



Network Rail: Staying on the right track

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This report is a submission to the Shaw Review of the future structure and financing of Network Rail (2015). This paper was commissioned by the TUC and rail union (Aslef, RMT, TSSA and Unite) Action for Rail campaign. The report was written by Dr. John Stittle, Senior Lecturer in Accounting at the University of Essex.

The Shaw scoping report raises a number of issues and possible options facing the shape and financing of Network Rail (NR). Since 2014 NR has been reclassified as an arm's-length public sector central government body. The Shaw report now highlights a range of possible options and directions that the government may adopt with regards to NR's future structure and financing. However, the nature and extent of some of these options and directions appear limited in facilitating a progressive, efficient and cost-effective railway infrastructure company. More generally, Shaw's potential options do not take a more explicit and holistic approach in recognising that a more radical restructuring of the current railway industry is required. In particular, Shaw should consider evaluating the operational and financial benefits of re-integrating NR within the ownership and control of a single organisation responsible for rail operations and infrastructure located within the public sector with public accountability.

This paper's response covers key areas including industry structure, financing, devolution, investment and safety.

Executive Summary

1. Shaw's options will do little to reduce or mitigate the fears that will arise from the possibility of the railway industry returning to the disastrous performance of its privatised predecessor Railtrack (RT) with years of poor management, neglect of safety standards, weak cost control and industry neglect which left the country's infrastructure in a substantially worse state than it was at the time of RT's flotation.
2. It is also the case that potential equity investors in a privatised NR will almost certainly hesitate to invest in such a company – whose debt is no longer underwritten by the state. Without government guarantees, the annual interest cost of NR's level of increasing debt could become unsustainable, which in turn could have negative consequences in respect of higher fares and cuts to services and investment.
3. Shaw highlights that partial privatisation may potentially be a funding and financing option. But as with full privatisation, this method offers little to recommend it. As a method there still remains the major concern of having a fragmented industry with the continuation of the increased costs on the many industry interfaces. A full or partial privatisation of NR in whatever guise significantly increases the risk of a repeat performance of the RT collapse and the subsequent industry upheaval, threats to safety standards and increased costs and disruption.
4. It is also self-evident that full or partial privatisation will result in higher fares for passengers because Network Rail will no longer be a not-for-dividend organisation. New cash leakages to shareholders will have to be paid for by either higher fares or a higher taxpayer contribution.
5. The use of Special Purpose Vehicles (SPVs) as mooted by Shaw to permit the creation of external infrastructure companies or joint ventures on their own or in

conjunction with NR poses substantial concerns and risks repeating the uncertainties, disruptions and additional costs for passengers witnessed by the failure of a number of rail franchisee operators such as GNER on the East Coast Main Line. Shaw should therefore be highly cautious about allowing devolved sectors to participate in forms of Special Purpose Vehicles, Public Private Partnerships or various schemes of joint ventures.

6. Devolution of functions in Network Rail also poses problems. It will increase interface complexities, lead to higher fragmentation costs and may have serious national planning and project implications. Moreover it is inappropriate having eight separate divisions perhaps with varying forms of investment, different methods and levels of funding or even legal and structural forms of ownership. Such an array of factors will hamper, restrict and lead to considerable practical problems with obtaining, servicing, controlling and monitoring the debt levels. Shaw therefore needs to provide clear and supportable evidence that further devolution of strategic, operational and financing issues to the current NR route sectors would yield any advantages, cost savings or improve decision making. In particular, Shaw needs to explain in substantially more detail how the devolution will impact on interface costs, safety standards, cost control and organisational and financial management.

7. It is also important to note that devolution in whatever form can be the first stage of privatising the route sectors and more easily facilitates the opportunity for privatisation at a later stage. The current devolved route sectors should not be used as the basis for introducing external debt or equity into the industry. External private-sector equity investment or selective debt investment in some of the devolved sectors threatens to undermine the organisational and financial strength of the overall national railway industry.

8. It is currently proposed that government subsidy will go direct to the private train operating companies by 2019, therefore train operating companies (TOCs) will be the infrastructure company's (or companies') main source of revenue. This is similar to how public funding was directed under Railtrack. It will place the TOCs in a strong negotiating position to influence the operational and investment policies of NR and risks introducing the commercialisation of infrastructure. Shaw should review this decision to assess whether it will compromise safety and efficiency.

9. The fundamental challenge faced by the industry is that it is too fragmented, with competing interests pursuing short-term commercial gains. More successful railways such as in France and Germany are funded and operated in the public sector and are far more integrated. Instead of full or partial privatisation and further fragmentation as a way of dealing with mounting costs, Shaw should give more priority to the potential benefits of having a single unified and vertically integrated railway industry under an over-arching single organisation that is in the public sector and is publicly owned and publicly accountable. The railway should be regarded as a 'public good' providing substantial social, economic and environmental benefits, with investment financed directly by government.

10. As a minimum Shaw should give more due recognition to the substantial role NR has played in repairing the extensive infrastructure neglect (caused by Railtrack), in

significantly improving safety and efficiency and in initiating substantial and successful investment projects.

11. Shaw should explore the extent to which the efficiency and cost savings achieved by bringing railway maintenance in-house can be replicated by bringing all rail renewals in-house.

12. Shaw should also recognise and protect the fact that NR can “cross-subsidise” support for the national rail infrastructure and invest on a UK wide basis to address the needs of the rail network as a whole.

13. Shaw should also ensure that NR has a more clearly defined and more accountable relationship with government in planning issues and investment projects.

14. The use of the Regulatory Asset Base (RAB) to determine investment and industry returns has allowed considerable improvements to the asset base of the industry. However, if the RAB methodology is abolished then Shaw should ensure there are structures in place to have levels of government debt agreed and guaranteed over lengthy planning and investment cycles. In any event there is a strong argument that funding should be planned over at least 15-year cycles (if not longer.) A substantial time frame is essential for major asset infrastructure planning and investment to be successfully implemented and will also deliver greater efficiency and flexibility.

15. It is cheaper to fund the railway by conventional government borrowing and it should be recognised that such funding provides wider and much needed benefits for the UK economy and the taxpayer as a whole. In terms of further investment, it would be welcomed from a planning, sustainability and accountability perspective if additional financing provision could be made from a National Investment Bank. However, Shaw should also proceed with caution in recommending that the railway industry should be financed from the National Infrastructure Commission (NIC) – should any financing become available. Any NIC financing should not be hurriedly used as a means for channelling debt (or even equity) into the industry which could then later form the basis of a mechanism for full, gradual or for partial privatisation.

16. Both passenger and employee safety is paramount in the safety-critical railway industry. Shaw must ensure that any reforms of the structures or financing of NR explicitly recognise the importance of safety and allow responsibility for the safety aspects of the industry’s functions to revert to the Health and Safety Executive (HSE) from the Office of Rail and Road Regulation (ORR). The ORR regulatory functions should be kept separate from that of ensuring safety standards are met. Shaw should also ensure that history does not repeat itself and ensure that safety is not compromised again (for example, as was typified by Railtrack.)

17. Shaw should review whether the current methods of determining staff efficiency are fit for purpose and could result in a false economy of losing skills and workforce capacity. This review should also assess whether moving all NR’s workforce functions in-house, as opposed to casualisation and outsourcing, would be safer and more economic and efficient.

1. Background and Context

1.1 Network Rail (NR) was specifically created in 2002 as a ‘not for dividend’ company that was limited by guarantee. The formation of NR originated after the structural and operational failings of its predecessor, Railtrack Group plc (RT). As part of the railway privatisation agenda, the country’s railway infrastructure of track, signalling and stations of the former state-owned British Railways Board (BRB) were transferred to RT and privatised in 1996. But by 2001 RT was placed into Railway Administration and in 2002 its assets transferred to NR.

1.2 Railways are a deceptively complex industry. They are characterised by an industry that is highly capital-intensive, assets with long lives, and with high priority accorded to operational safety. Within the railway industry, Crompton and Jupe¹ (2003, p.398) are explicit about the “strength of the case for unified operation and vertical integration.”

1.3 It is an essential industry that commonly requires state financial support in most countries. The industry is about much more than just providing passenger and freight train services; it is an essential ‘public good’ whose stakeholders extend far beyond a traditional customer base to encompass government, passengers and tax payers; and it is an industry that has wide public, political, social and environmental implications.

1.4 Railway privatisation in Great Britain has led to the dismantling of a fully and vertically integrated industry in favour of the separation of infrastructure and train operations. The result has been the creation of a fragmented, costly and complex interwoven web of contractual interfaces between train operators, NR, the current infrastructure owner and rolling stock companies.

1.5 Within the current railway industry there exist major issues and challenges concerning not only the nature of the organisational and operational structure of the railway industry but also, equally, other key issues relating to its funding, financing, devolution, efficiency and safety.

2. Range of options

2.1 The Shaw report refers to a spectrum of options for NR ranging from continuing to retain NR within the public sector through to partial or full privatisation. In addition, Shaw notes that it is possible to implement different combinations of some of the possible models within this spectrum of options. These options involve corporate debt financing, sale of assets, concessions and some form of part-funding from other sources. The report also considers options for specific projects based on Special Purpose Vehicles (SPVs), Public Private Partnerships (PPPs) and possibly access to loans and grants from public sector bodies.

2.1 Full privatisation and the lessons of Railtrack

2.1.1 The Shaw Report raises the option of full privatisation² of NR that, in practice, would probably be based on floating the entire equity of NR and possibly removing the

¹ Crompton, G., and R. Jupe (2003), “A Lot of Friction at the Interfaces: the regulation of Britain’s privatised railway”, *Financial Accountability & Management*, 19:4, November 2003.

² The Shaw Report, p.59.

government's support (or guarantee) for its debt. Shaw also highlights further options within the context of this full privatisation. In particular, the report discusses whether component parts of NR, in terms of assets or routes, may be sold off and, for specific projects, might be developed by the creation of privately owned SPVs.

2.1.2 However, a full privatisation method is the most extreme. If NR is privatised in its entirety, its equity would most probably be placed or floated on the capital markets in the same manner as RT. Indeed, Shaw's options will do little to reduce or mitigate the fears that will arise from the possibility of the railway industry returning to the disastrous performance of its publicly listed predecessor, RT. A major problem was that RT consistently prioritised the need to achieve a high income stream for its shareholders above that of maintaining sound industry safety standards. Soon after RT's floatation there was criticism that its directors had only "one purpose in life – to satisfy those shareholders and maximise their dividends."³ Indeed these directors had "no strategy, no vision, not even an idea of precisely what RT was for." As Wolmar noted, "RT never set out a corporate strategy or even figured out what its role was."⁴ Indeed, Murray (2001) noted that "the entire infrastructure management system (of RT) seems designed for disaster". When Gerald Corbett became CEO there was a policy to "delay replacing assets . . . until its condition demanded it."⁵ This policy was a switch from routine "replacement when assets reached a fixed age." A National Audit Office report (NAO) report alarmingly highlighted that the ORR "have found it difficult, however, to establish whether Railtrack have carried out sufficient maintenance and renewal to meet the needs of the users of the network".⁶

2.1.3 The Hatfield derailment in 2000 that finally triggered the demise of RT was caused by poor management, weak engineering standards and neglect of track maintenance.⁷ After the Hatfield derailment, accident investigators blamed negligent management of the track infrastructure, and RT was forced to take ruinously expensive emergency measures. Yet safety "concerns had been growing each year that had passed since privatisation" (Murray, 2001, p.54). The Southall and Ladbroke Grove rail accidents highlighted the extent to which safety standards were deteriorating. For example, in the case of Southall, Murray notes that the subsequent Uff inquiry found that "privatisation and fragmentation of the industry has considerably eroded the safety culture inherited from British Rail." From the time of privatisation, safety issues became secondary to meeting the demands of shareholders. Even when the company reported an after-tax loss

³ See Wolmar, C. (2005), *On the Wrong Line*, p.93. Aurum Press Ltd

⁴ *Ibid.*

⁵ Murray, A. (2001), *Off the Rails*, p.77, 76. Verso Books

⁶ NAO (2000), *Ensuring that Railtrack maintain and renew the Railway Network*, HC 397, Session 1999–2000, 12 April 2000, para 3.2. See www.nao.org.uk/wp-content/uploads/2000/04/9900397.

⁷ A pivotal point leading to RT's demise was the accident on 17 October 2000 on the UK's major arterial railway route (between London and Edinburgh) at Hatfield, which was largely caused by negligent management of the track infrastructure. RT (ORR, 2002, p.1) had belatedly realised that "its asset knowledge and engineering policies were seriously inadequate." Even Gerald Corbett indicated in his evidence to a House of Commons Select Committee that "the condition of the track . . . was appalling, it was totally unacceptable" (see reply to Q5, House of Commons, Select Committee on Environment, Transport and Regional Affairs, Hansard Minutes of Evidence, 1 November 2000).

of £314m for the year to 31 March 2001, it still declared a dividend of £138m, which the chief executive justified as “a signal to shareholders that better times were ahead” (Murray, 2001, p.118). Tom Winsor, the rail regulator at the time, even accused RT of having “had . . . almost a policy, certainly latterly, of neglecting their assets”.⁸ In addition, RT lacked adequate control over its many contractors and subcontractors to whom it had outsourced substantial amounts of maintenance and other engineering work. It soon became clear that RT had inadequate supervision of its contractors and poor cost control of the engineering work and other projects that were being undertaken. Indeed, when RT initially contracted out its own network maintenance in 1995, “a 30% cost reduction was expected, but by 2003–04 it was 50% higher in real terms”.⁹ The NAO (2000) highlighted that the number of broken rails on the network “increased from 750 in 1995–96 to 937 in 1998–99, a 25 per cent increase.”¹⁰ This is hardly the sign of an organisation successfully coping with the demands of operating a safety-critical infrastructure company.

2.1.4 Once NR acquired the infrastructure, its deputy chairman at the time, Ian Coucher, was clear about the failings of outsourcing maintenance: the railway does not “lend itself to output-based specifications, which give people the freedom to decide how to do it and when they're going to do it. It makes it very difficult to change something if you are not quite sure what people are doing out in the field.” In a warning that Shaw should heed, Coucher also cautioned that when “every contract was renegotiated locally by the regions . . . you ended up with a large amount of variations. Some were cost-plus, some had special performance regimes – it was a real mess.”¹¹ RT also assumed that private contractors could reduce their costs on some forms of maintenance contracts. But Coucher reports that in “about 1997–98, it was quite apparent that the contractors were losing money. They tried to take as much out through labour as they possibly could, and it was beginning to creak at the seams. The collective headcount at the start of privatisation was about 18,000, and by 1999 they had cut that back to about 12,000.” Coucher then accepts that “gradually over time, they have had to put them all back. So we lost a large amount of experience out of maintenance, and there was a corporate memory loss going on out there which didn’t help.”¹² The net result was clear: “Cost up, performance down”.

2.1.5 In addition, the privatised RT had an appalling record in cost control, planning and delivering major projects. A key example was in the upgrading of the West Coast Main Line (WCML). The NAO reported that shortly after RT went into administration the WCML upgrade estimate of the “programme’s final cost had risen (in 1998) from

⁸ See Q5, Q799, House of Commons, Transport Select Committee (2002), *First Report: passenger rail franchising and the future of railway infrastructure*, Vol. II: *Minutes of Evidence*, Session 2001–02, HC 239-II.

⁹ “UK brings Infrastructure Maintenance back in-house”, *Railway Gazette*, 1 June 2004. See www.railwaygazette.com/news/single-view/view/uk-brings-infrastructure-maintenance-back-in-house.

¹⁰ NAO (2000), *Ensuring that Railtrack maintain and renew the Railway Network*, p.6. See www.nao.org.uk/wp-content/uploads/2000/04/9900397es.

¹¹ Ian Coucher quoted in “UK brings Infrastructure Maintenance back in-house”.

¹² *Ibid.*

£2.5bn (in 2005–06 price terms) to £14.5bn (with the first stage of implementation) in May 2006”.¹³

2.1.6 The fate of RT provides clear evidence to Shaw that, for the country, the railway industry, tax payers and passengers, it is not in the public interest to return to the former days of a privatised infrastructure company. RT reflected nearly five years of poor management, neglect of safety standards, weak cost control and industry neglect and left the country’s infrastructure in a substantially worse state than it was at the time of RT’s flotation.

2.2 Privatisation and debt finance

2.2.1 The determination of NR’s revenue is based on a return on its Regulatory Asset Base (RAB) that is agreed by the ORR. The RAB is the amount of regulated assets that NR is permitted to use as a basis on which to determine its return. NR has then funded these assets by raising debt in the capital markets – that is indemnified by the government. The RAB could also provide a ‘balance sheet buffer’ or ‘margin of safety’ between the level of debt and the specified ORR 75% limit on the debt/RAB relationship. The RAB mechanism has the key advantage of allowing the government to approve investment in the railway industry without providing the financing or affecting government economic indicators. The financing interest costs were then paid through the return on the RAB. But in 2013, the ORR even warned that, “under reasonable assumptions, debt could continue to rise in future control periods and there will need to be a debate within the government and industry about how sustainable this is.”¹⁴

2.2.2 Since NR’s re-classification to the public sector, NR’s debt now appears in the Public Sector Net Debt economic statistics. Since in future all funding for NR will be channelled through the government Debt Management Office (DMO), there will be greater control of and greater restrictions to obtaining financing for railway industry investment.

2.2.3 Shaw notes there are “mixed views” on NR’s Regulatory Asset Base and the size of its debt. However, it is both the large RAB and the debt that raises sustainability questions over the longer term, given the size of the RAB and debt. Indeed, these factors alone could impact on a privatised NR if it attempted to raise debt from capital markets in the future – especially if the debt is unsupported by government (as may be probable in a fully or partially privatised NR.) If the RAB mechanism is removed then there needs to be a clear government commitment and agreement with NR to provide government debt (through the DMO) that is planned and guaranteed beforehand, and there needs to be clear and agreed terms to longer planning and financing cycles of at least 15 years (if not longer) [see also section 4.7 below].

2.2.4 Shaw raises the prospect that if the parent company of NR is fully privatised, then its debt finance could become unsupported (as opposed to being currently indemnified

¹³ NAO (2006), *The Modernisation of the West Coast Main Line: report by the Comptroller and Auditor General*, HC 22, Session 2006–07, 22 November 2006. See www.nao.org.uk/wp-content/uploads/2006/11/060722.

¹⁴ ORR (October 2013), *Final Determination of Network Rail’s Outputs and Funding for 2014–19*, p.48. See http://orr.gov.uk/_data/assets/pdf_file/0011/452/pr13-final-determination.

by the government). The loss of these guarantees can then present significant financing issues. NR's debt is already reaching £37.8bn in 2014–15 and is now expected to grow substantially over the coming years and Control Periods (CPs). Potential equity investors in a privatised NR will almost certainly hesitate to invest in such a heavily geared company whose debt is no longer underwritten by the state. Without government guarantees (and even after paying the Financial Indemnity Mechanism charge¹⁵) the annual interest cost of NR's level of increasing debt could become unsustainable, which in turn could have negative consequences in respect of higher fares and cuts to services and investment. The interest on the debt is becoming substantial. During 2014–15, NR's total interest charges¹⁶ amounted to £1.46bn, with borrowing now expected to exceed £50bn by 2019.¹⁷ By the end of CP5 (in nominal terms) the annual interest charges of NR could easily reach £2 billion in 2019. In recovering these charges, either the TOCs (through higher track access charges) or the government (through additional financial support) will be required to shoulder these increasing interest charges.

2.3 Partial privatisation

2.3.1 Shaw raises other possible aspects of privatisation including the sale of some of NR's assets and/or routes, which will then compound the industry's operational interface complexities and further increase the industry's operating costs and cash leakages by introducing yet further fragmentation.

2.3.2 Shaw highlights that partial privatisation may potentially be a funding and financing option. But as with full privatisation, this method offers little to recommend it. As a method there still remains the major concern of having a fragmented industry with the continuation of the increased costs on the many industry interfaces. A full or partial privatisation of NR in whatever guise significantly increases the risk of a repeat performance of the RT collapse and the subsequent industry upheaval, threats to safety standards and increased costs and disruption.

2.3.3 Shaw suggests this partial privatisation includes the possibility of using SPVs to permit the creation of external infrastructure companies or joint ventures on their own or in conjunction with NR, which pose substantial concerns. However, the use of SPVs risks repeating the uncertainties, disruptions and additional costs witnessed by the failure of a number of rail franchisee operators.

2.3.4 Previously, companies such as Sea Containers established an SPV to create GNER, and the National Express Group formed National Express East Coast and, even earlier in railway privatisation, the Veolia Group created Connex SouthEastern; all these SPVs ended in failure. The parent groups in the SPVs or in joint ventures can relatively easily terminate the agreement and walk away from the venture with minimal penalties, as clearly illustrated by GNER. Although these SPVs concerned train franchisees, it

¹⁵ The FIM is the additional annual charge that NR pays to the government in recognition of the provision of "letters of comfort".

¹⁶ Gross borrowing costs before interest capitalisation. See NR Annual Report 2014–15, Notes 9 and 19.

¹⁷ Office of Rail Regulation, October 2013, Final determination of Network Rail's outputs and funding for 2014–19, (para 181). In the Chancellor's autumn statement, 2015, it was indicated that this amount may increase by up to another £700m from an earlier amount of £49.6bn. See http://orr.gov.uk/_data/assets/pdf_file/0011/452/pr13-final-determination.

nevertheless illustrates how relatively easy it is for the management of parent companies of ailing SPVs to simply wind up the SPV and leave the industry without incurring large liabilities. The result often means that the government, as the ‘operator of last resort’, needs to intervene to ensure continuity of services. In addition, using SPVs, joint ventures or PPP schemes merely adds to the cost and complexity of operating what should be a fully integrated service.

2.4 Privatisation and devolution

2.4.1 On privatisation, the vertically integrated nationalised industry was fragmented into more than 100 companies. The result was the creation of a complex interwoven web of contractual relationships between players in the industry. That has had a significant impact on the structure, operations, financing and planning and project management in the industry.

2.4.2 Shaw does precisely define some of the partial privatisation aspects of the industry but, given that NR is operating on a divisional basis of eight geographical routes, these devolved routes might potentially be used as the basis for some degree of partial privatisation. The possibility exists that one or more route sectors will be tested as a means of privatisation. However, devolution facilitates a relatively easier method of providing investors with a route into operating the railway infrastructure. Greater levels of devolution will also accord with the government’s policies of granting increased political and economic powers to local authorities and the regions. Reforms to the business rating system will also permit regions and local authorities to finance more easily new infrastructure developments.

2.4.3 Mark Carne, CEO of NR, has already indicated initial support for the method of splitting NR and devolving control to route sectors; and this approach would lend support to Shaw and potentially help to facilitate devolution of some potential routes. Carne also proposes that small central remnants of NR should remain which would have a co-ordinating and monitoring function. In addition, Carne’s proposals are for a matrix arrangement whereby three service companies could meet the requirements of the eight divisions. Carne has already been reported as stating that these divisions could provide a vehicle to introduce capital from infrastructure companies, train operating companies and local authorities.¹⁸ But it is inappropriate to have eight separate divisions perhaps with varying degrees of forms of investment, different methods and levels of funding or even legal and structural forms of ownership. Such an array of factors will hamper, restrict and lead to considerable practical problems with obtaining, servicing and monitoring the debt levels. In addition, there will be associated issues that are concerned with ensuring controls over these debt levels and allocating the overall cost of debt to these devolved sectors.

2.4.4 But even further, devolution by itself within the current NR organisation (without seeking external financing) will increase interface complexities and higher fragmentation costs and may have serious national planning and project implications. Furthermore, devolution in whatever form can be the first stage of privatising the route sectors; it more easily facilitates the opportunity for privatisation at a later stage.

¹⁸ *The Sunday Times*, 15 November 2015.

2.4.5 Indeed, partial privatisation opens the way to introduce not only debt finance but also injection of equity. By establishing perhaps joint ventures or forms of PPP schemes, external organisations can obtain an initial foothold into these divisions and perhaps later extend their equity investments to obtain a majority holding in joint ventures. And creating yet more industry interfaces will cause more problems and higher costs. As Jupe previously argued, in railway privatisation these industry interfaces are a prime driver of industry costs and “arose as many profit-seeking companies were involved in the supply chain each aiming to squeeze profits from its contribution.”¹⁹ In addition, Jupe argues that there were other major cash leakages from the industry in the form of interest payments and dividends. Any form of privatisation based on NR’s planned structure of devolving major operating activities to eight route sectors, and perhaps combined with some supporting service organisations, would bring in more industry interfaces, thus increasing overall costs and complexity, and will not deliver value for money; and indeed a further fragmented industry may have potentially serious implications for safety.

2.4.6 McNulty (2011) draws attention to the success of bringing infrastructure maintenance in-house. Until 2011 when NR started this internal rationalisation, McNulty notes there were “over 70 different sets of terms of employment and hundreds of variable job descriptions after bringing infrastructure maintenance in-house. Many of the working practices were inherited from former infrastructure maintenance companies who had restructured old British Rail terms and conditions.”²⁰

2.4.7 Significantly, McNulty also notes that NR’s operating and maintenance expenditure (in 2011) was “the same as the level in 1996/97”. He further notes that “these costs peaked in 2003/04 and (by 2011) have now fallen by £1.1bn” and with “NR largely achieving its target of a 30% cost reduction during CP3.”²¹

2.4.8 By bringing its maintenance function in-house from 2004, NR has “delivered maintenance cost savings of over £400m per annum, of which at least £100m is reported to be a direct result of reduced interface costs”.²² The TUC (citing work from Jupe (2009)²³) highlighted the significance of the cost of subcontracting by NR. It was conservatively estimated that profit-taking by subcontractors to NR was “£200m per year for renewals and enhancements”.²⁴

¹⁹ Jupe, R. (2012), “Evolutionary Change? An evaluation of the McNulty report on rail”, *Public Money & Management*, 32:3, p.178.

²⁰ McNulty, R. (2011), *Realising the Potential of GB Rail: final independent report of the Rail Value for Money Study*, DfT/ORR, pp.286, 204.

²¹ *Ibid.*, p.19.

²² DfT/ORR (2010), *Rail Value for Money: scoping study report*, Version1.1. p.23

²³ Jupe, R. (2009), “New Labour, Public Private Partnerships and Rail Transport Policy”, *Economic Affairs*, 29:1, pp.20–26.

²⁴ TUC (2015), *Towards Public Ownership*. See

www.tuc.org.uk/sites/default/files/TUC%20summary%20TfQL%20analysis%20March%202015_0.

3. Future – staying on the right track

3.1 A unified model

3.1.1 There is a strong argument for the structure and management of the railway industry to be based on a unified and integrated model within the public sector. The whole railway industry as the former BRB was a fully integrated nationalised industry and, by many performance indicators, was highly cost-effective and productive.

3.1.2 By way of comparison, the state-owned British Rail was described as “perhaps the most financially successful railway in Europe”. Government subsidy was 15 per cent of revenue in 1994, making BR “the least subsidised railway system in Europe.”²⁵ Overall state subsidy was 0.16 per cent of Gross Domestic Product (GDP) compared to the European average of 0.52 per cent.²⁶ British Rail in the early 1990s, despite a chronic shortage of investment funding, was remarkably cost-efficient by international standards. Labour productivity (defined as train-kilometers per employee) “rose by 17% between 1987 and 1994 . . . and was the highest in Europe”.²⁷

3.1.3 Fragmentation of the industry has led to increases in unit costs and overall financial dysfunctional cost structures. Indeed, outsourcing of activities can also be costly in the industry, as RT previously found. RT discovered that outsourcing of engineering and other operational activities can lead not only to increased costs but also to serious safety implications. As Jupe highlighted, RT’s “initial focus was on producing attractive returns for its shareholders, and the network’s maintenance and renewal was neglected.” The Hatfield crash clearly illustrated “Railtrack’s neglect of safety and its poor management of contractors”.²⁸

3.1.4 McNulty (2011, p.286)²⁹ points out that there have been “many barriers to efficiency under the privatised structure . . . including the extent of the fragmentation of structures and interfaces”. He also noted (2011, p.284) that from studies “in the rail sector, privatisation does not appear to have led to cost reductions”.

3.2 Devolution

3.2.1 As discussed above, Mark Carne, the current CEO of NR, believes in the advantages that he considers will arise from a more devolved model. He believes some form of sector devolution of NR would permit other sources of funding from external investors and suggests the funding could come from “local authorities, infrastructure funds or train companies.”

²⁵ Shaoul, J. (2004), “Railpolitik: the financial realities of operating Britain's national railways”, *Public Money & Management*, 24:1, p.29.

²⁶ Although this low level of state funding is far from supportive or beneficial for a modern and efficient industry, it does at least illustrate the relatively efficient state of BR, given its minimal resources and funding. Harris, N. and Godward, E., *The Privatisation of British Rail*, p.52, The Railway Consultancy Press 1997

²⁷ Shaoul, J (2004) *Ibid* p.30

²⁸ Jupe (2012), “Evolutionary Change?”, p.178.

²⁹ *Realising the Potential of GB Rail*, Final Independent Report of the Rail Value for Money Study Detailed Report, Department for Transport, Office for Rail Regulation (2011)

3.2.2 In practice, this fragmentation of funding coming from a hotchpot of sources will result in a muddled, erratic and unsustainable funding model. Just because a limited number of railway ventures, such as the HS1 concession, have attracted finance from external infrastructure companies and overseas pension funds, this is no sustainable basis on which to consider extending this un-coordinated model on a larger national scale. To do so would have highly complex financing and planning implications. Privatising some of these divisions would, depending on the financing methods, mean more industry cash leakages in the form of dividends and considerable interest payments to external investors and lenders.

3.2.3 A financing model is needed that has sustainability and clarity and facilitates further and continued investment in the industry. The model also needs to be publicly accountable, co-ordinated, properly planned and managed within an overall public sector context.

3.3 Finance

3.3.1 Railway industries are highly capital-intensive, having many assets with long lives. At 31 March 2015, NR debt reached £38.55bn and is expected to reach nearly £49.6bn by the end of CP5 in 2019. Since NR was re-classified as a public sector corporation, its previous guaranteed government debt will be gradually replaced by debt channelled through the government's DMO. In the current CP of NR's £38.3bn settlement, over £22.2bn will be new investment, with the remaining £12.1bn for operating costs and industry costs.

3.4 Debt and the Regulatory Asset Base

3.4.1 NR's debt should be viewed in the context of its Regulatory Asset Base (RAB). The ORR incorporates the RAB as part of its mechanism in determining NR revenue requirements. The RAB represents NR's assets but without necessarily closely resembling the recognition of the assets in its balance sheet. NR receives a guaranteed return on its investment in assets. The key advantage of the RAB mechanism is that the government can authorise further investment in the industry but would only pay the interest on the debt – and the debt itself would not appear as part of the Public Sector Net Debt economic indicators. However, re-classification of NR as a public sector corporation has led to the debt appearing on the government's books – which, in practice, now eliminates the usefulness of the RAB from the government's perspective. Shaw highlights the substantial growth in the RAB and net debt of NR: during CP5 (2014–19), the RAB was planned to increase from £49.5bn to £70bn with net debt correspondingly increasing from £31.7bn to £49.6bn. In some ways, the RAB has been a useful vehicle to fund significant capital investment into the industry. It has allowed the government to invest in infrastructure, with NR being able to access private capital markets (albeit with debt guaranteed by the government), which has the effect of removing political reluctance to incur further debt on the government's books.

3.4.2 However, as Shaw notes, it is possible that this large RAB and debt could “raise sustainability issues” if NR were to raise debt from other capital market sources in the future. This debt sustainability is an issue that may well concern private-sector investors considering injecting debt or even equity in a privatised NR. If NR is broken up as a corporate entity and some or all of its eight divisions are fully or partially privatised,

there remains the issue of the treatment or allocation of NR debts (now on the government books) to the eight sectors. Pointedly, Shaw even warns that the RAB might even be greater than the “sum of the parts of the company” if the government sought private-sector involvement. Moving towards privatisation would mean, without state assistance, the private sector potentially being saddled with large, if not unsustainable, amounts of this debt.

3.4.3 In future, Shaw notes that the re-classification of NR means the role of the RAB would “become less clear” and indicates that the “government now faces including the whole cost of capital expenditure at the point it is incurred.”³⁰ As a result this may increase pressure for the government to remove the company from its books and indeed ownership.

3.5 Rail financing in Europe

3.5.1 A new act in France creates a public railway group with three indissociable components, SNCF Réseau, SNCF Mobilités and SNCF EPIC. The rationale for this approach is that an integrated railway group enhances service regularity. This approach enables greater track and train co-ordination, and improves live traffic management.

3.5.2 SNCF Réseau is a single infrastructure manager whose responsibilities include non-discriminatory access to the network, managing rail traffic, maintenance work and engineering projects. Under this model, infrastructure is reunified to enhance network safety.

3.5.3 SNCF has a strategic framework contract with the state for the entire public railway group. Among other things, this contract ensures that the resources allocated to the public railway group are commensurate with the objectives set out.

3.5.4 SNCF EPIC will have responsibility for social unity and cohesion of the system, as well as providing unified management of real estate and land development.

3.5.5 Importantly, SNCF say this reintegration and unification of railway functions will slow down the increase in debt, although there is also recognition that the debt will continue to increase.³¹

3.5.6 In Germany, the government plans to invest €28bn in the railways between 2015 and 2019. An additional €8bn per year is available for investment by regional rail services, and this increases annually by 1.8 per cent. This is a total of €36bn, which it is important to note is all funded by the state.³²

3.6 Operational risk: safety

3.6.1 Particular attention must be paid to any reform of NR that has operational safety implications. Under RT, there were considerable and serious concerns about safety aspects of maintaining the infrastructure. Indeed, the HSE noted that privatisation had led to a substantial increase in broken rails, from 654 in 1994–95 to 937 in 1998–99.

³⁰ The Shaw Report, p.57.

³¹ SNCF, internal papers project, 2015

³² Information provided by Eisenbahn und Verkehrsgewerkschaft (2015)

However, since NR assumed ownership and responsibility for the railway infrastructure in 2002/3, the number of broken rails has fallen from 444 to just 95 in 2014–15, an impressive record.³³ In addition, in the final days of RT, in 1999–2000 there were 593 Signals Passed at Danger (SPADs) but these numbers fell significantly under NR to 298 in 2013–14.³⁴

3.6.2 In 1999–2000, organisations such as the HSE, Rail Passengers Council and Central Rail Users Consultative Committee had all issued warnings about this threat to passenger safety.³⁵ In future, Shaw should consider splitting the health and safety functions and responsibilities from the ORR with its regulatory functions. Until 2006,³⁶ the Health and Safety Commission (HSC) and Executive had responsibility for health and safety policy and enforcement on the railways until it passed this function to the ORR. In 2002–03, total industry casualties amounted to 8435, which NR progressively reduced to 7112 by 2014–15. Further industry re-organisation and, especially if the industry is devolved into smaller infrastructure divisions or companies, may threaten this sound year-on-year improvement in NR’s safety record. Indeed, any restructuring of the industry should address the issue of health and safety to industry employees and passengers. Certainly, if NR becomes more commercialised then there is an increased need for having a separate health and safety regulator and inspectorate.

3.7 Funding cycles

3.7.1 The current planning based on five-yearly CPs should also be reviewed. The long-life nature of the capital-intensive assets has a resulting impact on both revenue and capital implications.

3.7.2 The five-yearly planning cycles of CPs are based on using Higher Level Output Specifications (HLOS) from the DfT and also a Statement of the Funds Available. The ORR then decides what can be achieved and delivered – in the context of the funding available. NR will be involved in the process by developing and submitting its planning proposals and later (after the HLOS) will produce its Strategic Business Review.

3.7.3 Currently, NR has a ‘balance sheet buffer’ or ‘safety margin’ which is the difference between its debt (as expected by the ORR) and a 75 per cent limit on the debt/RAB ratio. This buffer was originally expected to be approximately £3.5bn and is available for contingencies. However, as Shaw notes, re-classification of NR has, in effect, replaced these mechanisms with a single £1.8bn buffer based on NR changes of debt financing. The continued use of the RAB as a regulatory mechanism is now increasingly being called into question – now that there is direct government provision of debt finance.

3.7.4 Bowe (2015), in discussing planning aspects of NR, warns that the re-classification of Network Rail “fundamentally increases the oversight required in assuring the

³³ ORR Portal 2015 Table 5.31. See

<https://dataportal.orr.gov.uk/displayreport/html/html/6e40a98b-00b1-475f-b1b5-215f67f194c4>

³⁴ *Ibid.*, Table 5.25. See <https://dataportal.orr.gov.uk/displayreport/html/html/45fd875d-7ed7-450d-99e8-6f76c9727403>.

³⁵ Bagwell, P., and P. Lyth (2002), *Transport in Britain: from canal lock to gridlock*, p.195.

³⁶ See www.hse.gov.uk/railway/index.

affordability of rail infrastructure investment”. Bowe points out that, with regard to CP5, “the ORR’s role, in hindsight, is unclear”.³⁷ Bowe also recommended (para 1.7) that “the role of the ORR in respect of enhancements planning should be reviewed”. Indeed, Bowe should further investigate to what extent the role and responsibilities of the ORR could be further reduced in respect of these infrastructure projects. The Public Accounts Committee (PAC) have concluded that the 2014–19 rail investment programme could not have been delivered within the budget which the DfT, NR and the Office for Rail and Road Regulation agreed. The PAC notes that before signing up to the programme, the then Chief Executive of Network Rail described it as “unbalanced and unrealistic”.³⁸

3.7.5 In particular, now that NR has been reclassified, “the role of the regulator for future rail enhancement planning needs to be rethought,”³⁹ particularly given that the time frame of many railway infrastructure projects, such as electrification, are frequently lengthy and affect different CPs. A planning process with CP periods of 15-year cycles or perhaps longer (even 20 years) would improve both strategic and operational planning and assist the provision and structuring of financing.

3.7.6 For the future, the government has recently established the National Infrastructure Commission (NIC) as a means of enabling “strategic decision making to build effective and efficient infrastructure” for the country. Further investment in the railway industry is welcome, however, it is important that any funds invested through the NIC are not used as a means to support and further privatise the industry. Likewise, there should also be opportunity for a state investment bank to invest in NR’s railway infrastructure. The role and remit of the National Investment Bank could be extended to invest directly in key infrastructure projects – especially if this bank was awarded more extensive borrowing facilities and was granted access to substantially more capital for investment in railway projects.

3.8 Workforce

3.8.1 The rail industry is expected to save between £2.5bn and £3.5bn per annum by 2018–19, and 70 per cent of these savings are expected to come from Network Rail. According to the ORR (2013), if NR delivers on its CP5 efficiencies, then the organisation’s efficiency will have improved by 50 per cent between 2004 and 2019. Funding cuts to NR in CP4 and CP5 raise several concerns.

3.8.2 There should be improved workforce planning across the industry, with particular reference to NR in order to deliver decent, secure jobs and in the longer term help retain a skilled workforce. However, due to the proposed efficiency savings set out in the Rail Command Paper, the TUC estimates that around 6300 jobs are at risk in maintenance, signalling and operations, and a further 5500 in station staff across the network. In 2014, the TUC and rail unions commissioned *The Impact of Efficiency Savings on Network*

³⁷ *Report of the Bowe Review into the planning of Network Rail’s Enhancements Programme 2014–2019*, DfT 2015, para 4.38. See:

www.gov.uk/government/uploads/system/uploads/attachment_data/file/479560/bowe-review.

³⁸ House of Commons, Committee of Public Accounts, *Network Rail’s 2014–2019 Investment Programme* (2015) <http://www.parliament.uk/business/committees/committees-a-z/commons-select/public-accounts-committee/inquiries/parliament-2015/network-rail-2014-2019-rail-investment-programme-inquiry/>

³⁹ *Report of the Bowe Review*, para 1.7.

Rail Staff, Performance and Safety which involved frontline staff at Network Rail and its contractors. Findings from this research included:

- Safety has become secondary to meeting targets and budgetary demands.
- In the context of headcount reductions and restructuring, staff are having to take on multiple roles, affecting their ability to deliver a safe and efficient service.
- Staff shortages have led to the promotion of a culture of putting jobs off until ‘tomorrow’ because adequate resources are not available.
- Teams working on renewing tracks are smaller, and jobs need to be completed in a shorter amount of time.
- There has been a move to “fault-centred” maintenance, which has resulted in a reduction of regular equipment inspections.
- There is an endemic culture of long hours, and the increasing use of private contractors by NR has led to a growing number of workers being employed on zero-hours contracts.⁴⁰

4. Conclusion

4.1 The Shaw report properly highlights that: “Different company structures are likely to require different financing and funding solutions”. Supporting these comments, Shaw also appropriately indicates that “finance should follow structure”.⁴¹ But it is crucial that the industry’s structural and operational errors of the past are avoided. The splitting of the country’s infrastructure from railway operations formed the basis of the first major error. The industry’s problems were then compounded by the subsequent privatisation of Railtrack as a publicly listed company. RT’s demise was brought about by its poor maintenance, indifference to safety matters and the priority it accorded to satisfying shareholder needs above those of passengers and the industry. Privatising NR as a complete entity promises to replicate RT’s failings. It should not be forgotten that RT’s neglect of the infrastructure caused the railway industry significant financial and operational consequences lasting many years after RT’s demise, as well as contributing to several serious rail accidents.

4.2 Partial privatisation will introduce yet more industry interfaces and structural complexity into the industry. In particular, privatising some or all of the current devolved route sectors opens the door to privatisation for external investors and funders to take greater control of the industry and threatens a return to the problems and issues of former years of that arose with Railtrack.

4.3 Even using various methods and forms of injecting private equity capital and debt into a small number of divisions promises to push the privatisation door wide open at a later date. The use of various funding methods such as PPPs, joint ventures or establishing SPVs for project development will increase costs, threaten safety levels and lead to a more complex and even dysfunctional railway infrastructure ownership and

⁴⁰ McKay, S., and N. Clark (2014), *The Impact of Efficiency Savings on Network Rail Staff, Performance and Safety*, London Metropolitan University.

⁴¹ The Shaw Report, pp.58, 59.

control. In an attempt to respond to their own pressures to increase earnings, the train operating companies will be able to exert their increased influence over the infrastructure company (or companies) – leading to increasing pressure for the infrastructure company to reduce costs, threatening safety standards in return.

4.4 Although NR has experienced various challenges and problems, Shaw should recognise that NR has rectified much of the neglect caused by RT and has considerably improved the network infrastructure. A key strength of the current form of NR is the integrated nature of its ownership and control. As a minimum, this single organisational form should be preserved in any industry structural reforms.

4.5 There should certainly not be more fragmentation of the network that will arise from devolution of the infrastructure. Railway fragmentation is already a major cause of high industry operating costs and further impacts on the need for increasing subsidy levels. As with the vast majority of railway industries in the world, the industry requires state subsidies. But privatisation has seen industry subsidies soar. As Taylor and Sloman (2012) point out, the amount of subsidy “has increased from around £2.4 billion per year before privatisation (in the period 1990/91 to 1994/95), to approximately £5.4 billion per year in the period 2005/06 to 2009/10 (all at 2009/10 prices).”⁴² However, with government subsidy going direct to the TOCs by 2019, the TOCs will be the infrastructure company’s (or companies’) main source of revenue. This change will place the TOCs in a strong negotiating position to influence the operational and investment policies of NR.

4.6 Shaw should recognise that there is much to recommend a re-integrated industry with train operators, rolling stock companies and the infrastructure all contained within the framework of a single entity that is publicly owned and publicly accountable. As a minimum, the railway infrastructure should be based within a single ‘controlling mind’ of an over-arching public-sector ‘umbrella’ organisation.

4.7 Overall, Shaw raises a number of options for the future structure and financing of the railway industry. Unfortunately, Shaw’s remit did not include encompassing a complete reform of the entire structural aspects of railway industry. The infrastructure is just one part of the industry – albeit significant. The Shaw report refers to full privatisation of the infrastructure as a possible option – but financially, structurally and operationally this reform is unacceptable. It risks returning to the former years under Railtrack with all the associated funding, planning and safety issues.

4.8 Generally, many areas of the public sector where PFI/PPP schemes have been introduced they have not been financially successful – such as in the NHS.⁴³ Difficulties with these types of financing schemes have also been experienced by London Underground. For example, in terms of the PPP schemes for upgrading the infrastructure of the London Tube, the Transport Select Committee (TSC) noted that there were many

⁴² Taylor, I., and L. Sloman (2012), *Rebuilding Rail, Final Report*, June, Transport for Quality of Life. See www.togetherfortransport.org/wp-content/uploads/2013/07/120630_Rebuilding_Rail_Final_Report_print_version.

⁴³ NAO (2012), *Peterborough and Stamford Hospitals NHS Foundation Trust: report by the Comptroller and Auditor General*, HC 658, Session 2012–13, 29 November 2012.

failures in the contractual scheme with Metrolink which were “pretty much useless.”⁴⁴ Among claims of massive over-spending, poor project management and cost control, the TSC heard from the Secretary of State for Transport that Metronet’s failure had “let down Tube travellers, London Underground and taxpayers.” The NAO also found that the main cause of “Metronet’s failure was its poor corporate governance and leadership.”⁴⁵

4.9 While investment by regional and local authorities may be more acceptable (because of greater funding security and more public accountability), the door will also be open for an *ad hoc* collection of other investors, equity funds, other infrastructure companies, transport groups and engineering companies. These groups will then obtain an increasingly strong foothold in the railway infrastructure industry with their own financial and business objectives.

4.10 Above all, many of Shaw’s options are self-limiting and inappropriate; the railway infrastructure should ideally be publicly owned and publicly accountable – with its ownership and control being fully integrated within the overall context and structure of the whole British railway industry. Although the Shaw report is concerned with the structure and financing of NR, infrastructure needs to be viewed in a wider industry context.

⁴⁴ House of Commons, Transport Select Committee, *The London Underground and the Public–Private Partnership Agreements*, Second Report of Session 2007–08, 25 January 2008, para 63. See www.publications.parliament.uk/pa/cm200708/cmselect/cmtran/45/45.

⁴⁵ NAO, *The Failure of Metronet: report by the Comptroller and Auditor General*, HC 512, Session 2008–09, 5 June 2009.