

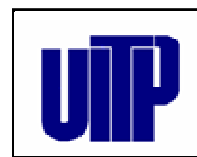
# Urban Transport Benchmarking Initiative Year Three



## Annex A4.1

### Public Transport Organisation & Policy Working Group

Annex to final report





# Annex A4.1

## Public Transport Organisation & Policy Working Group

Annex to final report

Prepared for

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by



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## **1. INTRODUCTION**

This document represents Annex 4.1 of the Urban Transport Benchmarking Initiative's year three final reports and contains information in support of the final report of the Public Transport Organisation and Policy working group.

Section 2 of this annex contains the data guides from year three of the Public Transport Organisation and Policy working group. Section 3 contains summaries of the discussion from the meetings during the working group's three site visits, which took place in Rotterdam, Berlin and Brussels during year three of the Urban Transport Benchmarking Initiative.

## 2. DISCUSSION CRITERIA

During year three of the Urban Transport Benchmarking Initiative the working group chose to focus primarily upon exchanging information and conducting site visits as opposed to undertaking a data collection exercise. The participants in the group stated a preference for this approach since they felt greater benefit could be derived from sharing information about the processes and approaches to public transport finance than collecting data on the topic.

Participants were invited ahead of each site visit to prepare a presentation to be delivered during the meeting following certain guidelines. The presentations were prepared using a standard approach, which had been proposed prior to each site visit meeting by the rapporteur. The guidelines indicated the topics and proposed a common structure. The presentations were followed by group discussions. The meeting itself was therefore an important part of the process of collecting information as the questions asked by each participant enriched the discussion.

On the basis of the discussion, the UITP expert gathered in-depth information on the identified good practices in cities outside the group, in the form of case studies/published research papers etc. These studies were provided to participants as a basis for a reflection on the practical application of these good practices to their own network.

After the meeting, participants were invited to prepare a brief report according to the following guidelines provided in advance:

- Is there any practical lesson you have learned from the presentations at the previous meetings and from the studies I have forwarded by e-mail? Which one (note that this can be on any of the subjects we have discussed: fare structure, integration, smartcards, decision making process, objectives, funding, human resources management, fleet maintenance, incentive contracts etc)?
- Has this led to an idea for change in your organisation?
- If this is a change on which you can decide; have you already done so? If not, what has been the impediment (opposition to change; need for further study work)?
- If you do not have the authority to implement this change, have you introduced a proposal for change? At what level is your proposal being discussed (intermediate management levels, CEO, board of directors, political level)? Again, what are the most important obstacles to change?
- Has this led to any decisions yet, or are there plans to implement changes?
- If none of the above has happened, what was the reason? *For instance, the participants might have heard of interesting practices, but they cannot be implemented in their regulatory context.*

The findings from these activities were then shared during the subsequent meeting of the group.

### Data Analysis

As each situation is unique, the description of a measure implemented in one city is just the first level of the work in devising a measure that is transferable elsewhere. The bulk of the work is

something which is carried out by each city individually, by being able to observe other practices and to combine relevant aspects of these practices into their own approach.

### **Definition of indicators**

The indicators of interest were defined ahead of each meeting in the guidelines for preparation of the presentations. The main indicators collected during year three are listed below.

#### Meeting 1: Fare policy

The purpose was to identify good practices related to the fixation and the integration of fares and to reflect on their applicability to each network's respective situation.

In order to update each other on fare policy and practices and to trigger the discussion, participants were invited to briefly present information on the state of the art and the problems in their own network related to the following:

- Decision making process regarding fare policy (who decides on fare structure and fare levels)?
- What are the objectives of fare policy? What are the criteria used for the fixation of fares (with distinction by mode if applicable)?
- What is the fare structure (geographical, modal, by operators)?
- What is the level of integration or differentiation between modes? (How) are revenues shared between modes and operators?
- Plans concerning the use of smartcards?

#### Meeting 2: Alternative approaches to public transport funding

The purpose was to identify good practices related to the non-conventional approaches to the funding of public transport and to reflect on their applicability to each network's respective situation. Firstly, the UITP expert sent a document providing an overview of the literature on the funding of public transport (see more details below).

In order to update each other on fare policy and practices and to trigger the discussion, participants were invited to briefly present information on the state of the art and the problems in their own networks. They were invited to use the following framework for their presentation:

1). Please indicate which revenue sources are used by your company/government:

- Capital subsidies from the federal/regional/local authorities
- Compensation for concessionary fares
- Compensation for public service obligation
- Tax exemptions (for instance on fuel)
- Earmarked local employers' contributions
- Earmarked taxes levied on other transport activities (road pricing, parking levies, carbon taxes, fines for traffic offences, vehicle taxes, fuel taxes, taxes based on the number of axles)

- Land value capture in the broad sense (through the sale of urban promotion rights, sales of annex lands, taxes for direct connection, concession, etc)
- Advertising
- Supply of services (car-sharing, tourist information, vehicle maintenance, consultancy and engineering...)

What are the main obstacles for the implementation of one of these schemes? Do you see any disadvantage that has not been dealt with in the survey documents the UITP expert has sent? Why do you think your government might be in favour of/opposed to the scheme?

2). Is there a differentiation between the funding of exploitation and the funding of investment (infrastructure and rolling stock)?

3). What is your view on the use of Public-Private Partnership (PPP)? What would be an advantage of PPP? What do you think of the problems that are reported on this subject (such as renegotiation of contracts, confidentiality of essential contract clauses, efficiency measurements, quality regulation, cost overruns, higher cost of capital for private sector)? What about claimed advantages (better incentives for efficiency)?

4). What is your view on earmarking specific government revenues for public transport?

5). With respect to government funding:

- Are government funds received in a lump sum way or is there some type of conditionality involved? What is the frequency of revisions?
- Does the rationale for government funding contain any reference to the existence of economies of scale in the operation of public transport?
- What is the division of labour between the different levels of government with respect of funding? Is this coherent with regulatory responsibilities?

6). With respect to debt finance:

- Do you use bank loans/ bond issues
- Are your loans secured by a lien on revenues/tax sources?
- Are your debts guaranteed by the government?

### Meeting 3: Cost reduction strategies

The purpose was to:

- identify good practices related to (1) cost reduction by operators (2) incentive provision for cost reduction in contracts between organising authorities and operators.
- reflect on their applicability to each network's respective situation.

Firstly, the UITP expert sent documents regarding the impact of regulatory frameworks on cost efficiency and good practices in cost reduction. In order to update each other on cost reduction practices and to trigger the discussion, participants were invited to briefly present information on the state of the art and the problems in their own network. They were invited to use the following framework for their presentation:

- The delegates from organising authorities were asked to focus on the issue of incentive contracts:
  - How can the contract between the OA and the operator provide incentives for cost reduction without affecting other desirable objectives (environmental performance, public service obligations, quality, safety etc)?
  - If possible, explain what practices you have tried in the past and what you intend to do in the future.
  - What are the main obstacles to innovation in this field?
  - Do you measure the cost efficiency of the operator in your area and do you compare it with other operators?
  - If you do measure cost efficiency, how do you do it?
  - Do you think that incentives based on comparative performance ('yardstick competition') would be an interesting approach for public transport?
  
- The following subjects were proposed to the operators:
  - How can better human resources management (for instance, more flexible labour contracts; better training of personnel; better scheduling tools) reduce labour costs?
  - What is the potential for cost reduction through better fleet management, and in particular better maintenance?
  - What is the potential for savings of energy costs?
  - What is the role IT can play in the above areas?
  - What is your view on fashionable management tools like Total Quality Management, Re-engineering, Balanced Scorecard, outsourcing of non-core competencies,
  - What are the main regulatory obstacles to improved cost efficiency?

### 3. SUMMARY OF DISCUSSIONS FROM SITE VISITS

The discussions were held at each of the year three site visits to inform the participating cities of the practices which are evident in the working group's cities. The year three site visits attended by the public transport organisation policy included Rotterdam, Berlin, Brussels and the remainder of this section summarises each of the meetings in turn.

#### 3.1 Rotterdam January 5<sup>th</sup> and 6<sup>th</sup> 2006: Fare Policy

The discussion within the working group started after presentations by Francis Cheung and Willy Sweers on the Dutch smartcard project. In order to update each other on fare policy and practices and to trigger the discussion, participants were invited to briefly present information on the state of the art and the problems in their own network related to the following issues:

- Decision making process regarding fare policy (who decides on fare structure and fare levels)?
- What are the objectives of fare policy? What are the criteria used for the fixation of fares (with distinction by mode if applicable)?
- What is the fare structure (geographical, modal, by operators)?
- What is the level of integration or differentiation between modes? (How) are revenues shared between modes and operators?
- Plans concerning the use of smartcards?

All participants agreed with the proposed methodology.

The remainder of this section contains abstracts from the full fares policy document which relate to the questions circulated prior to the Rotterdam meeting. Extracts are indicated by the use of quotes (“”). The “modes of travel” referred to in this document cover Metro (Belfast), Ulsterbus (rest of the region) and NIR (Northern Ireland Railways).

“The purpose of the Translink Fares & Ticket Policy Procedure is to identify the procedures, divisional responsibilities, timescales and approval channels for developing and implementing fares revisions on an annual basis and for the introduction of new routes, and also for promotional fares.

The Fares & Ticket Policy Document also highlights the key fares for each of the three operating companies and the relative ratios of each. It will be necessary to regularly review and, where appropriate, update the Fares & Ticket Policy Procedure to take into account changes in operating procedures, boundaries, corporate policies and structures.”

#### Question 1: Decision making process regarding fare policy?

“Annual fares revision procedure.

The recommendations for the Annual Fares Revision for the three operating companies is developed by a multi-divisional team co-ordinated and led by the Marketing Division and involves representatives from Bus Services, Rail Services, Finance – Rates and Fares, and Ticketing Systems Departments. Approval is to be sought at the January Executive Group meeting. All fares to be agreed and supplied to Rates & Fares and Ticketing Systems Department five weeks in advance of the agreed revision date.”

#### Question 2: Objectives of fare policy?

Translink is publicly owned but is largely autonomous from government in setting fares. However, proposed fare increases are included in the annual corporate plan which has to be agreed by the Department for Regional Development (DRD) so there is some degree of oversight. The main factors which govern fare levels are:

- The ability to remain profitable;
- Covering costs and being cost efficient;
- What the market will “accept”; and
- Our loosely defined “social obligation”.

Some general points:

- Within the past two years the overall policy of Translink has moved from the maximising of revenue to the maximising of patronage;
- In the context of the bus companies the term “profitable” is the generally accepted term of passenger revenue over costs (i.e. there is no operational subsidy) but in the railway context the revenue contains an annual PSO (Public Service Obligation) payment (in Northern Ireland the railways will never be profitable).

- Although bus services do not receive an operating subsidy the concept of route “socially necessary payments” is slowly gaining acceptance for non-commercial/non-profitable socially necessary services and some support has been paid by the DRD in recent years.
- The DRD has also given significant grants in recent years for bus and train purchase as part of the public transport modernisation project.

Question 3: What is the fare structure?

**Ulsterbus**

Ulsterbus is responsible for virtually all stage carriage bus services in Northern Ireland except Belfast area services which are operated by Metro. Ulsterbus currently has 20 bus depots across the province employing around 1,250 drivers and operating approximately 1,150 buses. Ulsterbus has a strict mileage, taper-based fares policy, with one exception, applied throughout its services in Northern Ireland. Passengers pay a fare according to the length of their journey, irrespective of where the journey is in the province. The further passengers travel, the less they will pay on a pence per mile basis. This is consistent with most forms of travel. The fare charged is consistent for all journeys in Northern Ireland of the same distance.

The one exception is that, on the periphery of Belfast, some minor adjustments have been made to the fares policy to ensure a maintained consistency with Metro fares for the same journey. Migration to the Ulsterbus fares structure is made for the remainder of these journeys. Where a route is served by both Ulsterbus 500 service and Metro there is no variance in the fare paid by passengers.

**Metro**

Metro operates approximately 60 routes in Belfast which tend to be dictated by the existence of large population densities and operate primarily on major arterial routes to the centre of Belfast. It operates a fleet of around 250 buses for this purpose.

Metro has a “flat fare” structure, i.e. it is not essentially distance related, with 3 key fare zones in the Belfast area. The inner zone extends approximately 1½ miles from the City Centre and incorporates most of the city’s major hospitals. The city zone extends to the edge of Citybus’ original area of operations, that is, the area previously served by the former Belfast Corporation Transport Department. However, an extended zone was created to provide special fares for longer distance journeys to areas such as Dunmurry, Conway, Twinbrook, Poleglass, Ladybrook and Newtownabbey.

**NI Railways**

The Northern Ireland Railways Network comprises of the Belfast – Dublin mainline to the border (the Enterprise Service) and the lines from Belfast to Londonderry, Bangor and Larne. There is also a branch line from Coleraine to Portrush. NIR’s operating deficit is funded by the Department for Regional Development under a Public Service Obligation (PSO). The Department has undertaken to fund NIR’s losses in operating specified services, provided that the overall average fare level per passenger mile exceeds a specified level.

NI Railways operate a fares structure that differs by line and is dictated by commercial objectives, depending on the market conditions for each line. This takes account of the availability of local competition in the form of alternative means of transport as well as the relative quality of the rail service, in terms of total journey times, service frequency and the directness of the route compared to the road.

### Enterprise Fares Revision

Cross border rail fares are reviewed on an annual basis by the Enterprise Business Development Team which includes representatives from different functions within both Iarnród Éireann and Translink. Where possible, every effort is made to harmonise the Sterling and Euro fares for each ticket type. The joint proposal is forwarded to the Executive Group for approval.

### Question 4: Level of fare integration?

Translink has sophisticated ticketing (Wayfarer) and analysis (Merit) systems and can analyse each service in great detail. Translink is committed to integrated ticketing but due to differing fare structure policy in the three separate companies there is little real integration, except for the “Freedom of Northern Ireland”, Pupil Tickets and “Annual Commuter” tickets, at present:

1. Freedom of Northern Ireland tickets - 1 Day, 3 Days, 7 Days.
2. Pupil tickets - Available for return travel from home to school by one mode or a combination of modes of travel.
3. Annual Commuter Travelcards
  - These are valid for one year and offer a saving of at least 15% compared with the purchase of 40 journey/monthly tickets.
  - They provide unlimited travel between two chosen points by one mode or a combination of modes and freedom of the Northern Ireland public transport network at weekends.

The above tickets are not smartcards but are passes which incorporate the holders’ photographs. However, there is great potential for integrated multi-modal stored value tickets which are seen as a natural development of the smartcards which are noted below. It is intended that these will be developed over the next couple of years.

### Question 5: Plans for smartcards?

This is a major development for Translink and there is extensive use of smartcards:

### **Concession Fares**

Everyone over the age of 65 is entitled to free travel and there are a number of other full and half fare concessions for disabled people. “SmartPasses” are issued to all such applicants. The introduction of smartcards to senior citizens a couple of years ago was the largest scheme to be implemented in the UK at that time. Approximately 200,000 SmartPasses have been issued with an annual uptake of 7 million journeys.

## **Metro Smartlink**

Multi-journey Smartlink fares (adults and children) offer considerable savings on cash fares. The card can be loaded with a number of journeys from 5 to a maximum of 50 and topped-up as required at various outlets.

## **Ulsterbus Smartlink**

Similar to the Metro Smartlink but in this case it is loaded in advance with a number of journeys between two specified stages up to a maximum of 40 journeys.

## **NIR Smartlink**

To be introduced. These will be rolling weekly and monthly smartcards.

## **Other**

Other types of smartcards will be developed over the next few years.

### Changing the current scenario

Jerome Pourbaix, UITP, asked the participants to identify the practice that would have the largest impact on improving their own situation.

The following points are being proposed:

- *Fare ticketing integration and management information.* Several participants point out that integration can go far beyond public transportation (intermodal integration, cheap flights, smartcards for football, to pay for lunch etc). According to Frank, the basic tension with integration is between user-friendliness and management information. Irvine raised the question how to distribute revenues if there are several companies.
- The customer friendliness of flat fares versus distance based fares; of fares based on zones rather real distance travelled
- How to “sell” changes politically?

The importance of the regulatory context was emphasised; one cannot really understand what is going on without knowing the regulatory framework.

The example was given, of bus operators who do not desire the integration of bus services with rail, and a reference was also made to a regulatory regime where the bus stations are obliged to “feed” the railway system. A comment was made that this illustrates how important it is for the authorities to have real power.

This raises the question as to how supportive EU policy is for integration.

## **RET Rotterdam demonstration visit**

Finally, the group paid a visit to RET and Connexxions, where the group also received a demonstration of the smartcard.

### 3.2 Berlin March 13<sup>th</sup> – 14<sup>th</sup> 2006: Alternative funding sources

The following references relate to survey documents that are freely available on-line. These were used as inspiration for the round table discussion session at this site visit.

#### Existing UITP documents (freely available for UITP members)

The final report of the International Metropolitan Railways Committee (Finance & Commerce Sub-Committee) on Secondary Income mainly tackled issues related to advertising, property and retailing activities. This report dates back to 1999.

There is also the June 2003 issue of Public Transport International, which contains several articles specifically dedicated to alternative ways of funding public transport.

#### World Bank (1)

The World Bank publication “Cities on the Move” contains a Chapter on Urban Transport Pricing and Finance.

(<http://siteresources.worldbank.org/INTURBANTRANSPORT/Resources/chapter10.pdf>). It discusses diverse points such as congestion pricing (with an inclusion of a description of the different options), fuel taxes, axle based taxes, parking charges, the impacts of public transport on road congestion, recovering of fixed costs through cost-subsidisation, coordination of supply within public transport, equity issues, peak load pricing, fare structure, the financing of infrastructure (including land value capture, employers’ contribution, concessions) and how to best arrange financial transfers between different levels of government, creation of urban transport funds.

#### Victoria Transport Policy Institute

The Victoria Transport Policy Institute (VTI) maintains an on-line encyclopaedia on Transport Demand Management, which is constantly updated. It contains an excellent survey on funding:

<http://www.vtpi.org/tdm/tdm119.htm>. This survey discusses parking pricing, parking taxes, road pricing, fuel taxes, transportation impact fees and special property taxes, etc.

It also maintains an annotated bibliography on financing transit systems through value capture: <http://www.vtpi.org/smith.htm>

on road pricing revenue use: <http://www.vtpi.org/revenue.pdf>

and on road pricing in general: <http://www.vtpi.org/tdm/tdm35.htm>

#### European surveys

EMTA has collaborated to an ATM and INECO survey of public transport finance in metropolitan areas in Europe: [www.emta.com/fichiers\\_divers/Publications/FINANCIAL\\_SURVEY\\_ENG.doc](http://www.emta.com/fichiers_divers/Publications/FINANCIAL_SURVEY_ENG.doc)

The report considers subsidies, compensations for reduced fares, tax exemptions, employers’ contributions, earmarked taxes levied on transport activities (carbon taxes, fines for traffic offences,

and vehicle taxes etc). It always describes the regulatory context (including the type of concession contracts) to which the operators are subjected. It distinguishes clearly between financing exploitation and investment (with a further distinction between infrastructure and rolling stock). Finally, in its policy recommendations, it suggests that the cost of investment should be passed on to the indirect beneficiaries, non-users of the transport system (through the sale of urban promotion rights, sales of annex lands, taxes for direct connection, etc). It should be noted that this study is not completely up-to-date (2001).

### World Bank (2)

In its paper “Where Do We Stand on Transport Infrastructure Deregulation and Public-Private Partnership?”<sup>1</sup> the World Bank discusses the different options for private sector participation in transport infrastructure (asset sales, Greenfield projects, service contracts for maintenance and franchises). It discusses issues such as renegotiation of contracts, efficiency measurements, price regulation, quality regulation, access regulation, re-bundling, and yardstick competition.

The working group members each gave presentations on alternative methods of funding and these can be accessed through the members section of the project website, which has now been opened up so everyone can access the information online. The username (utbinitiative) and password (work2004) are required to access this section of the website.

### **3.3 Brussels June 6<sup>th</sup> 2006: Cost reduction strategies**

Participants were invited to prepare a presentation ahead of this meeting in Brussels, using a standard approach proposed by the UITP expert. The guidelines indicated the topics and proposed a common structure, but left each participant to present the information in their own words, in order to gain a full understanding of the complexity of each situation.

The purpose of the third meeting was to:

- identify good practices related to (1) cost reduction by operators (2) incentive provision for cost reduction in contracts between organising authorities and operators.
- reflect on their applicability to each network’s respective situation.

In order to update each other on cost reduction practices and to trigger the discussion, participants were invited to briefly present information on the state of the art and the problems in their own network. They were invited to use the following framework for their presentation:

- The delegates from organising authorities were asked to focus on the issue of incentive contracts:
  - How can the contract between the OA and the operator provide incentives for cost reduction without affecting other desirable objectives (environmental performance, public service obligations, quality, and safety etc)?
  - If possible, explain what practices you have tried in the past and what you intend to do in the future.
  - What are the main obstacles to innovation in this field?

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<sup>1</sup> World Bank Policy Research Working Paper 3356, July 2004

- Do you measure the cost efficiency of the operator in your area and do you compare it with other operators?
  - If you do measure cost efficiency, how do you do it?
  - Do you think that incentives based on comparative performance ("yardstick competition") would be an interesting approach for public transport?
- With respect to the operators, the following subjects were proposed:
    - How can better human resources management (for instance, more flexible labour contracts; better training of personnel; better scheduling tools) reduce labour costs?
    - What is the potential for cost reduction through better fleet management, and in particular better maintenance?
    - What is the potential for savings of energy costs?
    - What is the role IT can play in the above areas?
    - What is your view on fashionable management tools like Total Quality Management, Re-engineering, Balanced Scorecard, outsourcing of non-core competencies,
    - What are the main regulatory obstacles to improved cost efficiency?

The presentations were followed by group discussions. The meeting itself was therefore an important part of the process of collecting information as the questions asked by each participant enriched the discussion.

In order to help the participants in the preparation of the meeting, the UITP expert sent references of existing studies to the members of the working group several weeks in advance.

For the use of the operators, reference was given to a report by the management consultant McKinsey.<sup>2</sup> It was thought that this article offered some good food for thought as the authors of the study claim that operating costs can fall by as much as 15 to 20 percent through:

- **fleet maintenance** This can help reduce service disruptions (which can in turn lead to a loss of patronage) and the cost of reserve staff and vehicles. It can be achieved mainly through an integrated approach to operations and maintenance and through thorough data mining.
- **labour management** There, the main source of improvements lies in driver utilisation: better overtime management, real-time analysis of passenger demand, cross-training, changing the organisation of shifts etc
- **fare collection** The introduction of smartcards and, as a second-best solution, self-validation systems can reduce the costs linked to fare collection significantly.

The expert also referred to a document which specifically tackled the issue of cost reduction in metro operations.<sup>3</sup>

For the use of the organising authorities, reference was given to some recent studies that have been performed on the impact of different regulatory regimes on the technical efficiency of the operators.

The most comprehensive document was a 2000 paper by De Borger et.al.<sup>4</sup> As stated in the abstract of this paper, it "provides a comprehensive survey of the literature on production and cost frontiers

<sup>2</sup> Jörss, Powell and Wolff, A streetcar named productivity, <http://www.mckinseyquarterly.com/>

<sup>3</sup> [http://www.carfree.com/fix\\_trans.html](http://www.carfree.com/fix_trans.html)

for public transport operators, and it evaluates the contributions of frontier analysis to our understanding of the performance of the public transport sector.” In this paper, it is shown that “the organisation of the market, contract design, the degree and nature of the regulatory regime, and the characteristics of the network being served are all important determinants of efficiency.”

Besides this survey document, we have also referred to some shorter papers that focused on some recent findings linked to developments in specific countries.

A first paper discusses the recent trend in Norway to move from competitive tendering to performance contracts.<sup>5</sup> We have also submitted two documents that discussed recent developments in France. The first paper (by Roy and Yvrande-Billon<sup>6</sup>) “investigates the impact of ownership structure and contractual choices on technical efficiency in the French urban transport sector.” The second paper (by Yvrande-Billon<sup>7</sup>) “provides theoretical arguments supported by empirical evidences explaining why the compulsory use of competitive tendering in this sector did not translate into better performance, the main reasons being the lack of expertise of local authorities and the existence of serious operators’ collusive practices.”

### Overview of findings

#### *Dublin*

Dublin Bus has a 75% Cost Recovery, coming from close to a 100% Cost Recovery in 1996. The problem with this type of measurement is that they do not tell anything about the quality of service provided.

In the field of engineering, the following points are noteworthy:

- The low average fleet age (write off period of 12 years) has important cost and reliability implications
- The warranty deals are an important aspect of the fleet purchase policy. There is a strict follow up of parts warranty.
- Cleaning has been sub-contracted externally
- Easy Clean moquette and panels have decreased the costs of cleaning.
- Multi Tasking across grades (was introduced in cooperation with the unions)
- Craftworkers reorganisation: Mechanics are now the only craftworkers

In the field of operations, the following actions have been undertaken:

- Strict performance monitoring (route and line examinations, running time surveys)
- Developer Contributions: for large projects, the developers must have a public transport plan in place

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<sup>4</sup> De Borger, Kerstens, and Costa (2000), Public transit performance: What do we learn from frontier studies, University of Antwerp, Faculty of Applied Economics, Working Paper 2000019 <http://ideas.repec.org/p/ant/wpaper/2000019.html>

<sup>5</sup> Norheim, B. (2000), Development of performance contracts in Norway, Nordic Road and Transport Research <http://www.vti.se/nordic/2-00mapp/noart2.htm>

<sup>6</sup> Roy and Yvrande-Billon, Ownership, Contractual Practices and Technical Efficiency: The Case of Urban Public Transport in France, [http://atom.univ-paris1.fr/documents/JTEP\\_11\\_07\\_2005.pdf](http://atom.univ-paris1.fr/documents/JTEP_11_07_2005.pdf)

<sup>7</sup> Yvrande-Billon, The Attribution Process of Delegation Contracts in the French Urban Transport Sector: Why is Competitive Tendering a Myth? <http://idei.fr/doc/conf/veol/yvrande.pdf>

- Garage Management Reorganisation
- Company Supervisory Restructuring: Automated Vehicle Location (AVL) allows further refinement and would allow an important staff reduction in this area
- School buses are operated by sub-contractors
- Multiple CCTV gives 100% recording

However, Dublin Bus has still not overcome paid travelling time payments: drivers are paid to drive from the garage to the terminus. In a similar vein, there is no fuel duty rebate for dead running (for instance, driving from garage to terminus)

In the field of finance, there is an active cost audit team and monthly depot budgets meetings.

Somewhat surprising is the important role played by third party claims (accidents), which accounted for 10% of the turnover back in 1995. Important factors for change in this field have been:

- Irish legislation / culture
- Changing laws: Personal Injuries Assessment Board (PIAB), Sworn Statements have halved the number of claims, Legal advertising....
- Safety Management Systems
- Training
  - Institute of Advanced Driving
  - Mentoring / coaching of new entrants
  - Corrective Training
  - Plain clothes monitoring for checking drivers

Dublin Bus maintains also a strict policy of contesting every claim (no exception) and of pursuing costs against claimants. It also participates in the organisation of collective knowledge across the industry (especially Local Authorities).

The following areas require ongoing attention:

- Introduce seasonal schedules to reflect changing speeds and demand (especially for summer and the Christmas period)
- Traffic congestion leads to major inefficiencies. The introduction of Quality Bus Corridors and Bus Rapid Transit could help here.

Faster passenger boarding could be made possible with changes in the ticketing policy, the generalisation of off bus sales, fare integration.

The most important lesson is however **the need to benchmark** against others!

### *Merseyside*

#### Buses

80% of the bus network is commercial: Merseytravel has no contract for these services while safety is a matter for the Traffic Commissioner. For the 20% subsidised “socially necessary” routes, there are contracts with the operators.

The subsidised bus contracts specify the following:

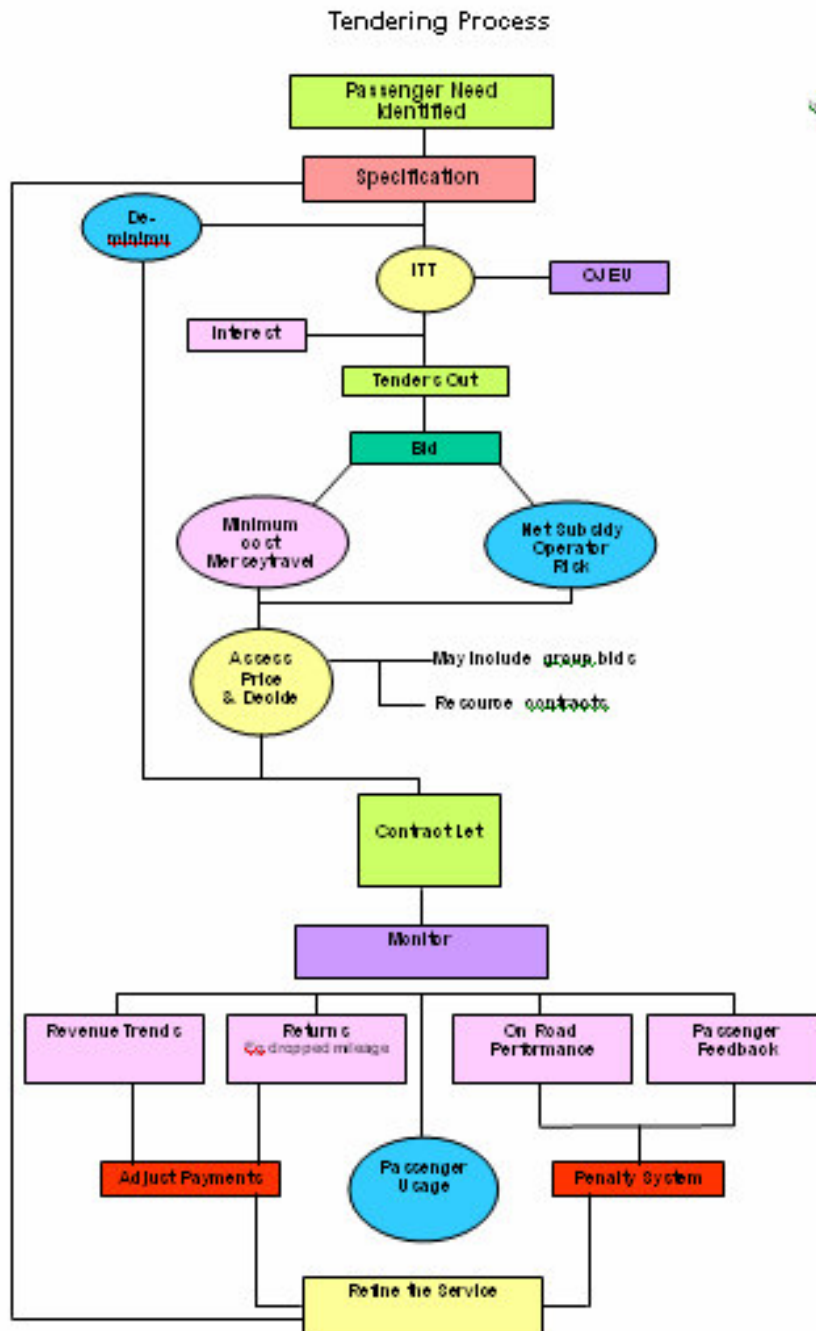
- Route
- Timing, 1st/last bus
- Bus capacity e.g. midi, single/double-decker
- Low floor/engine specification, e.g. Euro II (maximum of 15 years)
- Fares to be used
- Performance e.g. punctuality/reliability targets
- Contract length
- Special conditions
- Ticket equipment
- Contract period (maximum 5 years)

The tendering procedure is described by Figure 3.1<sup>8</sup>.

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<sup>8</sup> ITT stands for Invitation to Tenders, OJEU for Official Journal of the European Union.

Figure 3.1 the Tendering Process



The following comments can be added to this figure:

- The “de minimis” procedure is used, for instance if there is a small deviation required from the commercial road.
- There is an important cost linked to tendering.
- Operators can bid for a package of contracts. The risk linked to this is that they may overstretch themselves. Hence, they are unlikely to be successful.

- In the case of resource contracts, Merseytravel asks for buses to be available within a certain timeframe and then decides what to do with it.
- Quality is defined in the contracts.
- The passenger feedback is not used for payments to the operators.

The main obstacles are:

- Max 5 year contract (may be addressed later in year): this is rather short – in most EU countries, the contracts last for 8 years
- Cannot own or run buses (first point may be addressed later in year)
- Lack of competition due to low entry into market: In practice, there are 2 to 4 competitors for each tender, mostly located within 20 miles of Liverpool. Companies outside the UK never bid. The installation of depots can be an important barrier to entry.
- Cost pressures e.g. fuel, labour (due to labour shortages, drivers have been imported from Poland), insurance and the declining market
- Commercial network changes

We can conclude that with respect to buses, Merseyside as an authority relies, on the one hand, on competitive pressure to drive down costs (generally local), and on the other hand, on contract provisions and checks re: quality. However, there are significant problems with market imperfections.

## Rail

Merseytravel is the franchising authority for the rail network, which has been taken out of the national rail. Thus, the structure is:

Franchise Authority	Merseytravel
Infrastructure	Network Rail
Rolling stocks	Angel train (leasing company)
Operations	Serco/Nedrailways (maintenance, staff stations, depots, is allowed to enhance stations)

The main characteristics of Merseyrail Electrics are:

- Wirral/Northern Line
- 25 Year concession
- Every 5 year, there is a review. In case of major problems, Merseytravel can terminate the contract.
- Operator bears the revenue risk
- Benchmark payments

The contract contains the following elements:

- Passenger Services Requirement: The timetable is set by the authority but the operator can introduce additional trains (remember that the operator has the revenue risk)
- Provision of capacity

- Fares Structure: the peak hour fare is linked to the consumer price index; off-peak, the operators can do what they want
- Operational Indicators (reliability/punctuality)
- Customer Service regime
- Company Liquidity
- Handover Maintenance

The timing of the tendering process is given by the following table:

February 2002	Joint OJEC (SRA)
May 2002	Prequalified candidates bid (the others did not meet the thresholds)
January 2003	Best and Final Offers (BAFO) submitted
April 2003	Serco/NedRailways preferred candidate
23 May 2003	Concession signed
2 am 20 July 2003	Commence passenger service

The main strengths of the tendering process are:

- Prospects of acceptable bid enhanced by joint bid development (certainly easier with respect to “soft” issues such as the uniforms)
- Misunderstandings impacting on deliverability or viability are rectified before they became major issues
- Candidates can input into negotiations with third parties
- Timescale post BAFO substantially reduced
- Relationship developed with successful (and unsuccessful) candidates before contract went live
- Ensured key hard and soft issues appreciated and addressed
- Candidates like it

Its main weaknesses are:

- Resource intensive and costly especially in BAFO stage; this constitutes an important barrier to entry
- Risk of conflict with dual role in developing and appraising bid
- Threat from misuse of disclosed information to detriment of project
- Risk of candidates blaming Awarding Authority for weaknesses in bid
- Need to manage third party confidentiality/data protection issues

Important obstacles are the track/operator split.

We can thus summarise the main features of the rail contracting scheme as follows:

- Competitive tendering (international) re costs
- Quality incentives and operator revenue risks
- Track and signalling not controlled by operator

## *The Netherlands*

The main features of transport policy in the Netherlands can be described as follows (Mobility in 2004-2020):

- Strategic role of the Transport Ministry
- Decentralise if possible to the 19 public transport authorities (implementation of smartcard), centralise only when necessary (maximum fares, encourage the use of smartcard)
- Provide reliable door-to-door transport (carrot: better service and infrastructure, stick: possibly road charging in 2012)
- Promote public private partnership

In the distant past, operators in the Netherlands received a full compensation for operating deficits. This system obviously provided no incentive for management and thus led to a debate in the Netherlands.

In the next stage, subsidy was linked to performance. The system where the subsidies were linked to passenger kilometres proved to be very expensive, and therefore there was a move to a “Euro for Euro” system: if the company earned €1, it would receive €1 from the government.

Cost-recovery ratios vary strongly between regions and modes. In order to move the cost-recovery ratio in public transport from 30% to 50%, the following measures have been implemented:

- Decentralisation of authority: local government must decrease costs and increase revenues. There is also decentralisation and delegation of responsibilities to 19 PTOs who in the future will be able to determine their own fares and to determine the level of services as they know the market better than the government.
- Financial responsibility (BDU): BDU stands for Brede Doeluitkering. It has replaced the GDU (short for Gebundelde Doeluitkering). From 1 January 2006, the law regarding broad funding of transport and traffic projects in the regions has become effective. Different forms of funding by the central government are being bundled together to become one overall budget to finance investment in infrastructure, operational subsidy, maintaining traffic safety, etc. The 19 Public Transport Authorities are now able to determine how best to spend the money in accordance to their own preferences and priorities. However, if the total cost of a project is over 225 million euros, then it is necessary to obtain formal approval from the central government and is also required to evaluate the project proposal conforms to standard procedure.
- Open market tendering for concessions. Under the 2000 legislation, the 19 PTAs already have the authority to make changes. The PTA determines what form of performance contract to use, even though it is often a net cost contract.
- Improve operating efficiency
- Technological innovation (smart cards, light rail material on heavy rail infrastructure, BRT)

However, there are a lot of outstanding issues with respect to cost accounting:

- Do we really know what the costs are?
- Method of accounting & measurement
- Comparative cost analysis
- Freshness, scope & precision of data

- Standard definitions
- Common appraisal framework
- THOM/PIOV: combines two instruments (THOM and PIOV) to compare public transport techniques (THOM) and projects (PIOV). These instruments use cost-benefit analysis and multi-criteria decision making to determine the economic worthiness/viability and then to determine the relative priorities between different projects within the multi-year investment programme (MIT).
- Lessons learned from LiRa-2 (International Network of Light Rail Cities)

The willingness to share the information has become a problem with tendering. Moreover, the local authorities will not share with the central government unless they are compelled by law. Finally, there is the issue who should pay for the cost of collecting the data?

It is important to differentiate between efficiency and effectiveness:

- What indicators to use? For what purpose?
- Unit cost of production (reinforce services: in the Netherlands, there is a reserve of 10% compared to the average need in peak period because a predefined service level *must* be delivered)
- Differentiation by mode or type (problem of one-sidedness: all traffic goes in one direction in peak hours)
- Average versus marginal costs service (the operator will allocate all capacity costs to the peak period)
- Combined use of cost & revenue elasticity
- Price per loaded schedule hour (DRU<sup>9</sup>): (Subsidy + Fares receipt) / Hours operated

Performance contracts should contain the following elements:

- Goals & Objectives (setting the targets)
- Gross versus Net Cost Contract
- Network versus Route Agreements
- Bonus & Malus (Incentives & Penalty: in the Dutch railways, the bonus/malus was given up as the government was paying for the malus anyway)

Examples of innovative methods are:

- Concentrate on core business: fringe activities lead to extra uncertainty
- Outsourcing of activities
- Asset Management Contract
- Repairs and Maintenance
- Unconventional Practices (morning exercise, meditation class, afternoon rest period).

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<sup>9</sup> Short for Dienst Regeling Uur.