

A REVISED PROCUREMENT STRATEGY FOR MANCHESTER METROLINK

This note sets out the options for a revised procurement strategy for the GMPTE to take with Manchester Metrolink. It looks at the current contractual situation, at the current market place and the market's view of particular risks, and considers the options for a way forward for the GMPTE which would give best value. The central proposal is similar to that undertaken by Docklands Light Railway, but reflects the particular situation in Greater Manchester. More work needs to be done on contract content and on precise timings.

Objectives

The objectives for a revised procurement strategy include:

- To obtain best value for money
- To implement the projects quickly
- To fit with the funding and financing available
- To have a high level of process reliability
- To integrate with Greater Manchester's other strategies in general, and the new integrated segment approach in particular

Risk transfer to the private sector is not an objective in itself. The GMPTE's aim will be to transfer risks where that leads to improved value for money and to draw on low cost finance (e.g. prudential borrowing) where this serves the same end. Value for money also includes the aim of exciting the private sector bidders and keeping competitive tension throughout the bidding processes.

The Current Position

The DfT have indicated that they have no desire to revive the original procurement for the 'big bang' phase 3. In practice, all the parties recognise that it is no longer the best way to proceed. The extent of changes required would be impossible to deliver through the current procurement in a way that showed value for money. Consequently, there will need to be a new procurement process.

The Operator/Maintainer, Serco, for the current contract is essentially on a management contract with a very short notice period. So the GMPTE has considerable flexibility over the timing and content of any successor operating contract.

The Procurement Components

The previous procurement strategy bundled together a number of components. These form the building blocks that can be grouped together in a number of separate contracts in the new strategy. In addition the overall approach to Metrolink is now multi-modal and there is likely to be a link with the procurement of other modes and supporting behavioural change strategies. The components are listed below, with a short commentary on each:

- Operations. (Systems of this size have a single operator almost without exception.)
- Infrastructure maintenance. (For light rail, this can be done by either the operator or linked to privately financed infrastructure construction. Linking new construction with the responsibility for the maintenance of those assets is a key part of any PPP approach. But past work suggests that there is little gain in passing existing maintenance responsibilities to PPP companies.)
- Infrastructure renewals. (The major renewals/enhancements to the Phase 1 and 2 system could be procured through the Operator or directly by the GMPTE.)
- Rolling Stock maintenance. (This can be done by the Operator or the rolling stock manufacturer. If a PPP approach is used for rolling stock, then the maintenance needs to be bundled with the construction/purchase.)
- Rolling Stock purchase – Phase 1 and 2 capacity. (This is a relatively small order, but needs to be tied into the overall approach on rolling stock.)
- Phase 3 – Control system. (The original Phase 3 included a full renewal of the control system across the entire network. The options of using two control systems or expanding the network on the current control system are not feasible.)
- Phase 3 – New depot. (The existing depot would cope with one extension but not three. So at some stage during Phase 3 there needs to be a new depot.)
- Phase 3 – Rolling stock. (The Phase 3 extensions require significant rolling stock. This will need to operate across the network and should not be tied to particular infrastructure. So a separate rolling stock contract is likely to be required. Leasing is an option, but would need to demonstrate consistency with the best value approach.)
- Phase 3 – Oldham/Rochdale, Ashton, Airport/East Didsbury. (All three extensions are of a sufficient size to form separate infrastructure contracts

and can be taken forward either as a single contract or on a phased basis).

- Phase 3 – Links with other modes. (These medium term changes are likely to be about operations, rather than infrastructure; and the form may take some time to develop. Given the short life of an operating contract, it should be possible to develop a revised operating contract for the appropriate time. There are a number of European models for using the same operator for both tram and bus. One option is to consider a corridor by corridor joint venture between the single Metrolink operator and the key bus operator). This is currently being studied.

The Market Environment

There continues to be considerable interest from the private sector in bidding for light rail contracts in the UK and Europe. But experience with Croydon and elsewhere has made the debt providers very concerned about revenue risk. More successful UK procurements have moved from a revenue basis to an availability one (Nottingham) and have adopted a phased approach to extensions (DLR). Across Europe long term revenue risk is increasingly seen as a natural public sector risk; on the other hand some short term revenue risk can, and probably should, be taken by operators. The market remains reasonably comfortable with assuming construction risks and maintenance risks on new assets; there are market concerns over utility costs and on the commissioning process, but these can normally be addressed successfully during the procurement. In theory the market would accept long term operating risk mixed with construction and maintenance risks but there are practical problems about long term incentivisation of an operator that would make this an unusual choice.

The current market expectation is for split contracts (operations and infrastructure) with infrastructure procured to at least some degree on an availability basis. This form tends to produce substantial competition for both sets of contracts. There is market interest in early operator models, as in Liverpool and Edinburgh, but these seem to be a variant of the split model – with the operator acting as a consultant in the planning and construction stages. The Liverpool and Edinburgh models also seem to be showing the public sector taking more responsibility for designing the system, selecting the rolling stock and managing the integration. These changes may bring benefit, but this has yet to be proven; they could also expose the public sector to substantial failure costs.

A clear plan with an approach close to market norms, and careful handling, will be needed to give the market confidence. The plan will need to be supported by both the Department and the GMPTE.

Other stakeholders are also important, for instance the local authorities. Recent reports from the NAO and the DfT look at potential changes in procurement and the strategy will need to fit with those.

Procurement Options

There is a wide range of options that exist in theory. The practical options are more limited. Within the core strategy, there are further suboptions for variants, timings and so forth.

The likely options are in the middle of a private-public spectrum. There are known difficulties with the two ends of the spectrum. The previous UK approach of single DBFOM contracts probably represented a highwater mark of risk transfer to the private sector. As noted above, it is now discredited especially over revenue issues. The current discussion in the UK is about which risks the public sector should take back. Most European schemes never approached the level of risk transfer previously attempted in the UK, but there is widespread interest in the new models emerging out of the UK.

There has been previous discussion around a private sector option supported by revenue sharing. Revenue sharing presents some difficulties over a 25 to 30 year period, though there are examples in Europe. Revenue sharing does give the private sector some comfort over the predictability of income; but it mitigates rather than solves the problem and it can lead to additional inflexibility in contract conditions.

The linkage between revenue risk and the wider integrated strategy bringing in a new approach to buses and supporting behavioural change initiatives will also be relevant to this debate. As noted above, there may be a role for contractualised joint ventures with revenue pooling with bus operators and although integration and supporting behavioural change should boost revenues they would represent new uncertainties for bidders.

There are arguments both for public sector operations and for public sector control of infrastructure projects. In the UK, a new public sector operator would be a departure from previous policy. In some countries, such as Ireland and Portugal, new systems are being developed with private operators because of

greater efficiency and flexibility than the traditional public sector rail organisations. In Greece there is evidence that a new start public sector metro operator has rapidly become inefficient.

Public sector construction would mean either traditional construction with the public sector integrating a range of different contracts or a DB contract where all the finance came from the public sector. There are issues of value, risk and finance. Madrid Metro is often used as an example of system developed with strong public sector leadership on a traditional basis. Benchmarking work suggests that its outturn costs were similar to those estimated for a PPP, once local factors were stripped out. The Athens Metro extensions have also been traditional projects, and have had a similar result to the original DB construction of the core network. But UK experience is still marked by the expensive outcome of the Jubilee Line extension. It would be important for the GMPTE to establish who was carrying the financial risks, and that those could be afforded.

DB contracts are a more likely option. They can deliver reasonably effective results, and have been used in a number of places. They also fit with a range of financial techniques. There is a strong incentive on the contractor to deliver the project on time, perhaps at the expense of future maintenance costs for which they will not be responsible. (Warranties would be used to try to reduce this effect).

Both traditional construction and DB contracts can present financial problems. They require capital expenditure to be financed during or just after construction. This can be done through capital grants or borrowing. Attempts to finance 'off balance sheet' have been made outside the UK, but can lead to serious audit problems – as at present in Madrid.

The options in the middle form around two UK approaches – the DLR approach of separate operating and infrastructure extension contracts, both in the private sector, and the Edinburgh/Liverpool approach of Early Operator Involvement. In Edinburgh, this is likely to be applied with separate infrastructure and rolling stock contracts. Edinburgh are also considering a strong public sector role in the design of the system and the choice of rolling stock; this appears attractive, but there could be drawbacks if the public sector holds the risks.

When applied to the Manchester context, EOI and the DLR approach lead in the same direction. Both suggest a separation of operations and new infrastructure construction; both suggest a separate treatment of rolling stock; and, given procurement timings, both indicate starting with a new operations contract. This

approach would be close to the market expectation. The approach could involve a single operations contract, of between 7 and 10 years length, and separate infrastructure contracts, of 25 to 30 years length, for each extension. Both the EOI and DLR approaches have relatively strong operators, performing some maintenance and coordination functions. These have similarities to the previous discussion on a framework approach. Framework arrangements for investment projects are difficult, as the SRA discovered under the late Sir Alastair Morton.

The difficulties and choices come around the details and the timings. The next paragraphs look at the options for these for the middle approach, with some comment about more public and private approaches.

Rolling stock

Rolling stock does not fit easily into either the operations or infrastructure contracts. While the operator's staff will drive the trams and will almost certainly do the day to day maintenance, the short term nature of the operating contract means that the operator cannot be responsible for the assets. While the infrastructure contracts will have the right length, the GMPTE will want to use the rolling stock across the network and to have flexibility to adjust the fleet over time.

The rolling stock market is dominated by a small number of manufacturers. Care needs to be taken in procurement to ensure that there is competitive tension between rolling stock providers, and that rolling stock considerations do not dominate other factors. (There is some evidence that the single consortium approach can allow the rolling stock manufacturers to select the operator and construction company).

These concepts suggest that there may need to be separate rolling stock contracts. These could be based around leasing or PPP techniques and could pick up the depot. (The DLR approach of public sector financing could be another option). The contracts could pick up the entire rolling stock requirement, including the Phase 1 and 2 capacity build.

Rolling stock would be procured separately under more public sector options, and could still be leased or, possibly, procured under a PPP. Under the past more private sector options, there was generally a single consortium.

Phase 1 and 2 infrastructure renewals

These are urgent and do not fit easily with the extensions. So the logic is that they should be procured separately. This could be done through the current operations contract. Linking to an operations contract competition could give better value, but might lead to delay. The operating contract would not be expected to provide the finance, which would have to come from public sources.

Under a more public sector option, the renewals could be taken forward directly by the GMPT. There would still need to be careful liaison with the operator, and effective management.

Control system

The core approach of infrastructure extensions requires a careful specification of the control and communication equipment. A complete change of the control system and the control room will also be a major risk – and one it will be difficult to transfer to the private sector. An option would be to treat this as part of the Phase 1 and 2 renewals.

Depot

A new depot is needed between the first and second extensions. This could form part of the second infrastructure extension (even if it is not geographically close), or be linked to the rolling stock strategy as discussed above.

For both the depot and the control systems, public and private sector options could be developed. They would look like the infrastructure renewals options.

Timings

There are choices about where to start, and the order of procurement. The infrastructure extensions will take 18 to 24 months to procure and four years to build. A new operating contract might take 12 months to procure and secure handover. So it would be possible to procure the first infrastructure extension and then proceed to procure the new operating contract during the four construction years. This would give a good clear definition of the system in the operating contract documents; and it would allow links or joint ventures to be specified between light rail operations and bus 'quality contracts'.

An alternative would be to start with a new operating contract. This could allow a new control system, to be incorporated, but not financed, in the operating contract. This is likely to offer better value for money and incentivisation. The procurement of first extension contract might be started at the same time, but

would be timed to allow the new operator to contribute to the specifications before it closed.

This second approach is the one shown in the indicative route map.

Issues with the core approach

Interfaces

There are some issues with the approach proposed. To different extents, these also apply to more private and public options. The first is the problem of interfaces. Instead of a single long term contract, there would be at least a short term operating contract, several infrastructure extensions and a rolling stock contract. The interfaces between those contracts will need to be carefully defined in the documents and properly managed over time. Otherwise, the responsibility for disputed areas could effectively come back to the public sector. These interface issues are not new. They exist within the private sector consortium under more private options and are directly managed by the public sector under the more public options.

This is a complex area but there are techniques emerging for managing interfaces and minimising the public sector's exposure. These could be developed and adapted for Greater Manchester. Light rail, in general, does not seem to have had the interface difficulties of heavy rail. The early appointment of an operator will help the public sector identify and manage interface areas before infrastructure contracts are signed.

Balance sheet issues

There are also issues with the accounting and statistical treatment of availability based infrastructure contracts in the UK. The GMPTE is committed to the best value route whatever the balance sheet effect. In principle the statistical treatment of an availability based approach, which would be the basis of the middle option, could go either way. But ways through balance sheet issues have been found in the past, and in principle GMPTE should take the best value route whatever the balance sheet effect. The balance sheet treatment for the other options is much clearer.

Conclusion

The GMPTE has reconsidered its procurement options and strategy in the light of its objectives of achieving best value for money, quick implementation and

appropriate and affordable risk transfer. It wants to take forward Metrolink using the best available techniques. The conclusions at this stage are provisional, and the GMPTE is keen to discuss them with the Department. The direction of travel reflects the developments of the last few years and the current market view. The appointment of a single operator will promote integration, will allow management of interfaces and may also be the way forward for renewals. Infrastructure procurement will be on an availability basis – with no exposure of the debt providers to revenue risk. Issues remain with central systems, maintenance and accounting treatment. These need further discussion.

The final procurement strategy will also be linked with decisions on funding and financing Phase 3.

The procurement strategy could be completed in the next months and would allow procurement to start in the autumn, on the timetable set out in the roadmap.