# **Underground Revolution**

Modernizing London Underground through Public-Private Partnerships

There is widespread concern that London Underground is failing to provide the quality of service expected by passengers, business, politicians and government. Despite substantial investment in the core network in the 1980s and 1990s, delays and service interruptions are regularly publicised. A fresh and innovative approach is needed to blow away the political uncertainties which surround the reform of London Underground.

#### Political uncertainties

London Underground (LUL) executives attribute this underperformance to a lack of government funding, particularly a failure to clear an investment backlog estimated at £1.2 billion, and to provide consistent funds to update the network. However it seems that ministers are unable to decide what to do. It was reported that the new Labour government had been considering options drawn up by its predecessor, specifically:

- separation of infrastructure and service operations ("the BR model");
- privatisation as a single entity ("LUL plc"); and
- privatisation of individual lines.

With ministers reported to be following differing options, the board of LUL was asked to consider how private sector investment could benefit the network. A string of contradictory reports in the last few months has increased the uncertainty surrounding the future of LUL. There is a debate within the government as to how

to proceed with reform, with no sign of the promised green paper.

## **Investment requirements**

In 1993 it was estimated that the cost of tackling the investment backlog and bringing the assets up to standard to achieve a "Decently Modern Metro" would be £8.5 billion: this required investment of £900 million per annum for 10 years or £600 million per annum for 20 years (all at 1993/4 prices).

Expenditure on the core network has declined steadily since 1993/4 from £572 million to £358 million in 1996/7 at today's prices, well below the levels required to achieve the "Decently Modern Metro" in 20 years.

It is therefore clear, that unless radical action is taken, LUL will struggle to maintain service quality at current levels. With the LUL planning further infrastructure projects, the new government will find itself under pressure, particularly from the proposed 'Greater London Authority', to commit itself to funding or financing these projects. Constrained by commitments to existing spending limits, it will need to look to new sources of funding and finance, particularly private, to meet such commitments.

## LUL's financial and operational performance

Commercial analysis of LUL's accounts suggest that an operating profit is readily achievable by implementing strategies similar to those of the companies who have been awarded passenger rail franchises in the London and South-East region.

Revenue could be increased by: improving security; investing in new trains; modernizing stations; updating track & signalling; increasing revenue protection activities; promoting of off-peak and short distance travel; increasing fares in real terms; replacing the travel card with stored-value ticketing; and by increasing advertising and retailing activities.

Costs could be reduced by: improving the productivity of staff; eliminating unnecessary tiers of management, reducing "head office" bureaucracy; and by further contracting out of non-core activities.

Senior managers may claim that significant manpower savings have already been implemented and there is little scope for further reductions. Such claims were made by the British Railways Board, but experience post-franchising has shown such claims to be pessimistic, as major restructuring initiatives by franchise operators have realized substantial productivity gains.

## The Private Finance Initiative (PFI)

The PFI is, in effect, the UK application of the Build, Operate, Transfer approach to public-private partnerships which is now recognised internationally as the most cost-effective means of procuring public projects. The "Transfer" element refers to an obligation to transfer the asset back to the government at the end of the contract period.

It is vital however that the risks which the public sector seeks to transfer to its private partners are those which it is able to absorb and control, otherwise private contractors will naturally charge heavy premiums for taking on unreasonable risks. There are several options for enhancing the PFI: early definition of requirements; improving risk evaluation and allocation; clarifying and adhering to project timetables; reducing the number of shortlisted tenderers; redefining and enhancing compensation schemes for bidders; clarifying evaluation criteria and methodologies; minimizing the political risk associated with long-term projects; and ensuring that contractual terms are acceptable to the private sector.

The Adam Smith Institute, for its part, proposed the appointment of private sector "minders" to make sure that projects run to timetable, and to cut through red tape and indecision. The adoption of the above would be welcomed by the private sector, encourage more firms to participate, increase competition and thereby improve project quality and reduce costs.

#### A lack of vision?

LUL believes that the PFI has limitations, because it says that not all investments lend themselves to a PFI solution, particularly infrastructure work. There may not be sufficient private sector appetite to undertake projects, and the cost of completing deals are significant and contracts impose liabilities. LUL also argue that the PFI should not be seen as a substitute for investment but a supplement.

The experience of the PFI, both in the rail industry and elsewhere, is that the financial and other benefits far outweigh the costs of deals. Liabilities, particularly contractual payments, are a natural consequence of such deals, and cannot be avoided.

The desire for the PFI to be a supplement rather than a substitute for investment is wishful thinking. PFI deals are cost-effective methods of paying for investment, compared to conventional public sector procurement procedures.

LUL may fear that the private sector may be able to deliver service improvements more efficiently and therefore undermine their position. PFI deals and initiatives have related to the supply of services rather than private sector involvement in train operations.

## Competition in ideas

The main issue is whether LUL should be broken up, and the future ownership of any break-up. Unlike former British Rail services, the scope for inter-operator competition is limited. In only a few journeys is a choice of operator available.

It is preferable for the system to be broken up into groups of individual lines and to promote competition in ideas — marketing, efficiency and innovation. Vertical integration is supported because any upgrading of track and signalling will need to take account of future capacity requirements. It is better that operators and infrastructure contractors work together through a consortium, rather than a contractual, relationship.

This report proposes that ministers offer three to five, probably four, investment-led concessions to private consortia to design, modernize, finance and operate services, stations and infrastructure. Such a structure would provide operational flexibility in deploying rolling stock and manpower resources. It would also provide more bankable revenue streams. London Underground Limited would remain as publicly-owned holding company and lease stations and infrastructure to the concessionaires for the duration of their concessions.

The concession lengths would be determined by competitive bidding, *i.e.* the period to minimize the government capital contribution or operating subsidies. In some cases, the winning consortia may bid to pay a premium for the concession. There is significant scope to improve financial performance by increasing revenue and reducing costs by implementing initiatives which have been implemented by passenger franchisees and Railtrack. The improved financial performance would reduce external funding requirements.

This approach is very similar to the Design Build Operate Maintain concessions let by Labour-controlled Passenger Transport Authorities for new light rail projects, e.g. Manchester Metrolink and West Midlands Metro. In recent years it has been adopted in Sydney, Buenos Aires, Manila, Bangkok, Kuala Lumpur and New Jersey for metro rail networks. Further projects include Sweden's Arlanda Airport Link and planned Florida and European high speed train networks. One notable feature is that the consortium members generally own 100% of the concession company's equity.

#### Logical structure

A possible structure, for four vertically integrated businesses, would be:

- (a) Metropolitan, District, Circle, Hammersmith & City;
- (b) Jubilee and Bakerloo;
- (c) Piccadilly and Central;
- (d) Northern and Victoria.

An alternative structure to facilitate the construction of the Chelsea-Hackney line would be:

- (a) Metropolitan (Circle partner), Hammersmith & City;
- (b) District (Circle partner) Piccadilly & Central;
- (c) Jubilee, Bakerloo;
- (d) Northern and Victoria.

Under the latter structure, the Circle line would be joint venture company, owned and operated by (a) and (b). It would enter into track access agreements with each company. The East London and Waterloo & City lines would be allocated to the most appropriate businesses. Each business would be substantial and similar in size to the passenger rail franchises operating from London to the south coast.

This report also recommends the sale and lease back the Underground's rolling stock to raise additional finance for investment. This approach has been adopted by South Africa's Rail Commuter Corporation and in Germany with regard to high-speed trains. South Yorkshire PTE has proposed the sale of lease back of the Supertram fleet to cover operational losses and facilitate the franchising of tram operations.

Stations which were served by more than one of the above would be run by the

principal operator. The other operators would have station access agreements setting out their rights and obligations with regard to the principal operator. Such agreements currently exist between Railtrack and private rail franchisees.

Railtrack may wish to acquire the Underground stations which serve its main London terminals. In partnership with the franchise operators and concessionaires, Railtrack could acquire major interchange stations, e.g. Vauxhall, Elephant and Castle, Walthamstowe Central.

#### **Participants**

A consortium formed to bid for concessions would include a combination of the following members:

- a public transport operator, ideally with railway experience;
- an infrastructure operator or manager;
- a signalling contractor;
- financial institution(s); and
- management teams

Following the break-up of British Rail, there are now several new companies who have the necessary skills experience, the financial strength, to participate in such consortia.

Several private companies have publicly expressed their interest in participating in underground franchises or concessions, including Virgin, Stagecoach, Cowie Group, Go-Ahead Group and the former LT bus company Metroline. However there is a lack of appetite for a single, network-wide concession. There are several companies who have relevant UK infrastructure expertise, notably Railtrack, GEC Alsthom, ADtranz, Tarmac, Jarvis and John Laing Construction to name but a few. Management teams would be encouraged to bid with private partners.

Independent legal opinions have confirmed this report's view that much of the required legislation is already in place. Progress could be made quickly by making use of the structures created by the Railways Act 1993. Concessions would be let by the Office of Passenger Rail Franchising with operators being licensed by the Rail Regulator.

Service levels would be protected by minimum service requirements. Fares would be subject to regulation based upon proven capping arrangements. Throughticketing and inter-modal tickets would be protected in the contractual and regulatory arrangements with the concessionaires joining passenger franchisees in the Association of Train Operating Companies.

#### Conclusion

The proposals contained in the report are the quickest, most practical and cost effective means of encouraging the private sector to work in partnership with the government to transform the network and services. The principles have been tried and tested in the UK and internationally. Together they represent an opportunity to truly revolutionize London's Underground. There is no time to waste in putting them into action.

#### **Further information**

Underground Revolution by Kenneth Irvine (ISBN 1873712871) is published by the Adam Smith Institute, 23 Great Smith Street, London, SW1P3BL. £15

#### **Industry structure**