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Working Paper Series

The Modernisation and Fragmentation of the UK's Transport Infrastructure

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THE MODERNISATION AND FRAGMENTATION OF THE UK'S TRANSPORT INFRASTRUCTURE

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THE MODERNISATION AND FRAGMENTATION OF THE UK'S TRANSPORT INFRASTRUCTURE

ABSTRACT

The paper focuses on the creation of new organisational structures under New Labour's modernisation approach in three related areas: the creation of Network Rail as a replacement for the failed company, Railtrack, in the privatised rail industry; the part privatisation of National Air Traffic Services; and the part privatisation of the London Underground. In each case, the arguments of the Government and its critics will be examined. The analysis demonstrates that for each new structure the key objectives of risk transfer and value for money have not been achieved, and concludes with implications of the modernisation agenda for public policy.

KEY WORDS

Rail Privatisation; Air Traffic; Underground.

RUNNING TITLE

THE MODERNISATION OF THE UK'S TRANSPORT INFRASTRUCTURE

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INTRODUCTION

In Britain, the New Labour Government led by Tony Blair was elected on a pragmatic election manifesto in 1997, which promised to apply the principle of 'what works' in policy making. The Government embraced changes in the management of public services which may be broadly described as New Public Management (NPM) (Lapsley, 2008), and modernisation became 'a key theme' (Broadbent and Laughlin, 2005, p. 78). Privatisation had become 'inextricably linked' with modernisation by the 1990s, with 'the ascendancy of a right leaning ideology that favoured markets and competition' (Broadbent and Guthrie, 2008, p. 137). New Labour accepted that 'the private sector was a reservoir of good practices' (Broadbent and Laughlin, 2005, p. 78), and so encouraged partnerships between the public and private sectors in order to transfer 'good practices' to the public sector. In transport and many other policy areas, the notion of the 'third way' of partnerships (Giddens, 1998) became a 'metaphor for their approach' (Broadbent and Laughlin, 2005, p. 78).

New Labour's modernisation approach provided a substantially increased role for the private sector, and especially for private finance, in the delivery of public services. Thus, adherence to the 'third way', combined with the self-imposed fiscal constraint of keeping public sector net debt below 40% of GDP, provided 'some legitimation for the continuing adoption and development of the use of the Private Finance Initiative (PFI) despite it being a legacy from the earlier Conservative administration' (Broadbent and Laughlin, 2005, p. 83). New Labour presided over a major expansion of the PFI and its associate, the Public Private Partnership (PPP), in order to bring much-needed investment to public services. The PFI,

which involves private companies designing, building, financing and sometimes operating a facility which provides a public service, was introduced on a modest scale in 1992. It was greatly expanded by New Labour, especially in the areas of the hospital and school building programmes. There are now over 800 PFI and PPP projects operating in Britain, accounting for around £54 billion of investment and over £200 billion of long-term debt repayments.

This paper focuses on the changes in organisational structures in three related transport areas which stemmed from the modernisation approach. These changes in structures are: the creation of Network Rail as a replacement for the failed private company, Railtrack, in the privatised rail industry; the PPP used to part privatise Air Traffic Services; and the PPP used to part privatise the London Underground. In particular, it focuses on two key benefits claimed by the Government for these new organisational structures: they achieve better value for money than traditional public sector projects, financed and operated directly by the state, by raising capital more cheaply, and they transfer financial risks to the private sector. In practice, as the paper will demonstrate, privatisation in rail and the Underground led to a large increase in subsidy, Air Traffic Services required a financial rescue by the state, and in all cases risks were not transferred to the private sector.

The paper is organised into four further sections. The next section examines rail privatisation, including Railtrack's collapse and its replacement by Network Rail. The third analyses the part privatisation of the Air Traffic Services and the financial problems which followed. The fourth section focuses on the part privatisation of London Underground, and the subsequent collapse of Metronet. The final section concludes by considering the implications of these modernising organisational changes for public policy.

RAIL PRIVATISATION

The Privatisation Model

The Conservative Government led by John Major introduced rail privatisation through the Railways Act 1993, which originated in the 1992 privatisation White Paper. The White Paper claimed, without evidence, that ‘greater efficiency’ would result from greater opportunities to ‘reduce costs’ (Department of Transport, 1992, para. 19). It also claimed, again without evidence, that there would be a ‘higher quality of service and better value for money’ (*ibid.*, para. 1), and that public subsidy would be progressively reduced and then replaced by payments to the Government from profitable train operators (*ibid.*, para. 21). The lack of empirical evidence was striking, given that the White Paper conceded that the nationalised British Rail (BR) had recently made ‘significant’ improvements, resulting in labour productivity ‘among the highest of any European railway’ (*ibid.*, para. 3).

The Major Government embarked on a controversial and radical structural change, which split rail infrastructure from train services. The infrastructure authority, Railtrack, was privatised in May 1996, and by 1997 all rail businesses had been sold. The fragmented system included: Railtrack; 25 franchised passenger train operating companies (TOCs); 13 infrastructure companies; three rolling stock leasing companies; and six freight companies (soon reduced to two).

Impact of Privatisation on Costs

Far from reducing costs, rail privatisation in practice increased costs by over £3 billion per year (Crompton and Jupe, 2003a, p. 400) as a result of interface costs and cash leakages (Harris and Godward, 1997, p. 107). Interface costs arise when, with many companies involved in a supply chain, there is an upward pressure on prices as each company aims to squeeze profits from its contribution. The key interface costs were the track access charges

and train leasing charges paid by the TOCs, and the profit margins on infrastructure company contracts. Cash leakages were introduced in the form of interest payments and dividends required to finance debt and equity, respectively. Railtrack alone, for example, distributed dividends totalling £709 million between 1995/96 and 2000/01, equivalent to 41% of the total operating profits of £1.7 billion generated over the six years (Railtrack plc, 1995/96 to 2000/01).

The cost escalation under privatisation meant that the claim that subsidy would be eliminated in the long run was overly-optimistic, even delusionary. Most TOCs were loss-making, and so received a direct subsidy. The total subsidy was set initially at £2 billion, but was intended to fall progressively and then be replaced by net payments from the most profitable TOCs by 2005/06. Without subsidy, however, the TOCs would have made annual losses of over £1 billion (Jupe and Crompton, 2006, p. 1053). The TOCs' subsidy provided significant support for their track access charges, and so acted as an indirect subsidy to Railtrack.

Railtrack's Collapse and Replacement

Railtrack was meant to be incentivised by its guaranteed income from track access charges. Consistent with its private sector status, however, Railtrack's initial focus was on maximising returns to shareholders and the network was neglected. Maintenance and renewal work was outsourced to infrastructure companies, purchased by building companies which enthusiastically subcontracted the work. Despite the diversity of the network, there was no comprehensive asset register showing the rail infrastructure's condition. Such a register was urgently needed, as Railtrack had adopted 'Project Destiny', which focused on assessing the condition of assets in order to maximise their use rather than following BR's policy of replacing assets at set time intervals (Wolmar, 2005, p. 170).

Railtrack's neglect of maintenance led, as the National Audit Office (NAO, 2000, para. 17) predicted, to a decline in 'the health of the network'. This was demonstrated most dramatically by the Hatfield crash, the third major accident under privatisation originating from the industry's fragmentation 'and the neglect of safety considerations between organisational boundaries' (Crompton and Jupe, 2003b, p. 636). The Hatfield crash, which resulted in four fatalities and 70 injured, was caused by a faulty rail which had been discovered 21 months earlier, but not replaced because of Railtrack's poor management of the contractor responsible for the track. The accident led to a prolonged disruption of the rail network as a huge programme of inspections, speed restrictions, and renewals was undertaken. Railtrack had been awarded a generous funding settlement by the Office of the Rail Regulator (later renamed the Office of Rail Regulation) (ORR) in October 2000, but its escalating costs after Hatfield led to additional funding of £1.5 billion being granted by the Labour Government.

In addition to Railtrack's inadequate focus on its core business of maintaining the network, its poor project management skills were exemplified by the fiasco of its flagship project, the West Coast Main Line upgrade. The initial budget was £2.1 billion, but the project was poorly scoped and managed and costs escalated towards £10 billion. In October 2001, faced with increasing demands for subsidy, Transport Secretary Byers obtained a court order placing an insolvent Railtrack in administration.

New Labour's devotion to markets and PPPs meant that rail renationalisation was ruled out. Instead, the Government aimed to combine private finance and public subsidy with stronger regulation. A new body, the Strategic Rail Authority (SRA), was established in 1999 to strengthen the regulation of the TOCs and plan the rail network's strategic development. Prime Minister Blair argued explicitly at a rail summit that the SRA's creation represented a

‘third way’ beyond the ‘sterile debate between wholesale privatisation and old-style state control’ (Blair, 1999).

Railtrack’s collapse into insolvency provided the Blair Government with an opportunity to renationalise the rail infrastructure, and then to reintegrate the train services as franchises expired. Instead, the failed company was put into administration for one year. As in other modernisations of public services, ‘a high profile structural change which failed to work’ was ‘replaced by yet another structural, high profile change’ (Lapsley, 2008, p. 83). Railtrack’s replacement in 2002 was Network Rail, a ‘public interest company’ limited by guarantee. Unlike Railtrack, the new company does not have shareholders and so does not pay dividends. It has debt finance, rather than equity, and is formally owned by around 120 industry and public members.

A key argument used to support the new organisational structure for the infrastructure provider was that it avoided the need to consider shareholder interests. This argument was presented by Transport Secretary Byers in a speech to the House of Commons on the 25 March 2002. He explained that:

Railtrack was put into administration because it was, or was likely to be, unable to pay its debts Network Rail would be a company limited by guarantee. It would not have shareholders, so it will not be paying out dividends Its core focus will be on the maintenance and renewal of Britain’s railway. It will focus on the needs of the travelling public, not short-term profit for shareholders. It will be able to raise capital for investment more cheaply Getting Railtrack out of administration must be done on the basis that it will produce a viable, financially sound company ... (Byers, 2002).

Network Rail’s Financial Performance

The cost escalation which had contributed to Railtrack’s demise continued under Network Rail. Although Network Rail’s initial bids to the ORR for funding of £29.5-35 billion were regarded as completely unrealistic, and so scaled down, the revised funding settlement in

October 2003 was 50% higher than Railtrack's financial settlement in 2000/01 as the Regulator 'did not want Network Rail to be held responsible for the inefficiencies of its predecessor' (NAO, 2004, para. 1.23). The Regulator agreed that Network Rail's revenue requirement, net of station income of £3.7 billion, would be £22.7 billion for the period 2004 to 2009. This disaggregated as £9.9 billion from subsidy, £9.5 billion from track access charges, and £3.3 billion from additional borrowing (ORR, 2005, para. 1.18). The need to directly subsidise Network Rail arose from the increased maintenance and renewals expenditure required because of the poor state of the network, and from the negative impact of large performance penalty payments on the track access charges received from the TOCs (NAO, 2004, para. 3.9). The very significant shift in public financial support for rail is reflected by the fact that the direct and indirect support for Network Rail, from subsidy and access charges, represents 85% of its net revenue requirement over the current funding period. Further, the combined subsidy for the infrastructure provider and the TOCs increased from £1.6 billion in 2001/02 to £5.2 billion in 2006/07. By contrast, the subsidy for BR in the decade before privatisation averaged £740 million per year (Shaoul, 2006, p. 153).

Network Rail has improved on Railtrack's capital investment record, and has significantly increased renewals and enhancement expenditure. This is shown in Table 1.

Table 1 about here

As the table reveals, Railtrack's capital expenditure was low in the first two years after privatisation compared to BR's average expenditure of £869 million per year over the seven years to 1994. Network Rail is now devoting over £3 billion per year to capital investment, with expenditure of £3.85 billion in 2003/04 and £3.6 billion in 2004/05. The company claims to be bringing costs under control, at the same time as increasing infrastructure expenditure. Network Rail has made estimated annual savings of £100 million on

maintenance, representing around 7% of its 2003/04 expenditure of £1.4 billion, by bringing the work in-house (Network Rail, 2005, p. 26). Despite these savings, the company has refused to bring renewals and enhancement expenditure in-house and so around three quarters of total infrastructure expenditure is still outsourced. The ORR argued that ‘outputs can be delivered at significantly lower cost than Network Rail has projected’ and so expects efficiency savings averaging 21% on maintenance and renewals expenditure over the period 2009 to 2014 (2008, pp. 7, 13).

Network Rail’s increased infrastructure expenditure has been financed partly through increased subsidies and partly through a large increase in debt. This is shown in Table 2, which presents a cash flow analysis of the increases in Network Rail’s net debt between 2003/04 and 2005/06.

Table 2 about here

The largest increase in Network Rail’s net debt occurred in 2003/04, when debt rose by £3.2 billion to £12.9 billion. This occurred as total operating and infrastructure expenditure plus interest payments totalled £6.8 billion, which was partly offset by other positive cash flows of £1 billion, while revenue was £2.6 billion. Network Rail’s income increased substantially in the next two years, as its subsidy rose to £2 billion per year, but annual expenditure was over £6 billion. Thus, net debt increased by £2.7 billion in 2004/05 and by £2.6 billion in 2005/06. These three debt increases were all greater than BR’s total debt of £2.5 billion in 1993/94, the last year before its reconstitution as an infrastructure provider.

Network Rail’s reliance on debt finance has led to a very significant increase in cash leakages in the form of interest payments to financial institutions. This is shown in Table 3.

Table 3 about here

Network Rail's debt, as Table 3 reveals, has increased by over £10 billion from £7.7 billion in October 2002 to £18.4 billion by March 2007. Thus, the company's interest payments have more than doubled, increasing from £361 million in 2002/03 to £822 million in 2006/07. Network Rail's substantial borrowing has only been possible because of the Labour Government's willingness to underwrite borrowing up to £21 billion. This debt guarantee was intended to reduce borrowing costs, but the Government is charging Network Rail £275 million over the three years from 2006/07 for the benefit of the guarantee (ORR, 2006, para. 8.7).

Despite the Government's borrowing guarantee, the effective rate of interest paid by the company has risen substantially and is now higher than that incurred by Railtrack. Measuring the effective rate of interest as borrowing costs as a proportion of average debt for the year 2006/07 (£1,019m/£18,298m), the company's effective interest rate rose to its highest ever level of 5.6% (Network Rail, 2006/07). Thus, Network Rail is now paying significantly higher interest rates than it would if financed by public sector debt. Further, the company engages in hedging because of its very significant debt exposure. However, it appears to be unsuccessful in such activities, with its 2006/07 accounts showing a loss of £183 million from hedging activities. The additional costs incurred by Network Rail, arising from its private sector borrowing and outsourcing of renewals and enhancement expenditure, are summarised in Table 4.

Table 4 about here

As Table 4 reveals, the additional costs incurred by Network Rail in 2006/07 related to private sector borrowing and outsourcing were in the range of £612 – 694 million.

It is the significant private debt and interest burden carried by Network Rail which undermines the Government's claim that the new organisational structure provides a 'viable, financially sound company' which can 'raise capital for investment more cheaply'. Over the current financing period, 2004 to 2009, interest payments are expected to total £4.7 billion, representing 48% of the total subsidy to Network Rail over this period (Network Rail, 2006). Thus, interest payments on private borrowing are a significant burden on the company, and nearly half of its subsidy is leaking out of the rail industry to the providers of debt capital. Network Rail is paying high private rates of interest 'on large debts without achieving any real risk transfer from the public sector', as the Government has explicitly guaranteed its borrowing (Glaister, 2004, p. 55). Hence, the new organisational structure created for rail's infrastructure provider as part of Labour's modernisation strategy represents the 'worst of all worlds' (*ibid.*).

THE PPP FOR AIR TRAFFIC SERVICES

The Privatisation Debate

New Labour adopted modernisation in other transport infrastructures apart from rail. This proved to be very controversial in the case of the PPP for the National Air Traffic Services (NATS). NATS is the third largest air traffic controller in the European Union. Originally, it was state-owned, operating as a subsidiary of the publicly-owned Civil Aviation Authority (CAA), which remains its regulator. It provides vital services including take-off and landing at 14 large airports, and traffic control for aircraft flying over the UK's airspace. Like much of the transport infrastructure, NATS requires substantial investment if it is to operate a safe and efficient service for many airlines operating in a congested air space. Hence, air traffic control has 'traditionally been publicly-owned and managed' (Shaoul, 2003, p. 185). This understandably was challenged by the Conservative Government, in its 1994 consultation

paper, which argued that NATS should be fully privatised in order to raise funds for investment, but the proposal was not implemented.

Soon after the privatisation proposal's rejection, the Labour Government assumed office. Despite the fact that its election manifesto made no reference to this privatisation, New Labour, influenced by the Treasury, argued that NATS' planned investment programme, requiring around £100 million every year for a decade, would be best managed by adopting a PPP. The scheme included the following objectives:

- to ensure value for money for the taxpayer and generate proceeds, which will help fund other transport programmes;
- to provide capital investment without adding to pressure on public sector borrowing;
- to ensure the private sector bears the risk of and responsibility for funding the NATS' capital programme and new business opportunities (Department for Transport, 2000, para. 7).

There was widespread opposition to the PPP plan, led by a group of backbench Labour MPs who campaigned using the slogan 'Our air is not for sale'. NATS, which was alleged to be 'inefficient', was operating with recurring staff shortages at a time when there was a large increase in air traffic. The number of staff employed in the capital-intensive industry averaged only 5,200 in the 1990s. Further, NATS had consistently generated a surplus by charging fees to customers on a cost-plus basis, covering both operating costs and capital expenditure, and so was 'never a drain on public expenditure' (Shaoul, 2003, p. 186). With annual operating surpluses of £50 million in the 1990s, NATS was an efficient organisation which did not need to be privatised for financial reasons.

Further, and possibly most importantly, critics of the proposed PPP raised significant concerns over safety. It was argued that prioritising profits would lead to cost reductions, and the only area in which savings could be made would be through staff reductions. The House of Commons Select Committee on Environment, Transport and Regional Affairs found these

arguments of the PPP's critics to be far more convincing than the Government, concluding its investigation as follows:

The Government has failed, in its evidence to us, and more generally, to make a positive case for the public-private partnership for NATS. It has also failed to give adequate reasons for rejecting the options of establishing the company as an independent publicly-owned corporation, or as a trust or non-share-capital corporation similar to NavCanada The current proposal for a public-private partnership for NATS is, in our view, the worst of all possible options for the future structure of the company. It would lead to operational control of NATS, other than in extreme situations, being ceded to a private investor which is very likely to seek either to cut costs, jeopardising safety, or to increase revenues, by raising charges to its customers, putting airlines and airports in the UK at a competitive disadvantage (House of Commons, 2000, para. 83).

The Government was disappointed with the Select Committee's critique, and argued that the PPP scheme was 'coherent, robust and will meet both NATS' needs and the Government's wider policy objectives' (Department for Transport, 2000, para. 5). The Government's response to the Committee's proposed model of a non-share-capital body similar to that of NavCanada, the Canadian air traffic control service, was puzzling, particularly when analysed in the light of Railtrack's collapse. It argued that partial privatisation was needed in order to bring 'shareholder scrutiny' to bear on NATS and to provide performance incentives (Department for Transport, 2000, para. 32). Further, the Government argued that NavCanada's board, which included representatives of airlines, unions, the Canadian government, and independents was 'not accountable to anyone' (*ibid.*, para. 30). These responses suggest that the modernisation agenda, encompassing full and partial privatisations, is so strong that it can produce contradictory attitudes within government. The claim that privatisation encouraged 'shareholder scrutiny' was made less than six months before the Hatfield crash in October 2000, which dramatically confirmed the

NAO's earlier criticisms of Railtrack's poor performance. Moreover, the NavCanada model which was dismissed for lacking accountability was the model adopted for British railways two years later when Railtrack was replaced by Network Rail.

The NATS PPP

The PPP scheme for NATS was implemented in 2001. The Government received three bids for NATS, two of which were similar: those of the Airline and Nimbus Groups. The successful Airline Group bid appeared to offer £95 million more in sale proceeds than the Nimbus bid, as the Airline Group 'assumed a higher rate of growth in NATS' traffic and income than had Nimbus' (NAO, 2002, para. 7). The Government retained 49% of the shares, with 51% being transferred to the private sector – 46% to the Airline Group and 5% to employees. The Airline Group, a consortium of seven airlines, became the strategic partner for NATS, but then paid £87 million less than originally offered citing 'reductions in air traffic growth' and 'overlooked' costs (NAO, 2002, para. 7) Thus, the purchase price was reduced to £758 million. Ultimately, in an operation similar to private equity takeovers of listed companies, the airlines only put £55 million of their own money into NATS. The remainder of the purchase price was raised as loans which would appear as liabilities in the balance sheet of NATS, which assumed the interest and repayment obligations. Both NATS and the CAA warned that 'such a high level of debt would leave NATS vulnerable to adverse events' (NAO, 2002, para. 16), but the Department for Transport rejected this prescient warning. The Department 'assumed consistent growth in air traffic', ignoring the three 'severe checks' to this growth in the previous 30 years arising from events such as the 1970s oil price increase and the 1991 Gulf War (NAO, 2002, para. 16).

Financial Crisis for NATS

Within only three months of the operation of the PPP, NATS was in serious financial difficulty because of a fall in transatlantic traffic which, although originating in the US recession, was accentuated by the terror attacks of 11 September 2001. Far from being a ‘robust’ scheme as the Government had claimed, turnover fell from £595 million in 2000/01 to £553 million in 2001/02 and NATS incurred a loss of £61.6 million. NATS’ initial financial structure saw its debt rise from £330 million to £733 million to cover the sale proceeds paid to the Government. In addition to the £733 million debt facility, the Airline Group negotiated further bank facilities of £690 million to fund future capital expenditure, and a working capital facility of £30 million, a package totalling nearly £1.5 billion (NAO, 2002, para. 17). The impact of NATS’ fall in turnover was such that the banks were concerned that the company might be in breach of the provisions of its banking facilities, and so NATS agreed not to make further drawings under these facilities.

The Government was forced to provide short-term borrowing facilities of £30 million, a figure matched by NATS’ lending banks. In a major financial restructuring, which was only completed in March 2003, the Government injected £65 million in new capital, a figure matched by a new strategic investor, the British Airports Authority. The injection of new capital enabled NATS to repay £130 million of debt. NATS agreed to make cost savings of £170 million relative to the PPP bid plan over the period to 2006, and so gained a relaxation of the rate of price decrease imposed by the regulator up to 2005. NATS made savings on both staff and other costs, as can be seen in Table 5.

Table 5 about here

Staff costs were reduced through redundancies, with costs falling as a proportion of turnover from 53% in 2001/02 to 44% in 2003/04. The increased air traffic which led to a rise in turnover meant that NATS was soon obliged to recruit more staff. Thus, staff costs increased by £111 million between 2003/04 and 2007/08, and the proportion of turnover absorbed by these costs rose to 50%. There was a significant increase in interest costs, with net interest increasing to £60 million in 2002/03. In addition, debt restructuring was very expensive, costing £100 million over the period 2002/03 to 2007/08. It was only in 2004/05 that NATS returned to profitability, a position which is heavily dependent on the volume of air traffic.

The PPP scheme led to a significant increase in net debt and cash leakages, as shown in Table 6.

Table 6 about here

Net debt increased from £329.6 million in 2000/01 to £726.8 million in 2001/02. NATS has managed to repay some debt, with the net debt position improving to £538 million by 2007/08. However, interest and dividend payments are still a significant cash leakage with payments of £59.3 million in 2006/07 and £52.7 million in 2007/08.

A key justification for the PPP was that it would enable NATS to raise private sector funding for capital investment. As Table 7 reveals, capital expenditure to date has been significantly less than planned by NATS (2000).

Table 7 about here

NATS' financial crisis subsequent to the PPP led to a very significant reduction in capital expenditure. In 2002/03, for example, it fell to £37 million, compared to the planned figure of £163.6 million. Between 2000/01 and 2004/05, actual capital expenditure was almost £300

million less than planned. Capital expenditure increased significantly in the period 2005/06 to 2007/08, but there is still an accumulated investment deficit of £211 million.

As the foregoing analysis reveals, the PPP scheme did not create a 'robust' financial structure for NATS, and there are 'continuing risks' to its finances, particularly the uncertainty over future transatlantic air traffic (NAO, 2002, para. 22). Further, as in the replacement of Railtrack by Network Rail, the injection of extra capital by the government confirms that there was no real risk transfer to the private sector. No government could allow essential transport infrastructures to collapse into bankruptcy, especially one which provides services which are as unique and irreplaceable as those of air traffic control.

THE LONDON UNDERGROUND PPP

The Privatisation Debate

The London Underground, the world's oldest underground system, was originally built by private railway companies. Although an engineering success, the investment needed to maintain and develop the Underground meant that historically it was not financially successful. Thus, in the interwar years of the twentieth century governments accepted that public investment was needed for the Underground, leading to the nationalisation of the Underground in 1948. Until 1984, a combination of a charge on the council rates paid by Londoners and central government grants accounted for around 50% of the Underground's income, with the remainder coming from passenger fares. In 1984, the Thatcher Government took over responsibility for funding the Underground, and subjected it to strict financial controls. From the mid-1990s, government grants as a proportion of total Underground funding declined significantly. Table 8 shows that government grants as a proportion of total expenditure fell from a high point of 47.9% in 1992/93 to a low point of 4.5% in 1997/98,

while London Underground covered at least 100% of its operating costs from revenue between 1990/91 and 2000/01.

Table 8 about here

Despite its success in financing operating costs from revenue, the Underground came under attack in the early 1990s for inefficiency and was seen as a candidate for privatisation. The Underground's management were able to argue that, like BR's management, they had responded positively to the rigorous financial controls imposed by Conservative Governments. Productivity had been increased by reducing the workforce by 20%, with the number of employees falling from 21,500 in 1985 to 16,000 in 1999. In order to cope with grant reductions, fares had been raised by significantly more than the rate of inflation each year from 1988, and by 2000 were double the fares in the Paris and Tokyo Undergrounds.

On assuming office, New Labour saw the need for more investment in the Underground but, as in other areas of transport infrastructure, argued that it also needed modernisation through a PPP. The Underground PPP was strongly opposed by the Mayor of London, Ken Livingstone. Livingstone's critique of Labour's plans was supported by reports from a variety of sources, including academics, a House of Commons Select Committee, the Industrial Society and accountants Deloitte and Touche. The reports were very critical of the scheme on the grounds of affordability, safety and value for money. Shaoul argued that there would be an 'affordability gap' because of the additional costs of private sector finance, and so public subsidy would have to rise (2002, p. 58). The result would be that, far from ensuring the financial stability of the Underground, the PPP would 'jeopardise its future' (*ibid.*, p. 59). A report by the Industrial Society raised serious questions about the loss of control of London's transport needs which could result, and argued that the scheme would overly favour the private companies involved in terms of the 'distribution of risk and reward' (2000, p. 126).

Meanwhile, the Select Committee on Transport, Local Government and the Regions reported concerns expressed by witnesses that the PPP's complex management arrangements 'will jeopardise safety', and highlighted concerns that 'the pressure to deliver improvements' will potentially 'conflict with safe working practices' (House of Commons, 2002, paras. 19, 23). The Select Committee was very critical of the proposed scheme, warning that:

(i)f little risk can be transferred to the private sector then the rationale for the PPP is seriously undermined.

A number of key factors in the assessment of value for money are subjective and difficult or impossible to quantify. There are clear differences in opinion between experts in the engineering, management and finance fields involved in the process about these factors We note that the Secretary of State accepted that it will not be possible to provide a definitive answer regarding the value for money of the bids we therefore recommend that the Government does not approve the PPP deal (House of Commons, 2002, para. 87).

The Government responded to this critique in its own report. On the key issue of risk transfer, it argued that:

(t)he infrastructure companies will manage the key risks of ensuring that improvements to the infrastructure are delivered on time, on budget, and to high standards of quality and comparability.... All the finance provided by the bidders' shareholders will be at risk if they fail to perform. There will be no limit on the size of the penalties for poor performance (Department of Transport, Local Government and the Regions, 2002, para. 19).

While accepting that assessing 'value for money was subjective' (*ibid.*, para. 26), the Government still cited its own supportive advisers as 'it would be illogical to dismiss their evaluation just because other experts, who were less closely involved, reached different conclusions' (*ibid.*, para. 30). Hence, the Government reiterated its support for the PPP, arguing that it would save around £2 billion compared to traditional public funding (*ibid.*, para. 59). As the critics had presciently forecast, however, the scheme was unaffordable

without substantial public support, and so the Underground's annual subsidy was increased to £1 billion.

The PPP scheme for London Underground

The Labour Government transferred two key elements of the flawed rail privatisation structure to the modernisation scheme for the London Underground: the fragmentation principle and the use of complex contracts. The 30-year PPP contracts, which cost £455 million in consultancy fees to compile, divided the Underground into four parts. Transport for London, which is the Underground's parent body and remains in the public sector, manages the PPP contracts and provides staff to operate trains and run stations. Three infrastructure companies are responsible for maintenance and renewal of the trains, over 400 kilometres of track, the tunnels, signals and over 275 stations. After competitive tendering, two of the infrastructure companies were established by the Metronet consortium which was responsible for a £17 billion renewal project covering nine out of 12 tube lines. Work on the remaining three lines became the responsibility of the Tube Lines consortium. It was recognised, as with rail privatisation, that regulation was needed, and so the role of PPP Arbiter for the Underground was added to the work of the Rail Regulator.

The Metronet consortium comprised five companies, which were most notable for their intimate connections with previous privatisations: Bombardier, a train manufacturer; W S Atkins, an engineering firm; Seeboard, a privatised electricity company subsequently taken over by EDF, a French energy group; Thames Water, a privatised water company; and Balfour Beatty, a building company with rail infrastructure contracts. Metronet applied a tied supply chain approach and distributed work to consortium members. Hence, Bombardier obtained the contract to replace rolling stock and signals; Balfour Beatty gained the bulk of track replacement work; and a joint venture involving four of the members won contracts for

civil engineering and for the refurbishment of stations. Consortium members therefore expected to benefit twice from the subsidised payments to Metronet – individually from the contracts gained, and then collectively through sharing in profits.

Metronet's collapse

The infrastructure companies' performance was meant to be monitored and incentivised through a complex set of contracts. These included 300 mathematical formulae and 'volumes of legalese' (Wolmar, 2002, p. 220). Despite these contracts, it soon became apparent that there were problems strongly reminiscent of those arising from rail privatisation. In April 2004, just one year after Metronet commenced work, it was fined £11 million for poor performance. More seriously, in August 2004 a report into the White City tube train derailment strongly criticised the company for failing to comply with safety measures put in place in 2003 after a similar accident. In July 2005, it was revealed that Metronet and Tube Lines had together been fined nearly £36 million for poor performance. In the following year, the PPP Arbiter published a critical examination of the two Metronet infrastructure companies, arguing that their performance had fallen 'well short of bid expectations in the second and third years of the contract' largely due to 'slow progress on delivering station modernisations and refurbishments' (Office of PPP Arbiter, 2006, para. 1.31). This verdict was supported by an analysis of the bids and actual work to date, which is shown in Table 9.

Table 9 about here

As the table reveals, the two infrastructure companies had delivered much less than half of the planned station upgrades, and less than half the length of the planned Tube reconditioning.

The fines and criticism received by Metronet turned out to be warnings of impending disaster. In June 2007, Metronet asked for an extraordinary review of its funding by the PPP Arbiter. The company predicted a short-term cost overrun of £551 million, increasing to a £2 billion cost overrun by 2010, blaming additional unbudgeted demands made by Transport for London. On July 16, the Arbiter ruled that Metronet had not performed ‘in an overall efficient and economic manner’ and so was only entitled to £121 million in additional payments (Office of the PPP Arbiter, 2007). Faced with this verdict, Metronet’s board opted for administration.

Metronet’s collapse soon exposed how little financial risk had been transferred to the private sector. It was true, as the Government had claimed, that ‘all of the finance’ of Metronet’s shareholders was at risk, but the consortium only had £350 million in equity capital. The bulk of its capital came from almost £2 billion of debt finance. Further, the PPP guaranteed that 95% of the debt finance would be covered by Transport for London. Months of uncertainty followed as the Brown Government searched in vain for private bidders for the Metronet contracts, and Transport for London drew on emergency public funding to cover the escalating costs. It was only when private bids failed to materialise that the contracts were taken back into the public sector in 2008.

In January 2008, the Transport Select Committee published a scathing indictment of Metronet’s stewardship, arguing that:

(c)ontracts that were supposed to deliver 35 station upgrades over the first three years in fact delivered 14 – 40% of the requirement; stations that were supposed to cost Metronet SSL £2 million in fact cost £7.5 million – 375% of the anticipated price; by November 2006, only 65% of scheduled track renewal had been achieved ... It was a spectacular failure (House of Commons, 2008, para. 93).

The Committee was also very critical of the two key arguments used to justify the PPP: risk transfer and value for money. The key argument used to justify the Underground PPP was that there would be a significant transfer of financial risk to the private sector. As a result, the annual returns on the three infrastructure contracts, which were boosted by the supposed risks, were expected to be 18-20%. The fact that 95% of Metronet's borrowing was guaranteed by the public sector means that it is difficult to 'lend any credence' to the risk transfer argument. The reality, as the Committee argued, is the reverse as the taxpayer and the Tube passengers 'must meet the cost' (*ibid.*, para. 25). Further, the Committee provided trenchant conclusions both about Metronet's failure to obtain value for money, and about the wider implications of its collapse. It forcefully argued that:

Metronet's inability to operate efficiently or economically proves that the private sector can fail on a spectacular scale ... The evidence is clear: it cannot be taken as given that private sector involvement in public projects will necessarily deliver innovation and efficiency, least of all if the contracts lack appropriate commercial incentives (*ibid.*, para. 32).

The Committee's report concluded by warning the Government about the dangers of relying on private sector delivery, arguing that:

(i)f the Government is again tempted by a seemingly good deal from the private sector, it should recall Metronet's pathetic under-delivery we are inclined to the view that the model itself was flawed and probably inferior to traditional public-sector management It is worth remembering that when private companies fail to deliver on large public projects they can walk away – the taxpayer is inevitably forced to pick up the pieces (*ibid.*, paras. 97, 98).

Shortly after the Committee reported, the Government provided a good indication of the cost of Metronet's failure when it agreed to pay £1.7 billion to settle 95% of Metronet's

debts, and a further £300 million to cover administration costs. This eliminated the £2 billion in efficiency savings which the PPP scheme was intended to produce in its first 7.5 years.

CONCLUSIONS

The key implication of this paper is that the introduction of new organisational structures in transport under New Labour's modernisation agenda has been a failure. PPP schemes have been employed as a 'tool of modernisation', assuming that 'improvements' would follow, but 'modernisation' should not necessarily be equated 'with improvement' (Broadbent and Laughlin, 2005, pp. 77, 93). The PPPs have proved to be completely inappropriate for the rail and Underground systems. The essential feature of the railways and the Underground is that they are subsidy-dependent, capital-intensive industries which do not provide a universal service. The industries will never be able to generate enough fare revenue to cover the 'full cost of the infrastructure and train operations, investment and make a return on capital employed' (Shaoul, 2002, p. 53). Further, the competing claims of the providers of capital and the industries' investment needs mean that there will be constant pressure to save on infrastructure expenditure. In the case of NATS, costs had been covered by revenue under public ownership, but the PPP introduced additional costs which coincided with a decline in revenue.

The fundamental implication is the extent to which modernisation, and a belief in the need to introduce private sector finance and expertise into public services, has influenced and will continue to influence public policy in the British state. New Labour would not consider rail renationalisation, despite strong arguments which demonstrated that the fragmented privatisation model is inefficient and will require a permanent subsidy far higher than was ever provided for BR. The Labour Government not only renounced renationalisation but extended the PPP approach in transport into NATS and the London Underground. As Lapsley

(2008, p. 77) argued, a recurring feature of NPM is that unsuccessful reforms may reappear as a 'Back to the Future' phenomenon.

The modernisation approach, far from providing alternative methods of public service delivery, has been used to close down debate about alternatives. A key argument for PPPs under the modernisation agenda is that they allow public services to increase 'capital investment without adding to the public sector borrowing targets' (Broadbent and Laughlin, 2005, p. 85). Access to finance is ultimately a political decision, however, as New Labour denied some parts of the transport infrastructure access to public borrowing 'while at the same time allowing some local authority controlled airports' to borrow without counting their loans as part of public sector borrowing (Shaoul, 2003, p. 189).

Complex PPP schemes, underpinned by regulatory mechanisms, were designed to enable private companies to provide transport services when it would be cheaper, more efficient, and achieve better value for money by operating such services on an integrated basis in the public sector. The ultimate paradox of the modernised state is that there has not been a substantial risk transfer to the private sector in transport infrastructures, as companies cannot simply be left to the ultimate market discipline of bankruptcy. In a similar manner to Railtrack which had to be replaced by Network Rail, so NATS could not be allowed to collapse, and Metronet's contracts were taken back into the public sector. While structural change involving privatisation often represents 'the policy of first resort' under the modernisation agenda, a fundamental consideration for government should be that 'structural change alone will not avoid failure' (Lapsley, 2008, p. 83).

Table 1

Capital expenditure under Railtrack and Network Rail

	<u>£ million</u>
<u>Railtrack</u>	
1996/97	484
1997/98	599
1998/99	1,653
1999/00	1,847
2000/01	2,535
2001/02	1,557
April-Oct 02	1,500
<u>Network Rail</u>	
2002/03	1,654
2003/04	3,858
2004/05	3,598
2005/06	3,151
2006/07	3,326

Note: The figures for Network Rail for 2002/03 are for a six month period.

Sources: Annual report and accounts of Railtrack and Network Rail. Nominal values, unadjusted for inflation.

Table 2

Cash flow analysis of increases in Network Rail's net debt from 2003/04 to 2005/06
(£ billion)

Year	2003/04	2004/05	2005/06
Opening net debt	9.7	12.9	15.6
Income			
Access charges	1.9	1.5	1.5
Subsidy	0.5	2	2
Other income	0.2	0.3	0.3
Total income	2.6	3.8	3.8
Expenditure			
Operating	1.2	1.2	1.1
Maintenance	1.4	1.3	1.2
Renewals	3.1	2.7	2.7
Enhancements	0.7	0.7	0.4
Interest	0.4	0.5	0.7
Total expenditure	-6.8	6.4	-6.1
Other cash flows	1.0	0.1	-0.3
Total cash outflows	-5.8	-6.5	-6.4
Net expenditure/ increase in net debt	3.2	2.7	2.6
Net debt at 31 March	12.9	15.6	18.2

Source: Annual report and accounts of Network Rail. Nominal values, unadjusted for inflation.

Table 3

Rail debt and cash leakages before and after privatisation

	Before privatisation	BR reconstituted as infrastructure <u>company</u>							After privatisation					
	93/94 £m	94/95 £m	95/96 £m	96/97 £m	97/98 £m	98/99 £m	99/00 £m	00/01 £m	01/02 £m	02/03 £m	03/04 £m	04/05 £m	05/06 £m	06/07 £m
Debt														
BR	2484													
Railtrack		2192	701	1009	1456	2384	3333	3967						
Railtrack in administration									7716					
Network Rail										9744	12935	15678	18201	18394
Interest payments														
BR	121													
Railtrack		141	181	39	40	81	132	150	318	144				
Network Rail										217	428	505	669	822
Dividends														
BR														
Railtrack			69	111	121	133	137	138						
Network Rail														
Total dividends and interest	121	141	250	150	161	214	269	288	318	361	428	505	669	822

Notes: Railtrack was in administration from October 2001 to September 2002. The interest payments for Railtrack and Network Rail for 2002/03 are both for six month periods.

Sources: Annual reports and accounts of British Rail, Railtrack and Network Rail. Nominal values, unadjusted for inflation.

Table 4

Additional costs incurred by Network Rail in 2006/07

<u>Additional costs</u>	<u>Amount</u> £m	<u>Notes</u>
Outsourcing of renewals & enhancement expenditure	233	1
Private sector borrowing rates	104-186	2
Government charge for borrowing guarantee	92	3
Loss on hedging	<u>183</u>	4
Total additional costs	<u>612-694</u>	

Notes:

- 1 Assumes 7% savings on 2006/07 renewals & enhancement expenditure of £3,326 million comparable to 7% savings achieved when maintenance expenditure was brought in-house (Network Rail, 2005, p. 26).
- 2 The highest rate of interest charged on long-term debt by the Public Works Loan Board during 2006/07 was 5% and the lowest was 4.55% (Debt Management Office, 2008). Using these rates, the interest costs on the average debt for the year of £18,298 million would be £833 - 915 million. Thus, the actual interest cost of £1,019 million represented additional interest costs of £104 – 186 million.
- 3 ORR, 2006, para. 8.7.
- 4 Network Rail (2006/07).

Table 5Income statements for NATS from 2001/02 to 2007/08

	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08
	£ million	£ million	£ million	£million	£ million	£ million	£ million
Turnover	553.1	552.7	599.2	639	686.7	701.2	742.5
Operating costs							
Staff	(280.7)	(270.1)	(263)	(289.9)	(322.7)	(335.8)	(374.1)
Other	<u>(308.5)</u>	<u>(223.7)</u>	<u>(219.3)</u>	<u>(207.7)</u>	<u>(226.8)</u>	<u>(221.4)</u>	<u>(234)</u>
	(589.2)	(493.8)	(482.3)	(497.6)	(549.5)	(557.2)	(608.1)
Operating profit/(loss)	(36.1)	58.9	116.9	141.4	137.2	144	134.4
Finance costs							
Loss on debt restructuring	-	(27.8)	(56.6)	-	-	-	(15.8)
Net interest	(43.7)	(60.1)	(58.5)	(56.1)	(56.9)	(49.6)	(51.9)
Profit/(loss) before tax	(79.8)	(29)	1.8	85.3	80.3	94.4	66.7
Tax	18.2	2.7	(5.4)	(24.5)	(22.9)	(25)	(17.5)
Profit/(loss) for the year	<u>(61.6)</u>	<u>(26.3)</u>	<u>(3.6)</u>	<u>60.8</u>	<u>57.4</u>	<u>69.4</u>	<u>49.2</u>
Staff costs as proportion of turnover	53%	49%	44%	45%	47%	47%	50%

Sources: Annual reports and accounts of NATS. Nominal values, unadjusted for inflation.

Table 6NATS net debt and cash leakages before and after partial privatisation

	Before privatisation			After partial privatisation				
	2000/01 £ million	2001/02 £ million	2002/03 £million	2003/04 £ million	2004/05 £ million	2005/06 £ million	2006/07 £ million	2007/08 £ million
Net debt	329.6	726.8	702.3	697.6	630	617.5	577.3	538.1
Interest payments	30	38.9	61	50.1	44	52.3	56.8	50.3
Dividends	-	-	-	-	5	5	2.5	2.4
Total dividends & interest	30	38.9	61	50.1	49	57.3	59.3	52.7

Sources: Annual reports and accounts of NATS. Nominal values, unadjusted for inflation.

Table 7

Analysis of variance between planned and actual capital expenditure by NATS 2000/01 to 2007/08

Year	Actual expenditure (A) £ million	Planned expenditure (P) £ million	Variance (A-P) £ million
2000/01	79	97	(18)
2001/02	62.3	133.8	(71.5)
2002/03	37	163.6	(126.6)
2003/04	81	146.6	(65.6)
2004/05	120	136.1	(16.1)
2005/06	167.4	118.3	49.1
2006/07	141.2	140.4	0.8
2007/08	137.3	100.5	36.8
Totals	825.2	1036.3	(211.1)

Sources: Annual reports and accounts of NATS, and NATS (2000). Nominal values, unadjusted for inflation.

Table 8Underground cash income and expenditure from 1990/91 to 2000/01

Year	Passenger and other revenue £ million	Operating costs £ million	Proportion of operating costs covered by revenue %	Capital expenditure £ million	Operating costs and capital expenditure £ million	Government grant £ million	Government grant as proportion of total expenditure %
1990/91	576.6	575.2	100.2	413.6	988.8	341.7	34.5
1991/92	610	594.3	102.6	295.1	889.4	308.5	34.6
1992/93	642	620.7	103.4	631.6	1,252.3	600.2	47.9
1993/94	688.3	620.5	110.9	479.9	1,100.4	506.7	46
1994/95	765.1	637.2	120	502.5	1,139.7	397.3	34.9
1995/96	815.7	623.9	130.7	485.2	1,109.1	278.8	25.1
1996/97	853.6	643.5	132.6	371	1,014.5	206.5	20.4
1997/98	960.5	695.8	138	323.7	1,019.5	45.4	4.5
1998/99	1,045.1	785.2	133.1	415.2	1,200.4	73.3	6.1
1999/00	1,148.7	995.1	115.4	251.5	1,246.6	221.6	17.8
2000/01	1,229.4	1,156.2	106.3	293.3	1,449.5	108.6	7.5

Notes: Over 90% of revenue is from fares; other revenue includes rents and advertising.

The capital expenditure and grant figures exclude the Jubilee Line Extension, which was largely grant-financed.

Source: Adapted from Greater London Authority (2001).

Table 9

Planned and actual renewals work by Metronet up to 31 March 2006

ITEM	PLANNED	ACTUAL	PLANNED	ACTUAL
Stations modernised/refurbished	17	4	18	10
Track renewals	19 km	22.2 km	30.1 km	12.7 km
Tube reconditioning	18.7 km	9.1 km	N/A	N/A

Metronet BCV

Metronet SSL

Notes: Metronet BCV is responsible for the Bakerloo, Central, Victoria and Waterloo & City lines. Metronet SSL is responsible for the Metropolitan, Circle, Hammersmith & City, District and East London lines.

Source: Office of PPP Arbiter, 2006, para. 1.33.

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