

# London Underground PPP: Were they good deals?



REPORT BY THE COMPTROLLER AND AUDITOR GENERAL  
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# executive summary

- 1 On 7 February 2002 the then Secretary of State for Transport announced approval of a decision by the board of London Regional Transport to enter into three Public Private Partnerships (PPPs) for the infrastructure of the London Underground system (the Tube). The operation of the trains would remain a public sector responsibility of London Underground Limited (LUL), together with responsibility for managing the PPPs themselves. In July 2003 LUL was transferred to Transport for London which was set up in July 2000 and reports to the London Mayor.
- 2 By approving the PPPs, the Government intended to establish long term arrangements for the private sector to carry out a major programme of improvements to the Tube infrastructure. London Underground evaluated the net present value<sup>1</sup> of spending under the three PPPs over 30 years at £15,700 million (with a value of £9,700 million over the first 7½ years). The public sector would make service charge payments subject to the private sector partners, Tube Lines and Metronet (see Figure 1), delivering specified contract outputs.



- 3 The resulting deal structure is unique, complex and contains a number of novel features. These include an output-based performance and payment regime. There is also a built-in periodic review mechanism to enable the parties to re-specify requirements within the PPP scope and re-price the deals every 7½ years. And an Arbiter has been established who can be called on to decide on the price, including financing costs, that an economic and efficient supplier in similar circumstances could charge.
- 4 This report examines whether these PPP deals are likely to give good value for money, taking into account the Government's objectives. It concludes that:
  - a The complexity of the deals resulted from the scale of the work required to modernise the Tube, the decision to have innovative output-based contracts and limited knowledge of the condition of the less accessible infrastructure.

<sup>1</sup> The discount rate used by London Underground here and elsewhere, in line with the Treasury's guidance, was 6%.

- b There is only limited assurance that the price that would be paid to the private sector is reasonable. The terms of the deals changed markedly during prolonged negotiations with the eventual winning bidders. Periodic review at the 7½ year breakpoints leaves some uncertainty about what the price eventually will be - but given the uncertain condition of some assets, greater price certainty would have resulted in bigger contingency provisions and a higher price. Revisions to the price have to meet tests of economy and efficiency for the rate of return to be unchanged.
- c The process of negotiating the deals, and obtaining consents (including state aid clearance), was costly for all the parties involved. Extra time and costs were incurred as a result of partially rebidding contracts on two occasions before the selection of preferred bidders, and - the Department for Transport believes - as a result of the legal challenges from Transport for London although Transport for London disagree. The public sector (comprising the Department for Transport, London Regional Transport and London Underground Limited) spent some £180 million and the winners of the three bids a further £275 million. This £455 million equates to about 1½ per cent of the undiscounted 30 year deal value (2.8 per cent of the discounted deal value).
- d Compared to London Underground's pre-1997 investment regime, the resulting deals offer an improved prospect, but not the certainty, that the infrastructure upgrade will be delivered. The work will start 2 years later than originally planned. Recovering the maintenance backlog will take 22 years rather than the 15 years originally intended, following the Department for Transport's decision to spread the scale of remedial work required, which proved greater than anticipated, over a longer period.

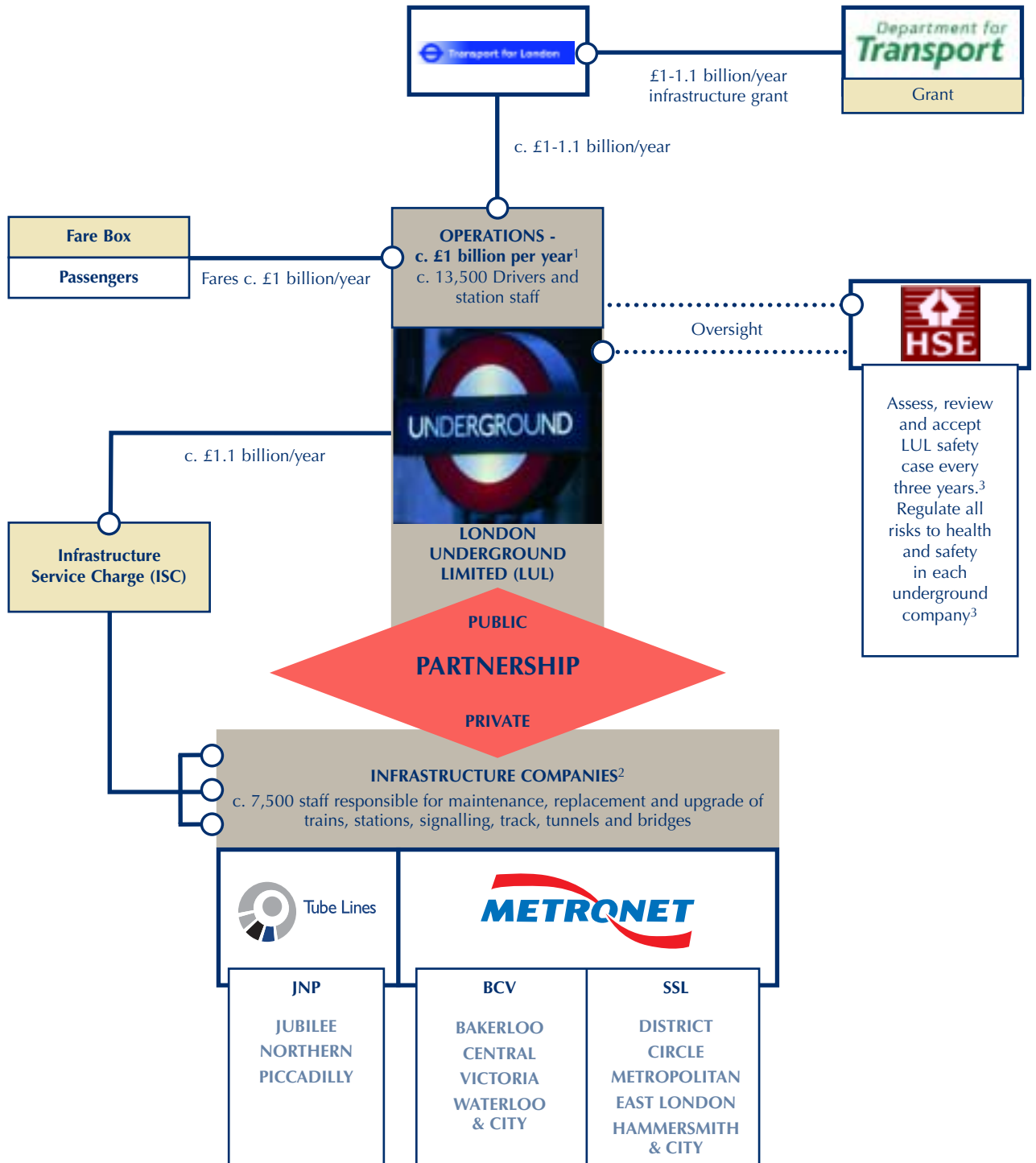
## The PPP structure

- 5 Between June 1997 and February 1999 the Government and London Regional Transport conducted a wide-ranging debate about the future arrangements for the Tube. A number of options were analysed. The Government considered that under conventional public sector management the Tube had long suffered from under-funding and also from financial uncertainty as a result of annual public expenditure reviews. Moreover, it considered that London Underground's management of major capital programmes had been weak, leading to substantial cost and time over-runs. Yet, the Government considered that performance in operating the trains had been satisfactory and selected a structure of PPPs intended to combine:
  - stability of funding - because the private sector would raise the capital required on a long term basis;
  - private sector project management of a major infrastructure programme, in which the private sector retains an interest in the performance of the infrastructure over 30 years; and
  - continued public sector management of the train operations.

Although these goals are not inherently complex, setting out to achieve the desired outcomes through output based contracts requires the PPP structure to be sufficiently detailed and, at times, complex.

**1 Structure of the Public Private Partnerships (PPPs)**

Tube operations and infrastructure are run through a partnership between three parties - LUL, Tube Lines and Metronet. They are paid through a combination of grant and farebox revenue.



**NOTES**

- 1 All monetary amounts are the most recent annual figures.
- 2 A Partnership Director, nominated by LUL, sits on all three Infraco boards.
- 3 Each Infraco is also required, under the PPP agreement, to satisfy safety requirements.

Source: National Audit Office

## Price

- 6 LUL and London Regional Transport (collectively "London Underground") established a competitive framework and secured a competitive process leading to the selection of preferred bidders in May and September of 2001. To secure such competition in the face of the very high bidding costs and political risks to the project, London Underground took the unusual but not unprecedented step of agreeing to reimburse bidding costs.
- 7 Although bidders were asked to price their delivery against an output-based specification, they were not asked and could not have offered firm prices beyond the first 7½ years of the deals. This was because there was limited information available about the condition of some of LUL's assets, and no-one had experience of pricing against output specifications for such a large and extended programme of work. In addition LUL wished to retain flexibility to re-specify its output requirements on a periodic basis. As a result, bidders and finance providers offered conditional or estimated prices over 30 years, unavoidably adding to the qualitative element of the assessment of the bids. The parties will, however, be able to refer to the Arbiter, for review of whether adjusted prices are economic and efficient and provide for the agreed return on equity.
- 8 During negotiations with short-listed bidders, it became evident that more work would be required to deliver the outputs and the terms of the deals changed significantly. The prices quoted all rose, adding £590 million to the 30 year cost of the deals. In addition the Department for Transport (the Department) and London Underground accepted the case, which some lenders had been making throughout, for an increase from 90 per cent or less to 95 per cent or more in the amount lenders to the PPPs would get back in the event of termination. The Department attributes this, in large part, to market perceptions of political risk.
- 9 In December 2000, we reported on the public sector comparator exercise then being used as part of the assessment of the value for money of the bids. London Underground acknowledged that its public sector comparators were always subject, as we had shown, to a high degree of inherent uncertainty and therefore gave only limited assurance about the reasonableness of the prices quoted by the bidders. When, some 12 months later, the Board of London Regional Transport took the decision to proceed with the PPPs, public sector comparator figures were available to them alongside, as we had recommended, considerable analysis of the wider benefits and risks associated with the deals.
- 10 The bidders' prices reflected not just their estimated costs of delivering the upgraded Tube system but also their financing costs. There is a risk of loss of the PPP investment, conditional on persistent uneconomic and inefficient behaviour, but the PPP otherwise differs in scale and type of risk from PFI deals. A comparison of financing costs with PFI deals is not straightforward, and is seen as inappropriate by the Department, but shows:
  - a Private sector shareholders, who have put up altogether some £725 million risk capital in the PPPs, stand to receive nominal returns of 18-20 per cent a year. As the first deal of its kind, London Underground considered that such a rate of return was proportionate to the risks being borne. It is about one third higher than on recent PFI deals if the infrastructure businesses can deliver the bid levels of performance. Likely real rates of return at the benchmark levels set by the performance regime would be lower - in a range from 10-17 per cent.



- b Lenders, who are committed to advance at least £3,800 million to the private sector companies, have limited downside risk (because in the event of termination they stand to get back 95 per cent of what they have lent) but are charging rates of interest in line with an independent credit rating of the companies as "low investment grade". Direct government borrowing of such a base case amount, had it been available, would have cost some £450 million less. The Department considers this is a reasonable cost to pay for the risk sharing settled on and for scrutiny of the deal and Infracore performance by lenders.
- c In the Tube Lines PPP, at least £600 million of the original bank financing was due to be refinanced at an early stage by issuing bonds. Refinancing of the larger sum of about £1,800 million was completed in May 2004 and resulted in a net disclosed gain of £84 million. Tube Lines told us that the initial 60 per cent share for the public sector rises, over time, to 70 per cent, leaving 30 per cent for the consortia shareholders.

## The costs of the PPPs

- 11 The Department, together with the Treasury, took the lead in deciding on the form of the PPPs and relied largely on London Underground to develop and procure the deals. London Underground had always understood that it would be expensive to negotiate such large and complex deals and in February 1999 budgeted to spend £150 million. The outturn was £180 million (£170 million in 1999 prices). In addition, having decided to reimburse bidders' costs, London Underground agreed to add £57 million to the total deal cost to cover bidders' costs up to the point of selecting preferred bidders. London Underground required the preferred bidders to disclose the level of bid costs they intended to recover from the service charge. After prolonged negotiations the accepted level amounted to a further £218 million of bidders' costs and fees. In total £275 million of bidders' costs are reimbursed. Those costs included a success fee payable to the sponsors of the Tube Lines consortium as compensation for funding bid costs based on the cost of capital, the lost opportunity of utilising this capital to make other business investment returns, and any risk of non-recovery of costs during the three year bid process. London Underground realised this at the preferred bidder stage and questioned whether it was reasonable. It was advised that this was a normal market practice and the level was a matter for commercial judgement.
- 12 Three factors that are not easily quantified contributed to the transaction costs which in total came to £455 million:
  - a As they were based mainly on output specifications rather than inputs, the costs of the programme could only be known when firm bids came in. It was then that the Department came to realise that the total costs falling on the taxpayer were far more than those considered affordable. There followed a review of the specification to reduce the total cost of the programme. The review and the subsequent re-bidding added some five months to the process therefore increasing costs.
  - b A second cause of re-bidding arose from identifying, before it was too late, and then addressing constraints on the ability of LUL to provide the power required by initial proposals for new trains.

- c Transport for London was due to take over responsibility for LUL but only after the PPPs had been put in place. For most of the negotiations Transport for London, therefore, stood outside the process but understandably, as a future party to the deals, took a very close interest in it. Transport for London opposed the PPPs and made a number of interventions, including two applications for judicial review, in its efforts to change the deals. This - the Department believes - further extended the time taken to complete the deals and obtain state aid clearance, although Transport for London disagrees.

## Delivery of Tube modernisation

- 13** As signed, the eventual PPPs are broadly in line with the Government's objectives to bring in private sector expertise to manage the Tube infrastructure on the basis of stable long-term funding, while the train operations remain a public sector responsibility. Although, as noted above, there is only limited assurance that the price of the deals is reasonable, the deals do provide safeguard mechanisms (including the provision for an Arbiter) aiming to link payments to the private sector to actual delivery of services at prices in line with those an economic and efficient supplier would charge.
- 14** The private sector companies are firmly committed for the first 7½ years, and are incentivised to stay in the deals for the full 30 year period. After the first period they are committed to provide services at a price agreed between the parties, or an economic and efficient price determined by the Arbiter if the parties are unable to agree. If the Infraco requires additional funding for the next period, which is likely, the existing lenders do not have to provide it. A number of options are available, including a reduction in the deal scope, LUL providing equity or new forms of financing. LUL is committed to pay for the services delivered and has limited contract rights to terminate the deals for non-performance or non-compliance with safety requirements. LUL has no formal right to terminate the deals voluntarily, subject to paying compensation, although this is a common arrangement in PFI deals.<sup>2</sup> The Department told us that London Underground gave up this right to discourage lenders from increasing their price because of political uncertainty.
- 15** Following the signing of the deals, work to improve the Tube started in 2003, two years later than planned, and following recognition that more work was needed some investment has been deferred to keep within subsidy limits that central Government was willing to permit. This increased the period over which the Tube would be brought up to a steady state, at which it would then be maintained, from 15 years to 22 years.
- 16** In our companion report, also published today, we examine:
- the potential to deliver improvements to passengers;
  - whether key success factors are in place for building a partnership approach to managing the contracts; and
  - how the issues that have been left open will be tackled and how the wider context affects the Tube.



<sup>2</sup> Standard PFI contract terms proposed by the Treasury do provide for voluntary termination by the public sector authority on payment of prescribed compensation.

# Recommendations

## Partnership design:

- 1a** A traditional partnership means sharing openly and transparently in the profits and/or losses of a business equally, without special advantage to either partner. In the case of London Underground, this principle has been applied to tackling major procurement challenges in a non-adversarial way. As attempted in this case, Departments and agencies should explore the scope for sharing risks and design how to share the rewards before entering detailed contract negotiations. If this appears feasible, the business proposition can then underpin the economic proposition by providing a detailed, but not necessarily complex, contract structure.
- 1b** Good corporate governance calls for maximum transparency. Public sector bodies should insist that contracts include strong provisions for open book monitoring of both special purpose company and prime contractor performance. As in any partnership, there is scope for LUL and the Infracos to develop working relationships that improve on the contract arrangements.

## Economic analysis

- 2** Departments that take forward a business option, after stronger business cases have been eliminated on policy or market grounds, as was done in this case (see paragraph 1.8) should ensure that they, or the agency, subject it to the same extent of economic analysis to reduce the risk of later controversy.

## Joint Review and Negotiations

- 3** The provisions for consultation with Transport for London failed to secure agreement at each stage of a review process that preceded the current good practice framework of 'gateways'. In its absence, the Department and London Underground's decision makers faced difficulty in attempting to satisfy the private partners that they were insulated from the consequences of a possible early breakdown in the partnership. As good practice, and to avoid strengthening the private partner's negotiating position, Departments should - whenever possible - follow the path of joint negotiations and, at each stage, shared decision making with their agencies and other public sector bodies.

## Transaction costs and reimbursement provisions

- 4** Bid & transaction costs: In some cases, such as this one, Departments may not be able to develop sufficient competition without reimbursing bid costs. If so, after

conceding the principle of reimbursing losing bidders, they should take care to control the extent of reimbursement, generally excluding sunk costs. This should also include restricting any early distributions to shareholders, if disclosed, for example the success fees in this case.

## Contract Terms

- 5** Departments should negotiate commercial terms that are broadly neutral in respect of unforeseen and unforeseeable asset condition because seeking to transfer too much risk is likely to over-compensate the private sector on grounds of uncertainty. Steps were taken to think through and reduce such risks in this case. Specifically, the provisions for decision by an independent Arbitrator mitigate the risk that thresholds for price review are too easily reached. In larger deals, Departments should consider similar arrangements after weighing up the benefits and costs involved.
- 6** Departments should avoid asymmetry in the right to terminate, and should not permit the private sector an easier exit from a long term partnership that encounters difficulties. Although, for what the Department considers understandable reasons, this was not achieved here, the voluntary right to terminate becomes more important with arrangements that face a higher degree of uncertainty.

## Financing

- 7** The risk profile for lenders was improved at the committed finance offer stage such that the worst case outcome put 5 per cent of the loan at risk (compared to at least 10 per cent previously). Changing the risk profile for lenders could materially influence financing options. As was done in this case, Departments should continually assess the scope for repackaging the various types of debt. Before accepting the final loan package and pricing, they should ensure that their written advice from financial institutions is updated from current market knowledge for both the proposed and alternative sources of finance.
- 8** As with the Tube Lines deal, market perceptions of political risks could initially lead to higher costs. Departments should consider whether the prospect of an early refinancing, before major project construction milestones have been achieved, evidences uncompetitive original terms. In such cases, as with Tube Lines, a larger public sector share than the 50 per cent envisaged in current guidance should be negotiated - 60 per cent was achieved in the Tube Lines deal. The appropriate percentage will depend on the scope for reducing risk in the specific case.