectively.

R5.15 The report team also advocates re-aligning rail investment decisions with standard public sector timetables, and moving away from fixed five year spending periods which are often unsuitable for rail enhancement projects. Meeting these aims will mean fully separating enhancements planning from the settlement process for operations, maintenance and renewals (OMR) – the DfT has already indicated its intentions in this space, in response to the Bowe Review.

Strengthening the local and regional voice

R5.16 Under the Shaw Report team's proposals, customers, passengers and freight shippers will feed into the long-term vision for the railway set by the DfT. Similarly, the report team recommends the introduction of route-based action plans and scorecards, which should be used to evaluate route performance. By encouraging routes' customers to focus on specifying not just immediate priorities but also those over a medium and long-term horizon, those customers will have a voice in the strategic and long-term planning of the railway as well as being able to demand and publicly rate the quality of delivery (or planning) of infrastructure.

R5.17 In turn, the long-term vision and local scorecards should be used by routes, working with TOCs, freight operating companies (FOCs), rolling stock companies, open access operators, local and regional political bodies and passenger representatives, to develop specific enhancement strategies for their area, which sit alongside, and are aligned with, route-based action plans. An assessment of how well individual route plans align with the strategic priorities set out in the long-term vision will then allow the government to allocate public sector funding to both the railway as a whole and individual routes, in line with spending review timetables, as discussed later in this section.

BOX 12

INTEGRATED TRANSPORT PLANNING IN THE WEST MIDLANDS

The West Midlands is at the centre of the national road and rail networks, and so is struggling with significant congestion and air quality issues which reduce productivity and reliability, and have a knock on impact on economic growth. It is clear that both rail and road works planned for the Midlands area (including construction of HS2) will severely disrupt the transport network over the coming years, creating the need for a collaborative, multi-modal approach to ensure the Midlands keeps moving and keeps growing.

The West Midlands Integrated Transport Authority is therefore establishing a working group – made up of West Midlands Combined Authority, HS2, Highways England, the M6 Toll and local highways authorities, Network Rail and the Department for Transport – to ensure that local transport capacity is managed effectively, to tackle resilience issues and to consider interventions required across the network. The group will focus specifically on the next 10 year period, which will see critical infrastructure, including HS2, delivered in the Midlands. Its responsibilities will include:

- establishing a common evidence base against which to measure the impact of potential interventions;
- forward planning for investment in the network and understanding interdependencies; and
- understanding options for better integration and utilisation of network assets, including assessing costs, impact, productivity gains, emissions, impact on local traffic, implementation issues and the economic case.

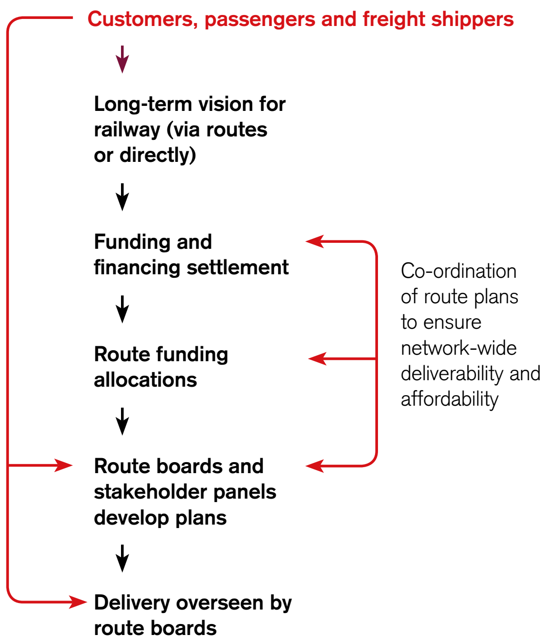
Current thinking about upgrades to the West Midlands road network highlights the type of holistic planning that this working group can provide. To manage congestion, these upgrades will require significant road traffic to move onto rail, but this modal-shift is constrained by the availability of parking at stations. Identifying (and being able to respond to) such dependencies is just one of the benefits that a regionally-integrated approach can bring.

R5.18 Building on this, and taking into account the views shared in both discussion sessions and consultation responses, it is clear that there is a need for customers, passengers, freight shippers and other industry groups to be represented in the planning process specifically, as the network considers what enhancements are required and how best to deliver them.

R5.19 In order to ensure this is the case, the report team suggests that the route board and stakeholder panel should work together to oversee all enhancements planning at route level and make recommendations for both desirable outcomes and specific projects, drawing on the strategic priorities set out in the government's long-term vision for rail. The stakeholder panel and the alignment between enhancement strategies and the wider route-based action plans provides stakeholders with a way of holding the route board to account for planning and delivery, and would also be able to make suggestions to the route board on a variety of issues, including whether to accept or reject third party funded proposals, how best to monitor progress on pre-existing enhancements projects, and when and how to carry out ex-post reviews of completed enhancements projects.

R5.20 By bringing technical and local expertise together in one place, this approach should encourage quicker project development, better project planning and more accurate cost estimation – thus addressing a number of longstanding issues raised by stakeholders throughout the Shaw Report team's consultation process. Detailed planning and costing work can be undertaken with more direct input from those who will be delivering the work, leading to development of more credible outputs at an earlier stage of the process than is currently possible with the IP-led approach. In addition, through collaborative working, these stakeholders will be able to develop a holistic economic appraisal of each scheme, taking into account the transport, economic and social benefits, and measuring them against costs in an integrated way.

Figure 11: Customer and end-user input into the planning process



Co-ordinating and prioritising route enhancement plans

R5.21 Although the recommendations in this report are focused on moving towards a customer and end user-led approach to planning and delivering enhancements, it will still be necessary to co-ordinate and prioritise plans at a network-wide level to ensure national consistency and deliverability. This co-ordinating role is currently carried out by Network Rail's central teams, working with the Rail Delivery Group (RDG) to produce the initial industry plan. However, consistent with arguments made throughout this report, in a more devolved world it will no longer be appropriate for Network Rail's head office to undertake this function. Such an approach would risk undermining the benefits of significant devolution to the routes and the local working resulting from scorecards and action plans. Another body will therefore need to undertake this co-ordination role.

R5.22 To discharge this role effectively, the co-ordinating body will need to be responsible for co-ordinating and prioritising plans and proposals put forward by routes and other stakeholders in a clear and transparent way, confirming affordability, flagging any obvious conflicts across routes, and securing the wider social and economic benefits generated by enhancement projects. To strengthen the position of the co-ordination function and maximise credibility, it should be coupled with appropriate levers to incentivise good behaviour at route level. One way to achieve this would be to link the co-ordination of route plans with the process for allocating government funding to routes, so that funding can only be unlocked via the consolidated plan, which itself could only be overturned following an explicit steer from ministers.

R5.23 These considerations suggest a number of key criteria that this body must satisfy:

- it must be able to hire and retain individuals with industry and technical expertise;
- it must be perceived to be open to route and third party proposals, and objective in its assessment of these;
- it must operate transparently from end to end, both with respect to how plans are developed, and how funding is allocated, because some projects will not receive funding and so will not be realised;
- it must be able to stand up to large and powerful industry players, including Network Rail;
- it must be close enough to government to have the authority to make decisions in the expectation that they will unlock public funding, and to interact directly with ministers to secure political buy-in where necessary; and
- it must be independent enough of government to manage political interest in the day-to-day business, expose trade-offs to ministers and to challenge where appropriate (and where backed up by expert advice).

R5.24 It is clear that there is no existing organisation which meets all of the criteria set out above, and so the report team recommends that the Department for Transport works with national and sub-national authorities, the Office of Rail and Road (ORR), RDG, Rail Supply Group, HM Treasury and Network Rail to consider where responsibility for co-ordinating enhancement plans might best sit in the future. The solution, whatever it may be, should focus on balancing independence from government against the need to work closely with ministers, as well as supporting recruitment of individuals with the appropriate industry experience and technical expertise.

R5.25 In any scenario, to maximise the transparency of the process both the initial proposals from the routes and the final, prioritised network-wide plan should be published alongside an explanation of any key differences and trade-offs, and an explanation of why these have arisen.

To maximise the transparency of the process both the initial proposals from the routes and the final, prioritised network-wide plan should be published alongside an explanation of any key differences and trade-offs

Funding route enhancement plans

R5.26 Once the prioritised enhancement plan has been produced, the Department for Transport will need to be responsible for securing the necessary funding at spending reviews, budgets and autumn statements. However, to ensure the co-ordinating function retains credibility, the report team recommends that funding allocations should be linked to the prioritised enhancement plan, no matter where it is produced, and that the Department should be required to consider the plan in its entirety when making decisions, rather than singling out specific elements for support at the expense of other recommendations. The report team also suggests that the Department should secure a longer-term funding allocation for rail enhancement projects at each spending review, extending over at least two spending periods.

R5.27 In order to maximise route autonomy, it will be important for the government to allocate funding to routes on the basis of outputs rather than specific projects wherever possible, extending the use of Network Rail's 'ring fenced funds' to a broader range of enhancement opportunities. The relative balance of grant and borrowing for delivering enhancements will be for the DfT and HM Treasury to agree at any given spending review depending on spending priorities and the fiscal position.

R5.28 The Shaw Report team does not anticipate that the approach described above would apply to planning and funding enhancements in Scotland, responsibility for which is already devolved to the Scottish Government. Instead, the DfT should work closely with Transport Scotland to ensure planning processes are aligned wherever necessary, for example when relating to network-wide or cross-border projects.

BOX 13

THE ROLE OF DEVOLVED BODIES

As well as giving devolved bodies a chance to fund enhancements, there would be a strong advantage to, over time, moving towards funding more route enhancements through devolved bodies. This achieves:

- greater local political buy-in (see for example Transport Scotland);
- closer accountability to local customers;
- co-ordination for local authorities;
- stronger devolution away from centralised decision making; and
- more efficient use of public funds, as local government bodies are expected to live within their means rather than request additional funding from central government for specific projects.

Devolved bodies should be given some flexibility to organise their governance for the enhancements process with the route and operators as they see fit, and in keeping with the extent of devolution in their area. However, the report team suggests that devolved bodies and their corresponding routes keep within the spirit of these recommendations, in order to maintain a level playing field between routes with different governance arrangements.

Improving accountability for delivering enhancements

The role of the regulator in enhancements

R5.29 One issue that was discussed in the scoping document was the role of the regulator in the process of planning and delivering enhancements. Throughout the process of stakeholder engagement and consultation, the report team heard that many people consider that the ORR, because of its central role in the periodic review process, may have come to be perceived by Network Rail as a proxy "client" for enhancements. The Bowe Review also considered this issue and recommended that the role of the ORR in enhancement planning should be clarified.

R5.30 The report team suggests that the ORR's focus should be on two distinct areas: first, towards the end of the planning process; and, second, once an enhancement has been delivered. For the former, the ORR should provide independent assurance in assessing the efficient price for a proposed enhancement when it has been fully worked up, but before funding has been committed and delivery has commenced. Involvement at this stage of the process will also allow the ORR to consider not only the standalone efficient price, but also whether any efficiencies resulting from potential synergies between the proposed enhancement and any planned renewals have been explored and exploited. This also allows the implications of OMR charges to be understood.

R5.31 Once an enhancement has been completed, the report team recommends that the ORR should be responsible for determining whether it has been delivered for an efficient price, and therefore how much of the cost of delivery can be added to the regulatory asset base (RAB).

Improving accountability for delivering enhancements

R5.32 Proposed changes to the processes for planning and delivering enhancements will need to be supported by a robust set of governance and accountability arrangements to ensure that reporting lines, responsibilities and accountabilities are clear. Such arrangements should have the following characteristics if they are to be effective:

- only one party should be accountable for each task;
- whoever is responsible should answer to whoever is accountable;
- each party should participate in only one way in each task, apart from in the case where a party is both accountable and responsible for its completion; and
- those informed should only be those with whom there is no need for two-way communication on the specific task.

R5.33 The enhancement planning and delivery process is complex. There are multiple stages, and many different organisations involved at each stage, and responsibilities and accountabilities vary between these organisations. Additionally, decisions still need to be taken about where certain key responsibilities should lie – in particular, that of co-ordinating and prioritising route-based enhancement plans. Notwithstanding these complexities and uncertainties, the report team recommends that the DfT should complete and publish a detailed RACI analysis (mapping out who is responsible, accountable, consulted and informed at each stage) to ensure that the final process conforms to the characteristics described above.

Contestability and alternative funding sources

R5.34 The approach set out above does not prevent routes from delivering projects outside this process using wholly third party sources of funding. In fact, the report team would like to see routes encourage more of this kind of activity, and suggests that maximising the use of alternative funding should be made an integral part of the role of the route board and stakeholder panels.

R5.35 For a project fully funded and financed by a third party, the third party should be able make a proposal to the relevant route board or investment panel, in order to get the proposal added to a route's enhancements plan. If a third party cannot fully fund a proposal themselves, they should be able to request funding from the route, a sub-national or regional body, or directly from the DfT, who should assess both value for money and alignment with other strategic plans for the railway when making a decision.

R5.36 The key here is that the funder of any given project should take on the role of project sponsor. It will then be open to the sponsor to decide whether to use the route to deliver a project, or whether to make use of external capabilities, thus increasing contestability. Of course in any scenario it will be necessary for a project sponsor to work with the relevant route(s) to ensure the necessary standards are met and appropriate track access and possessions are granted. How well different suppliers perform on delivery will likely be picked up by the regulator as part of its benchmarking activities, allowing project sponsors to make increasingly well-informed decisions about delivery as the quality of available data improves.

R5.37 The ORR should also be involved in adjudicating disputes where Network Rail routes and third parties cannot agree on aspects of the delivery of an enhancement project.

R5.38 Within Network Rail, greater contestability could be achieved at different stages of the enhancements process including:

- contestability at the idea inception stage and through the preliminary high-level design phases;
- contestability of delivery of entire projects; and
- contestability of extensions to the network.

R5.39 In practice these different models can be combined depending on the nature of the project. For example, in some contexts it will be beneficial to combine the first two options, to ensure that the party delivering the project has an appropriate degree of control over the original design.

R5.40 Opening up enhancement activity to a greater level of contestability could bring a number of benefits including improving efficiency – by driving competitive tension on outputs and costs during the initial bidding process and through management of the contract – and encouraging innovation, by drawing from ideas and approaches from a wider and more diverse pool of firms.

R5.41 Of course increasing contestability is not without risk – particularly where it involves approaching the open market. The main challenges include complicating interfaces for enhancement projects which involve significant interaction with the rest of the network, and the risk of undermining consistent technical and safety standards. However, these risks will be mitigated by the proposals for safeguarding standards and strengthening governance and accountability set out elsewhere in this report.

R5.42 Overall, the recommendations set out in this report create new opportunities for contesting the planning and delivery of enhancements, and there is a strong case for taking advantage of these. However, turning this potential into a reality is a challenging task; the RDG has set up a working group to look into contestability issues further – explored in more detail in section R6.

R5.43 In addition, it should be noted that the forthcoming Fourth Railway Package may give rise to changes in the law which may be relevant to the roles different organisations either can or must play in the enhancements process. Implementation of the report team's recommendations will need to take any such changes into account.

R6

RECOMMENDATION 6

Explore new ways of paying for the growth in passengers and freight on the railway

The need for new sources of funding and financing

R6.1 As set out in the scoping document, delivering safe and sustainable growth across the railway will be a key challenge in the future. However, this comes at a time when, given the current fiscal and economic environment, the government is aiming to control public spending in order to cut the deficit and bring down public sector debt. There is, therefore, an unavoidable tension between the overall constrained position faced by the public sector, and the need for sustained and substantial investment to grow the railway to meet social and economic needs.

R6.2 This section of the report recommends a variety of ways to address this issue – from small to large. All are likely to be required.

R6.3 As highlighted in the scoping document, funding and financing solutions may apply at three different levels: at the parent company level, for certain parts of the infrastructure manager, and for specific infrastructure projects. The proposals considered in the report focus on the latter two options. The report team is not recommending the introduction of private sector capital at the whole company level, recognising that, for the foreseeable future, Network Rail ownership will remain in the public sector.

R6.4 Options considered for parts of the infrastructure manager are centred on concessions or sale of time-limited licences for the operation of the infrastructure – retaining long-term public sector ownership but transferring risk to the private sector for a period. Options considered for specific infrastructure projects are much more varied – from contributions from local property developers who will benefit once a project is complete to privately implemented schemes. There are also opportunities to access additional project funding from other parts of the public sector, away from central government.

R6.5 Accessing any, all, or a combination of these sources of alternative funding and financing could generate significant benefits across the network, unlock substantial sums for future projects and help ensure sustainability of investment in the railway for many years to come. Considering whether and how to do so will therefore be an important task for the government.

R6.6 Neither the changes announced in the 2015 Summer Budget nor in Sir Peter Hendy's recent review were within the remit of this report. The £1.8 billion asset disposal programme is among the priorities included in Sir Peter Hendy's review, which states: "Network Rail is planning to release £1.8 billion of investment through the sale of non-core and lower value assets, including the sale of some of Network Rail's property assets [...] This includes considering options for the sale of property assets (including retail units in managed stations and the commercial estate), spare capacity on the telecoms network and non-core rail assets such as depots."[1]

The report team is not recommending the introduction of private sector capital at the whole company level, recognising that, for the foreseeable future, Network Rail ownership will remain in the public sector

1 Hendy Review (November 2015): Report from Sir Peter Hendy to the Secretary of State for Transport on the replanning of Network Rail's Investment Programme http://bit.ly/Shaw005

Introducing private sector capital in parts of the infrastructure manager

R6.7 When considering options for the introduction, in the future, of private sector capital in parts of Network Rail, concessions or time-limited licences for large sections of the network (e.g. a route or parts thereof) are likely to offer the most significant sums for the public purse. Therefore, while structuring and implementation complexity should not be underestimated, such contractual arrangements may well be attractive. On the other hand, implementation issues will include structuring a transaction that is attractive to private sector capital whilst still delivering value for money for the public purse and maintaining the long-term flexibility of the rail system to meet the evolving needs of users. Indeed some of the issues that Transport for London (TfL) and its suppliers faced in the public-private partnerships (PPPs) for the Tube are useful and informative experiences (see box 15).

R6.8 Significant additional benefits, in addition to the financial input to the public purse, will include autonomy, a different approach to management of the assets, more comprehensive benchmarking of alternative approaches, innovation, greater efficiency and a focus on cost management.

R6.9 Currently private capital markets are competitive, with the cost of private sector finance at very low levels historically. This means that, based on the report team's analysis, the route in concession could attract a weighted average cost of capital in line with other regulated businesses in the UK, subject to appropriate structuring of risks, rewards and other contractual mechanics. A number of factors would impact the overall cost of financing for a private sector concessionaire (or licensee), including the level of risk transfer away from the government and the need for shareholder returns, counterbalanced by the ability to innovate and manage the infrastructure autonomously for a relatively long period of time.

R6.10 Having drawn from lessons of previous similar initiatives and considered inputs received in consultation – from all parties – the report team proposes a hybrid concession model between the traditional regulated asset ownership and the letting of a conventional concession. Similar characteristics could also be achieved in the award of a time-limited licence. Resting on the ability to achieve autonomy to extract benefits from the assets, the proposed model is expected to attract interest across different parties, resulting in competitive tension and maximising any upfront proceeds for the government. It should also benefit customers and passengers from a greater focus on innovation and cost control and more effective benchmarking and competition between routes. Furthermore, it could be accounted for off the government's balance sheet, if structured with sufficient risk transfer and autonomy from government to meet Eurostat guidance whilst still meeting public interest tests. The proposed model provides for:

- the award, through a competitive tender to a private partner, of exclusive rights to operate, maintain, renew and in some cases invest in the further enhancement of the assets for a fixed period of time (typically 20-30 years), protecting national ownership of the railway;
- an upfront sum paid by the concessionaire (or licensee) to the Secretary of State for Transport in return for an income stream deriving from the asset;
- regulation, with price control periods and a regulatory asset base (RAB),[2] to provide flexibility on investment requirements, spreading the capital expenditure over the life of the assets, while also mitigating the risks associated with potentially imperfect asset knowledge and providing the appropriate benchmarks for efficiency; and
- clear risk transfer.

2 As discussed in section R2, the report team has considered whether, disaggregated to route level, the RAB would be too large for a single concession or licence. While recognising the importance of the size of the RAB to value the upfront price and the scale of returns as well as the means through which the concessionaire manages risk, on balance, the report team does not recommend that the RAB, once appropriately apportioned to routes, is resized. The size of the RABs in question would not be dissimilar to other regional utilities, and a reasonably sized RAB provides a buffer against financial risk.

R6.11 The System Operator and Technical Authority's functions would extend to the concessionaire (or licensee) in order to preserve network integrity. The concessionaire (or licensee) would also have access to the Route Services Directorate, should this prove competitive. It would be a member of any collaborative fora, as appropriate, and have a relationship with the freight route as for other routes. Furthermore, it would be responsible for its own submissions to the Office of Rail and Road (ORR) at periodic review, with specific ORR determinations.

The System Operator and Technical Authority's functions would extend to the concessionaire (or licensee) in order to preserve network integrity. The concessionaire (or licensee) would also have access to the Route Services Directorate, should this prove competitive

Accounting for capital in the private sector

R6.12 It will be for the Office for National Statistics (ONS) to judge whether or not the transferred asset (and its associated debt and spending) remains on the government's balance sheet. However, the report team is confident that the model proposed above could achieve off-balance sheet treatment. To achieve this, the concessionaire (or licensee) would have to, in the judgement of the ONS:

- be a private sector institution;
- bear the majority of risk and reward associated with the asset, rather than the government; and
- not, through contract or otherwise, be deemed to be controlled by government or by Network Rail.

R6.13 The government, in the detailed design of the terms of the concession or time-limited licence, would have to demonstrate that these three conditions have been met. Box 14 sets out more detail on these tests and why, on balance, the report team is confident that it is possible for a concession (or time-limited licence) to be designed to meet them (recognising that the guidance is always evolving and may change in the future).

BOX 14

OFF-BALANCE SHEET ASSESSMENT

There are three broad conditions which the ONS will consider when it is determining whether or not a concession (or a time-limited licence) is off-balance sheet, set out below. This is not intended as an exhaustive list of the factors under consideration, but rather the report team's view of the most important considerations.

If the concessionaire (or licensee) is a private sector institution
Assuming the concession (or time-limited licence) will be structured as a dividend distributing institution, the ONS will consider a set of 'control criteria'. Primary indicators include whether the government appoints the majority of the board or key subcommittees, or it owns a majority voting interest. Secondary indicators include government's power to appoint or veto key officers (such as the CEO), ownership of golden shares, controls over borrowing, and whether a substantial amount of the institution's contractual arrangements are with government.

The report team foresees no significant problems with designing arrangements to meet this test, once the route is legally separated from the national network and the concession let (or licence awarded) to a private sector party.

If the concessionaire (or licensee) bears the majority of risk and reward
Eurostat guidance sets a number of design features that could lead to classification of a concession as being on the government's balance sheet, including explicit guarantees on the majority of debt (including direct issuance by government), or on revenue or profit. Less explicit characteristics – such as regulation – may also be relevant. To avoid this, it will be important to demonstrate that the government does not hold the risk that the concessionaire does not perform to its capital budget or specification, or that the asset is unavailable at specified levels of performance.

The report team is confident that these tests can be met in the proposed model because:

- the majority of the debt would be unsupported (i.e. without a government guarantee) unlike the existing debt of Network Rail;
- the regulatory regime will not allow the concessionaire or licensee to pass overspend risk to the government, either directly or through 'blanket' additions to the RAB on which the government pays the marginal return; and
- the government is not liable for the under-availability of the asset. As the performance regime works on the basis that Network Rail (or any infrastructure manager that may be in charge of the infrastructure, including the concessionaire or licensee) is liable for the full cost of non-availability attributed to it, this test should be passed.

If the concessionaire (or licensee) is not controlled by the System Operator and Technical Authority or government
The System Operator and Technical Authority will be in the public sector, so it will be important that its functions do not undermine the concessionaire's or licensee's autonomy.

The report team is confident that this can be the case in the proposed model, given that the System Operator and Technical Authority has a clear role as a network standards and co-ordination body and does not undertake direct operating functions for the concessionaire or licensee.

Avoiding constraints on further change

R6.14 Drawing from past experience, including evidence from TfL's London Underground PPPs, critical lessons are:

- once the concept is announced, the impetus to pursue the transaction regardless of the value for money of the eventual market proposition may be significant;
- complex and detailed contractual arrangements may constrain further evolution. Given that the rail industry is dynamic and growing, the long-term flexibility of the rail system to meet evolving needs of users is always going to be important and much more so than in other regulated utilities; and
- it may be difficult to identify the true source of, and responsibility for, any underperformance and so making sure that the mechanisms are in place to measure delivery transparently and benchmark with other providers is also necessary.

Public interest test

R6.15 It is recommended that, before going to market, a public interest assessment should be carried out.

R6.16 The public interest assessment would need to take into account the following aspects:

- **delivery,** i.e. the need to deliver customers' and funders' objectives over the 20-30 year life of the contract;
- **flexibility for the future,** i.e. the need to be able to respond effectively to the dynamic environment of the railway – as passenger and freight requirements may change over the life of the contract – without substantial renegotiation with lenders as well as government;
- **off-balance sheet treatment,** i.e. that the structure is accounted for off the public sector balance sheet by the ONS;
- **affordability**; and
- **value for money.**

R6.17 If these tests were passed in the round then it would be appropriate for the government to proceed.

BOX 15

LONDON UNDERGROUND PUBLIC-PRIVATE PARTNERSHIPS: LESSONS LEARNED

In January 2003, London Underground Limited (LUL) formally split operations from train and infrastructure maintenance, renewals and enhancements. The three PPP consortia or Infrastructure Companies (Infracos, two of which were won by Metronet Rail and the third by Tube Lines) provided LUL with trains, stations, and related infrastructure to the standards and performance levels required to ensure a reliable service in a safe, efficient, and economic manner. LUL paid the Infracos an infrastructure service charge (ISC) – a monthly payment increased or abated to reflect the network's performance. Importantly, the Infracos were also responsible for delivering a significant programme of enhancements and renewals, including the upgrade of every single underground line with new trains, refurbished and expanded stations and other works to both improve performance and to significantly increase capacity of the network.

By 2007, with performance not improving and significant cost overruns against the ISC, an extraordinary review was triggered in regard to Metronet. In July 2007, Metronet entered into administration with the company transferring back to LUL in 2008. In May 2010, Tube Lines was also reacquired by TfL. The combined cost to buy out the shareholders and establish the three Infracos was over one billion pounds.

While there were a number of benefits, the key lessons learned include:

- **organisational change:** significant disruption, particularly in the first three years with impact on performance. Some of this disruption was due to the splitting of operations from infrastructure management – and the blame apportioned from one to another – which would not apply to the recommended model here;
- **asset register:** while much work went into understanding asset condition before 2003, the Infracos had to do far more work (at additional cost) than initially expected to bring assets up to a modern state of good repair. While this additional cost was borne by the private sector, it impacted their risk and contingency buffer;
- **complexity:** it will be difficult to agree long-term contractual arrangements with the flexibility to last 20-30 years in what will inevitably be a dynamic political, economic and technological context;
- **incentives:** given the immaturity and scale of the works proposed, imperfect asset condition and novelty of the structure, the output-based contracts were either not challenging enough or not sufficiently clear to drive innovation; and
- **structure of the Infracos:** any contractual arrangement should lead to a proper corporate structure and not a vehicle designed to win contracts at preferred rates. While this was achieved by Tube Lines (with tight cost controls and performance targets), Metronet suffered by not implementing a properly autonomous company to manage the business, heavily relying on the consortium members to manage various key activities with limited oversight.

Criteria for route selection

R6.18 The characteristics of different routes vary considerably across the UK. The following metrics will be key for route selection in the proposed concession or time-limited licence model:

- **level of public subsidy**: the lower the level of public support provided to a route (albeit indirectly through train operating companies), the greater the risk transfer to the private sector; and
- **level of committed and planned enhancements**: higher enhancement project volumes could create significant risks and uncertainty for any concessionaire or licensee therefore increasing the cost of risk transfer.

R6.19 Tested against these criteria, Wessex and Anglia are currently the strongest candidates for a concession or a time-limited licence because they have no or low levels of public subsidy and little forecast enhancement activity. However, over time, as route performance varies in response to wider industry and economic changes, this assessment is likely to shift. Based on the described 20-30 year contractual model, the report team anticipates that the government might raise several billion pounds in upfront proceeds for each of these two routes. These proceeds could in turn be used to repay part of the legacy debt or to support expenditure for further growth elsewhere. It will be for the DfT to consider the appropriate time to take this further.

R6.20 Concessions in parts of existing routes could also be considered for different purposes and to achieve other benefits. The report team understands that concession arrangements are currently being considered in the following parts of the network:

- the Valley Lines in Wales, for which the Welsh Government, the Department for Transport (DfT), and Network Rail have agreed to work together to explore the potential for alternative models, including a concession, to operate, maintain, renew and enhance the infrastructure as well as to operate passenger services as part of the wider Wales and Borders franchise. This may also include responsibility for the concessionaire to specify rolling stock, signalling and electrification equipment that would be best for the Valley Lines. The Welsh Government recognises that, as with any large project, there are some challenges around how this can be structured, but it has been working through those in detail and believes they can be overcome. The report team understands that the Welsh Government is working towards starting procurement as early as summer 2016, in parallel with the procurement for an integrated Wales and Borders franchise, and closing a year later. The winning concessionaire is expected to be a consortium of different parties, including operators as well as financial sponsors, with each bearing a specific set of responsibilities, risk and rewards as appropriate; and

- on the infrastructure used by the Essex Thameside franchise, where a concession structure could be considered to achieve an earlier than planned introduction of new signalling on the route and allow the franchised operator to increase capacity considerably earlier than otherwise planned. Rewards and incentives for the concessionaire would be built into the return from capacity uplift delivered through the deployment of new signalling systems (as explained in a subsequent section), potentially resulting in less pressure on baseline cost reductions, and as a further evolution of achievements through recent alliances (e.g. Scotrail).

The role of private sector capital in infrastructure projects

R6.21 Network Rail (and its predecessors) has looked at different forms of private sector funding and financing in support of its enhancement projects in the past, but it has not taken this very far. When the point was raised in discussion with Network Rail, the lack of a real need for it was mentioned: the 'RAB credit card' and ample access to debt capital markets with the UK Government's guarantee meant that it was simpler for Network Rail to pursue existing methods, rather than prioritising alternative routes.

R6.22 Other potential reasons include:

- the smaller rather than larger scale of projects under consideration (although the transaction costs were perceived to be high);
- the absence of incentives for Network Rail's management teams;
- the limited transparency of the ideas outside the promoter and Network Rail, meaning that there was limited negative reaction or coverage if they were not delivered; and
- the evolution of priorities.

R6.23 Both Mark Carne and Sir Peter Hendy have argued strongly that new public sector circumstances require new third party and private funding and financing sources. They are developing capability within Network Rail to achieve this.

R6.24 In addition, as discussed in section R5, a team was recently established within the Rail Delivery Group (RDG) to improve understanding of why projects have not gone forward and also to promote contestability in project delivery to ensure efficiency. The report team recommends that the RDG team report to the DfT with the conclusions of its studies within the calendar year 2016, appropriately supported by senior input from all interested parties. This should assist in addressing barriers for greater private sector input in enhancement projects and thereby also facilitate the new Network Rail approach sponsored by Mark Carne and Sir Peter Hendy. The remainder of this chapter highlights the various options which the DfT may choose to select once those barriers are removed.

Both Mark Carne and Sir Peter Hendy have argued strongly that new public sector circumstances require new third party and private funding and financing sources

Enhancements in publicly owned routes

R6.25 There is much talk about the need to fund and finance growth and develop technological innovation in the rail industry.

R6.26 Work is currently underway through the digital rail group in RDG and with the Rail Supply Group (RSG) to establish the costs and benefits of early adoption of the European Train Control System (ETCS). The costs will include: the installation of new equipment on all rail vehicles and of beacons on the infrastructure, the implementation of new control systems, and changes to infrastructure. Furthermore, once more trains can operate safely on the infrastructure, there will be a consequential need to invest in new rolling stock to make use of the additional capacity. There are however also substantial benefits to be expected from the reduction in maintenance and renewal costs relating to the existing signalling system, the reduction in operating costs related to poor performance of what is frequently old or outdated infrastructure, and the avoidance of more expensive enhancements which would otherwise have been required and may not have been deliverable. Passengers and freight shippers will also directly benefit from an improvement in the reliability of trains.

R6.27 To date, industry discussions have focused on the technological challenges and the implementation programme, with little consideration of their funding and financing. But as noted above, the technology is transformative, and this means there will be various benefit streams which could be used to finance the upgrade to ETCS:

- the release of additional capacity;
- the use of additional capacity;
- the improvement in punctuality; and
- the reduction in maintenance and renewal cost as lineside signalling is removed.

R6.28 Obvious candidates for such financing models would be the organisations who either build or install the equipment that will be used, for example signalling manufacturers, and/or the rolling stock companies who own the vehicles. The report team's conversations with such suppliers confirm that there is strong appetite to assist, subject to a meaningful plan being developed, including the specification, location and timetable of the project.

R6.29 With regard to other types of enhancements carried out in routes that remain in the public sector, there are various ways to attract private sector money, either in the form of funding or financing. These include:

- support from local developers who will benefit from the additional transport options provided upon completion of specific enhancements – these would be true private sector funding contributions (similar in fashion to those made for the Canary Wharf Crossrail station);
- the design-build-finance-transfer (DBFT) model that was used in the procurement of one of the Chiltern Evergreen's projects – this would be private sector money to finance the delivery of the project;
- models akin to TfL's new procurement approaches, including the Innovative Contractor Engagement (ICE) applied for the Bank station improvement works, which would represent an evolution of Network Rail's alliancing procurement process to seek more innovation and clarification of what is required to reduce uncertainty. ICE can draw on private investment as part of a wider package of measures to progress enhancements; and
- a combination of all of the above, which, coupled with alternative public sector funding sources discussed later in this section (e.g. community and business levies) would allow private sector contribution to support the viability of a project.

R6.30 In the case of the London Underground, over 10% of project spend is funded by a combination of third parties, developers and the joint development of land.[3] It is estimated that over the next five years over £1.3 billion will be generated to support the delivery of capital projects. On Crossrail, a further third of the £14.8 billion cost is being funded by community infrastructure levies and business rate retention. In the case of station regeneration projects, however, the contribution from the private sector has in some instances been significantly higher, for example at Crossrail's Canary Wharf, Woolwich and Imperial Wharf stations. The report team recognises that for Network Rail's already committed enhancement projects, replicating similar results in terms of private sector involvement may be difficult due to a number of factors, including the difference in location (not necessarily London) and the complexity of generating contributions for already specified projects. However, for future projects, there is the potential to unlock significant sums.

R6.31 Where projects are initiated to meet specific local needs through the scorecard and action planning process recommended earlier, and have funding contribution from interested parties (e.g. by local authorities, airports, or other developers), they are likely to warrant higher priority in the national prioritisation and co-ordination process.

R6.32 Projects that are separable from the core of the national infrastructure – for example new high speed rail ventures and regeneration of non-core assets like stations, depots and adjacent land – which could be structured to be attractive to the private sector and deliver value for money would also represent an attractive opportunity, but they are rarer. In these cases, financing by third parties can be structured against the funding of a predictable future long-term revenue stream associated with that asset, for example rental income.

Projects that are separable from the core of the national infrastructure – for example new high speed rail ventures and regeneration of non-core assets like stations, depots and adjacent land – which could be structured to be attractive to the private sector and deliver value for money would also represent an attractive opportunity, but they are rarer

3 Transport for London (2014): Business Plan 2014 - Transport for London's plans into the next decade http://bit.ly/Shaw015

Enhancements on routes in the private sector

R6.33 With regards to enhancements taking place in a route (or routes) that may be in concession or transferred under a time-limited licence, the report team anticipates:

- greater freedom for the route to raise financing in the debt capital markets against funding on the RAB;
- that certain projects requested by external parties (which, perhaps, cross several route boundaries, or which have been suggested on economic or social grounds) could be delivered and financed separately. Depending on the nature of the asset, these could either be added to the route's RAB upon completion or structured so that the concessionaire (or licensee) provides a share of the financing; and
- that the terms of the concession or time-limited licence should allow the Secretary of State for Transport to buy back the concession at fair value in an extreme case where the concessionaire (or licensee) opposes a significant enhancement programme (although this would need to be handled as a measure of last resort).

BOX 16

OFF-BALANCE SHEET ASSESSMENT FOR INFRASTRUCTURE PROJECTS

As for treatment of private sector involvement in parts of the network, the treatment of private sector funding or financing in enhancement projects is also complex.

The report team would generally expect the ONS to classify enhancement projects making use of private sector finance as PPPs or concessions. The classification of a particular scheme will however depend on their specific design. In each consideration the ONS will focus on the following criteria:

- sufficient separation in construction and operation, such that Network Rail (either routes or centre) would not require strict access conditions that would indicate control;
- sufficient risk transfer, with the private partner holding almost all construction risk, and at least one of either the risk that the asset is unavailable, or that demand for the asset is lower than anticipated; and
- the absence of explicit guarantees from government – or Network Rail, as part of the public sector – on the financing or revenue stream associated with the asset, including the direct provision of the majority of finance.

Additional sources of public funding for infrastructure projects

R6.34 Outside of opportunities to introduce private financing and funding, there are ways to access additional project funding from other parts of the public sector. This can include, but is not limited to, funding from local authorities and devolved administrations.

R6.35 While these sources of funding will remain on the UK Government's balance sheet, they can still bring a number of benefits including a smaller capital burden on central government and additional funds for investment from local bodies, which could help drive local economic growth, foster closer relationships with customers and clarify accountability.

R6.36 Although the report team has identified a set of alternative funding sources, the devolution landscape across Great Britain is changing rapidly. It will be important for Network Rail and the sponsors of projects, to remain alive to this developing landscape and take advantage of new opportunities.

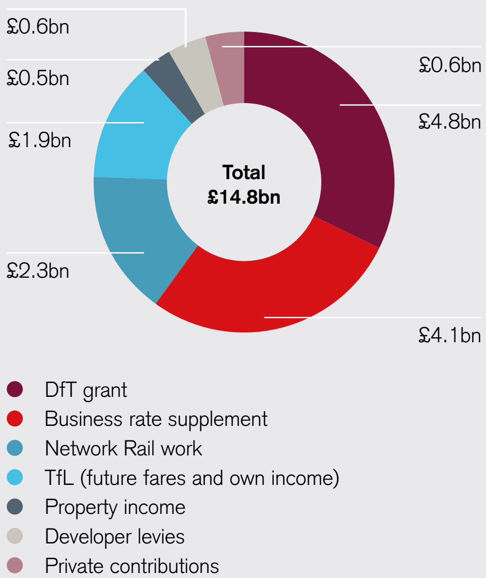
BOX 17

CASE STUDIES OF ALTERNATIVE PUBLIC SECTOR FUNDING

Crossrail: Crossrail attracted a number of alternative public sector funding sources to meet its £14.8 billion budget. For example, the Greater London Authority utilised its ability to levy a two pence business rate supplement raising £4.1 billion, and also established a mayoral community infrastructure levy and other developer contributions.

In addition, the European Investment Bank (EIB) provided £1 billion of finance for the project against funding through passenger revenues and other sources of funding such as business rate supplements.

Figure 12: Crossrail – funding breakdown[4]



Northern Line Extension: Developers and businesses – through local authorities – are fully funding the £1 billion project through a combination of levies on developers and business rate retention, effectively benefiting from an increase in property value. Against this funding, a £480 million loan from the EIB could be accessed.[5]

Scottish Borders: The £294 million cost of the Scottish Borders Railway was largely funded by conventional means. However, around a tenth of the cost (£30 million) is expected to be met by developer contributions/levies over the next thirty years, levied by the three local authorities in Scotland.[6]

4 National Audit Office (2014): Crossrail https://www.nao.org.uk/wp-content/uploads/2014/01/Crossrail.pdf
5 Transport for London (2013): Northern line extension factsheet http://bit.ly/Shaw016
6 Borders Railway: Our Partners http://bit.ly/Shaw017

BOX 18

ALTERNATIVE PUBLIC SECTOR FUNDING AND FINANCING SOURCES

LOCAL SOURCES

Developer contributions: Local authorities can levy charges on development (the community infrastructure levy, and section 106 contributions) to pay for infrastructure needs resulting from development.

Local government borrowing: Local authorities and regional transport bodies can borrow against their own future revenues to finance capital investment (for example from the Public Works Loan Board).

Business rate supplement: Local authorities can levy a two pence supplement on business rates for infrastructure, subject to a local business referendum. Directly elected mayors will need the approval of their Local Enterprise Partnership in the future, rather than all local businesses.

Local authorities can borrow against this future income stream in order to raise finance for infrastructure.

Business rate retention: Local authorities can retain 50% of business rates raised in their local area (and the government has announced the intention to increase this to 100%).

Local authorities can use this power to finance an infrastructure project, by borrowing against future revenues resulting from local economic improvements derived from the new infrastructure.

NATIONAL SOURCES

Devolved borrowing and expenditure: Devolved governments in Scotland and Wales have, or are in the process of receiving, powers to borrow money for capital expenditure. They also receive an annual capital grant from central government which they can allocate according to their own priorities.

Competitive grant funding: National and devolved governments may have bespoke ‘pots’ of grant funding available for specific projects, which routes or local authorities can bid into. Some may be transport specific (such as the total transport fund), or broader (such as the local growth fund).These are subject to regular change.

EUROPEAN SOURCES

European Investment Bank: The European Investment Bank provides finance for specific infrastructure projects.

Competitive grant funding: The EU runs a number of funds (such as European Structural funds) that invest in infrastructure. Access to these funds is typically highly competitive.

R7

RECOMMENDATION 7

Develop industry-wide plans to develop skills and improve diversity

R7.1 Network Rail has much to be proud of since its creation in 2001. It has become more efficient and responded to an increase in passenger demand of over 100%. It has built a workforce which is passionate and committed to the railway, and which undertakes difficult jobs in challenging and often dangerous environments. It has delivered one of the safest railways in Europe, and responds well in a crisis, arguably when the need is greatest. It has a graduate programme which attracts a diverse range of high calibre candidates as well as an apprenticeship programme, each of which take on around 200 people each year.

R7.2 However, there are still some clear areas for improvement, particularly as the organisation looks to the future, and there are critical gaps in the skills required to run the railway. This is not just a challenge for Network Rail; addressing these gaps is an issue for the whole industry, and the Shaw Report team therefore recommends taking an industry-wide collaborative approach to skills and capability for rail.

R7.3 In the course of the report team's work, the culture of Network Rail has frequently come up. Elements of this culture include history and legacy, ways of interacting with each other, language, style and rules of behaviour. As with all organisations, some elements of Network Rail's culture are to be celebrated, and others will need to evolve and adapt, to enable the organisation to transition into a more devolved structure with increased emphasis on accountability to its customers and end users.

Building on success

R7.4 Despite its positive track record, Network Rail and the industry need to go further in terms of both the skills and diversity of its workforce. This is an area where recommendations relating specifically to Network Rail are not sufficient.

R7.5 Based on consultation responses and workforce data, the report team has identified a number of headline concerns around skills and capability. These are:

- a paucity of skills in some parts of Network Rail;
- a gap in the pipeline of industry skills; and
- a lack of diversity across both Network Rail and the industry as a whole.

As with all organisations, some elements of Network Rail's culture are to be celebrated, and others will need to evolve and adapt, to enable the organisation to transition into a more devolved structure with increased emphasis on accountability to its customers and end users

Breadth of skills in Network Rail

R7.6 Network Rail is a large organisation with a large workforce. Long-term workforce planning will therefore be essential for its growth and success.

R7.7 The report team has identified the following areas as being those worthy of particular attention:

- infrastructure, engineering and technical;
- digital and technology (covering not only increased agility to respond quickly to changing customer, freight shipper and passenger habits and expectations but also to develop, manage and secure next generation technologies);
- strategy and leadership;
- financial management and planning; and
- asset management.

R7.8 Some of these areas are already addressed by work ongoing elsewhere in the industry, from which Network Rail can benefit.

R7.9 For example, the National Skills Academy for Rail (NSAR) has established a long-term plan, prioritising the most critical skills for frontline delivery; technical and engineering skills (see box 19).

R7.10 There are also some immediate actions that Network Rail needs to take, supported by the government, to ensure that the transition to the new arrangements recommended in this report is successful. In particular, Network Rail needs to review its remuneration and benefits package to ensure that it is capable of attracting the right calibre of people to lead the autonomous elements of a highly devolved organisation.

R7.11 Pay is clearly not the only factor in attracting the right people, but it is important that it is not a deterrent. The report team looked at pay and reward for train operating company (TOC) managing directors and for Network Rail route managing directors, and found that the latter were very much at the lower end of the scale when considering total remuneration. This is equally true looking outside the rail industry to other network industries. In the new devolved structure route chief executives will have greater decision-making power, challenge and accountability, but their remuneration will need to be balanced with their position in the public sector.

R7.12 Since Network Rail has limited flexibility in these areas, the Department for Transport, Cabinet Office and HM Treasury should swiftly determine how any necessary flexibility in pay can be provided.

BOX 19

NATIONAL SKILLS ACADEMY FOR RAIL

NSAR was established in November 2010 with a £2.7 million start-up grant from the UK Government. Its purpose is to develop and implement the skills strategy for rail, to create an engineering workforce with the necessary skills to support the maintenance, development and expansion of a first-class, cost-effective railway.

NSAR works with:

- employers to understand skills needs;
- training providers to ensure they are delivering what the industry needs; and
- others to ensure the industry has people with the correct skills.

In 2015, the National Training Academy for Rail was opened as a training centre, jointly funded by the Department for Transport and Siemens.

Pipeline of industry skills

R7.13 A significant amount of analysis looking at the pipeline of engineering skills has already been carried out across the industry.

R7.14 The recent Transport Infrastructure Skills Strategy,[1] published by the Department for Transport (DfT) and led by Terry Morgan (the Chair of Crossrail) outlines a range of actions designed to attract young people to engineering and infrastructure careers (see box 20).

R7.15 This is vital for the future of infrastructure in the UK, and Network Rail, HS2 and Crossrail have all been involved in this work. However, the strategy is intentionally focused on entry level and on rail specific skills, which will yield promising returns, but only over the next several years.

R7.16 There have been other skills challenges across the industry, such as zero hours contracts in the supply chain (meaning limited staff loyalty and hence skills lost to other industries or countries) and weak career development pathways – so that building up cross industry knowledge can be difficult.

R7.17 Other approaches to attract the right talent in all parts of the industry (including at mid and senior managerial levels) will therefore be required, such as:

- introducing experience from other industries;
- delivering leadership programmes to prepare leaders both for managing the present and preparing for a more heavily digital and innovative future; and
- delivering graduate schemes that give participants the benefit of industry-wide understanding, creating a new generation of leaders that understand passenger and freight operations as well as infrastructure.

BOX 20

BALANCING STRATEGY AND DELIVERY

The railway industry has no shortage of strategies on skills.

As well as the National Skills Academy for Rail:

- the Rail Supply Group analysed the skills challenges for the supply chain in particular and these are well set out in its recent strategy for productivity and growth in the UK rail supply chain;
- the Rail Delivery Group has a "people working group", with "the development and implementation of a strategic vision…" as the first part of its aim; and
- the Department for Transport recently published a Transport Infrastructure Skills Strategy (see below).

There is a large number of organisations operating in the rail industry. The leadership space is particularly crowded, with different organisations having different claims to lead part, or all, of the industry, and developing strategies accordingly.

It is true for skills, as well as for other areas, that the industry's success needs to be judged in terms of better outcomes – and turning strategy into execution, rather than writing one more strategy.

Clarity over who is responsible and accountable for delivery, understanding customer needs, and certainty of funding will be important here – and will require mature co-operation from different parts of the industry.

1 DfT (January 2016): Transport infrastructure skills strategy – building sustainable skills http://bit.ly/Shaw018

Diversity

R7.18 There is a high level of risk posed by the lack of diversity in the rail industry. This is not a challenge unique to Network Rail (indeed, Network Rail performs better than organisations in similar industries under some measures), however it still has a long way to go to better represent the make-up of contemporary British society.

R7.19 In Network Rail, the percentage of female employees is just 15.3%[2] and across the industry women make up just 16% of the workforce.[3] As rail continues to grow and hold itself increasingly accountable to its customers, this lack of diversity becomes ever more problematic. The disadvantages of having all or predominantly male senior management boards in terms of the limitations of group think are well documented (see box 22), and the same principle holds true below board level and across other groups. A lack of diversity of social background, gender, ethnicity, sexualty and perspectives all limit the industry's ability to understand its customers and ultimately freight-shippers and passengers. Perhaps more importantly, the industry is also missing out on a vast pool of potential talent that does not fit the traditional profile.

R7.20 Network Rail already has a five year diversity and inclusion strategy in place, as well as a comprehensive set of staff networks to support employees from a range of backgrounds. There is already some collaboration across different organisations, but this could go further; indeed it should go further if diversity is to strengthen the industry in any meaningful way.

R7.21 There are signs of change. Of Network Rail's 2015 graduate intake, 31% of successful candidates were from black, Asian and minority ethnic (BAME) groups, and 29% were women, increases of 13 and 5 percentage points respectively on 2014.[4] However, relying on these entry level programmes alone to increase diversity across the workforce will make for slow progress.

BOX 21

KEY RECOMMENDATIONS FROM THE TRANSPORT INFRASTRUCTURE SKILLS STRATEGY

Published in January 2016 by the Department for Transport and led by Terry Morgan, the Transport Infrastructure Skills Strategy includes the following ambitions:

- establish 30,000 transport apprenticeships;
- establish the Strategic Transport Apprenticeship Taskforce to address skills challenges in a co-ordinated and collaborative way;
- at least 20% of new engineering and technical transport apprenticeships to be women by 2020;
- 20% increase in the number of black, Asian, and minority ethnic (BAME) apprentices by 2020; and
- use procurement to secure this ambition through, for example, including requirements for skills and apprenticeships in all rail franchises, and setting numbers of apprentices in infrastructure contracts.

2 Network Rail (2015)
3 Women in Rail (January 2016): Industry Survey http://bit.ly/ShawReport019
4 Network Rail (2015)

Recommendations

R7.22 Bringing these two strands on cross-industry talent together, the report team therefore recommends that a group comprised of representatives from trade unions (who have significant expertise in this area, see box 23), the Rail Delivery Group, the Rail Supply Group, the Rail Safety and Standards Board and the National Skills Academy for Rail comes together and appoints someone to co-ordinate and drive a holistic approach to skills planning for the industry.

BOX 22

WOMEN ON BOARDS – LORD DAVIES

In 2011, Lord Davies published his report on the participation of women on company boards.[5] He recommended;

- the FTSE 100 should aim for a minimum of 25% female representation on boards by 2015;
- the FTSE 350 should set out the percentage of women they would aim to have on boards in 2013 and 2015; and
- companies should be transparent about the proportion of women in their organisation and about their appointment processes.

The report called on companies to "comply or explain" within a voluntary approach to meeting the targets. Quotas would only be used if voluntary measures failed.

Progress against the recommendations has been reported annually and in 2015 was as follows:

- 23.5% representation on FTSE 100 boards up from 12.5% in 2010
- no all-male boards in the FTSE 100 in 2015 where there were 21 in 2011, in the FTSE 250 the number is 23 all-male boards down from 131 in 2011

5 Lord Davies (February 2011): Women on Boards http://bit.ly/Shaw020

R7.23 Their specific responsibilities should be to:

- produce and communicate a workforce and diversity strategy, segregated for the key components of the system as appropriate;
- review and agree what should be provided on either an industry-wide or company-specific basis, with an understanding of where good practice advice should be provided, where industry-wide training packages should be offered, and where railway organisations should be encouraged to share training with other industries;
- facilitate the design and delivery of an industry-wide leadership programme to enhance leadership capability at all levels, preparing leaders both for managing the present and preparing for the future (innovation);
- facilitate the design and delivery of a pan-industry graduate scheme, the operation of, and charging for, which will need to be negotiated with the routes and with train operators, rolling stock companies (ROSCOs) and suppliers (consideration of levers to apply to secure continued funding will be needed such as, for example, making it a condition of franchising agreements or licences); and
- a shared action plan for improving diversity with targets for 2020 and 2025. An independent report should be published each year showing participants' progress against the diversity targets. If the targets are not achieved, further action should be taken to ensure meaningful progress is made. Progress is certainly possible – as illustrated by the impact of the Women on Boards review by Lord Davies in 2011.

BOX 23

UNION INVOLVEMENT ON SKILLS

The rail trade unions have a longstanding tradition of supporting the skills agenda in the industry, and have developed a set of approaches through which to do this. These include:

- learning agreements with employers, setting out clearly types of learning provision, and the roles and responsibilities of all stakeholders;
- learning committees comprised of employer, union, provider and learner representatives to review learning in the organisation;
- union learning representatives whose role is to help the workforce access learning opportunities; and
- learning centres for on-site learning and discussion of training.

Each of the main rail unions – ASLEF, RMT, Unite and the TSSA – are involved in these and other skills-focused initiatives. A notable example is where ASLEF, the RMT and TSSA are working jointly in partnership with Cross Country, London Midland, East Midlands Trains, Stevenage College and the Union Learn Midlands team to deliver access to fully funded and flexible learning opportunities at work. For example, an IT apprenticeship, aimed at relatively mature workers , including ticket office staff and train drivers, provides opportunities for staff to increase their IT skills and gain a Level 2 qualification at the end of a 13-month apprenticeship.

The unions are also involved in promoting diversity across the industry, through a range of programmes focused on different diversity issues. For example, the RMT has launched a campaign against homophobia, with the intention of having accredited LBGT representatives throughout the organisation at branch and regional level. TSSA runs a neurodiversity programme that builds awareness and tackles issues relating to dyslexia, dyspraxia, autism spectrum disorder and adult ADD/ADHD. ASLEF published "On track with diversity"[6] in 2012, the first major study of diversity in the rail industry, which it has used to open dialogue with train operating companies on diversity in recruitment.

6 ASLEF (2012): On track with diversity http://bit.ly/Shaw021

Summary of recommendations

Recommendation 1: Place the needs of passengers and freight shippers at the heart of rail infrastructure management. Train operators should drive this customer focus into Network Rail through scorecards and agreed action plans, recognising they are sharing use of the network with others and operating within a national (and international) system.

Recommendation 2: Focus on the customer through deeper route devolution, supported by independent regulation. Building on the current Network Rail move to greater devolution to its routes, there should be a step-change in the degree of autonomy of these routes to deliver more flexibly and responsively for their customers, passengers and freight shippers. This change should be supported by regulation by the independent Office of Rail and Road (ORR).

Recommendation 3: Create a route for the North. This new route will work closely with the customers there and in particular the new regional government body, Transport for the North. Network Rail should also work closely with other integrated transport authorities, city regions, and London, as funding and delivery models evolve. HS2 will remain a separate organisation but be able to draw on the System Operator and Technical Authority for access planning and timetabling in particular.

Recommendation 4: Clarify the government's role in the railway and Network Rail. In particular, the roles of the Department for Transport (DfT) – as funder, client and owner of Network Rail – should be considered and clarified. As the body responsible for transport in England and Wales, the DfT should also develop a visible longer-term strategy for rail travel, co-ordinating as appropriate with the governments of Scotland and Wales.

Recommendation 5: Plan the railway based on customer, passenger and freight needs. Enhancement planning should be generated from passenger and freight shipper requirements. Routes should be given the freedom to build up their plans based on these needs and recognising the role of the railway in the wider transport, economic and social objectives of the area.

Recommendation 6: Explore new ways of paying for the growth in passengers and freight on the railway. Further options for involving private sector finance – for example, from letting a concession, or involving suppliers in technological investment – should be explored to release government capital, encourage innovation, and speed up delivery of improvements for passengers. Routes should also be required and empowered to find local sources of funding and financing, including from those (such as local businesses or housing developers, for example) who stand to benefit from new or additional rail capacity.

Recommendation 7: Develop industry-wide plans to develop skills and improve diversity. People are one of the railway's greatest assets. But the industry as a whole needs to support and grow the pool of skilled and talented people working in the railway better and encourage more diversity.

The Shaw Report recommendations

R1

RECOMMENDATION 1

Place the needs of passengers and freight shippers at the heart of rail infrastructure management

R2

RECOMMENDATION 2

Focus on the customer through deeper route devolution, supported by independent regulation

R3

RECOMMENDATION 3

Create a route for the North

R4

RECOMMENDATION 4

Clarify the government's role in the railway and Network Rail

R5

RECOMMENDATION 5

Plan the railway based on customer, passenger and freight needs

R6

RECOMMENDATION 6

Explore new ways of paying for the growth in passengers and freight on the railway

R7

RECOMMENDATION 7

Develop industry-wide plans to develop skills and improve diversity

ISBN: 978-1-84864-177-8
Design by Katy Scott based on orginal design by DVLA Creative Services