EDINBURGH TRAMS: OUTLINE BUSINESS CASE

Purpose

1. **For discussion**. City of Edinburgh Council and tie ltd are seeking £32.678m from Transport Scotland to continue preparatory work for the implementation of the Edinburgh Tram project. This would take the project through to end December allowing 2 months for consideration of the draft Final Business Case to be presented in October 2006.

Issues for discussion

2. I would be grateful for views on the following:

- **progress required over the next 6 months**
- **suggested contents of the Final Business Case (paras 20-24)**
- **how we work with CEC, tie ltd and TEL over the next 6 months and beyond to promote the best interests of the tram scheme and protect Transport Scotland's investment in the tram scheme (para 26)**
- **review of the procurement strategy (paras 9-19)**
- **impacts on other areas of Transport Scotland business (Annex A)**

3. Following the discussion at the Transport Scotland Board and any agreed review of the procurement strategy I would propose to request an Investment Decision Makers meeting to consider the formal approval of funding.

Nature of Outline Business Case

4. Strictly speaking this is an update of an already agreed Outline Business Case (OBC). That was agreed by Ministers in August 2005. However, in agreeing the OBC the Minister for Transport did not agree funding for the whole of the period to be covered by the production of either the draft Final Business Case (FBC) in October 2006 or the completed FBC in June 2007. Instead he agreed funding up to March 2006 when Royal Assent for the Bills was expected.

5. Since last August some very significant progress has been made:

- CEC has agreed a phasing strategy for the tram network
- the Minister for Transport has secured Cabinet agreement to a contribution to Phase 1a of that network (from Leith Waterfront to Edinburgh Airport)
- initial economic appraisal of Phase 1a indicates a likely BCR of around 1.5
- the Minister for Transport has secured Cabinet agreement to indexation of the Executive's £375m contribution in line with increases in general construction costs since 2003
- Transport Edinburgh Ltd (TEL) has been properly established as a single economic entity for Lothian Buses and the tram operator. It has secured experienced and effective directors including a Chairman (David McKay) and another key Director (Willie Gallagher) drawn from the private sector

- the Finance Partnerships Unit has concluded its evaluation of the proposed procurement strategy and agreed that a PFI/PPP solution would not represent value for money
- further development of the procurement strategy has taken place to confirm the strengths and weaknesses of tie ltd's preferred procurement strategy

6. The issues in para 5 have been wholly or largely closed out. In addition there has been good progress on a number of issues but the work is not yet concluded. These areas will be key in the period to October 2006 when the draft Final Business Case (FBC) will be presented:

- finalisation of the procurement strategy – this needs to happen very quickly as release of the tender documentation for the infrastructure is on the critical path
- revised patronage modelling to reflect the likely scope of the tram network and reflect/generate service integration proposals – this is being undertaken by the Joint Revenue Committee (JRC) and is due to be complete in August 2006
- TEL has started work on a business plan that will be informed by the outcome of the JRC
- the MUDFA contract under which utilities will be diverted in advance of infrastructure construction is almost ready for award and planning work continues to target areas of route where the risks are greatest
- systems design work has begun which still leaves freedom for the infrastructure contractor to contribute to the final design but which again targets areas of route where risks are greatest
- tie ltd has started discussions with Network Rail on signalling immunisation issues

7. Better progress is also needed in a number of areas:

- re-considering and re-negotiating the DPOFA which is the early operator agreement under which Transdev has been working – the agreement needs to reflect the existence of TEL and incentivise all parts of TEL to work together to maximise overall public transport patronage and revenues rather than purely tram patronage and revenues
- CEC has made some limited progress in aligning its various departments to support the tram as far as possible without falling foul of its other statutory duties – we need to see specific, resourced proposals for the handling of applications for Traffic Regulation Orders, planning permissions, listed building consents etc to have confidence that they will not be subject to delay and that permission will not be given with "gold-plated" conditions
- CEC finally took a vital decision on prioritisation and scope but it is essential that there is a strong and clear client function at both official and political levels within CEC to give confidence that CEC is ready to play its part and take the difficult decisions that will be necessary to deliver an effective scheme within the available budget

Breakdown of work proposed for April – December 2006

8. tie ltd has presented a proposed breakdown of work and costs in the OBC. The total of this work is £32.678m broken down as follows:

• tie costs for project management and development	£2.612m
• early operator involvement	£0.540m
• legal costs	£2.072m
• system design	£11.478m
• Joint Revenue Committee	£0.638m
• technical support services (contributing to informed client function)	£3.585m
• communications & marketing	£0.461m
• additional costs of TEL	£0.585m
• service integration planning	£0.250m
• financial advice	£0.114m
• utilities diversion preparation	£6.260m[1]
• land & property, insurance, other	£1.091m
• contingency (10%)	£2.971m
Total	**£32.678m**

Procurement strategy

9. tie's preferred procurement strategy is outlined in Annex B. This strategy is based on learning the lessons of other GB tram schemes and early risk reduction is a significant feature. The strategy has produced some positive results including the benefits of early operator involvement and the significant benefit of agreeing with the utilities companies that a single contractor can carry out all the utilities diversions at one time at any location.

10. The 2 main issues outstanding for urgent resolution are:

- response to the infrastructure pre-qualification tenders
- whether to request a variant bid from infrastructure providers that would see a greater percentage of scheme cost paid on completion and/or during the initial operational period by means of an extended retention

Response to infrastructure pre-qualification

11. tie ltd has had 5 responses to the Infraco pre-qualification questionnaire and has been carrying out further discussions with those 5 companies. The 5 break down as 1 major European company with UK heavy rail experience; 1 major European company not previously active in the UK; 1 UK joint venture which has not actually built a light rail scheme but was preferred bidder on a scheme recently not approved by HM Treasury and 2 tram vehicle and systems manufacturers.

12. Further discussions have been continuing between some of those who expressed an interest and between tie ltd and each of the potential bidders. As a result of that it seems likely that the potential bidders will consolidate as follows:

- the UK joint venture together with one of the tram vehicle & systems manufacturers (discussions on this have been continuing this weekend)

[1] This includes a £5m refundable deposit that is required 3 months before utilities diversions can begin

- the major European company not previously active in the UK together with the other tram vehicle & systems manufacturer (discussions have not taken place in relation to working together on Edinburgh but the 2 companies have worked together on precisely this basis elsewhere in Europe)
- the major European company with UK heavy rail experience

13. It is interesting that 2 of the tram vehicle manufacturers are effectively seeking to run counter to tie ltd's preferred procurement strategy by forming consortia with infrastructure partners. However, both companies sell tram signalling and control systems, overhead line equipment and a number of other components of a successful tram system as well as vehicles. Both have confirmed that they would therefore continue to be interested even if their own tram were not chosen through the vehicles contract.

14. This is not a particularly strong response to the infrastructure PQQ but recent English tram schemes have not been supported by Central Government leading to substantial abortive costs by bidders and some construction companies have suffered losses when schemes have been constructed. I will have an update on the comparison of the Edinburgh situation with recent strength of competition in other UK schemes.

15. Some civil engineering contractors who have not expressed an interest have cited the novation of the tram to the Infraco as a reason for not bidding. **We should therefore consider whether removing that requirement would produce a stronger competition and whether the delay involved would undermine confidence amongst those who have already expressed an interest**.

Variant bids

16. tie ltd's proposed contractual structure is to pay the Infraco contractor on finely-graded milestones with a small payment on completion. Essentially this approach minimises the finance costs of construction. However, it could leave the contractor with a weak incentive to complete to time and for the system to work "out of the box" as the contractor would not be substantially out of pocket. To remedy this tie ltd proposes a series of performance bonds that can be called on in the event of non-compliance.

17. Substantial discussion has gone on with tie ltd about whether an alternative structure where a larger sum were retained until completion and further sums were paid over an extended warranty period would provide better incentivisation and cost certainty. This would constitute a variant bid and would have to be included in the Infraco tender documentation. Inclusion would allow the benefits and costs of such an approach to be tested but would involve additional work for the bidders and should only be used if we believe there is a realistic chance of securing improved cost certainty as a result.

18. Further financial modelling work has been undertaken to try to inform a decision on this issue but this work is not yet complete. **We should press for early completion of the financial modelling**.

19. Work has also been undertaken to assess the risk of the 2 strategies and how that risk is managed to allow a like for like comparison. This would include the cost of management structures that would supplement commercial incentives with a strong contractor monitoring role within tie ltd.

Content of draft Final Business Case

20. The next 6 months are crucial to the ultimate success of the tram project and to the next investment decision of whether or not to start physical utilities diversion works. We have moved out of the Parliamentary phase and are moving very clearly into delivery. tie ltd has recognised this and is proposing changes to its structure as a result. We need to set clear expectations of issues to be resolved in the draft FBC and how we expect to evaluate whether the draft FBC is acceptable or not.

21. The current OBC is 96 pages plus some annexes (and would benefit from better organisation of the material) but covers key issues at this stage. There are supporting documents for the OBC but they are not always well referenced. In contrast the FBC for Larkhall – Milngavie ran to 6 volumes and several hundred pages and we would expect a document of that type for the trams in October.

22. I recommend that the FBC should comprise the following sections and that we should specify clearly what we are seeking within each section:

- Executive Summary
- history of scheme development – to the end of the Parliamentary process
- JRC modelling report
- TEL business plan endorsed by the TEL Board and CEC
- interchange proposals
- project execution plan including phasing plan and resource-loaded programme
- comprehensive risk management strategy
- cost report
- cash flow and funding – includes contributions and clarity on which party takes which financial risks and rewards
- affordability analysis
- Gateway Review report and associated action plan
- benefits assessment
- benefits realisation plan
- review of contractual structures for delivery and operation
- whole lifecycle cost assessment including funding of major renewals
- approvals and 3rd party works strategy

23. During the period to the production of the draft FBC the most critical elements for Transport Scotland are the TEL business plan, the affordability analysis and the risk management strategy although we would expect to see specific progress on all of the other elements.

24. In addition to setting clear specifications of what the various elements of the FBC must contain in draft and final stage we need to monitor the process closely. This is essential to avoid delay in consideration and to ensure that all parties know that we take this process very seriously.

Summary

25. The tram OBC demonstrates that the scheme continues to represent value for money and that significant progress has been made on a number of fundamental issues to the success of the scheme.

26. Significant further progress is needed over the next 6 months and that can be encouraged through clear specification of the outcome required in the draft FBC. I believe it is also necessary for the Chief Executive to write following this Board meeting to the Chief Executive of City of Edinburgh Council to set out the issues the Board expects to see resolved in the FBC. That letter should also propose regular (perhaps 6-weekly) meetings between the Chief Executives of Transport Scotland and CEC and the chairs of tie ltd and TEL to ensure there is the necessary level of commitment within all the organisations to deliver the progress required to October 2006.

27. The outstanding issues are not of a nature to require the scheme to be cancelled or delayed significantly. Indeed some cannot be resolved without the work that is planned in the next 6 months.

Damian Sharp
Head of Major Projects
Rail Delivery Directorate
23 April 2006

ANNEX A

EDINBURGH TRAMS: OUTLINE BUSINESS CASE
CHECKLIST OF IMPACT ON OTHER AREAS OF TRANSPORT SCOTLAND BUSINESS

Rail Delivery

Franchise

1. There is no impact on the funding of the franchise in the work to be carried out to December 2006. The development of good interchange at Haymarket and Edinburgh Park will potentially benefit the franchise through making public transport journeys more attractive. We would expect discussions to start in earnest between Transport Edinburgh Ltd (TEL) and First ScotRail about through ticketing between tram, bus and train.

Rail Operations

2. Construction of the tram will require immunisation of the lineside signalling equipment where the tram runs alongside the heavy rail network between Haymarket and Broomhouse. Discussions are underway between tie ltd and Network Rail to agree the implementation of this work. The costs of this are included in the tram cost estimate. The Major Projects Team will work closely with Network Rail and David Binnie's team to ensure this work is co-ordinated with other works in this area and passenger disruption is minimised.

Finance

3. £32.7m has been requested (which would be followed by a request for a further £35m for the period January – March 2007). When the estimated spend for future years was reported to Cabinet in December 2005, it included £31.2m for Edinburgh Tram in 2006-07 in a total spend of £167m and a budget of £178m.

4. Clearly if tie ltd succeeded in implementing at full pace and all other schemes proceeded to plan then there would be pressure on the Major Projects budget in 2006-07 that could not be managed within that budget alone. However, there are ways of managing the potential demand of £204m v a budget of £178m.

5. The primary issues are:

- projects in this programme (and other major infrastructure programmes) have tended to spend more slowly than planned and in the case of Waverley Station are likely to deliver savings;
- a number of the projects in the programme have land acquisition allowances in 2006-07 including over £16m in March 2007 by the tram project – these purchases can generally be completed either late in 2006-07 or early in 2007-08 giving us control of the year in which spending falls.

6. In summary, the work to December 2006 is affordable within the current budget and land acquisition across the programme provides the means to manage expenditure between 2006-07 and 2007-08 should this be necessary.

ANNEX A

Strategy & Investment

7. The proposed work is consistent with the Partnership Agreement commitment to delivering a tram network in Edinburgh and with our broader proposals for encouraging modal shift, economic growth and social inclusion.

Trunk Roads

8. There is no impact on the maintenance and operation of the current trunk roads network.

9. TRIPS owns land at Gogarburn that is needed for the construction of the tram. There has been very limited discussion of the terms and mechanism of the transfer. The terms of the transfer are something we should require to be agreed in principle between CEC and Transport Scotland in time for inclusion in the October 2006 draft Final Business Case (FBC).

Concessionary Fares

10. The Interim OBC assumes that concessionary fares will be available on the tram on the same basis as in the local Edinburgh concessionary fares scheme in force before the national scheme began. Further work is required on this issue to produce better modelling of the consequences for CEC, TEL and Transport Scotland of including the tram scheme in the national concessionary fares scheme as it will be difficult to resist such inclusion. Clear assumptions together with realistic costs must be included in the draft FBC.

Major Projects Team
April 2006

ANNEX B

EDINBURGH TRAMS: OUTLINE BUSINESS CASE
SUMMARY OF PROCUREMENT STRATEGY

1. The Edinburgh Tram project is learning from lessons from previous tram GB schemes. In particular, uncertainty over detailed design and planning has resulted in cost overruns and increased prices. These lessons, together with the constraints imposed by Edinburgh's World Heritage city centre, have convinced **tie** Ltd that detailed planning and design, and risk reduction work, should be completed before the main construction contracts are let.

2. **Tie**'s proposed procurement strategy identifies a number of key contracts that allow them to bring in-house the skills and experience of leading light rail technical design and planning contractors. While this entails higher up-front public sector investment, tie argue that this will help minimise cost overruns and increased risk premia on transfer to the private sector. Before this transfer, these risks will largely fall to the public sector.

Early operator involvement

3. A contract has been signed with Transdev: an experienced tram operator in the UK and in Europe. This gives **tie** access to the operator's knowledge and experience during the key phases of parliamentary approval, business case planning, bus/tram integration, design, and commissioning to ensure that the system will be capable of being operated effectively. Once in the operations phase, Transdev will assume a portion of the operating cost risks.

Establishment of Joint Revenue Committee

4. The Joint Revenue Committee (JRC) is developing a public transport modelling tool to support the development of the Tram network and integration of both tram and bus. The JRC is responsible to **tie** along with the design contractor on a jointly and severally liable basis. The modelling tool is analysing: the impact of system design features on revenue predictions and on service and frequency changes; and the effect of changes in passenger numbers on revenue. The JRC will report on the integration with other public transport modes and this output will facilitate the development of a business plan for integration of buses and trams.

Early Designer involvement

5. This allows development of detailed advance design work for sensitive sections of the lines, particularly through Edinburgh's World Heritage city centre. The design contract focuses on the most sensitive sections of the network between Ocean Terminal and Haymarket via Princes Street. The early involvement of the designer should reduce risks to which bidders for the infrastructure contract are exposed and therefore the premia they would otherwise charge.

6. It will also facilitate the advanced works on utility diversions. This is an area where both programme and costs would present considerable risks and therefore high premia to be paid for transfer of risk to the private sector. **tie** and CEC plan to manage without such transfer. Drawing on the experience of other schemes within **tie**, they will monitor the solutions being prepared by the design contractor with the assistance of the Technical Support Services Contractor and Transdev. The purpose of this is to avoid 'gold plating' and any

tendency towards high risk or high cost options which do not provide the overall best value for money. Costs will be closely tracked throughout the design period, so that overruns can be identified quickly and mitigating actions taken while there is still scope to change the solution.

Advance Utilities works

7. Early utilities work should reduce programming and cost risk pricing by the infrastructure providers. It will also minimise disruption and through the key city centre areas. **tie** propose to retain and manage the significant risks associated with utilities. They will implement the major utilities diversions required through a single framework contract - the contractor to be approved by all the affected utilities. **tie** and CEC will use their powers under the Tram Acts and as the roads authority to negotiate with the utilities, allowing works to be carried out on all of the utilities assets at a single site under a single contract. Advance negotiations have already resulted in a number of innovative solutions for utility issues.

Separate selection of infrastructure and vehicle providers

8. **tie** will run separate competitions for infrastructure and vehicles in order to allow selection of its favoured rolling stock choice and its favoured infrastructure provider. **tie** also believes that separate procurement will increase competition for the infrastructure contract. As with the design contract it is **tie**'s intention to novate the vehicles contract to the infrastructure contract with all interface risks passing to the infrastructure contractor. This has been a key change to previous GB schemes and not all potential infrastructure providers have welcomed this or been prepared to bid on this basis.

Outstanding issues

9. There is general agreement across all stakeholders and financial advisers that tie's proposed procurement strategy requires increased attention to governance issues. The position of Transport Scotland as majority funder exposes us to continuing funding pressure. Edinburgh's World Heritage status and the expected stance of the historical environment lobby mean that there remains significant risk from exposure to proposed cost increases, particularly through cost creep and "gold-plating". There are also concerns about the proposals to separate the competitions for infrastructure and vehicles as promoted by **tie**.

Major Projects Team
April 2006