



National Audit Office

**DEPARTMENT FOR TRANSPORT**  
The failure of Metronet

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# SUMMARY

**1** In July 2007, Metronet BCV and Metronet SSL, two companies set up to modernise London Underground's infrastructure, went into administration when they became unable to meet their spending obligations. Their failure resulted in London Underground Limited (London Underground) having to buy 95 per cent of Metronet's outstanding debt obligations from its private sector lenders in February 2008 rather than repaying this debt over the 30 years of the contract. The Department for Transport (DfT) made £1.7 billion of grant available to help London Underground do so.

**2** The Government provided funding for the modernisation work on the basis that it would be carried out through Public Private Partnership (PPP) contracts. It accepted that stable funding was needed to remedy decades of underinvestment, but was concerned about London Underground's track record in delivering major enhancement and maintenance projects to time and budget. The Government, therefore, decided that London Underground should focus on operating passenger services, and that the private sector should be used to deliver maintenance and major infrastructure improvements.

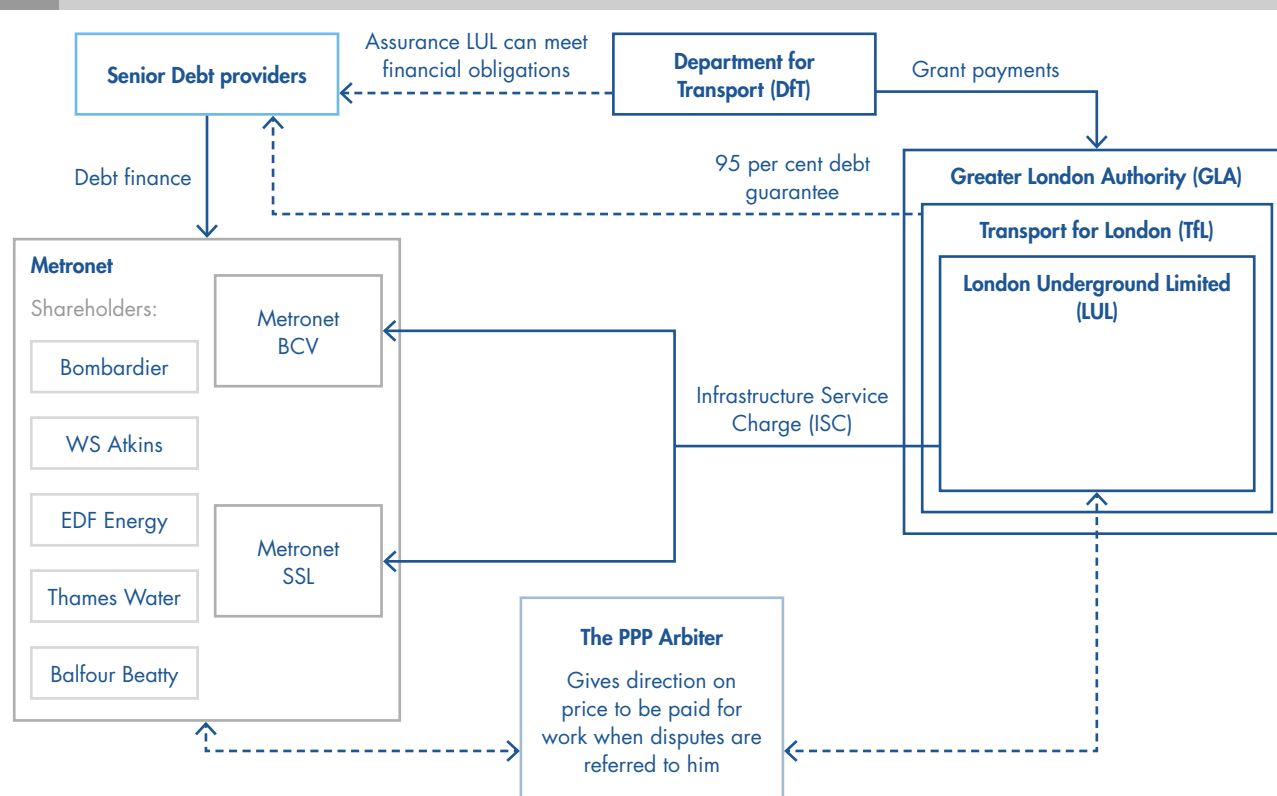
**3** Metronet BCV and Metronet SSL were responsible for two-thirds of the modernisation work under their PPP contracts – Metronet BCV for the Bakerloo, Central, Victoria and Waterloo & City lines, and Metronet SSL for the District, Circle, Hammersmith and City, Metropolitan and East London lines. Both companies, collectively referred to in this report as Metronet, were ultimately owned by a consortium of Balfour Beatty plc, Bombardier Inc., WS Atkins plc, EDF SA (formerly Seeboard Group plc) and Thames Water plc (**Figure 1**). The other PPP contract was awarded to a company called Tube Lines.

**4** The cost of work under Metronet's contracts was expected to be at least £6.9 billion over the first 7½ years of the contract in 2002 prices (£8.7 billion in cash terms). As the condition of some of London Underground's assets was unknown, Metronet could be paid for unforeseen extra work that was necessary. The PPP Arbiter was given the role of deciding, if asked, how far the public sector should be liable for extra costs which had been incurred economically and efficiently.

**5** DfT, the Treasury and London Regional Transport (which owned London Underground until July 2003 when it was transferred to Transport for London (TfL)) had responsibility for the strategy and design of the PPP arrangements. London Underground negotiated and managed the contracts. DfT retained a crucial role after the PPP contracts were put in place. It gave assurances to Metronet's lenders that it would not stand by and do nothing should London Underground be unable to meet its financial obligations and provided an annual grant of around £1 billion for the modernisation.

**6** In May 2008, after ten months in administration, Metronet BCV and SSL's assets and liabilities were transferred to two new wholly-owned subsidiaries of TfL. DfT and TfL saw this as an interim solution and set up a Joint Steering Committee which made recommendations to the Secretary of State and the Mayor of London on a long term solution in late December 2008. The Secretary of State and the Mayor are now preparing to take a joint decision.

## 1 Roles of key players



Source: National Audit Office

### NOTE

Simplified representation of stakeholder relationships.

**7** The NAO has published three previous reports on the London Underground PPP arrangements: a report in 2000 on the financial analysis undertaken before the award of the contracts; and two reports in 2004 on the prices paid and the potential to deliver improvements for passengers. Key conclusions from our 2004 reports were that: there was only limited assurance that the price paid was reasonable, because of the complexity of the arrangements, and uncertainty over the eventual price; and the arrangements offered an improved prospect of delivering upgrades to the network compared to the pre-1997 investment regime.

**8** This report focuses on DfT's risk management. It examines:

- i** the establishment and record of the Metronet businesses, highlighting key factors that contributed to their failure;
- ii** DfT's approach to risk management; and
- iii** the direct costs and consequences to the taxpayer of Metronet going into administration and progress towards a permanent solution.

This Report does not consider the merits or flaws of the PPP structure, focusing instead on how DfT, and the parties it relied upon, sought to manage the Metronet structure as it stood.

## Key findings

### Causes of failure

**9** **The main cause of Metronet's failure was its poor corporate governance and leadership.** Many decisions had to be agreed unanimously by five shareholders, which all acted as Metronet's suppliers and had different motivations depending on their roles. The executive management changed frequently and was unable to manage the work of its shareholder-dominated supply chain effectively. These suppliers had power over some of the scope of work, expected to be paid for extra work undertaken and had better access to cost information than the management. The poor quality of information available to management, particularly on the unit costs of the station and track programmes, meant that Metronet was unable to monitor costs and could not obtain adequate evidence to support claims to have performed work economically and efficiently.

### DfT's risk

**10** **DfT's exposure to risk as a result of the PPP contracts resulted in it having to pay £1.7 billion of grant to London Underground.** DfT had ultimate responsibility for protecting the interests of the taxpayer and was exposed to policy and financial risk. It considered that it might have to increase grant levels to meet the cost of extra spending under the PPP contracts. It would have had to do so where the Arbiter decided that the extra spending had been incurred economically and efficiently and where the cost could not be borne by London Underground or TfL. Although it did not guarantee Metronet's borrowing formally, the Secretary of State had given assurance to Metronet's lenders. Eventually DfT had to make grant payments of £1.7 billion to help TfL purchase Metronet's debt obligations, a sum that would otherwise have been repaid over the 30 year life time of the contracts.

**11** **DfT had few formal levers to manage risks to the taxpayer.** Under the Greater London Authority Act 1999, strategic and investment responsibility for London Underground was devolved to TfL and the Mayor of London. The Secretary of State could only direct the Mayor to make changes to transport strategy where it would be inconsistent with national policy and have an adverse effect outside London. DfT was not a party to the contracts and had no direct influence over performance. While the payment of grants to cover infrastructure modernisation costs was potentially an important lever, the payments could only be made as part of a block grant to TfL, without conditions, reducing the direct leverage it gave. The PPP contracts were developed in the knowledge that devolution would limit formal levers. DfT therefore relied upon the monitoring of public and private sector parties and obtaining cooperation through influence, assisted by its role as the funder of grant.

### Risk management

**12** **DfT was obliged to rely on other parties.** DfT had to respect the devolution of powers to London Underground, TfL and the Mayor of London, which made it difficult to adopt a risk management strategy commensurate with the risks DfT faced. All parties were hampered by a lack of good quality information. DfT relied mainly on public sector monitoring by London Underground, TfL and the Arbiter, and private sector monitoring of the contracts by Metronet's shareholders and lenders. DfT expected these parties, in their respective roles, to identify and then mitigate the risks:

- i DfT relied on London Underground and TfL to manage performance and financial risk on its behalf. London Underground focused on holding Metronet to account for delivery, which entailed cost increases in some areas. London Underground did not have sufficiently detailed information to take a ‘partnering approach’ with confidence and did not have the full array of contractual levers to drive improved performance when necessary. Metronet did not provide good quality performance and cost information in the way London Underground envisaged and London Underground did not have a breakdown of Metronet’s high level budget on station refurbishment work. It was, therefore, difficult for London Underground to understand how its rigorous interpretation of the contract scope was tending to increase the costs of the stations work.
- ii DfT relied on the Arbiter to warn of potential cost overruns which might fall to the public sector. The Arbiter has no specific statutory duty to protect the public interest, although part of his statutory duty is to promote economy and efficiency. Furthermore, it is not part of the Arbiter’s statutory function to help DfT monitor the PPP contracts’ performance. DfT were, nevertheless, informed of developments by the Arbiter through informal briefings and presentations.
- iii At the outset, DfT expected Metronet’s shareholders and lenders to identify and resolve performance problems but they failed to do so. Although Metronet’s shareholders and lenders had financial investment and reputations to protect, they did not act as expected. In the case of the shareholders, the governance structures adopted, and their differing priorities and positions as beneficiaries of supply contracts, meant that they did not tackle problems effectively. Only five per cent of the lenders’ investment was at risk. The controls they put in place over access to loans did not require evidence that Metronet was delivering as expected under the contract.

**13 When the extent of Metronet’s problems emerged in early 2006, DfT’s response reflected the limited number of levers it had to influence the progress and the outcome of the PPP contracts.** By February 2006, Metronet projected £1.2 billion of extra spending over the first 7½ year period. The reliability of this projection was uncertain. But it suggested an increased possibility of DfT having to increase grant levels to help TfL and London Underground meet obligations under the PPP arrangements. DfT responded by increasing its liaison

with London Underground and TfL, but decided against becoming involved in disputes between the contracting parties. Instead it relied on London Underground, as contracting party to: develop a better understanding of Metronet’s estimated overspending; and encourage Metronet to proceed to an Extraordinary Review by the Arbiter to determine whether the extra spending was liable to be met by the public sector. In February 2007, following a statement by the Mayor of London, Metronet accepted that it would have to ask for an Extraordinary Review. Metronet had spent a further £1.1 billion on capital works and maintenance since the potential scale of its problems emerged 12 months earlier. On the basis of the Arbiter’s work we estimate that approximately 90 per cent of this £1.1 billion was spent economically and efficiently, with the remaining 10 per cent being wasted.

## Taxpayer loss

**14 We estimate that the overall direct loss to the taxpayer arising from Metronet’s administration is between £170 million and £410 million, in 2007 prices.** DfT paid £1.7 billion of the £1.747 billion cost of repaying 95 per cent of Metronet’s debt obligations through grant funding to TfL. This £1.7 billion payment was an unanticipated upfront cost to the taxpayer. It is not all a loss, however, because the public sector has received the benefit of Metronet’s capital investment, despite some of the capital spending being inefficient. Our estimate of the loss to the taxpayer is based on the difference between the public sector costs incurred and the value of the work done. The detailed calculations behind our estimate are set out in Part 3 of this report.

## Developments during administration

**15 Metronet’s performance was managed effectively during administration.** London Underground and the PPP Administrator decided to slow Metronet’s track renewal and replacement programme. They did so because Metronet was able to hit its track condition performance target with a slower rate of replacement than had previously been planned. They also decided to slow the stations refurbishment programme to gain control of costs. Metronet’s operational performance remained mixed. For example, the number of delays related to track faults fell for the Bakerloo and Victoria lines, but increased for the Central and District lines because of the Central Line derailment in July 2007 and a strike by the National Union of Rail, Maritime and Transport Workers (RMT) in September 2007.

**16 The Joint Steering Committee, set up to make recommendations on a long term solution, made recommendations to the Secretary of State and the Mayor of London in late December 2008.** Work towards a permanent solution has not, however, proceeded as quickly as originally anticipated. A range of options, which all involve London Underground retaining responsibility for operations, have been considered including:

- i** direct procurement with TfL taking full responsibility for operations, maintenance and major capital works, as happened before the PPP structure was introduced;
- ii** direct procurement by a separate company owned 50 per cent by TfL and 50 per cent by an equity investor. The company would have responsibility for the programme management and delivery of major capital works, with London Underground responsible for operations, maintenance, strategy and the delivery of minor capital works;
- iii** long-term performance based contracts, let by London Underground for the modernisation of categories of assets or other specific pieces of work wherever practicable and value for money, with remaining work being delivered via traditional procurement; and
- iv** whole system outsourcing for the lines and assets previously maintained by Metronet to the private sector, giving the private sector major responsibility and discretion over parts of the infrastructure. TfL could potentially take a stake of up to 50 per cent in these businesses.

## Conclusion on value for money

**17** DfT's role in securing value for money was: (i) to protect the taxpayer from potential financial liabilities; and (ii) to ensure that those responsible for the delivery of the improvements, which it was funding, were operating effectively. Metronet's poor corporate governance and tied supply chain created financial and delivery problems. DfT had few formal levers to influence outcomes as it was constrained by devolved oversight arrangements and was not itself a party to the contracts. Instead, it relied on other parties whose ability to identify risks was hampered by the poor quality of information available from Metronet. The fact that these other parties did not mitigate the risks effectively exposed DfT to major residual risks which it had few levers to manage. As a result, the taxpayer was not effectively protected.

**18** The taxpayer has borne some of the direct costs of Metronet's failure, including the unexpected upfront payment of £1.7 billion. We estimate there has been a direct loss to the taxpayer of between £170 million and £410 million. This is a direct loss of between four and ten per cent of the costs which the PPP Arbiter judged to have been incurred efficiently and economically by Metronet. Metronet's shareholders have also lost their equity investment. In terms of delivery of improvements, passengers have had to endure late delivery of scheduled work and the cancellation of promised upgrades to stations.

**19** Underlying all these issues has been a more fundamental problem. The public sector bodies involved in the oversight, monitoring and management of the Metronet PPP contracts did not all share a common agenda. Our recommendations are aimed at securing a greater alignment of interest between these various public sector bodies.

## Recommendations

This report focuses on the failure of Metronet and the ability of the various public sector bodies to manage risk within the PPP framework. It concludes that at the heart of Metronet's fate lie problems of internal governance. It also highlights the key limitations facing DfT and London Underground in managing risk. The recommendations focus on improvements in governance, co-ordination, and assurance on costs as DfT and its partners seek a lasting solution to the problems of the Metronet PPP contracts. Recommendations B, C and E would require the agreement of the Mayor. These recommendations could usefully also be applied to the management of the Tube Lines contract, although Recommendation E would require Tube Lines' consent.

## Tied supply chain

**A** **The five shareholders in Metronet, each with different interests, chose to structure the business as a joint venture in which many decisions needed to be agreed unanimously. The shareholders were also suppliers in a tied supply chain, and they adopted governance and management structures which gave power to the suppliers rather than the management of the business. Metronet's management was unable to extract key information or incentivise suppliers to perform their roles in line with its own interests.**

DfT designed the PPP contracts in accordance with the HM Treasury guidance that existed at the time. HM Treasury's *Standardisation of PFI Contracts* now provides guidance to Departments on how to achieve commercially balanced contracts, which avoid the conflicts of interest that can occur when suppliers have too much influence over what is to be delivered, and how to achieve value for money. In line with the guidance, future PPP contracts should be awarded to bodies which have clear leadership, a credible corporate governance structure and an approach to securing suppliers which can be demonstrated to be value for money. Departments also need to ensure:

- i contracts with the supply chain are structured to enable those managing delivery to access the information they need;
- ii incentives in the contracts and sub-contracts within the supply chain are aligned with and reflect the interests of the public sector partner; and
- iii there is a public sector option to withhold payment unless the private sector is able to produce reliable and timely records to back up claims.

## Risk management

**B The modernisation programme was the responsibility of the Mayor of London, TfL and London Underground. DfT was not a party to the PPP contracts, and therefore had no direct visibility of performance. DfT thus relied to a great degree on due diligence and monitoring work carried out by Metronet's shareholders and lenders to protect their respective investments, and on London Underground as the contract manager to ensure performance and delivery.**

To understand and manage the risks to which it is exposed, DfT should:

- i collect and analyse a range of financial and performance data held by parties to the contract or available independently;
- ii request regular risk reports from London Underground and TfL as the contracted clients; and
- iii review the devolved body's understanding of the key risks to the project to allow DfT to identify and investigate any issues relevant to the management of its own risk.

## Alignment of interest and governance

A feature of our findings has been the lack of a common agenda between the various public sector bodies involved, and between public and private sector. The interests of these bodies need to be better aligned. We make two specific recommendations:

### **C DfT was exposed to risk but lacked direct ways of gaining assurance over the management of this risk.**

In the permanent solution for Metronet's business, DfT should work with the Mayor of London and TfL to ensure that there are effective controls to contain costs within agreed limits and to maximise the value for money of the grant funding it provides. Effective independent scrutiny and evaluation of London Underground's management of major infrastructure projects, on behalf of both TfL and DfT, could provide greater assurance on value for money.

### **D London Underground had limited ability to manage the contract in a way that prevented costs from escalating. It sought to undertake rigorous cost analysis as far as possible, but could have drawn more on the Arbiter as a source of information and cost assurance.**

As the party responsible for managing performance under the contracts, London Underground should have sufficiently detailed information available to it to confirm that work is affordable, within the limits of the grant, and that the taxpayer is receiving value for money. But under the contracts, London Underground needed to ask the Arbiter formally when it needed more detailed cost and performance information. The Arbiter should, within the statutory framework, work with London Underground to provide assurance on whether the work performed is affordable and value for money. This assurance could be achieved by the type of high-level benchmarking exercises undertaken by the Arbiter to compare the performance of PPP suppliers with other companies carrying out similar activities. This top-down assurance should then be supplemented by more detailed analysis of individual components of cost where this would enable better management of the contract by London Underground.

## The role of the Arbiter

**E** Early provision of information about the likely extent of economic and efficient additional spending by Metronet would have helped the public sector manage the risks better, although this alone would not have been sufficient to ensure value for money. The PPP Arbiter was the external party with greatest access to Metronet's performance data and could therefore have been invited to give early warning on the cost implications of its delivery problems. London Underground, as contract manager, did not have access to the same level of information.

To enable the Arbiter to highlight issues affecting the taxpayer's interests and continue to monitor Tube Lines effectively, any permanent solution should allow effective comparison to be made with Tube Lines and give the Arbiter oversight over the comparator.

Any new oversight arrangements should be clear about roles and responsibilities and should:

- i** allow DfT, which has the greatest financial risk but is not a party to the contracts, to request investigations where appropriate;
- ii** require an annual review, including an audit of financial models produced, to improve the transparency of information about delays or cost overruns and make DfT aware of any risk to the taxpayer; and
- iii** allow an Extraordinary Review or other investigation where it is possible that the public sector may have to provide extra finance, even where it has not been requested by other parties.

It is desirable that new measures adopted to protect the public interest should also apply to the Tube Lines contracts, which would improve DfT's ability to understand and manage risk. Any new arrangements would, however, require the agreement of Tube Lines and London Underground under the remaining PPP contract.

## Whole life costing

**F** The Joint Steering Committee has considered a range of options for the line upgrades, rolling stock, station maintenance and renewals work that were expected to be undertaken by Metronet. While the permanent solution is under consideration by the Secretary of State and the Mayor of London, TfL is determining Metronet's budgets annually.

A permanent solution should be based on a whole life costing of infrastructure renewal and avoid a return to short-term budgeting based on annual grants from DfT. The long-term funding agreement between DfT and TfL provides the necessary framework. TfL seeks to adopt the principles of a whole life approach to asset management in its business plan. A TfL business plan published in November 2008 for the period to 2018 is under consideration and needs to be taken to a conclusion if infrastructure renewal is to reflect strategic priorities rather than 'patch and mend'.