Better Public Transport for Europe through Competitive Tendering

A Good Practice Guide
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Introduction

More than 75% of the population of the European Union (EU) live in urban areas. Therefore, urban transport accounts for a significant part of total mobility. One-fifth of all person kilometres travelled within the EU are urban trips of under 15km. Between 1995 and 2030, total kilometres travelled in EU urban areas are expected to increase by 40%. Urban areas suffer heavily from congestion and nuisances caused by the excessive use of the private car. Pollution, noise and accidents are particularly acute in large urban environments and affect the lives of thousands of people.

Urban transport is a significant contributor to climate change. About 28% of greenhouse gas emissions in the EU presently come from transport, with 84% of that coming from road transport alone. More than 10% of all carbon dioxide (CO2) emissions (one of the key greenhouse gases) in the EU come from road traffic in urban areas. The Kyoto protocol calls for an 8% cut in total EU CO2 by 2008–2012 based on 1990 levels, but if current trends continue CO2 from transport will be some 40% higher in 2010 than it was in 1990. Road traffic in urban areas is also the main source of carbon monoxide and fine particulates. Innovative solutions to ‘clean’ urban public transport are therefore important for achieving the EU targets under the Kyoto Protocol and improving urban air quality.

Large urban areas are not viable without public transport. The high density of inhabitants and jobs makes space a very scarce resource. Urban public transport is therefore one of the most significant sectors to consider in creating a sustainable urban environment. Public transport is the most efficient mode of transportation in terms of space consumption per traveller and is currently the best answer to mobility needs in densely populated areas.

In most European Countries, local authorities have traditionally provided urban public transport, either directly or through associated companies. This corresponds to the insight that public transport is a social service provided by public authorities to ensure a certain level of mobility for everybody. Urban public transport, however, has moved from being a profitable industry with a high modal share, to a loss-making one with, in most cases, a minority modal share. Leaving public transport entirely to the market would lead to a situation where some profitable transport routes would be served, leaving less profitable times and destinations not to be served at all. In order to avoid this shortcoming and to profit from the efficiency advantages of competition at the same time, the provision of a public transport can be made subject to competitive tendering.
What is Competitive Tendering?

Competitive tendering refers to the awarding of an exclusive right to operate a route, or a network of routes, to an operator (or possibly a consortium) following a competitive process. Along with, or instead of an exclusive right, the Authority may also grant subsidises to the successful operator in compensation for the fulfilment of public service requirements.

Authority refers to public or publicly-owned organisation with a legal responsibility to plan or regulate public transport services in a specific geographical area. Operator refers to any organisation with a contract from an Authority, usually for a fixed term, to provide or organise public transport services.

This Good Practice Guide provides information on improving urban public transport. It showcases how cities in Sweden, Finland, France and Germany have improved the environmental and social standards in urban public transport through the competitive tendering process or through preparations for competitive tendering. Specifically, it provides an information source for:

- Authorities and operators who are designing contracts and tendering for the first time.
- Authorities who are interested in improving the social and environmental aspects of the awarding of contracts.

This Good Practice Guide will focus on the most common form of urban public transport in Europe – buses.

Emergence of a European Market for Public Transport

For several decades in Western Europe regulation of local public transport effectively ruled out competition. With the changing environment in the 1960s, growing car ownership and sub-urbanisation, public transport services became unprofitable. Authorities decided to subsidise existing services but since then an explosive growth of subsidy requirements for public transport services could be observed, without a simultaneous growth of public transport patronage.

In the last 10 years, the economic conditions of the public transport sector in the EU have changed a great deal. More Member States have now introduced an element of competition in their legislation or administrative practices, relating to at least part of their public transport market detailed in the table below:

<table>
<thead>
<tr>
<th>Mode</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bus</td>
<td>Denmark, Finland, France, Italy, Netherlands, Norway, Spain, Sweden and United Kingdom</td>
</tr>
<tr>
<td>Light Rail</td>
<td>France, Ireland, Portugal, Spain, Sweden and United Kingdom</td>
</tr>
<tr>
<td>Metro</td>
<td>Denmark, France and Sweden</td>
</tr>
<tr>
<td>Railway</td>
<td>Denmark, Germany, Netherlands, Portugal, Sweden and United Kingdom</td>
</tr>
</tbody>
</table>

Markets already opened up to competition in 2003
In nearly all cases the above is ‘controlled competition’ – based on the regular renewal of exclusive rights, rather than on free access to the market. Only in England - except Greater London - free competition has been introduced.

Experience in the Member States, such as Sweden and Denmark, supported by studies carried out at the European Commission’s (EC) request, shows that controlled competition can lead to more attractive services at lower costs.

The EC’s research (see table below) indicates that controlled competition achieves the best results in attracting passengers to public transport and using resources most efficiently. Badly organised deregulation, however, brings no efficiency gain, and drives customers away. The specific details are crucial: although the European Draft Regulation on Public Service Requirement (see next chapter) requires a high level of consumer protection, and good environmental and social standards, a lot is still left to the competent authorities. The political will of the local authority therefore determines to a large extent whether public transport facilitates environmental and social improvements or not.

### Controlled competition is associated with attracting more passengers to public transport

<table>
<thead>
<tr>
<th></th>
<th>Annual rate of change in numbers of passenger trips</th>
<th>Annual rate of change in the proportion of operating costs covered by fares</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cities using controlled competition</td>
<td>+1.8%</td>
<td>+1.7%</td>
</tr>
<tr>
<td>Cities without competition in public transport</td>
<td>-0.7%</td>
<td>+0.3%</td>
</tr>
<tr>
<td>Cities using deregulation without significant control by public authorities</td>
<td>-3.1%</td>
<td>+0.3%</td>
</tr>
</tbody>
</table>

Source: *Footnote 1, page 2, COM (2002) 107 (amended proposal for regulation).*

The research compared trends in public transport in 30 large EU cities during the 1990s. Cities using controlled competition attracted most new passengers, they also had the best financial performance. The advantages of controlled competition compared with deregulation are also shown by a comparison between London and the rest of England. Between 1986 and 2000, the number of trips on local buses in London, using controlled competition, increased by 13%. In the rest of England, under deregulation, the number of trips on local buses fell by 34%.

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1 See the introduction
European Framework

The European Draft Regulation on Public Service Requirement

Over the past two decades, policies have been established to convert government monopoly transport systems to competitive tendering. Today’s understanding is that sustainable transport policies should maximise the long-term welfare of citizens by keeping a reasonable balance between the traditional policy objectives of "secure (safe)”, "competitive” and "environment-friendly” transport services.

A new regulatory framework has recently been put forward, aimed at improving the performance of public transport through controlled competition. This will establish an explicit obligation for authorities to pursue good public transport services.

In general, public bodies awarding contracts have to follow the competitive tendering rules in the public procurement directives. Contracts for services are covered by directive 93/38 (where the contracting authority is itself a public transport operator) or directive 92/50 (where it is not).

However, these directives do not require competitive tendering for:

- all contracts for conventional rail, metro and inland waterway services, whether or not they are ‘concessions’;
- all contracts for bus and tramway services which qualify as ‘concessions’;
- contracts awarded to another part of the same authority; to an entity over which the authority exercise a similar degree of; to an undertaking affiliated to the authority (in the case where the authority is itself a public transport operator); or to a body that is governed by public law and has previously been awarded, in accordance with Community law, an exclusive right to provide the service in question.

Regulation 1191/69\(^1\) sets rules for the content of public transport service contracts that incorporate public service obligations, and for compensation. In principle, this includes public service contracts that are also caught by the public procurement directives. The regulation does not say how the contracts should be awarded.

In practice, the public procurement directives have not led to widespread use of competitive tendering in the field of public transport due to the various exemptions described above. However, the EC has proposed a new Regulation\(^2\) (to replace 1191/69) that would require the majority of urban public transport services to be opened to competition either through free competition or controlled competition. This choice would be left to the authority but the aim of the EC is to improve the quality of public transport services by setting quality requirements. Some services would be excluded: many metro and tram systems, and contracts for low-value routes or networks. The European Parliament has completed its first reading of this proposal (November 2001) and responding to this the European Commission adopted a new proposal in 2002, but they have yet to reach a common position.

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\(^1\) Regulation (EEC) No 1191/69 of the Council of 26 June 1969 on action by Member States concerning the obligations inherent in the concept of a public service in transport by rail, road and inland waterway.

\(^2\) COM(2002)107 (amended proposal)
Ruling of the European Court of Justice on Subsidies for Public Transport Services

What could speed up the Commission’s proposal to come into force is a ruling of the European Court of Justice on subsidies for public transport services, which took place in July 2003 (European Court of Justice decision C 280/00). The Court ruled that public subsidies can be paid without breaking EU competition rules, but only if they are for clearly-defined public service obligations.

In 1990 the company ‘Altmark Trans’ obtained licences and subsidies for providing bus services for the public in the district of Stendal, Germany. In 1994 the German authorities renewed Altmark’s licences and rejected an application for licences by another company ‘Nahverkehrsgesellschaft Altmark’. This company went to court, claiming that Altmark Trans was not financially viable because it could not have survived without public subsidies and therefore the licences were unlawful. The case was referred to the European Court of Justice resulting in the above mentioned ruling.

This ruling will have a big impact on the German public transport market, particularly on existing financial practices which now have to be changed. At present most public transport companies are receiving public money without any definition for what kind of public service obligations they are given (the subsidies are defined at the end of the year for the compensation of the company’s deficit). From now on subsidies are only allowed if the following criteria are met:

- The recipient must actually have public service obligations to fulfil and these must be clearly defined.
- How the compensation is to be calculated must be established in advance in a transparent and objective way.
- Compensation cannot be greater than the costs to be covered, allowing for a reasonable profit.
- If the undertaking is not chosen by tendering, the level of compensation must be estimated on the basis of the costs which a typical enterprise would incur.

To ensure transparency and legal practice competitive tendering will be the best solution of meeting the requirements of the Court’s ruling.

Key European Environmental Legislation Relating to Urban Public Transport

Environmental factors are one of the quality criteria authorities should take into account to ensure the quality of public transport. This means, if a public authority wants to have clean and silent buses and trams they have to define these in the tendering process. Operators who want to run the service have to fulfil these requirements. This has been confirmed by a judgement issued by the European Court of Justice in 2002. The case had to decide whether the combination of environmental standards stricter than European standards in combination with an incentive system rewarding stricter standards by the Helsinki transport authorities was compatible with European procurement law. The court ruled that environmental criteria are compatible with the principles of the European internal market, as long as it is non-discriminatory, objective and transparent (European Court of Justice decision C-513/99).
Air Quality

The Air Quality Framework Directive adopted in 1996 by the EU sets a general policy framework for dealing with air pollution. In practice, the Directive is applied through a set of four pollutant-specific "Daughter Directives". It should be emphasised that this legislation is about air pollution, not emissions from vehicles.

The first Daughter Directive (1999/30/EC), relating to limit values for Nitrogen Oxides (NOx), Sulphur Dioxide (SO2), Lead (Pb) and particulate matters (PM10) in ambient air, came into force in July 1999. Member States need to ensure that up-to-date information on ambient concentrations of SO2, NOx, PM10 and Pb is routinely made available to the public. The limit values for NOx for the protection of vegetation should have been met by 2001. The health limit values for SO2 and PM10 must be met by 2005. The other health limit values for NO2 and Pb must be met by 2010. In cases where the concentrations of pollutants are very high now, EU countries must prepare action plans showing how they will achieve the limit value. For the limit values see the Council Directive 1999/30/EC of 22 April 1999.

The second Daughter Directive (2000/69/EC), relating to limit values for benzene and carbon monoxide in ambient air, came into force in December 2000. This Directive establishes limit values and requires an assessment of concentrations of those pollutants in ambient air on the basis of common methods and criteria and ensure that it is made available to the public. The limit value for carbon monoxide must be met by 2005. The limit value for benzene must be met by 2010 unless an extension is granted. As with the first daughter Directive, Member States will have to prepare attainment programmes for those areas where attainments cannot be assumed without further changes. For the limit values see the Council Directive 2000/69/EC of 16 November 2000.

The third Daughter Directive (2002/3/EC) relating to ozone was adopted in February 2002. Member States must transpose it by 9 September 2003. The directive sets long-term objectives equivalent to the World Health Organisation’s new guideline values and target values for ozone in ambient air to be attained where possible by 2010. Non-compliance requires Member States to work out reduction plans and programmes to be reported to the Commission and to be made available to the public so as to allow citizens to trace progress towards meeting the ozone standards. The directive includes improved and more detailed requirements to monitor and assess ozone concentrations and to inform citizens about the actual pollution load. The target values for 2010 in respect of ozone concentrations in ambient air are: information threshold - 1 hour average 180µg/m3, alert threshold 1 hour average 240µg/m3. Further information on this Directive can be found at: http://europa.eu.int/eurlex/pri/en/oj/dat/2002/l_067/l_06720020309en 00140030.pdf.

The Commission is preparing a proposal for a fourth Directive that will cover the remaining pollutants - arsenic, cadmium, nickel, mercury and poly-aromatic hydrocarbons.
European Union Emission Standards for Bus Engines

In 1992 European regulations came into force to set limit values for the most important pollutants emitted by heavy-duty vehicles to which buses are counted. These limit values are commonly referred to as Euro I, II, III IV and V. The EURO standards, following Directive 1999/96/EC, regulate the legal emission levels of both new heavy-duty highway diesel engines and urban buses. These are applied progressively, becoming stricter over time. Currently the EURO III standards are in force for all new vehicles, with EURO IV to be introduced in 2005 and EURO V in 2008. These regulations also contain the new standard for Enhanced Environmentally friendly Vehicles (EEV) with even stricter limits than EURO V.

EU Emission standards for HD Diesel Engines, g/kWh (smoke in m⁻¹)

<table>
<thead>
<tr>
<th>Directive</th>
<th>91/542/EWG</th>
<th>1999/96/EG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td>1992/93</td>
<td>1995/96</td>
</tr>
<tr>
<td>Test cycle</td>
<td>ECE R-49</td>
<td>ESC &amp; ELR</td>
</tr>
<tr>
<td></td>
<td>ETC</td>
<td>ETC</td>
</tr>
<tr>
<td></td>
<td>ETC</td>
<td>ETC</td>
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<tr>
<td>CO</td>
<td>4.9</td>
<td>4.0</td>
</tr>
<tr>
<td></td>
<td>2.1</td>
<td>5.45</td>
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<td>1.5</td>
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<tr>
<td></td>
<td>0.4</td>
<td></td>
</tr>
<tr>
<td>NMHC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Methane</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOx</td>
<td>9.0</td>
<td>7.0</td>
</tr>
<tr>
<td></td>
<td>5.0</td>
<td>5.0</td>
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<tr>
<td></td>
<td>2.0</td>
<td>2.0</td>
</tr>
<tr>
<td>PM</td>
<td>0.4</td>
<td>0.5</td>
</tr>
<tr>
<td></td>
<td>0.10</td>
<td>0.13</td>
</tr>
<tr>
<td></td>
<td>0.16</td>
<td>0.02</td>
</tr>
<tr>
<td></td>
<td>0.03</td>
<td>0.03</td>
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<tr>
<td>Smoke</td>
<td>-</td>
<td>0.8 m⁻¹</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.5 m⁻¹</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.5 m⁻¹</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.15 m⁻¹</td>
</tr>
</tbody>
</table>

1 ECE R-49 is the old steady-state engine test cycle, which is to replaced by two cycles: a stationary cycle ESC (European Stationary Cycle) for all diesel engines and a transient cycle ETC (European Transient Cycle) for all diesel engines with after treatment and for all gas engines. Smoke opacity is measured on the ELR (European load Response) test.
2 for engines of less than 0.75 dm³ swept volume per cylinder and a rated power speed of more than 3000 min⁻¹
3 for for gas engines only
4 for diesel engines only

Note: ETC is for diesel engines with after treatment and for engines which run by gas; in ETC instead of HC NMHC (not methane hydrogen carbonates) is the indicator; EURO III – EURO V: levels for PM only for diesel engines

Noise

Legislation governing sound levels for motor vehicles (Cars, Lorries and Buses) was adopted in 1970 (directive 70/157/EEC) and has since been amended nine times. The limit values for bus and lorries have been reduced by over 10 dB(A) over the period that the legislation has been in place. The latest amendment by directive 92/97/EEC came into force in 1996. All vehicles must meet the limits and therefore production models need to be designed to -1dB(A) below the limits to allow for production tolerances. As the limits have fallen, tyre noise has become more significant and with the new limits will be the main source of noise at speeds above 50 km/h.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Bus</td>
<td>91 dB(A)</td>
<td>88 dB(A)</td>
<td>84 dB(A)</td>
<td>80 dB(A)</td>
</tr>
</tbody>
</table>

Tram and Railway Noise

One of the key environmental criteria to consider with regards to trams and buses is noise. Noise depends on the kind of vehicle and railway infrastructure. Special emission limits for trams do not exist. When developing new trams the manufacturers only have to consider best techniques which will ensure low noise emissions. At present, therefore it is up to the operators to set noise limits when purchasing new trams.

Within the EU there are generally no limits for railway noise except for high speed trains in where a new European Guideline has been adopted at the end of 2002 which sets limits. At present there is much activity from the EC to establish limits for new rail vehicles. A working group for railway noise is measuring options for noise regulation. In addition to the railway package directives it is intended to set maximum values for the TEN-T routes which contain technical specifications for high speed trains and conventional trains, including maintenance of rolling stock and infrastructure.

A range of techniques have been developed and tested to improve the measurement of railway noise. This is to support the regulatory approval of rolling stock, monitoring of ambient noise and diagnosis of the sources of noise. These results have fed into a new version of the ISO standard for exterior noise type testing of rail vehicles, increasing its reproducibility. In the longer term, the results will assist national authorities in determining measures needed for compliance with future EU legislation on noise. For example, the techniques proved capable of quantifying the noise reductions due to technologies such as improved braking systems and bogie shrouds. For more information visit: the METARAIL website: http://www.schreiner.at/metarail/.
European Good Practice

The following case studies present how cities (highlighted on the map below) in Sweden, Finland, France and Germany have improved the environmental, social and economic standards in urban public transport through the competitive tendering process or through preparations for competitive tendering. The case studies do not to give an exhaustive description of each authority’s strategy but details their particular experiences.
Competitive Tendering of Bus Services in the Helsinki Metropolitan Area, Finland 1994-2003

The Helsinki region is the only major city conurbation in Finland. Over a million people inhabit the 12 municipalities of the region and these offer over half a million workplaces. The heart of the region, Helsinki itself and its neighbouring towns, Espoo, Vantaa and Kauniainen together make up the Helsinki Metropolitan Area Council, referred to hereafter by its Finnish acronym, YTV.

Regional public transport services arranged by the Helsinki Metropolitan Area Council YTV (i.e. inter-authority services crossing the municipal boundaries) were first introduced in the summer of 1986. The services were run on the basis of long-term contracts and operator licences granted by YTV. In practice, the operator licence gave the operator an exclusive right to run services in a given area or on a given route.

Objectives

YTV has set the following targets for competitive tendering:

- Reduction in the costs of transport by for example, cutting the automatic rising spiral of costs brought about by index-linked contracts.
- Improvement in the service level achieved with the resources invested in public transport.
- Added impetus to the increase in productivity gained from using operators.
- The client ordering the services should also benefit from the increased productivity in bus service operation.

Tendering YTV Regional Bus Services in Stages

In March 1991, the new National Passenger Transport Act came into force in Finland. The Act permitted the city municipal authorities and YTV to tender public transport passenger services for which they were financially responsible. YTV subsequently commissioned research, which investigated the effects of competitive tendering and established the principles, outlined in this case study, on which tendering would be carried out.

In December 1992, the Executive Board of YTV took the decision to undertake competitive tendering for regional bus services, with the aim that the tendered services would begin operating on January 1, 1995.

The National Act on Public Procurement came into effect at the start of 1994. The Act states that tenders must always be invited for public procurements. Procurements, which exceed a certain threshold value, must observe the procedure defined by the European Union. From the start of 2000 the EU’s threshold value for service sector procurement tendering is EUR 400,000.

Implementation

The first tender was awarded in June 1994. The tendered services, comprising 15% of regional bus transport (4.4 million passenger km) began operating on January 1, 1995. Tenders were invited once for all
the regional transport services managed by YTV during 1995 and 1996. Since then all the regional bus transport services have been purchased through competitive tendering.

The contracts for the services awarded under the first tender were for three years. Once the contracts expired the process was continued by inviting tenders twice a year. Four major tender invitations were arranged in the second round. In between these major tenders, separate tenders were also invited for a few individual routes. This guide takes into account the tenders awarded up to January 2003.

**Tendering Principles and Tender Specifications**

At the preparation stage several different tendering approach were considered, such as the operating cost, kilometrage cost, gross cost, service level and net cost principles. The approach selected was that of kilometrage cost. This was not only straightforward but had already been applied in contracted services for many years.

Under this approach, the tendering authority, i.e. YTV or the municipal authority, receives all ticket revenues. In its bid, the operator states the unit costs of the service (cost per kilometre, per hour and per vehicle day), which the tendering authority then uses to calculate the total costs of service provision. The client (authority) plans the routes, timetables and fleet schedules. The operator is left with planning the bus service provision itself.

The contract period was initially three years. In the first round of regional transport tendering the aim was to treat all operators the same by awarding each of them the same share of the total traffic. The blocks of tendered services were not ideal in terms of areas covered or management of the services. The aim has nevertheless been to invite tenders for blocks of services (inter- and intra-authority services). For this reason some operator contracts have been continued without competitive tendering. For the same reason, contracts also contain an option for a 1-2 year extension, if necessary. In addition to the major tenders, smaller tender invitations have also been arranged for new services. The contract period today is generally five years.

In the tender invitation, YTV specifies certain requirements regarding the operator, the bus fleet and the service quality. The operator must fulfil or submit the following to YTV:

- The applicant must be entitled under the Passenger Transport Act to operate bus services.
- The person who would be responsible for the bus services must fulfil the conditions stipulated by law.
- Financial statements for the previous three financial years.
- A certificate from the taxation authorities stating that the applicant has no tax debts.
- Notification confirming that employees' pension contributions have been paid.
- A staffing plan and any personnel accounts.
- Accident statistics.
The tender requirements specified for the bus fleet include: the number of seats, the spacing of the seats, the number of doors and various vehicle properties affecting level of service, such as places for disabled persons, space for prams, safety equipment, illuminated and informative signs, lighting, etc. YTV has also classified vehicles into four categories (low-floor buses, semi-low-floor buses, bogie buses, and articulated buses). Particular types of bus can be specified in the tender for different services.

The quality requirements for bus service provision specified in the tender invitation include:

- Quality control programme for the operator
- Quality of customer service, such as provision of information, procedure for service interruptions and driver uniforms
- Quality of service provision, such as service reliability, use of route number displays and driving practices
- Technical quality, such as vehicle condition and cleanliness.

YTV carries out a customer satisfaction survey twice a year, on the basis of which the best services are paid a quality bonus.

**Principles Adopted in Awarding Tenders**

YTV follows a two-stage process in awarding tenders. At the first stage, applicants who, for financial or other operational reasons, are not expected to fulfil the tender specifications are rejected. To make this decision YTV commissions external consultants to conduct financial analyses of the information provided by the applicants. Generally applicants have fulfilled the requirements concerning financial and technical performance.

At the second stage of the process the tenders submitted by approved applicants are compared. The contract is awarded to the applicant whose bid would produce the lowest overall costs for YTV. In this overall financial evaluation, different factors are weighted as follows:

- The lowest tender price is given 87 points. The points given to the other tender prices are calculated in relation to this.
- The bus fleet can receive up to 2 points. The points given depend on certain properties of the vehicle, such as low floor, nitrous oxide and particle emissions, noise, additional doors, number of seats, seat spacing and extra pram places.

Evaluation of the bids is carried out by first evaluating the fleet and the quality factors. Only then are the tender prices examined and the overall costs of the bids calculated. The principles on which the tender is awarded have remained almost unchanged throughout the period of competitive tendering. Initially the age of the fleet was also a factor in the evaluation, but this was removed and replaced with a requirement for the maximum average age of the bus fleet.

The weight attached to the tender price has risen. In the first tenders it was given only 75 points. Both the clients (authority) and the operators approved this change. The reduction in importance of the quality factors has been compensated by raising the minimum requirements specified in the tender for the fleet and other quality factors.

The methods developed by YTV have also been used in tendering intra-city bus services in Helsinki, Espoo and Vantaa. Small changes
have been made in some of the requirements, mainly those concerning the fleet, which are due, for example, to the nature of Helsinki’s intra-city services. The bus fleet requirements have been standardised between YTV and the municipal authorities, so that generally the same fleet can be used in both regional services and internal services. This allows the operator to participate on an equal footing in both YTV and city authority tender invitations.

Quality of Services

The quality of services has been monitored since 1995 using customer satisfaction surveys. The overall score given in 1995 was 3.98 on a scale of 1 to 5. The score then remained above four until autumn 1998. The subsequent surveys indicated a declining score, partly due to the hard winter of 1999, which made it difficult to keep to the timetables. The score for overall quality given in 2000 and 2001 did, however, show an improvement and it was 4.0 and for 2001-2002 it was 4.02.

In summary, it may be said that tendering resulted initially in a clear improvement in quality, but that the quality score proved to be sensitive to the quality of the bus fleet and the ability to keep to timetables. Overall, however, the quality score remains high.

Another factor influencing the quality of services is the extent of bus service provision. The reduction in operator compensation brought with competitive tendering has enabled additional timetabled departures. A total of 29.1 million bus kilometres were driven in regional bus services in 1994. In 2002 the volume of traffic had grown to 34.5 million kilometres, an increase of about 19% compared to 1994.

Fleet

Competition has brought with it a more modern bus fleet and has reduced the average age of the fleet. The average age of the regional transport fleet today is about 4.5 years, compared to the figure of 6.5 years prior to competitive tendering. A large number of the new low-floor buses have entered service. In regional services the proportion of low-floor buses is already more than 50%.

Fleet renewal has been guided by the fleet requirements set in the tender specifications and via the principles adopted in awarding tenders. In one tender, however, the emphasis placed on low-floor designs and average age of the bus fleet led to unforeseen results: the low-floor buses brought from Copenhagen by Linjebuss have not met the expectations of Finnish bus passengers, and their refurbishment to the required standard took some time to complete. Following this, advance inspection of the fleet has been added to the terms of the tender, to ensure that such situations do not arise in the future.

The increase in low-floor buses is not necessarily due to competitive tendering, as fleet replacement was moving in the direction of low-floor buses anyway. The YTV fleet requirements have been standardised with those of Helsinki City Transport (HKL), so that the same buses can be offered for service in both YTV and HKL traffic. The fleet requirements of Espoo and Vantaa comply with the YTV requirements.
Ticket Prices

The reduction in operator compensation brought by competitive tendering has also been seen in ticket prices. The price of a 30-day regional ticket fell from FIM 370 (62.2 EUR) in 1994 to FIM 325 (54.6 EUR) in 1997. The year 2000 saw the first increase in regional transport ticket prices, the price rising to FIM 340 (57.1 EUR).

At the same time as ticket prices fell, the regional transport deficit also decreased. If services had been managed at the contract price prevailing prior to competition and the deficit were kept at today's level; the 30-day regional ticket would today have cost about FIM 500. In 2000, regional ticket revenues covered 67% of expenditure. This figure was at its lowest in 1991, when ticket revenues covered 62.5% of expenditure on bus service provision.

Staff Issues

The position of staff in competitive tendering has risen strongly to the fore. Changes of operator have also meant the transfer of drivers from one company to another. Following the strike that affected all services in February 1998, the so-called Lonka agreement was drawn up between the employer and employee organisations, which safeguards the retention of employment benefits for drivers transferring from one operator to another. Competitive tendering has, however, created uncertainty over employment in the sector, and some drivers have sought employment from other sectors instead. Competitive tendering has, also, increased the extent of bus traffic by over 10%. As a result, there are more jobs in the sector than before. The number of jobs is estimated to have grown by about 250 drivers.

Costs

The annual saving in costs can be estimated by calculating the cost of present-day services using the inflation-adjusted unit costs paid prior to competition. The cost of today's regional transport calculated in this way would have been FIM 446 million in 2002, whereas in reality it was FIM 322 million. The estimated benefit of competitive tendering is therefore FIM 124 million.

After the first tender, YTV approved the principle that the monetary benefits of competition would be distributed in three ways: the extent of bus service provision would be increased and the service level improved; ticket prices would be reduced; and the contributions from municipal authorities would be reduced.

Barriers

The biggest problems are those associated with the conditions of employment for drivers and their job security as a result of competitive tendering. The market shares of companies have, however, generally been preserved in the longer term or have even grown, and the demand for drivers has increased considerably. It appears that the staff problems are largely related to short-term fluctuations in driver needs when tenders are lost by one operator and the new operator has not yet sought additional drivers.

Conclusion

The targets set have been achieved. Competition has brought major cost savings in traffic operation, which have been used to increase the
service level and to reduce ticket prices. Competitive tendering has also enabled rapid modernisation of bus fleets and service quality has remained high. From a Finish perspective it can be concluded “that without competitive tendering public transport in the metropolitan area would be in a considerably worse position.”

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Competitive Tendering in the City of Dijon, France

The City of Dijon is located in the north of France (in the Département of Bourgogne) and has 244,000 inhabitants. The transport company is called Société de Transport de la Région Dijonnaise. The network covers 16 communes. Dijon is one of the most advanced cities in France with regard to their Urban Transport Plan (PDU in French). The city administration is aiming at rationalising the whole transport system by promoting alternative modes of transport than the car, for example through further developing priority bus lanes in addition to the 20 km that already exist. Studies are being made on emission impact of public transport, but it seems that filters can reduce the emission up to 90%.

Objectives

The local authority of Dijon undertook a tendering procedure as foreseen in French law in order to find a operator of public transport. Improving the quality of public transport was one of the key aims through undertaking competitive tendering. The call for tenders for the whole network was launched at the European level in 2002. Since the Sapin law in 1993, the normal procedure in France is to launch a European tendering process every five or six years. The city specified that candidates should provide proposals in order to satisfy the following:

• Controlling the financial deficit incurred by the public authority.
• Adapting the frequency of services in both densely and less populated areas.
• Replacing the use of fossil fuels for alternative energy sources.

The transport network of Dijon went through a phase of intensive development from 1975-1995, and has been expanding into suburban areas. However, the increased scope (in terms of distance served) of the network arrived at a time when the usage of public transport started to decline. The objective of tendering was therefore to develop a public transport system which met the needs of the majority of the population while controlling the evolution of the expenditure.

Implementation and Tender Specifications

The tender was awarded on the 1 January 2003. In the call for tender Dijon included a rules and regulations book (in French ‘cahier des charges’) in which they included environmental criteria. The criteria focussed on pollution from vehicles and the maintenance requirements of vehicles for example, to ensure less particulate matter is emitted. This forces the operator to spend more time on the maintenance. There is also a six-monthly control for testing the smoke emitted by the buses (25% of the fleet is measured each time). These are all compulsory criteria that has to be respected by the operator of the transport service.

The investments, in particular the purchases of buses, remain under the responsibility of the public authority. The operator must ensure their maintenance and that personnel are trained to use the new vehicles.
Quality of Service
There has been a positive effect on public image and acceptance. One out of four people use public transport. Between 1975-1995 there was an increase in passenger numbers from 19,100,000 to 38,100,000. This rise is related to organisational aspects of the transport system, including the increase in frequency of services, the improvement of the flow through priority at crossroads and lower fares. To undertake these changes it was necessary to co-ordinate the actions of various organisations including the authority responsible for the decisions concerning the transport network. This included the Mayor of Dijon for the implementation of the regulation of the network and the representatives for the installation of the national road systems.

In order to motivate the operator, various benchmarks were put in place to allow for regular measurement. The benchmarks included:

- Reliability of buses.
- Quality of the service as perceived by customers.
- Information provided to the customers.
- Handling of complaints made by customers.
- Cleanliness of buses.

Fleet
The company has a total of 215 buses of which 100 are articulated buses and they are currently testing diesel particulate filters on 32 buses. Half of the current fleet conforms to the EURO II and EURO III standards. The other half conform to the EURO I standard. A number of buses are equipped with particle filters and all the buses are fuelled with Ultra Low Sulphur Fuel (ULSF). As from 2003, all new buses bought will use natural gas, which makes it possible to further reduce particle emissions. 14 standard buses running on natural gas will be delivered during the year 2004.

Cost
Dijon had chosen to offer customers a low price for using public transport. In spite of this and due to a good level of usage (140 journeys a year per person), the rate of recovering the initial expenditure remains on a level higher than the average of a network of comparable size (41.5% in Dijon compared with 37.9% on average in France). If measures had not been undertaken the cost of using public transport would increase at the risk of losing customers. The aim is to maintain the deficit at the 2000 level. A number of policy measures are under discussion to limit the rise in fares and a decision is envisaged for autumn 2004.

Staff
The tender requires the new operator to take over the staff of the current organisation from the date of entry of the contract.

Other Results and Impacts
A number of tests have been undertaken based on alternatives to fossil fuel energy and dust was a persistent problem. The filter appeared to be the best solution for old buses as it reduces the particulate matter emitted.
As natural gas benefits from having a good public image, and reduces noise pollution, the local authority decided to continue with the use of this type of energy in the coming years and wait for the future development of other energy sources, such as hydrogen. Electric vehicles have not as yet been chosen as they have a small or medium capacity to carry passengers.

**Conclusion**

The reasons for using public transport are related to personal and necessity trips, for example shopping and leisure and work and education trips. The local authority’s goal was to allow the possibility of continuing to travel easily and safely, maintain mobility in economic life while preserving the quality of life of the residents. The basic principles underlying these goals are:

- To create a better environment for the public.
- To support the sharing of the transport network between different modes of transport such as walking, cycling and public transport.
- To encourage good interchange between different modes of transport.

In 2020 automobile traffic in the local authority is expected to double, resulting in an increase of 1000 cars entering the city every day if no measures are taken. Therefore, journeys between Dijon and the surrounding regions will become one of the key issues of the future. This is why, in its tendering procedures, the local authority has emphasised the importance of a sustainable transport policy and social and urban cohesion. It is also thought that this will form a strong foundation to support the future integration of the tram.

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Public Transport Procurement in Göteborg, Sweden

The city of Göteborg located on the west coast of Sweden is the country’s second biggest City. The population of the Göteborg region is 750,000 with approximately 470,000 living within the city boundaries. Non-commercial traffic has been growing steadily with 2-4% in the urban area and 4-6% in suburban areas. However, this form of traffic has remained at the same level for years in the city centre, due to various restraint measures.

The primary means of public transport in the Göteborg region are trams, buses, ferries and commuter trains. In recent years significant investments have been made in extending the tram system to improve accessibility making it the most important mode of public transport. The tram system accounts for 60%, and commuter trains for only 2% of trips made by public transport. A wide variety of priority measures for public transport have been applied, for example trams have priority at nearly all traffic-regulated intersections.

Implementing the national public transportation law requires the foundation of a regulation authority. This was formed in 1991 in Göteborg under the name of Trafikkontoret (Traffic and Public Transport Authority), which drew together the traffic planning experts formerly working for the local authorities in the City of Göteborg as well as those employed by the city owned public transport company, Göteborgs Spårvägar AB.

Trafikkontoret became the new “purchaser-operator” organisation forming part of the City of Göteborg authority. One of the departments formed was Stadstrafiken (Public Transport Authority) who were responsible for the budget, route network, travel standard, fares, information and marketing. Another department is responsible for the infrastructure. Both departments have been acting as purchasers through tendering procedures.

In 1999, a new Public Transport Authority by the name of Västrafik was formed for the new province/county in west Sweden. Västrafik Göteborgsområdet, a subsidiary for the Greater Göteborg Area. This new body took over the staff of Stadstrafiken and also the former regional authority, Göteborgsregionens Lokaltrafik (GL), and is now responsible for devising public transport in that area. In short, Västrafik Göteborgsområdet now undertakes planning and tendering for the city.

Objectives

The transport plan for Göteborg formulates a vision based on competition and sustainability. The transport infrastructure has developed in a way that makes best use of existing facilities in order to minimise the use of the private car. The Göteborg region aims particularly to improve the local environment by reducing traffic sources and other forms of pollution. The aim is to improve the overall quality and accessibility of public transport, as well as its safety record. To achieve this Göteborg aims to develop the public transport system further and to make it more efficient, with the tramways as the base. However, bus operation is also very important. The environmental goals are intended
to be achieved with the use of more natural gas/biogas powered buses and the environmental protection zone in the city centre.

National law in Sweden has required the provision of public transport services to be tendered since the early 1990s. The objective when implementing this national law at the local level, in Göteborg, was to use the new tender specifications and contract agreements to:

- Increase the quality and frequency of public transport services.
- Achieve a better relationship between public subsidies granted and transport provided.
- Maintain social standards in public transport.
- Increase environmental standards.
- Enable small bus companies to access the market.
- Allow public as well as private companies to participate in tenders (there is no intention to privatise).

More specifically, during the mid 90s the politicians on the Board of the Göteborg Traffic and Public Transport Authority set the goal of increasing the number of journeys made by public transport by 20% by 1999 and having the cost coverage increased from 28% to 50% in 2-3 years.

Implementation

The first call for tender of the public transport system was issued in 1992, which covered one third of the bus operation. The second and third followed in 1996 while the remainder occurred in 1998. In mid 2003 another two thirds is being evaluated after a tender. The tram system will not be subject to any calls for tender before 2010, the ferry system was subject to calls for tender in Winter 2002 - 2003.

The ferry operator Styrsöbolaget was privatised in 2000 and is now owned by Skärgårdstrafik i Väst AB. Västtrafik (public transport authority in West Sweden) awarded Styrsöbolaget the contract for the operation in the southern archipelago and the harbour, in 2002. Other companies asked for the requirements that were tough especially regarding accessibility (provisions for elderly and disabled) and environmental aspects.

The ferries operating for Västtrafik in the city already operated on low-sulphur fuel and the engines only had small harmful exhausts, which might have narrowed the range of tenders. They were also fully accessible for elderly and disabled. For further information see: http://www.styrsobolaget.com

Tendering Principles and Tender Specifications

In order to achieve the objectives outlined on the previous page, two strategies were chosen:

The first approach targeted emission standards. Strict emission standards were achieved by directly integrating them into the specifications of the call for tender. Already, the requirements for NOx and particulates were tough and in 1999 it was specified that NOx levels would have to be below 5 g/kWh and particulate matter below 0.11 g/kWh. This reflected the EURO 3 standards, which have applied to all fifteen EU Member States since 2001. While these standards were required, some flexibility was left on how to achieve them. Later specifications required that by 2000 10% of fuels would have to come
Better Public Transport for Europe

from renewable resources and that buses should not be older than 10 years, with the fleet average age being no higher than 5 years old. Some contracts prescribe that all new buses shall be equipped with diesel particulate filters. Older diesel buses that enter the “environmental zone” of the inner-city of Göteborg must be retrofitted with particulate filters in order to meet the local exhaust regulations that apply to that zone.

In the second approach, incentives to strive for better results than demanded were set. In the award phase of the tendering process a bonus was given to those, who would achieve even stricter emission standards. Furthermore, incentives for good service quality were set by giving 25% of transport fares to the operator. Normally, all fares go to the authority and the operators are paid by operated vehicle kilometres. Also, contracts containing specific targets were used which set certain performance goals and procedures of monitoring their achievement, for example an independent market research institute assesses the quality of service.

Results and Impacts

The introduction of competitive tendering was very successful in the Greater Göteborg Area, as well as in the rest of Sweden. The main aim and effect was to achieve better public transport with the same amount of public subsidies provided for the system. The main indicator of success is the number of passengers transported. In actual fact, between 1990 and 1997 the number of bus-km decreased by 7%, while the number of passenger increased by 7.5%. Therefore, the system is now used much more efficiently.

The total cost for running the system increased slightly between 1991 and 1998, while the rising passenger numbers and slight fare increases led to a decrease in public subsidies from the city of Göteborg by 30%. Cost recovery increased from 30% in 1991 to 60% in 2003.

All environmental standards included in the tendering process were achieved. Through this, competitive tendering contributed to getting buses on the road with Euro 3 standards earlier than the legal requirements. The aim of increasing the share of renewable resources, hence decreasing the reliance of fossil fuels, was achieved two years earlier; in 1998 fuels from renewable sources covered 15% of total fuel consumption.

With regards to social requirements, the goals were also achieved. Wages of bus drivers were kept constant by tendering requirements in the first years. However, since 1999 the wages have been increasing due to the growing demand for public transport services and the generally low level of well-trained staff on the employment market.

In 1998, the city bus fleet consisted of 117 diesel buses with CRT-filters, 94 diesel buses without a filter and 38 biogas or natural-gas-fuelled buses. Today Västrafik operates a total of 93 CNG buses, 10 biogas buses and 32 ethanol buses. However, the biogas and ethanol buses are not used in Göteborg but in smaller towns in the south-west of Sweden. Around 40 different bus operators currently have contracts with Västrafik AB. Around half of the total bus traffic commissioned by Västrafik takes place in the Greater Göteborg Area.
Barriers and Conflicts

The new system resulted in competitors having interests that differed when specifications of the call for tender were designed. This occurred with one case in particular in 1998, when a call for tender was brought to court by two competitors who claimed to be discriminated by the requirement to take over existing personnel as well as the infrastructure of natural gas filling stations. The court ruled that the authority could not require an operator to take over personnel or buses, for example natural gas buses.

Lessons learned

For those cities willing to undertake a similar project, it is recommended to set specific emission levels as a criterion when tendering, not demand a specific technology, for example, demanding diesel fuelled buses. The body which sets the tender will theoretically then only receive the reduction in emission levels, whilst the suppliers must then provide the adequate technology to achieve the reduction.

Competition in Göteborg has shown to bring major cost savings in traffic operation whilst improving social and environmental standards and increasing the number of passenger by 7.5%. Financial savings were used to increase the service level and to reduce ticket prices. Competitive tendering has also enabled modernisation of the bus fleet.

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Preparing for Competitive Tendering: 
Examples from Germany

Tendering of public transport services in Germany is divided between local public transport services with buses and trams and regional railway services. The latter is subject to competitive tendering on the basis of a new regulation, privatisation of the Deutsche Bundesbahn, introduced in 1994. The German “Bundesländer” (States) or the regional transport associations are responsible for the regional railway services. They manage the service and prepare the contracts with the railway companies, for which they receive a fixed amount of money from the German Government. Some States have already tendered a number of networks and lines, however, the “Deutsche Bahn” is still operating more than 90% of the whole regional railway services. Private companies like “Connex” or public-private-partnership ventures are successful and experiences after tendering have been very positive, for example the quality of the services has been improved and the number of passengers increased whilst deficits have decreased.

A different picture can be seen at the local level where competition is very low. In the cities and densely populated areas local authority owned companies dominate the market, which receive concessions without tendering. This practice has a long tradition and illustrates the regulated frame of a closed market, which protects these companies from competition. However, through new regulations at the European level the German legal framework for public transport contains an increasing amount of competitive elements.

To prepare for competition, public owned transport companies have to lower their expenditure, restructure and form a strong foundation for the company. The future could see an increase in mergers, the selling of public transport companies to private investors or joint ventures. Those local transport companies who are already considered as forerunners likely will have the opportunity to expand their good practice to other cities as well. The development of this will greatly depend on the strategies and political will of local authorities. A factor that will influence future trends is the ruling of the European Court of Justice on subsidies for public transport services, which took place in July 2003. The Court ruled that public subsidies can be paid without breaking EU competition rules, but only if they are for clearly-defined public service obligations. To ensure this is transparent and legal, competitive tendering will be the best solution of meeting the requirements in the Court’s ruling (see chapter on European Framework for more information).

Environmental Standards for Public Transport Services – a Pilot Project

To encourage local authorities and public transport operators to take competition elements and quality criteria into account the German Environmental Ministry in 2002 started a pilot project called 'Demanding environmental standards in competitive public local transport'. The project considered the environmental effects and costs of measures relation to the overall costs for public transport. First, a call for proposals was launched aimed at transport companies and
authorities to show how they will prepare for competitive tendering by integrating environmental criteria. The best concepts from operators came from Berlin and Frankfurt/Oder. In Berlin the operator wanted to introduce clean diesel buses. Frankfurt/Oder decided to renew the whole bus fleet by introducing compressed natural gas (CNG) buses. In both cases the buses fulfil the highest emission standard EEV (Enhanced Environmentally Efficient Vehicles). The Environmental Ministry believes that competition forced the manufacturing industries to develop clean buses. An evaluation should also cover the environmental effects and life-cycle costs of EEV buses in comparison to EURO III. First results show that the additional costs for EEV can be neglected. Within the demonstration project the Ministry also supports preparations for tendering in the Region Hannover. For further information contact: Gabriela Felder, Verkehrsverbund Berlin-Brandenburg GmbH, Hardenbergplatz 2, 10623 Berlin, Germany, Tel. ++49 (0) 30 254 14-345, email: felder@vbbonline.de.

The following case studies from Germany demonstrate how German local authorities and operators have prepared for competitive tendering by considering environmental and quality criteria, which have led to innovative concepts. In each case political action was the driving force.

**Frankfurt (Oder)**

Frankfurt/Oder has approximately 68,000 inhabitants and is situated on the border to Poland. It has one local authority owned public transport company, the Stadtverkehrsgesellschaft GmbH Frankfurt (Oder). The company operates 6 tramlines and 10 bus lines and also took part in the demonstration project detailed above.

Since March 2003 the whole bus fleet is running with new CNG buses. The buses reach EEV standard and only produce half of the noise as regulated by European legislation. Frankfurt (Oder) is reputed to have one of the most environmentally friendly bus fleets in Germany and even in Europe.

The purchase of clean buses is based on a strong political support. After the flood of the river Oder in 1997 the City council decided that the city itself had to introduce measures to reduce negative impacts on the global climate and the local environment. In 1998, for example, a plan for mid-term and long-term measures to reduce CO2 emissions as well as to reduce noise was adopted. As well as the bus fleet running on clean fuel, attention has been given to environmental standards with regards to the company's new bus depot and offices. They have a certified quality and environmental management system, for example, low energy consumption and use of rainwater.

For further information contact: Gabriele Felder, Verkehrsverbund Berlin-Brandenburg GmbH, email: felder@vbbonline.de.

**Bocholt**

Bocholt has 72,000 inhabitants and is situated near the Netherlands. It has 6 lines of medium sized buses and 4 lines of taxi buses (on demand). Founded in 1999, the local authority owned company StadtBus GmbH functions as the management and infrastructure authority.

In 2000 the whole service of the newly formed bus network was tendered European-wide. Ambitious quality standards including low bus
emissions were emphasised for example, all buses must meet the EURO 3 standard and therefore not be older than five years. A bonus was also given for those buses that ran on CNG. Fifteen companies took part in the tendering process. The successful company was not the cheapest but best value regarding cost and quality.

Service started in August 2001. The experiences after the tendering process are quite positive, the quality has improved and the costs are 20% lower. In comparison to other public transport networks with similar quality standards but without competition the cost reduction is more than 30%. The number of passengers has more than doubled in two years, shown in the graph below.

For further information contact: Ms Behrendt, Stadtbus Bocholt GmbH, email: peb@stadtbusbocholt.de

Frankfurt/Main

Frankfurt/Main has 650,000 inhabitants and is located in west Germany. In September 2001 the city founded a new local public transport authority called traffiQ which is responsible for Frankfurt's entire public transport network. The network consists of 7 underground lines, 7 tramlines and 52 bus lines. Before traffiQ, transport planning was overseen by the local operator, Verkehrsgesellschaft Frankfurt am Main (VGF). To meet the EU legislative requirements of tendering which state there should be a clear division between the operator and the organisation that tenders, all operating control was transferred to traffiQ. The council could not operate the network from the same office of the VGF as the basis of the new authority.

TraffiQ is responsible for: finance, tendering and contracting, measuring quality standards, marketing, co-ordination of all public transport services in Frankfurt and managing the information centre.

Targets have been set for competitive tendering within the following areas:

- Higher modal share for public transport.
- High quality standards.
- Reduced costs.

An incentive system should improve the quality. Strong environmental standards are aimed at for busses (EURO V / EEV). A proposal for tendering the whole bus network has already been developed. It is intended to divide the network into five sections and tender one each year. The city council in autumn 2003 decided that tendering will start in early 2005. Apart from this traffiQ published a European wide tender for four buslines (two new and two existing connections) in October 2003. The tender document also includes specific requirements for the vehicle emissions. Frankfurt is the first city in Germany who has prepared for competition and followed tendering legislation closely.

For further information contact: Christian Schaefer, traffiQ, email: c.schaefer@traffiq.de.

![Passenger numbers 2000 – 2002 (2003 expected)](image)
Region of Hannover

The Region of Hannover is a municipal association of the city of Hannover and surrounding cities and towns. The whole region has approximately 1,100,000 inhabitants, which covers 15% of the inhabitants of Niedersachsen ("Lower Saxony"). The regional authority coordinates planning tasks and is also responsible for the public transport. In 2002 the regional authority set the foundation for more competition in public transport. All bus services have been contracted until the end of 2004. The aim is then to start competitive tendering which will include environmental criteria.

A project has been started together with the Bundesländer (States) Bremen and Niedersachsen, which will examine the effects of tendering. In a so-called “virtual tendering”, different networks should be tendered for which suppliers can offer a bid. The aim is to give special recommendations on how to set environmental standards in the tendering process. First results are expected early 2004. This project is linked to the above mentioned demonstration project of the German Environmental Ministry.

For further information contact: Bernt Hüsken, Region Hannover, email: bernt.huesken@region-hannover.de.

The Beauty Contest - Environmental Ranking of Public Transport Services in Germany

Research has been undertaken to get an overview of public transport authorities and operators in Germany with regard to competition and environmental standards. In 2002 the Verkehrsclub Deutschland (VCD) started the first German environmental ranking of public transport. In order to examine, evaluate and compare the environmentally friendliness of public transport networks a questionnaire was developed in co-operation with the Chair of Transportation Ecology at Dresden University of Technology. Different aspects, such as vehicle fleet, infrastructure, transportation performance and environmental management were included.

The main purpose of the ranking initiative was to show decision-makers and transport experts in local authorities and transport companies that environmental and quality standards can be introduced and enhance the performance of public transport. The initiative also examines the environmental performance of public transport services in Germany and showcases examples of good practice. Results are published in the brochure „ÖPNV-Umweltliste 2002“. The German Environmental Ministry and the German Environmental Agency funded the project.

After a call for participation 32 public transport companies from Germany completed the questionnaire. These companies show that for them the environment is an important issue. There were a number of categorises and the winners are listed in the table over the page.
Conclusions

The initiative highlighted that there is still a high share of old diesel buses in operation, but there is an increase in the use of clean fuels and after-treatment. There are increasing number of companies with CNG buses (the most environmentally friendly). Public transport companies are also becoming aware of the need for incorporating environmental aspects and being customer focused and this could lead to an advantage in cases of tendering. The initiative also highlighted that there is still a lack of political action from local authorities, for example priorities for public transport at traffic lights and bus lanes etc. The contest will continue next year with the focus on local authority action.

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<th>Categories</th>
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<tr>
<td>Rural Area</td>
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<tr>
<td>Cities up to 100.000 inhabitants</td>
<td>• KVS GmbH, Saarlouis</td>
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<td>Cities 100.000 to 500.000 inhabitants</td>
<td>• Freiburger Verkehrs AG, Freiburg</td>
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<tr>
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<td>• üstra Hannoversche Verkehrsbetriebe AG, Hannover</td>
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<tr>
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<td>• Geraer Verkehrsbetrieb GmbH, Gera</td>
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<td>• Stadtwerke Rosenheim – Verkehrsbetriebe, Rosenheim</td>
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<td>Operation of buses</td>
<td>• Saarbahn GmbH, Saarbrücken</td>
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<td>Operation of trams</td>
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<td>Environmental engagement for the future</td>
<td>• Stadtverkehrsgesellschaft Frankfurt/Oder mbH, Frankfurt/Oder</td>
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<td>• Saarbahn GmbH, Saarbrücken</td>
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<td></td>
<td>• Berliner Verkehrsbetriebe BVG, Berlin</td>
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<td>• üstra Hannoversche Verkehrsbetriebe AG, Hannover</td>
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<td></td>
<td>• Stadtwerke Augsburg – Verkehrs-GmbH, Augsburg</td>
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</table>

Winners of the public transport services environmental ranking initiative, Germany
Designing Competitive Tendering

Besides policy tools like spatial planning, price incentives and transport infrastructure investments, there are a number of factors that are important to the success of competitive tendering and improving environmental and social standards in urban public transport:

- It is important to create an independent transport authority that sets up the requirements for the urban public transport system, carries out the call for tender and closely monitors the fulfilment of the contracts. Often this authority can be set up with employees from the planning unit of the former local public transport company.

- The transport authority should be driven by an ethic that places delivery of the maximum amount of service with available funding, whilst incorporating social and environmental criteria.

- Public transport plans should be based on a long-term vision for integrated sustainable urban transport, which should be consistent with other policies and approved by citizens.

- Emphasis should also be put on public transport access to all large land-use developments.

- Work with key providers and develop a dialogue between procureurs, suppliers, manufacturers, regulators, transport development organisations, businesses and citizens’ groups.

- Apart from high quality and environmental criteria social standards have to be considered. It does not help urban public transport if the skilled local workforce is made redundant and replaced by low-paid drivers. Good experience has been achieved through ensuring that local labour tariffs are paid to employees, whilst phasing out differences between public and private transport companies. Unions and employers should work out common wage agreements.

Competition has shown to bring major cost savings in traffic operation whilst improving social and environmental standards. These savings can be used to increase the service level and to reduce ticket prices. Competitive tendering can also enable rapid modernisation of bus fleets therefore improving environmental standards whilst service quality remains high.

Procura⁺ Criteria for High Environmental Performance

In order to maintain the environmental advantage of urban public transport, high standards need to be applied to vehicles, i.e. the bus fleet. This has to be ensured in the tendering process. Procura⁺, ICLEI’s Sustainable Procurement Campaign, starting in 2004, aims at encouraging public authorities across Europe to adopt these key criteria, and thereby send a clear signal to suppliers that a substantial market exists for vehicles and transport services with high environmental standards. Specifically the manual sets qualitative criteria and emission levels and does not demand a specific technology.

The key criteria for direct bus purchases taken from the Procura⁺ manual are as follows:
Buses

Engine EURO Standard
Specifications:
Vehicle engines must be certified as meeting the EEV standard for emissions, according to EC Directive 1999/96/EC.

Monitoring Fuel Use
Specifications:
All vehicles are to be fitted with driving-style meters to monitor fuel usage

Noise Emissions
Specifications:
Vehicle noise emissions must be below 75 dB (A) for vehicles with an engine power between 75-150 kW and below 77 dB (A) for vehicles with an engine power above 150 kW.

Tenders of Public Bus Services

Engine EURO Standard
Specifications:
All buses used in carrying out the service must have engines meeting EURO II standards, according to EC Directive 1999/96/EC. Where buses are not certified as EURO II, but technical after-treatment has achieved the same standard, this should be documented in the tender application, and approved by a credible independent third party.

Award Phase:
The contract will be awarded to the tender applicant with the highest score of points, to be allocated along the following criteria:
- Price: 95 points* – 95 points awarded to the cheapest tender and 1 point less for every 1% increase above this price
- Engine EURO standard: 5 points – 1 point awarded for every 20% of buses used in carrying out the service meeting the EEV standard (i.e. 0 points awarded for tenders offering no buses meeting EEV standards).

Contract Provisions
The share of EEV driven km per year must increase by …% per year**. Proof of compliance must be documented and provided to the contracting authority. If compliance is not achieved a penalty of …** will be applied.

* Whether all 95 points are allocated according to price, or whether additional criteria are taken into account must be decided by the tendering authority.

** To be determined during contract negotiations

Environmentally-conscious Driving
Specifications:
- All buses used in carrying out the service must be fitted with driving-style meters to monitor fuel usage
- It must be proven that all bus drivers involved in carrying out the service are being trained in a locally recognised institution on environmentally-conscious driving on a regular basis to increase fuel efficiency

Contract provisions:
If the standards claimed in the tendering competition have not been met satisfactorily over the first 2 years of the contracting period then a penalty of …* will be applied.

* To be determined in negotiation with the selected service provider
**Good Quality Service**

**Contract provisions:**

- X% of the operating revenue awarded if the operator achieves a "good quality service", as evaluated by an independent market research company at the supplier's expense every two years

* To be determined by the public authority in negotiation with the selected service provider

** The supplier must provide details of an appropriate company in the tender application

For more information on Procura+ contact Christoph Erdmenger, ICLEI European Secretariat, Leopoldring 3, D-79098 Freiburg, Germany, tel: +49-761 368 920, e-mail: christoph.erdmenger@iclei-europe.org or visit www.procuraplus.org.

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**Better Urban Public Transport: Making a Commitment**

A declaration of commitment has been developed as part of the Sustainability in the Urban Public Transport Market project (details on page 29). It is aimed at mayors, councillors, senior managers and other leaders of local and regional authorities across Europe. It commits the signatory to bringing the opportunities from competitive tendering to the attention of your local authority. Your authority can then consider improving environmental and social standards in urban public transport. For more information or to obtain a copy of the declaration of commitment contact: Mark Hidson, ICLEI European Secretariat, Leopoldring 3, D-79098 Freiburg, Germany, tel: +49-761 368 920, e-mail: mark.hidson@iclei-europe.org or visit www.iclei.org/europe/sip-tram/.

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4 Assessment to be done 2 years after commencement of service. Specific targets and goals must be set and agreed upon. The main indicators should be: passenger numbers, fuel efficiency levels, measurement of passenger satisfaction levels, price levels (cost of service and fare prices).
Sustainability in the Public Urban Transport Market (SIPTRAM) Project

This Good Practice Guide has been developed as part of the SIPTRAM project - Sustainability in the Public Urban Transport Market. The aim of the project is to assess the opportunities to integrate social and environmental criteria in the competitive tendering process for public transport services. The project has three objectives:

1. Trigger exchange on good practices between local politicians as well as between local technical experts involved in public transport.

2. Explore, how a dialogue between procurers, suppliers, manufacturers and regulators can lead to a mutual increase both in environmental and social standards as well as in the cost-effectiveness and quality of public urban transport.

3. Enhance commitment of local authorities and other actors to high quality and sustainable public transport, therefore strengthening political objectives in the course of public transport tendering.

If you would like further information on the SIPTRAM project please contact Mark Hidson, Project Coordinator, ICLEI:

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E-mail: info@t-e.nu
Website: www.t-e.nu
ICLEI – Local Governments for Sustainability

**ICLEI - Local Governments for Sustainability**, is a worldwide association of 400 local governments dedicated to sustainable development. ICLEI’s mission is to build and serve a world-wide movement of local governments to achieve tangible improvements in global environmental and sustainable development conditions through cumulative local actions. ICLEI forms a global network of cities and coordinates regional campaigns and thematic networks.

ICLEI’s offices on all continents serve as technical assistance and training agencies. In Europe, ICLEI is one of the constituting networks of the Sustainable Cities and Towns Campaign and is a member of various committees, among them the Steering Committee of the European Eco-Efficiency Initiative.

ICLEI’s European Secretariat based in Freiburg, Germany, hosts ICLEI’s International Training Centre and employs an international staff of 40, mainly academics with a command of more than 10 European languages. ICLEI’s liaisons in each of its 170 member local authorities in Europe provide both practical expertise and a link to the cities’ political leadership and technical services.

Having originally proposed Local Agenda 21 to the UN Conference on Environment and Development in Rio 1992, ICLEI is today the leading inter-municipal clearinghouse on local sustainable development and Local Action 21. Other activities include the Water Campaign, the development of Sustainability Management instruments for local authorities, and Climate and Air. Beside these topics ICLEI membership has voted Sustainable Procurement to be one of the top five priorities for ICLEIs work.

The SIPTRAM project that provides the framework for this good practice guide is carried out jointly by the Sustainable Procurement and Climate and Air teams.
### Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>CO₂</td>
<td>Carbon dioxide</td>
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<tr>
<td>CNG</td>
<td>Compressed natural gas</td>
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<td>dB</td>
<td>Decibel</td>
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<td>EEV</td>
<td>Enhanced Environmentally friendly Vehicles</td>
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<td>EUR</td>
<td>EURO</td>
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<td>EC</td>
<td>European Commission</td>
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<td>EU</td>
<td>European Union</td>
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<td>T&amp;E</td>
<td>European Federation for Transport &amp; Environment</td>
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<td>FIM</td>
<td>Finnish Mark</td>
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<td>GL</td>
<td>Göteborgsregionens Lokaltrafik</td>
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<td>YTV</td>
<td>Helsinki Metropolitan Area Council</td>
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<td>HKL</td>
<td>Helsinki City Transport</td>
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<td>ICLEI</td>
<td>ICLEI - Local Governments for Sustainability</td>
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<tr>
<td>Pb</td>
<td>Lead</td>
</tr>
<tr>
<td>NOₓ</td>
<td>Nitrogen Oxides</td>
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<tr>
<td>PM10</td>
<td>Particulate Matters</td>
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<tr>
<td>SO₂</td>
<td>Sulphur Dioxide</td>
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<tr>
<td>PDU</td>
<td>Urban Transport Plan</td>
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<td>SIPTRAM</td>
<td>Sustainability in the Public Urban Transport Market</td>
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<tr>
<td>ULSF</td>
<td>Ultra Low Sulphur Fuel</td>
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<td>VCD</td>
<td>Verkehrscub Deutschland</td>
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<td>VGF</td>
<td>Verkehrsgesellschaft Frankfurt am Main</td>
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Urban public transport is one of the most significant sectors to consider in creating a sustainable urban environment. Many urban public transport systems are now subjected to competitive tendering, which is perceived partially as a threat, and partially as a chance to make systematic improvements and to develop high environmental and social standards. Experience from Sweden and Denmark indicates that competitive tendering can lead to increased efficiency together with high procurement standards resulting in better quality and cheaper public transport services. This guide showcases how cities in Sweden, Finland, France and Germany have prepared for competitive tendering and improved the environmental and social standards in urban public transport through the competitive tendering process.