

Study on economic and financial effects of the implementation of Regulation 1370/2007 on public passenger transport services

European Commission

Final Report
February 2016

Our ref: 22765001
Client ref: MOVE/A5/SER/2014-356/SI2.698871





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DISCLAIMER

The information and views set out in this report are those of the authors and do not necessarily reflect the official opinion of the European Commission. The Commission does not guarantee the accuracy of the data included in this study. Neither the Commission nor any person acting on the Commission's behalf may be held responsible for the use which may be made of the information contained therein.

Executive Summary

Regulation 1370/2007 applies to the national and international operation of public passenger transport services by rail and other track-based modes and by road, except for services which are operated mainly for their historical interest or their tourist value. The purpose of the regulation is to define the framework governing the means by which competent authorities ensure the provision of public transport services offering higher service frequencies, better quality or lower fares than the market would otherwise provide. More specifically, it sets out the conditions under which authorities securing services operated in accordance with public service obligations should compensate the service provider, and the mechanisms to be applied in procuring such services by contract.

The Regulation took effect in December 2009, but allows for a transition period for the full implementation of its provisions of 10 years. During this period, Member States are expected to move towards full compliance with the requirements concerning the award of public service contracts. However, the transition period did not apply to the provisions defining how compensation should be calculated.

The Commission has previously undertaken an analysis of the implementation of the Regulation, but this focused primarily on legal issues. The objective of this study was to:

- assess the economic and financial situation of the public transport sector; and
- assess to what extent the gradual implementation of the regulatory framework defined in the Regulation has affected the economic and financial situation of the sector and whether it has succeeded in meeting the objectives defined in the 2001 White Paper of providing safe, efficient and high quality passenger transport services.

This study focusses on urban public transport modes. The scope of this study excludes heavy rail in general, but does include urban rail services (principally light rail, metro, tramways, tram-train systems) operated as part of an integrated transport system.

The methodology used to answer the Terms of Reference was based on a number of actions:

- Stakeholder engagement across Europe in order to obtain views and opinions, to obtain more detailed information and obtain contacts with key stakeholders not previously identified;
- Member State fiches gathering information and data on public transport organisations and trends in each Member State.
- Case studies focussing on eight networks across Europe in order to obtain specific and detailed information to facilitate validation of general findings.
- Desk research to identify the relevant stakeholders, identify experts, collect data and relevant information, coupled with analysis to develop an understanding of the issues;
- Organisation of a stakeholder workshop in May 2015, at which emerging findings were presented and discussion and feedback was received which assisted in validating those findings and sourcing of additional information that would be useful in completing the study;
- Continuous analysis of findings in parallel with each of the tasks mentioned above.

Conclusions

Overall, the use of public transport across Europe increased by 8% between 2000 and 2012, with stronger growth observed between 2005 and 2008, mainly driven by an enhanced attractiveness of public transport. The economic crisis resulted in a temporary reversal in what

has otherwise been a period of sustained growth. It took more than four years for the public transport sector to recover from the effects of the crisis.

The public transport sector of Europe is highly fragmented and whilst it presents some common characteristics, it differs on many crucial aspects. To understand these, requires analysis at a local level, but that in turn presents some difficulty in extrapolating findings at a European level. The environment of public transport in Europe is to a large extent nationally driven and there is considerable variation between Member States in terms of legislation, and approaches to funding, market structure and types of procurement.

There is little consistency between Member States in terms of the capabilities of the competent authorities in the area of public transport as well as the number of competent authorities in a given Member State: they can vary from just one to more than 2,000. There can be clear advantages of having a small number of competent authorities within one Member State, as that can facilitate better access to expert skills and resources and the coordination and dissemination of best practices.

Sources and levels of public funding available for public transport services vary widely across Europe and have suffered in many areas as a result of the 2008 financial crisis. This has forced some authorities to make significant changes to the PSO services, to stop infrastructure improvements or to increase fares paid by users. The proportion of costs paid by users through ticket prices differs significantly across the EU and between networks. In some cases, the sustainability of public transport is probably not guaranteed in an environment with pressure on public finances. Our review has also highlighted the lack of reliable data to enable comparisons of the economic and financial performance of the public transport sector across Member States.

Assessing the competitive environment faced by operators remains a challenge too, as the availability of sources of information related to the state and nature of the competition is very limited. Some Member States have established relatively well developed competitive frameworks with well-equipped authorities to stimulate competition (Sweden, Denmark, Netherlands and London), but the situation remains somewhat unclear in many other countries. In at least two States, the introduction of the Regulation resulted in an amendment of the national legislation to ensure that direct awards were possible for some transport modes. In Estonia, outside Tallinn, the provision of subsidised bus transport services had previously been compulsory by competitive public tendering. In Italy, *Decreto Burlando*, which had introduced competitive tendering as the primary means of procuring Public Service Obligations services, was amended to reflect the direct award possibilities of Article 5 of Regulation 1370/2007.

Additionally, competitive tenders do not necessarily always ensure a high level of market contestability. In case of extensive or onerous contract requirements, particularly where the risks to the bidder are perceived as excessive, the number of bids can be significantly reduced or even, in extreme cases, can result in no bids.

Reporting of evaluation of the economic performance of public service contracts is very limited. In principle, the Regulation should also greatly improve the information on public transport services and supporting contracts, not least because of the reporting requirements of Article 7.1. This should be expected to result in greater transparency and accountability, benefitting both users of transport services and tax payers who fund them. However, our investigation indicates that reports prepared in response to Article 7.1 are not always

prepared regularly, may not be published and often do not comply with its requirements. In addition, only a small number of operators report their economic and financial performance. Our assessment of these revealed low-margins and significant variations in profitability from year to year.

While it is possible to define economic and financial performance, at least at a high level, by reference to economic efficiency (providing cost efficient transport services that are valued by users and other citizens in a way that is financially sustainable), we have not been able to draw firm conclusions on how levels of performance compare between Member States.

As the Regulation has only been in force since 2009, there is insufficient evidence at this stage to determine its economic and financial impact with confidence. Overall, there is some uncertainty about the impact of the Regulation among a wide range of stakeholders. We also note that some national competent authorities do not appear to be familiar with all aspects of the legislation, and that some local level authorities were unaware of it.

However, the study has identified a number of benefits brought about by Regulation 1370/2007: clearer definition of policy objectives as a basis for specifying service requirements and other contractual obligations, greater transparency particularly of methods and levels of compensation including in the case of direct awards, reduced uncertainty for both the competent authority and the service provider over legal obligations, and a more considered approach to the design of public service contracts (for example in the development of effective incentives on operators to deliver services in line with public sector objectives).

These improvements are likely to contribute to improved economic and financial performance over the longer term and lead to greater cost efficiency, by ensuring that contractual obligations are better aligned with policy objectives, and greater financial sustainability, by enabling transport operators to assess contractual risks more accurately and price accordingly. At the same time, we note that these are necessary rather than sufficient conditions for improved performance, and that actual outcomes will also depend on exogenous factors (such as economic conditions and local circumstances) as well as the broader capabilities of competent authorities in procuring public service contracts.

We have identified a number of key capabilities that competent transport authorities will require if they are to award cost efficient transport service contracts capable of meeting economic, social and environmental objectives. They include skills required during the procurement process and others needed while contracts are in operation and some are required whether an award is made directly or through competitive tendering.

In the course of the study, a number of interviewees noted that many competent authorities do not always have sufficient resources, skills and experience to support all these capabilities. This is a particular concern as we found that capabilities of competent authorities to procure high quality contracts are as important as the best practice conditions for the award of PSCs and the design of the scheme for compensation.

A number of best practices for the award of PSCs under direct award and competitive tendering have been identified, encompassing all aspects of the contract timeline from first high-level design to hand-over. However, their suitability for adoption or application by other competent authorities will depend significantly on local and individual circumstances and therefore may not be appropriate for adoption as universal best practices.

Recommendations

In our view, competent authorities will need to develop stronger capabilities in contract procurement, management and monitoring if the full benefits of Regulation 1370/2007 are to be realised. This could be encouraged by greater interaction among authorities, particularly those in Member States where responsibility for ensuring the provision of public transport services is devolved to a large number of local organisations. We therefore recommend the creation of an EU cooperation platform possibly encouraged by the Commission representing also the smaller competent authorities and/or their associations. We also recommend that Member States consider what support could be given to smaller authorities that do not have the skills or resources needed to implement procurement processes and manage contracts in accordance with the Regulation.

In order to improve data availability we recommend that consideration is given to consistent collection of data in Article 7 reports and other national or local databases. Article 7 reports are intended by the Regulation to allow “the performance, quality and financing of the public transport network to be monitored and assessed”. These reports therefore, should be more than a compliance exercise. They should be drafted with the objective of providing transparency with information compiled in a consistent and comparable form for the benefit of the industry and the general public.

It would appear useful to have a single source of information listing, at a national level all the public service contracts within the scope of Regulation 1370/2007 and their key features. This would also help Member States to better assess the state of the public transport sector in their own country, as we found that many were unclear about it. In parallel, the Commission could help to clarify the requirements of Article 7.1, for instance, through interpretative guidelines to ensure that reporting is carried out on a consistent basis across Europe. We do, however, foresee a number of practical issues which would need to be addressed and recommend that the Commission encourages a working group made up of competent authorities, operators and Member States to work on this issue.

1 Introduction

- 1.1 This report is the final report related to the study undertaken on the economic and financial impact of Regulation 1370/2007. It presents our findings, reports on the status of the pan-European stakeholder consultation that was organised and presents good practices related to tendering for passenger transport services and to PSO compensation schemes.

Background

- 1.2 The purpose of Regulation 1370/2007 is to define how, in accordance with the rules of Community law, competent authorities may act in the field of public passenger transport to guarantee the provision of services of general interest which are among other things more numerous, safer, of a higher quality or provided at lower cost than those that market forces alone would have allowed.
- 1.3 To this end, the Regulation lays down the conditions under which competent authorities, when imposing or contracting for public service obligations, compensate public service operators for costs incurred and/or grant exclusive rights in return for the discharge of public service obligations (PSO).

The situation before Regulation 1370/2007 was implemented

- 1.4 The Altmark judgement of July 2003 by the Court of Justice of the EU clarified the position related to public service obligations and state aid. This judgment listed four conditions relating to compensation paid to operators for the production of public service obligations. In Altmark, the European Court of Justice ruled that compensation for public services does not contain state aid when four cumulative conditions are met:
- The recipient undertaking must actually have public service obligations (PSO) to discharge compensation and the obligations must be clearly defined;
 - The parameters for calculating the compensation must be established beforehand in an objective and transparent manner, to avoid it conferring an economic advantage which may favour the recipient undertaking over competing undertakings;
 - The compensation cannot exceed what is necessary to cover all or part of the costs incurred in the discharge of PSOs, taking into account the relevant receipts and a reasonable profit for discharging those obligations; and
 - Where the undertaking to discharge PSOs is not chosen pursuant to a public procurement procedure which would allow for the selection of the tenderer capable of providing those services at the least cost to the community, the level of compensation needed must be determined on the basis of an analysis of the costs which a typical undertaking, well run and adequately provided with means of transport so as to be able to meet the necessary public service requirements, would have incurred in discharging those obligations, taking into account the relevant receipts and reasonable profit for discharging the obligations.

- 1.5 It is important that all four of the Altmark conditions are met. If a Public Service Operator fails to meet any one of these tests, the compensation will constitute State Aid in terms of Article 107.
- 1.6 The Altmark ruling finds that a public tender procedure is a preferable solution with a view to establishing compensation, but does not rule out cases of direct awards.

The situation since December 2009

- 1.7 Regulation 1370/2007 was published on 3rd December 2007 and came into force on 3rd December 2009. It is designed to deal with the special position of State aid in relation to public transport and SGEIs and replaces the two existing EU Regulations on public transport, namely Regulations 1191/69 and 1107/70.
- 1.8 Regulation 1370/2007 on public passenger transport services by rail and road was part of a series of regulatory measures in the transport sector introduced in the same year and designed to improve the operation of EU transport markets. Parallel measures included the introduction of open access international rail services (including cabotage) by 2010, and Regulation 1371/2007 on rail passenger rights and obligations.

Scope

- 1.9 Regulation 1370/2007 applies to the national and international operation of public passenger transport services by rail and other track-based modes and by road, except for services which are operated mainly for their historical interest or their tourist value. Member States may apply this Regulation to public passenger transport by inland waterways and, without prejudice to Council Regulation (EEC) No 3577/92 of 7 December 1992 applying the principle of freedom to provide services to maritime transport within Member States (maritime cabotage), national sea waters. This study focusses on urban public transport modes.
- 1.10 However, the Regulation does not apply to public works concessions within the meaning of Article 1(3)(a) of Directive 2004/17/EC or of Article 1(3) of Directive 2004/18/EC.

Transition period

- 1.11 The Regulation took effect in December 2009, but allows for a transition period with respect to the provisions for the award of public sector contracts defined in Article 5 until December 2019. In the meantime, it requires Member States to begin to implement these provisions and defines how contracts awarded before the Regulation came into effect should be treated. In most other respects, the provisions of the Regulation, for example those defining how compensation should be calculated, are not subject to a transition period.

The main provisions of Regulation 1370/2007

1.12 The Regulation sets out a number of provisions:

- It requires the use of Public Service Contracts (PSCs) whenever a competent authority grants an operator exclusive rights to operate a service or groups of services, and/or compensation. PSCs are defined broadly and include any legal instrument that confirms there is an agreement between the authority and the operator regarding the provision of services meeting a Public Service Obligation (PSO).
- As an exception to this, the Regulation permits the implementation of PSOs as general rules (rather than through PSCs) where these are schemes for discounted travel, or overall limits on the fares that can be charged.
- The Regulation also requires clear definitions of the PSOs, exclusive rights, compensation payments and allocation of revenue associated with any PSCs and arrangements for the transfer of staff.
- Where there are direct awards or an internal operator provides a service, the Regulation requires that operators should be compensated on the basis of the net financial effect of the PSO, and describes how this should be calculated. In other circumstances, where contracts are awarded on the basis of a competitive tender, this provision does not apply but nonetheless the Regulation requires that there must be no overcompensation.
- The duration of PSCs should be limited to 10 years for road transport and 15 years for rail transport, although this can be extended by 50% if the operator has to provide significant assets.
- The Regulation specifies the process for the award of PSCs. It defines a general principle that, except where there is an internal operator, awards should be through competitive tenders. However, it allows exceptions to this, including where it is necessary to introduce emergency measures. Direct awards are also permitted in the rail sector but PSCs in this case should be limited to 10 years.
- The Regulation requires the publication of details of PSOs.

1.13 The European Commission's (the Commission's) communication¹ of March 2014 provides interpretative guidelines concerning these and other parts of the Regulation.

The need for this study

1.14 The Commission has previously undertaken an analysis of the implementation of the Regulation, but this focused primarily on legal issues. The objective of this study was to:

- assess the economic and financial situation of the public transport sector; and
- assess to what extent the gradual implementation of the regulatory framework defined in the Regulation has affected the economic and financial situation of the sector and whether it has succeeded in meeting the objectives defined in the 2001 White Paper of providing safe, efficient and high quality passenger transport services.

1.15 In order to inform this assessment, the Commission has engaged Steer Davies Gleave to undertake a study to undertake the following tasks set out in the Terms of Reference:

- Task 1: Provide an overview of the economic and financial situation of the public transport sector in all EU Member States;

¹ [http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:52014XC0329\(01\)](http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:52014XC0329(01))

- Task 2: identify the factors contributing to the economic and financial performance of the sector;
- Task 3: assess the economic and financial impact of applying the new regulatory framework (Regulation 1370/2007), with the analysis based on 6-8 case studies;
- Task 4: using the findings of Task 3, set up a knowledge base that should be suitable for updating;
- Task 5: organise an expert workshop to present and validate the draft findings under the study contract.

1.16 The scope of this study excluded heavy rail in general, but does include urban rail services (principally light rail, tram-train systems) operated as part of an integrated transport system.

Purpose and organisation of this report

1.17 This report is a final report that presents our findings and conclusions. It has been developed around the following structure:

- Chapter 2 presents our methodology;
- Chapter 3 displays our analysis of factors that determine performance;
- Chapter 4 provides some background about public transport and about the Regulation so that the reader can better understand the information that follows in the remaining chapters;
- Chapter 5 presents the choice of case studies and the findings;
- Chapter 6 presents the impact that the Regulation has had across Europe;
- Chapter 7 presents a knowledge base part which details best practices; and
- Chapter 8 presents our conclusions and recommendations.

2 Methodology

Introduction

2.1 This chapter describes our methodology.

2.2 The methodology that we have used to answer the terms of referenced was based on a number of actions:

- Stakeholder engagement across Europe in order to obtain views and opinions, to obtain more detailed information and obtain contacts with key stakeholders not previously identified;
- Member State fiches gathering information and data on public transport organisation and trends in each Member State. These fiches are available in Appendix B.
- Case studies focussing on eight networks across Europe in order to obtain specific and detailed information rather than too general findings. Case studies are presented in Chapter 5;
- Desk research followed by analysis of material found in order to understand the issues, identify the relevant stakeholders, identify experts, collect data, find sources of information, identify suitable reports;
- Organisation of the stakeholder workshop in order to present our first emerging findings, obtain additional information and/or possible confirmation of first findings as well as useful material for the rest of the study;
- Continuous analysis of findings in parallel with each of the tasks mentioned above.

2.3 More detailed information on these tasks is set out below.

Stakeholder consultation

Objectives of the engagement with stakeholders

2.4 Objectives of the engagement with stakeholders were to:

- Determine stakeholder views on:
 - the impact that Regulation 1370/2007 has had on contract award procedures;
 - the impact of different contract award procedures;
 - the issues or problems encountered in the application of the Regulation;
 - relevant examples of success (or failure) that should be assessed in greater detail; and which could inform the knowledge base that is to be created as part of the study.
- Enable us to obtain information and data required to provide an overview of public transport provision in each Member State and for the case study analysis.

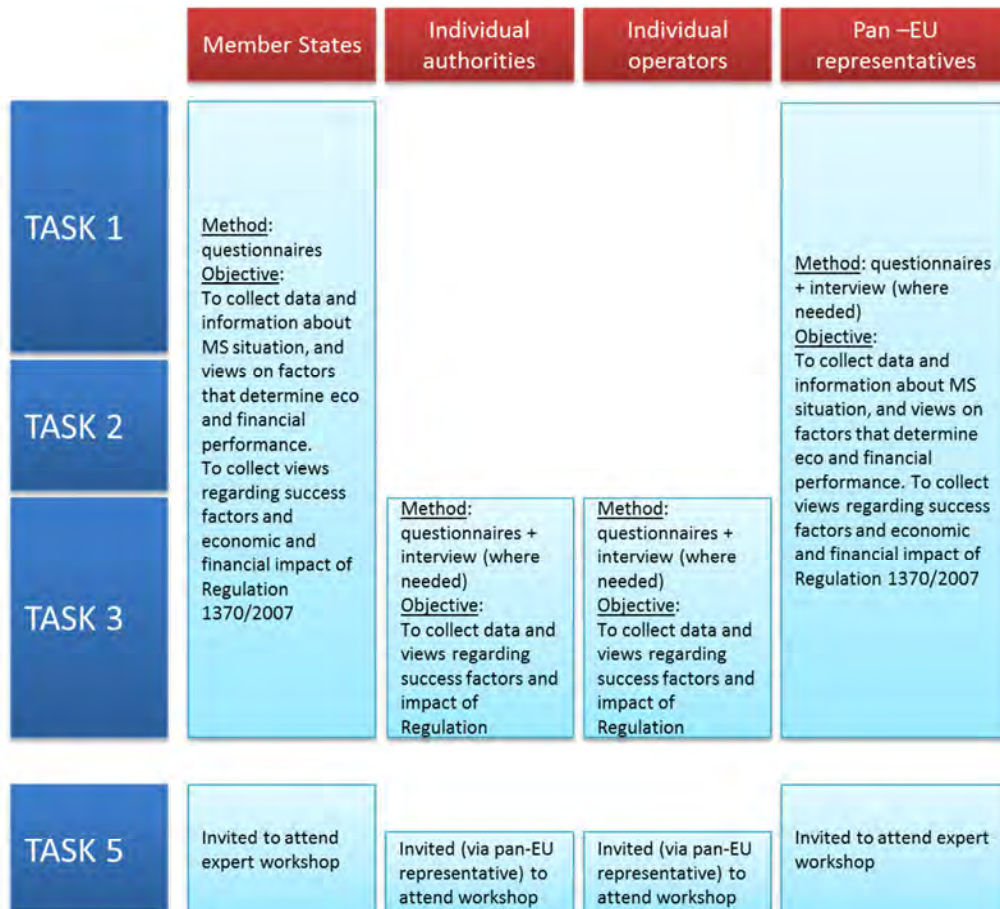
Approach to stakeholder engagement

2.5 We identified three broad communities of stakeholders:

- **Member States**, who are primarily responsible for setting up the regulatory framework, and who have an obligation to cooperate with any evaluation of the Regulation, “particularly as regards the collection of information for the report” (Article 12.2). The representatives of Member States include national transport authorities (typically the department of government responsible for transport) as well as other national bodies such as competition bodies.
- **Local, regional or national competent authorities responsible for transport**, who are directly responsible for ensuring that public transport services are provided.
- **Public service transport operators**, who manage the provision of services and are well placed to comment on the impact of the Regulation on levels of funding, risk transfer and service quality.

2.6 The figure below shows how we have engaged with each group of stakeholders for each task (as set out in the Terms of Reference – see paragraph 1.15).

Figure 2.1: Approach to stakeholder engagement for the study



Stakeholder consultation

Stakeholder contacts for Task 1 and 2

Our lists of stakeholder contacts from Member States and Competition Authorities who participated in the study are shown in Table 2.1 and

2.7 Table 2.2 respectively. We do not list below stakeholders who declined to participate. As noted above, Member States were engaged on Tasks 1, 2 and 3.

Table 2.1: Stakeholder contacts from Member States who participated to the study

Member State	Organisation
Austria	Federal Ministry of Transport, Innovation and Technology(BMVIT)
Belgium	Service Public Fédéral Mobilité et Transports
Bulgaria	Ministry of Transport, IT and Communications
Croatia	Ministry of Maritime Affairs, Transport and Infrastructure
Cyprus	Ministry of Communications and Work
Czech Republic	Ministry of Transport, Ministerstvo Dopravy
Denmark	Ministry of Transport/Transportministeriet
Estonia	Ministry of Economic Affairs and Communications
Finland	Finnish Transport Agency Ministry of Transport and Telecommunication
Germany	Bundesministerium für Verkehr, Bau und Wohnungswesen
Greece	Ministry of Infrastructure, Transport and Networks
Hungary	Ministry of National Development/ Nemzeti Fejlesztési Minisztérium
Ireland	Department of Transport, Tourism and Sport
Italy	Ministero dei Trasporti
Latvia	Ministry of Transport/Satiksmes ministrija
Lithuania	Ministry of Transport and Communications - Susisiekimo ministerija
Malta	The Ministry for Transport and Infrastructure
Netherlands	Ministerie Van Infrastructuur En Milieu
Poland	Ministry of Transport, Construction and Maritime Economy
Portugal	Ministério Das Obras Públicas, Transportes e Comunicações
Romania	Ministry of Transport
Slovakia	Ministry of Transport, Communications and Public Works
Slovenia	Ministry of Transport
Spain	Ministerio de Fomento
Sweden	Ministry of Enterprise and Energy
United Kingdom	Department for Transport

Table 2.2: Stakeholder contacts from competition authorities who participated to the study

Member State	Organisation
Bulgaria	Commission for the Protection of Competition (CPC)
Croatia	Agencija za zaštitu tržišnog natjecanja
Cyprus	Competition Protection Commission

Member State	Organisation
France	Autorité de la Concurrence
Ireland	Competition and Consumer Protection Commission
Italy	Agenzia Garante della Concorrenza nel Mercato
Lithuania	Competition Council of the Republic of Lithuania/Lietuvos Respublikos konkurencijos taryba
Netherlands	Netherlands Competition Authority/Nederlandse Mededingingsautoriteit (NMa).
Portugal	Autoridade da Concorrenca
Sweden	Competition Authority

2.8 We also contacted a number of additional stakeholders from relevant organisations. Only stakeholders who participated in the study are listed in the Table below.

Table 2.3: Stakeholder contacts from other relevant organisations who participated to the study

Organisation/Name
Fachverband der Schienenbahnen (WKÖ)
Finnish Public Transport Association
Union des transports publics et ferroviaires (UTP)
Verband Deutscher Verkehrsunternehmen e.V. (VDV)
ASSTRA Associazione Trasporti
Uniunea Română de Transport Public (URTP)
Passenger Transport Executive Group (Pteg)
Svenskkollektivtrafik
Die Bundesarbeitsgemeinschaft der ÖPNV-Aufgabenträger (BAG ÖPNV)
French Association of Transport Authorities (GART)
AGIR
Stadsregio Amsterdam
Bundesverband Deutscher Omnibusunternehmer (BDO)
Associazione Nazionale Autotrasporto Viaggiatori (ANAV)
Delft University of Technology
Université de Paris

2.9 The pan-European stakeholder contacts shown in Table 2.4 below were also contacted and participated in the study, contributing mainly to Tasks 1 and 2. They also assisted us in identifying and contacting participants for the Expert workshop. We would like to thank these stakeholders for their help in this instance.

Table 2.4: Pan-European stakeholder contacts who participated to the study

Organisation	Status
International Association of Public Transport (UITP)	Questionnaire response received
European Metropolitan Transport Authorities (EMTA)	Declined to send an EMTA response but forwarded a response from a member
European Passengers Transport Operators (EPTO)	Questionnaire response received
European Passengers' Federation (EPF)	Questionnaire response received
European Transport Workers Federation (ETF)	Received presentation for expert workshop

Stakeholder contacts for Task 3 (case studies)

- 2.10 Table 2.5 summarises the case studies we have carried out and the competent authorities and operators we have contacted and interviewed.

Table 2.5: Case study contacts

Case study	Status
Sweden, Stockholm Metro	Operator interviewed only
Italy, Emilia-Romagna	Competent authority interviewed only
Hungary, Budapest	Competent authority interviewed only
Bulgaria, Burgas	Both competent authority and operator interviewed
France, Grenoble	Both competent authority and operator interviewed
Germany, Ulm	Operator interviewed only
UK, Manchester Metrolink	Both competent authority and operator interviewed
Ireland, Bus Éireann	Both competent authority and operator interviewed

Confidentiality

- 2.11 A limited number of stakeholders for the case studies agreed to be interviewed only on the basis that their comments were confidential. As a result, the case studies set out in Chapter 5 of this report refer only to published, factual or verifiable data, and matters of opinion. Stakeholder views, on good contracting practice or other issues, are referred to without attribution later in this report.

Desktop research

Introduction

- 2.12 We present here the information and data sources that we have used throughout the study. We have identified some challenges in sourcing meaningful data to allow – where possible - comparisons for reasons that we describe below.

Sources of analytical data

2.13 Table 2.6 summarises the data sources used for this study.

Table 2.6: Summary of data sources' availability and usability

Type	Sources of data	Comments
Total volumes by mode (passengers, passenger-kilometres etc.)	Eurostat	Some data was partial and hence not directly comparable
	International organisations (CER, UIC, IRU)	Non-urban rail excluded as out of scope Some data unavailable for non-members
	National statistics for each Member States	Limited availability and consistency, passenger-kilometres not always estimated
Data on public service contracts and payments and risk transfer	Reports issued in accordance with Article 7.1 of the Regulation	Few such reports were found
	Transport authority financial/annual reports	Some reports provide only limited non-financial data
Data on operating costs and revenues	Operator financial/annual reports	Many operators consolidate data across all modes and operations
	Transport authority financial/annual reports	Some reports provide only limited non-financial data
	Operator financial/annual reports	Many operators consolidate data across all modes and operations
	Transport authority reports	
Data on passenger satisfaction	Operator reports	
	Passenger/consumer association reports/surveys	
	Reports on service quality issued in accordance with Regulation 1371/2007 (rail sector only)	Non-urban rail aspects out of scope in many cases
	Eurobarometer surveys	

Source: Steer Davies Gleave analysis

Eurostat and national statistics

2.14 We have used Eurostat data as a consistent source of control totals for national data. However, Eurostat data contained only a very limited subset of information relevant for this study.

2.15 National data sources provided a useful source of information but were of course all prepared according to national requirements, meaning that there was little consistency between them. National statistics varied widely in:

- The modes included, with modes such as commercial long-distance coaches and airport buses, or shared taxi services, or commercially operated non-PSC local bus services, included in some sources and not in others;
- The extent of the coverage, with some statistics including only the larger networks or operators; and
- The range of information provided, particularly with regard to measures such as passenger-kilometres, which, as discussed below, are not estimated or collated in some networks or states.

Transport authority and operator financial/annual reports

- 2.16 All competent authorities are required to keep annual financial accounts, although these may not fully distinguish the accounts of an internal transport operator from other activities carried out by the authority. Similarly, all contracting operators are required by their national accounting and tax authorities to keep annual financial accounts, although these need not distinguish the costs and revenues associated with different contracts or transport modes.
- 2.17 We found that the extent to which such information was readily available varied widely between authorities and operators.
- 2.18 As data collection (operational and financial) was a key input for the study, we review below some common limitations of data related to:
- The availability of estimates of passenger-kilometres;
 - The availability and meaning of information on “vehicle-kilometres”; and
 - The availability of information on revenue by mode.
- 2.19 Passenger-kilometres, except in the case of operations with pure distance-based fares, cannot be identified from revenue or ticket sales. We found that it is rare for operators to report passenger-kilometres unless they are specifically required to do so. Some competent authorities estimate passenger-kilometres from distance-based fares, from smart ticket records, or from passenger surveys; some provide only information on passenger boardings by mode; and some only provide estimates of passenger journeys.
- 2.20 Vehicle-kilometres: some competent authorities provide data on seat-kilometres, which in principle allows comparison between modes, at least where standing is not permitted or there is a policy that there should be no standees (some authorities, in contrast, explicitly allow a certain number of standees per seat or per square metre of floor space). Other authorities provide data on a measure such as “service” kilometres in which it appears that a multi-vehicle tram or train is counted as a single service, although their reports rarely provide clear definitions of the term. However, this means that each unit reported might range for a bus with capacity for fewer than 50 passengers to a suburban train with capacity for more than 1000 passengers. The absence of a consistent vehicle-kilometre unit makes it difficult to create or compare meaningful KPIs of passenger-kilometres per vehicle-kilometre, vehicle-kilometres per staff member, fare revenue per vehicle-kilometre and operating cost per vehicle-kilometre.
- 2.21 Revenue from multimodal tickets (tickets that can be used on more than one mode), common in many large urban areas, can often not be attributed to specific modes on which they are valid. The networks we examined typically used one of three operating models set out below:
- Multimodal internal operator (Table 2.7)
 - Gross cost contracting (Table 2.8)
 - Net cost contracting (Table 2.9)
- 2.22 Typically, with a multimodal internal operator, the competent authority reports total ticket revenue but does not attempt to identify it to specific modes. The competent authority, or its internal operator, may report operating costs in aggregate or by mode. However, in the absence of any measure of revenue by mode it is not possible to identify, by mode, either the fare revenue or the gross subsidy as a percentage of operating costs.

Table 2.7: Typical data availability with multimodal internal operator

	Mode 1	Mode 2	Mode 3	Mode 4
Fare revenue	Not identified to specific modes			
Gross subsidy	Not calculated	Not calculated	Not calculated	Not calculated
Internal operator costs	May be in internal operator accounts	May be in internal operator accounts	May be in internal operator accounts	May be in internal operator accounts

Source: Steer Davies Gleave analysis, illustrative of the information available with multimodal internal operators

- 2.23 Typically, with gross cost contracting of individual modes or packages, the competent authority reports total ticket revenue and the gross contract prices paid. Article 7.1 requires that they should be identified for each contract, although this information does not always seem to be available. Even where this is done, however, the operator may not identify the revenue associated with the mode and may have no access to the operator's costs. In these circumstances it is not possible to identify the operator costs or profit margins, and the only information which can be identified, possibly by mode, is gross subsidy.

Table 2.8: Typical data availability with gross cost contracting

	Mode 1	Mode 2	Mode 3	Mode 4
Fare revenue	Not identified to specific modes			
Gross subsidy	May be identified by authority	May be identified by authority	May be identified by authority	May be identified by authority
Contractor costs	Confidential	Confidential	Confidential	Confidential

Source: Steer Davies Gleave analysis, illustrative of the information available with gross cost contracting

- 2.24 Typically, with net cost contracting of individual modes, contractors collect some or all of their own revenue but may not be required to report either it, or their costs, to the competent authority. The result is that the competent authority may not be able to identify either revenue or costs, whether in aggregate or, as required by Article 7.1, by mode, and the only information which can be identified is gross subsidy.

Table 2.9: Typical data availability with net cost contracting

	Mode 1	Mode 2	Mode 3	Mode 4
Fare revenue	Confidential	Confidential	Confidential	Confidential
Net subsidy	May be identified by authority	May be identified by authority	May be identified by authority	May be identified by authority
Contractor costs	Confidential	Confidential	Confidential	Confidential

Source: Steer Davies Gleave analysis, illustrative of the information available with gross cost contracting

Literature review

- 2.25 We list below all the reports and studies that have been used as part of this study.

- Performance of public transport
 - Modes de gestion et efficience des opérateurs dans le secteur des transports urbains de personnes, Baumstark, 2005
 - Mobility in Cities Database, UITP, 2006

- International Bus System Benchmarking: Performance Measurement Development, Challenges, and Lessons Learned, Randall, Condry, 2006
- Appels d'offres concurrentiels et avantage au sortant, une étude empirique du secteur du transport public urbain en France, Anne Yvrande-Billon, 2009
- Auction Procedures and Competition in Public Services: The Case of Urban Transport in France and London, Amaral, M., Saussier, S. and Yvrande-Billon, A., 2009
- Décision n° 10-DCC-198 du 30 décembre 2010 relative à la création d'une entreprise commune par Veolia Environnement et la Caisse des Dépôts et Consignations, Autorité de la Concurrence, 2010
- Mesure de la performance des lignes de transport urbain, APEROL, Faivre d'Arcier, 2012
- Competitive tendering of urban public transport: a disappointing success? Van de Velde, 2012
- Barometer, EMTA, 2012
- Best practices
 - Bus Planning, Performance and Regulation, Steer Davies Gleave, 2004
 - Urban Bus Toolkit, Tools and Options for Reforming Urban Bus Systems, PPIAF, 2005
 - Contracting in urban public transport, inno-V, KCW, NEA, RebelGroup, TØI, Steer Davies Gleave and TIS, 2007
 - Policy and research recommendations report, SPUTNIC, 2009
 - Public consultation on 2014 Public Bus Service Contracts, Irish Competition Authority, 2014
 - Vergaben von Busverkehrsleistungen nach der EU-Verordnung 1370/2007, VDV, 2015
 - Tendering Road Passenger Transport Contracts, Department for Transport, 2015

Expert workshop

2.26 Task 5 of the Terms of Reference required that an expert workshop be organised. It was thought that the workshop would be most useful if it took place at a mid-point within the study where first findings would be available, but prior to completion of the analysis. As a result, a free and open to all workshop was held in May 2015.

Key themes

2.27 A number of key themes were identified for the workshop and the agenda was developed along these key themes. Speakers with relevant knowledge were identified and invited. Pan-EU stakeholders supported us in reaching out to their members and informing them about the workshop.

2.28 It was important to ensure a range of views and perspectives to be represented, so a targeted selection of speakers was invited to make presentations. Speakers were sourced from different parts of the industry: competent authorities, operators, trade union representatives, the European Commission and academics. Their presentations provided relevant subject matter, formed a constructive contribution and also helped to stimulate engagement and discussion from other participants.

2.29 The workshop was translated simultaneously in English, French, German, Italian, Polish and Spanish. The table below presents the Agenda and the speakers.

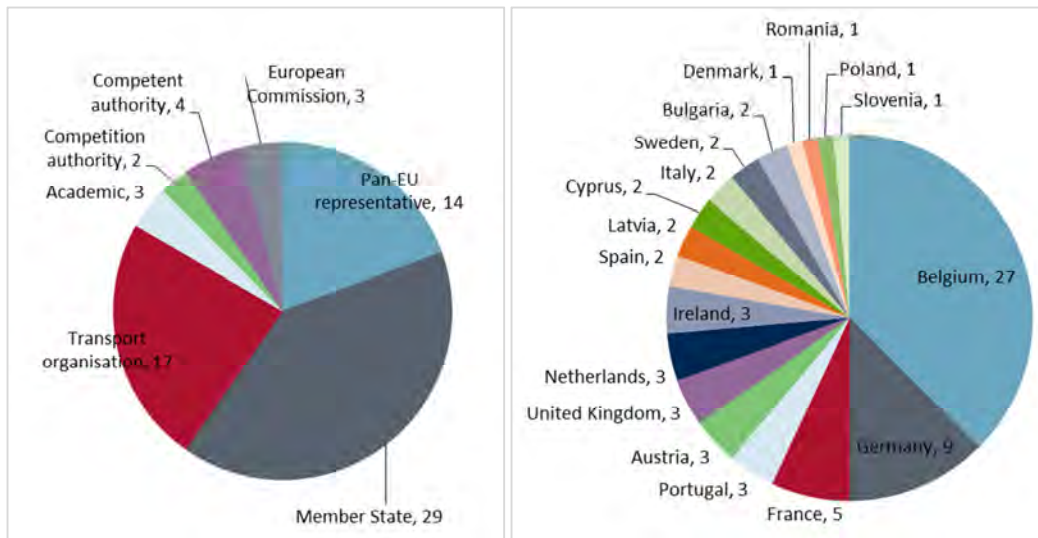
Table 2.10: Workshop agenda

Theme	Speaker	Type
Introduction	Mr. Olivier Onidi	European Commission
	Mrs. Clémence Routaboul	Steer Davies Gleave
	Mrs. Clémence Routaboul	Steer Davies Gleave
Theme 1: What explains eco & financial performance of public transport in the EU?	Mr. Thomas Avanzata	UITP
	Mr. Jan Moellmann	EPTO
	Questions and observations	Attendees
Coffee Break		
Theme 2: Cost effectiveness of the award decision	Mrs. Clémence Routaboul	Steer Davies Gleave
	Dr. Michael Winnes	Competent authority
	Mr. Martin Schäfer	Operator association
	Mrs. Anne Yvrande Billon	Academic
	Questions and observations	Attendees
Lunch break		
Theme 3: Delivering high quality in public transport	Mrs. Clémence Routaboul	Steer Davies Gleave
	Mr. Piers Marlow	Operator
	Mrs. Sabine Trier	Trade Union
	Mr. Didier Van de Velde	Academic
	Questions and observations	Attendees
Conclusions and way forward	Mr. Jan Scherp	European Commission

Participants

2.30 The graphic below shows the 72 participants who registered to attend.

Figure 2.2: Workshop participants



Copy of the presentations

Copies of the presentations were circulated to speakers and participants, and to parties who expressed an interest, and are attached in Appendix A.

3 Economic and financial performance of public transport in Europe

Introduction

3.1 The Terms of Reference included the following tasks:

- Provide an overview of the economic and financial situation of the public transport sector (bus, tram, metro and urban rail) in all EU Member States. This analysis shall be based on a set of suitable key performance indicators (KPI) covering inputs (e.g. productivity), financial aspects (e.g. cost cover ratio) and output (e.g. quality of service).
- Identify the factors that determine the economic and financial performance of the sector.

3.2 In this Chapter we therefore:

- Provide an overview of the market structure and economic situation;
- Define what can be understood by performance in public transport;
- Consider the objectives of public transport policies and their impact on performance;
- Identify the factors that determine performance;
- Analyse performance “top-down” and “bottom-up”; and
- Summarise our conclusions on the economic and financial performance of public transport in Europe.

Overview of market structure and performance

3.3 The collection of data and information that we did for each Member States (displayed in the country fiches available in Appendix) provide a good base for an overview of the organisation of public transport nationally. Beyond the legislative environment which is by nature nationally driven, we observe that there is little consistency across States in terms of the size of the area of competence of the competent authorities. In smaller or island States the authorities tend to be national, whilst in many states there can be an incredibly large number of authorities. Some states have authorities in charge of transport at a regional level, including Belgium, Czech Republic, Denmark, Croatia, Italy, Spain, Slovakia and Sweden. In principle, there are some benefits in having a small number of authorities within one Member State, with better access to expert skills and resources, and limited need to coordinate for the dissemination of best practices across authorities at a national level. There is nothing to prevent authorities of national competence to manage many distinct contracts. However, in the case of Ireland, Cyprus and Malta, we observe that there are only a limited number of public service contracts in use. Although probably also partly due to the small size of the territories in the respective States, this greatly limits the opportunities for operators and a competitive market (when these contracts are competitively tendered which is not the case everywhere).

3.4 At the other end of the spectrum, some countries such as Bulgaria (with 265 authorities) or Estonia (213 municipalities) among others, have so many authorities in charge of complex PSOs that the outcome of public transport can expect to vary widely even at a national level. A large number of authorities should require some standardisation in approach, such as for the effective management of awards and monitoring of the operator, but we have not found evidence from many Member States of a national repository of information or an association of competent authorities in charge of these issues. They do exist in some Member States but not in many. We explain in later sections of this Chapter that, in terms of economic and financial performance, the role and skills of the competent authority is crucial.

3.5 The Table below presents for each Member State the number and geographic spread of the competent authorities. We also list, where available, the sources of funding of public transport as well as some information related to the national competitive environment.

Table 3.1: Public transport market structure

Member State	Competent authorities	Estimate number of competent authorities	Funding sources	Competitive environment
Austria	Regional authorities	9	Federal government	Unclear
Belgium	Regional authorities	3	Unclear	Lack of competition, direct awards used
Bulgaria	Municipal authorities	265	Unclear	Unclear
Croatia	Regional and large municipal authorities	22 regions + largest cities	Unclear	Unclear
Cyprus	National authority	1	National government	Main public transport mode is bus, small and medium size operators
Czech Republic	National, regional and municipal authorities	960	Regional and municipal government	Unclear
Denmark	Regional authorities	7	Unclear	Well established tendering processes, no political interference in decision of transport authorities. Long experience of competitive environment
Estonia	Counties and municipal authorities	228	All governments	Competitive public tendering for the provision of subsidised bus transport services was made compulsory in 2000 before entry into force of 1370/2007. In certain areas, including the capital bus contracts have continued to be awarded directly to publicly-owned companies
Finland	Regional and municipal authorities	35	Regional and municipal governments	Competitive tendering is now becoming the preferred method of award in Finland

France	Municipal, departmental and regional authorities	288	Municipal, departmental and regional authorities, business tax	The vast majority of operators are private but 68% of the networks (and 78% of trips) are operated by the 2 largest companies (Transdev and Keolis)
Germany	Regional and municipal authorities	430	Federal and regional governments	The vast majority of urban transport contracts are directly awarded, but there is a large share of subcontracting
Greece	Regional and municipal authorities	338		No competition in local public transport procurement in Greece
Hungary	Municipal authorities	116	Unclear	In Budapest, move towards more competitive tenders
Ireland	National authority	1	National government	Political aim to create and increase competition
Italy	Regional and large municipal authorities	25	National and regional governments	Previous legal requirement of mandatory use of competitive tendering, with high renewal rate of previous incumbents
Latvia	Regional and municipal authorities	10	State and local subsidies	A significant share of the transport operators are nationally owned
Lithuania	Municipal authorities	60	Municipal governments	Unclear
Luxembourg	National authority	1	National government	Unclear. Private companies provide transport services, but there seems to have been limited changes in the 3 main operators over the years
Malta	National authority	1	National government	Competitive tender covering the provision of the entire transport system of the island ran into difficulties and resulted in a change of operator by 2015
Netherlands	Provincial and city-region authorities	15	Unclear	Long experience of competitive tenders, as well as a mature supplier base of ten large transport operators
Poland	Municipal authorities	2500	Unclear	Unclear
Portugal	State and municipal authorities	3 + all other municipal authorities	Unclear	In the largest cities, state-owned companies tend to be directly awarded contracts. This may differ in other municipalities
Romania	Local authorities	Unclear	Unclear	Unclear
Slovakia	Regional and city authorities	8 regions + largest cities	Regional and municipal governments	Gradual move from direct awards to competitive tenders. Half of bus operators are privately owned.
Slovenia	Cities	7	Unclear	System is being transitioned from direct award of concessions without a public tender, to new tender documentation for the award of concessions

Spain	Autonomous communities and municipalities	139	Unclear	Avanza is the leader of the urban bus transport operations in Spain with 20% of the market, that otherwise is directly awarded to publicly-owned operators in about 40% of the market. The remaining 60% is operated through concession contracts.
Sweden	Regional authorities	21	Unclear	The vast majority of transport contracts are competitively tendered to private operators. Well established tendering processes
United Kingdom	Regional and metropolitan authorities	Approx. 60	National, regional and metropolitan	Apart from London, deregulated market. In London long experience of competitive practices

Source: Steer Davies Gleave analysis, UITP information

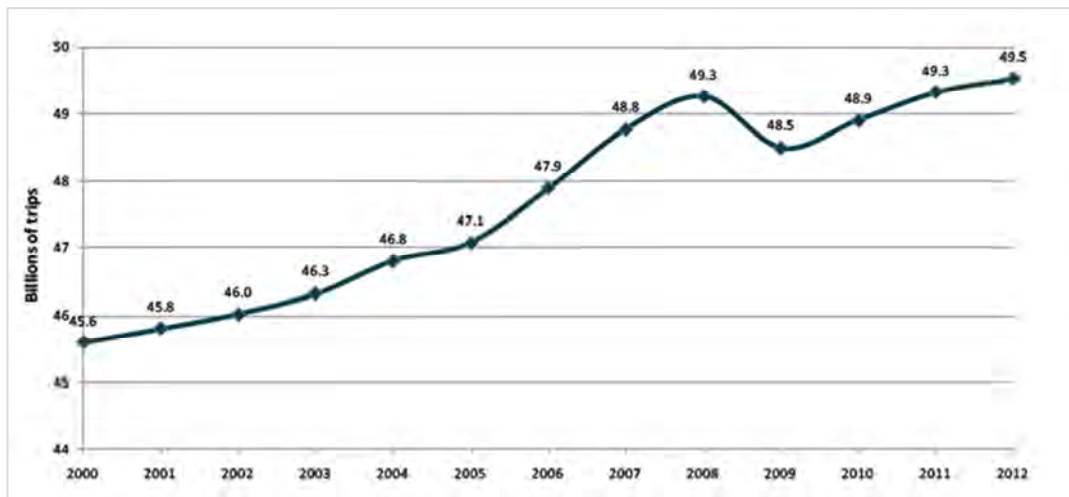
- 3.6 Sources and amount of public funding available for public transport services varies widely across Europe and has certainly been impacted in many places from the 2008 financial crisis. This has forced some authorities to make significant changes to the PSO services, to stop infrastructure developments or to increase fares paid by users, etc. The proportion of costs paid by users through ticket prices differs significantly across the EU and across networks, from 89% in Lisbon to 26% in Grenoble, with some networks where users do not pay for their fares at all (Tallinn). The sustainability of these models is probably not guaranteed in an environment with pressure on public finances. In the case of networks with limited financial contribution from the public transport users, assessing the economic and financial performance of the network is probably less related to an assessment of transport but rather on an assessment of the use of tax-payer funds.
- 3.7 Assessing the competitive environment faced by operators remains a challenge too, as the availability of sources of information related to the state and nature of the competition is very limited. Some Member States have established relatively well developed competitive frameworks with well-equipped authorities to stimulate competition (Sweden, Denmark, Netherlands and London), but the situation remains somewhat unclear in many other countries.
- 3.8 In two States, the introduction of the Regulation resulted in the national legislation becoming less restrictive: In Estonia competitive public tendering for the provision of subsidised bus transport services had been made compulsory from 2000 by the Public Transport Act (but in certain areas, including the capital Tallinn, bus contracts continued to be awarded directly to publicly-owned companies). In Italy, *Decreto Burlando* had introduced competitive tendering as the primary means of procuring Public Service Obligations services. Following the introduction of Regulation (EC) N° 1370/2007, a number of amendments were made such as allowing direct award for the cases foreseen by its Article 5(4) where contract value is less than €1,000,000 or service provision less than 300.000 km or regarding the duration of contracts. In addition the Italian Regional Legislative Framework allowed regions to choose their reference framework. Many regions choose frameworks with competitive tendering as a key pillar, leaving direct award only to those cases foreseen by Article 5 of the Regulation.
- 3.9 Additionally, competitive tenders do not necessarily always ensure a high level of market contestability. In case of extensive or onerous contract requirements, particularly where the

risks to the bidder are perceived as excessive, the number of bids can be significantly reduced or even, in extreme cases, can result in no bids. Smaller operators can struggle to be competitive where they are unable to meet the stated requirements for expertise, stability and proven delivery assurance for instance.

3.10 Indicators of quality and functional public transport solutions include the use of tenders where quality (such as delivery assurance with minimal operational disturbances, high levels of performance that takes climate and environmental impact into consideration and vehicles equipped with modern equipment for high accessibility²) is highly prioritized, as well as the inclusion of contracted performance incentives. Another recognised sign of quality is a reducing gap in competitive tender offers between the highest and the lowest bidders as this indicates better pricing evaluation.

3.11 Overall, the use of public transport (recorded as transport journeys by bus, tram and metro) across Europe increased by 8% between 2000 and 2012, with a strong growth between 2005 and 2008, mainly driven by enhanced attractiveness of public transport. The economic crisis stopped this and it took more than four years for public transport to recover (Source: UITP).

Figure 3.1: Local public transport journeys by bus, tram and metro in the EU, 2000 to 2012



Source: UITP "Local public transport trends in the European Union", 2014

3.12 However, there are some considerable differences between Member States, due to a number of diverse factors, encompassing the resilience of the country to the economic conditions, changes in socio-demographic characteristics, changes in urban population, changes in fares or level of funding, as can be observed in Table 3.2 below.

² Source: Nobina annual report 2014/2015

Table 3.2: Development of public transport in Europe

Member State	Public transport trend	Rationale
EU overall	Demand for public transport has risen by 8% between 2000 and 2012	Steady growth between 2000 and 2005 driven by an increase in urban residents, strong growth between 2005 and 2008 driven by increase in attractiveness of public transport followed by the negative impact of the economic crisis in 2009.
Austria	Demand for public transport has risen by 25% between 2002 and 2012	Secure public transport funding schemes, policies to increase public transport share, affordable fares
Belgium	Demand for public transport has risen by 114% between 2000 and 2012	Increase in urban population, development of transport infrastructures
Bulgaria	Overall decline in public transport share	Significant increase in car ownership, fall in country population
Croatia	Demand for public transport has declined by 7% between 2000 and 2012	Impact of the economic crisis, changes in economic activity led to a decrease in passenger movements in the metropolitan areas, increase in fares
Cyprus	Steady decline in bus passengers (only urban transport mode available)	Rapid increase in car ownership (low population density), poor service and conditions of the buses, previously-free travel for some social categories stopped, impact of the financial crisis
Czech Republic	Demand for public transport has declined by 8% between 2000 and 2012	Unclear
Denmark	Demand for public transport has risen by around 4% between 2000 and 2012	High cycling market share
Estonia	Demand for public transport has declined by over 20% between 2001 and 2012	Car ownership and car usage have increased, funding of PT for municipalities remains difficult. However, introduction of free public transport in Tallinn for residents has boosted use of PT in the capital city
Finland	Demand for public transport has risen by around 4% between 2000 and 2012	High car ownership. Demand for public transport decreased up to 2006, but then increased.
France	Demand for public transport has risen by nearly 30% between 2000 and 2012	Continued movement of urbanization, cheap fares.
Germany	Demand for public transport has risen by 12% between 2000 and 2012	Strong economic growth in spite of the crisis, policy initiatives to incentivise use of public transport, good quality services
Greece	Unclear	
Hungary	Demand for public transport has declined by nearly 20% between 2001 and 2012	Impact of the economic crisis, limited public funding, increase in fares
Ireland	Demand for public transport has risen by 4% between 2000 and 2012	Impact of the financial crisis since 2009 causing a significant drop in demand at that point, with a previous significant increase in urban inhabitants that drove growth between 2000 and 2008
Italy	Demand for public transport has risen by 8% between 2000 and 2012	Growth in urban population, better integration of local public transport, improved organisation of transport operations
Latvia	Over the period 2000–2012, demand for public transport declined by 30%	Impact of the financial crisis in 2009, reduced density and reduced population

Lithuania	Demand for public transport has declined by 6% between 2000 and 2012	Decrease of population and in the urban population, increase in car ownership
Luxembourg	Demand for public transport has risen by over 50% between 2000 and 2012	Continued movement of urbanization, strong car ownership but political support to public transport.
Malta	Unclear	Unclear
Netherlands	Unclear	Unclear
Poland	Demand for public transport has declined by 10% between 2002 and 2012	Stable demand after the economic crisis, growth in car ownership, demographic changes meaning that public transport has lost in attractiveness
Portugal	Unclear	Unclear
Romania	Demand for public transport has declined by 8% between 2000 and 2012	Decline in population and urban population, decline in density, impact of the financial crisis
Slovakia	Demand for public transport has declined by 4% between 2000 and 2012	Urban transport systems have faced difficulties in ensuring funding for services, resulting in poor service and infrastructure quality
Slovenia	Demand for public transport has declined by 25% between 2005 and 2012	Strong impact of the financial crisis, reduce national funding availability, increase in ticket prices
Spain	Demand for public transport has declined by 5% between 2005 and 2012	Impact of the financial crisis since 2009 causing a significant drop in demand, but the share of public transport compared to car trips has increased
Sweden	Demand for public transport has risen by 25% between 2000 and 2012	Policies and availability of funding in favour of public transport, moderate increase in urban population, rapid negative impact of the financial crisis
United Kingdom	Demand for public transport has risen by nearly 20% between 2000 and 2012	Public transport usage increased driven by a strong increase in London, whilst the rest of the country suffered a decline during the economic recession

Source: UITP, Steer Davies Gleave analysis

- 3.13 It should be noted that published data on the development of bus, tram and metro journeys at national level is not widely or consistently available. In most Member States, there is no central repository of this information and many Ministries that were contacted for this study were not able to provide figures. Assessing the trends in development of public transport over time is also difficult due to a lack of available data.

Overview of the economic situation

- 3.14 Assessing the state of the economic landscape in public transport across Europe has proved to be difficult to accomplish. There is a lack of available information on the results of assessments of the economic performance of contracts awarded. Such assessments or ex-post reviews only take place in a very limited number of cases, since they are complex to undertake and expensive, and may also provide (constructive) criticism of choices made by local authorities political power. Where such assessments are made, they are rarely made publically available.
- 3.15 In this study we undertook an in-depth analysis of eight case studies (as detailed below). The aim of the case study analysis was to extract relevant information and identify best practices. Where possible we have also presented trends showing the evolution of the performance and/or other indicators, but these case studies have not revealed sufficient information to

enable the economic situation of the eight markets to be examined in a consistent or meaningful way.

- 3.16 In the absence of regional market information, we examined the economic situation of pan-European private operators who publish annual reports. Smaller operators are not always required to report their results and therefore we concentrated on the larger operators. This approach also has some limitations. Several operators have some form of state-ownership. Arriva is owned by Deutsche Bahn, which is a state-owned German company, Keolis is owned by the French state-owned railway company SNCF, Transdev is partly state-owned by the French government and Nettbuss is owned by NSB, the Norwegian state railway company. With state-ownership there are different yield requirements and financing options for the operators.
- 3.17 The picture created by focusing on these operators is also partly distorted, since most of the business activities of the operators listed below cover more than public transport and may also provide heavy rail or commercial coach transport services without a breakdown by transport type in their reporting.

Table 3.3: Economic performance of pan-European transport operators

Operator	Markets	Item	2012	2013	2014	2015
Nobina (SEKm)	Scandinavia, bus only	Net sales	7050	7212	7269	7549
		Operating profit	37	246	326	371
		EBITDA margin	7.5%	9.8%	11.4%	12.2%
National express (£m)	UK, Spain, US, bus, coach and heavy rail	Group revenue	1831.2	1891.3	1867.4	N/A
		Operating profit	211.9	192.9	193.1	N/A
		Operating margin	11.6%	10.1%	10.3%	N/A
Stagecoach (£m)	Mainly UK, bus and heavy rail	Revenue	2590	2804	1012.8	1045.5
		Operating profit	262.9	235.4	147.4	141.1
		Operating margin	N/A	N/A	14.6%	13.5%
Keolis (€m)	France, Europe, public transport, heavy rail	Revenue	N/A	3967.3	4275.6	N/A
		Operating profit	N/A	62.3	67.7	N/A
		Operating margin	N/A	N/A	N/A	N/A

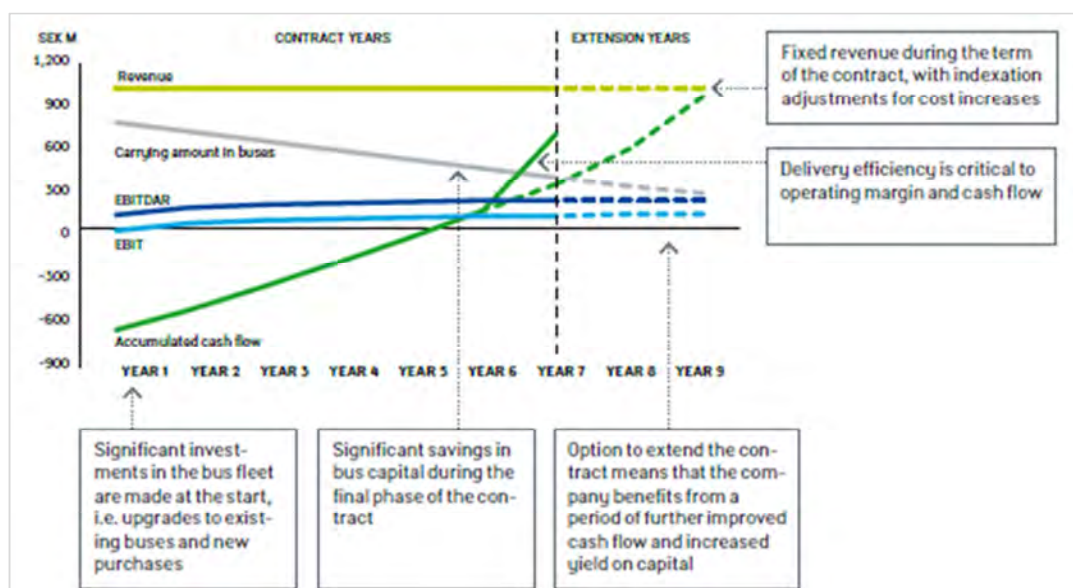
Source: Steer Davies Gleave analysis of annual reports. Note N/A = not available

- 3.18 Most transport operators acknowledged that they operate in an industry with fairly low-margins sometimes with a number of non-profitable operations. Stagecoach also reported higher margins of 17% on bus operations outside London (which are deregulated) than operations within London (9.4%). We also observed a significant fluctuation in the year-on-year operating profits of operators who reported them.
- 3.19 Nobina, the largest public transport service provider in the Nordic region (Sweden, Finland, Denmark, Norway) stated in its 2013/2014 annual report that “an important prerequisite for profitability is to only participate in tendering processes where the risks are limited over the entire contract period so that the contract generates a positive cash flow. That also means

that it must be possible to establish efficient traffic operations throughout the duration of the contract”.

- 3.20 It also commented on the profitability trends for a typical contract, explaining that “costs and revenues are unevenly distributed over the contract term, which affects cash flow and profitability. Initially, the costs are high and cash flow is weak primarily because it is necessary to make significant investments in the bus fleet and it is difficult to run fully efficient operations right from the very start (see Figure 3.2). Contract management is thus a core part of the business model in order to balance mature and new contracts in the portfolio, thus ensuring both profitability and growth”. The latter strategy would not be available to smaller operators who do not have the advantage of a large portfolio of contracts.

Figure 3.2: Profitability trend in a typical public transport bus contract



Source: Nobina, Annual report 2013/2014

Definitions of performance

- 3.21 Economic performance traditionally encompasses two dimensions of efficiency of resource use, namely:
- Whether resources are being used to deliver outputs that are valued, either by the market or by society more broadly (for example, after taking account of externalities such as emissions or noise); or
 - Whether the use of resources is productively efficient in the sense of minimising inputs for a given volume of output.
- 3.22 In public transport, as in other areas of economic activity, there is no single measure of either aspect of economic performance. The first is captured to some degree by economic valuations of outputs such as journey time and emissions reductions, and the results of customer satisfaction surveys and stated preference analysis may also serve as a proxy. The second can be measured by reference to physical inputs and outputs (e.g. by calculating passenger-kilometres per vehicle-kilometre or track-kilometre) and, in principle, by reference to costs and revenues (e.g. by calculating passenger-kilometre per unit of operating cost or passenger revenue per full time employee). However, difficulties in ensuring consistency of

measurement between Member States make comparisons problematic, especially when measures are based on financial values.

3.23 Financial performance concerns the returns that those providing finance, whether in the form of debt or equity, can expect to receive from their investment, and whether the investment is secure (e.g. whether providers of debt finance can expect the loans that they make to be returned). It is measured using a range of metrics, including returns on capital and its components (debt and equity) and ratios that capture the ability of an entity to cover liabilities at a point in time (financial sustainability). In the case of private sector public transport service providers, which may be subject to capital market discipline (albeit often as part of a wider corporate grouping), these measures can be calculated relatively easily although they may not be published. However, where service providers are subject to some form of public sector ownership or control, financial performance can be difficult to measure and, even where it can be measured, the results are usually difficult to interpret. For example:

- Even where a publicly-owned transport operator is managed on a self-standing, commercial basis, it may be required to meet a publicly determined profit target that has no relation to what private investors would require;
- Such an operator may receive subsidies through a range of channels, including operating subsidies, support for capital investment and free access to infrastructure, and the financial sustainability of the operation may therefore not be determined through examination of its accounts alone; and
- An operator that is effectively managed as a department within a transport authority may not prepare separate accounts at all, and even where it does the calculation of costs and revenues may be subject to specific allocation rules, such that they cannot be compared with those of other operators organised in a different way.

3.24 In view of the lack of comparable data, and the particular difficulties of obtaining robust and consistent financial data, our analysis has focused on economic performance.

Conclusion on the definition of economic and financial performance

3.25 In the area of public transport, there is not a single definition of economic or financial performance that would “fit all” transport undertakings. The definition varies according to how inputs and outputs are measured, as well as depending on the ownership model of the operator. Results can be difficult to interpret and certainly to compare.

Objectives for public transport

3.26 In practice, there are a wide range of objectives that can often be in conflict with high levels of economic and financial performance. This was confirmed by stakeholders, who highlighted:

- “The choices made by local representatives for public transport are guided by the benefits for the community of each mode of transport on their territory. Therefore, the positive externalities of public transport, such as reduction of congestion, noise, local pollution or safety of persons must be considered, although their financial benefit is difficult to appreciate”;
- “Each performance is to be assessed in the light of the specific obligations imposed by the competent authorities. They enjoy a wide margin of discretion when defining the PSOs of their network and have therefore a very important influence on the performance”;

- “The competent authority and the operator seek to optimise the economic and financial performance of the public transport. But the main objective of public transport remains a social objective”.
- 3.27 Stakeholder views are broadly supported by academic literature that we have examined. An academic study³ notes that transport policy usually seeks to address many objectives including spatial access for poorer residents (who may not have a private vehicle), improved urban spatial use, congestion reduction in urban centres, and improved environment with a decreased share of car usage.
- 3.28 Many competent authorities state these objectives as part of their public transport and urban/rural planning management policies, but rarely provide a transparent assessment of how general policy objectives have been turned into operational objectives. Operational objectives result from choices and arbitration made by the competent authorities, based on numerous local circumstances, including access to funding as well as political choices. Authorities must prioritise some objectives over others, which explains why authorities may make different choices.
- 3.29 The study also observes that performance of the passenger public transport sector can be interpreted in different ways. It can be explained:
- In terms of cost efficiency and quality of service provided, solely a reflection of the performance of the operators and authorities (our KPIs reflect only these measures); and
 - In terms of the provision of accessibility to areas of employment, leisure and residence, as experienced by users.
- 3.30 We therefore conclude at this stage that there is often a conflict between the objectives of the competent authorities and the notion of “economic” or “financial performance” which only reflect performance against operational objectives and but do not provide an assessment of performance against the general policy objectives.

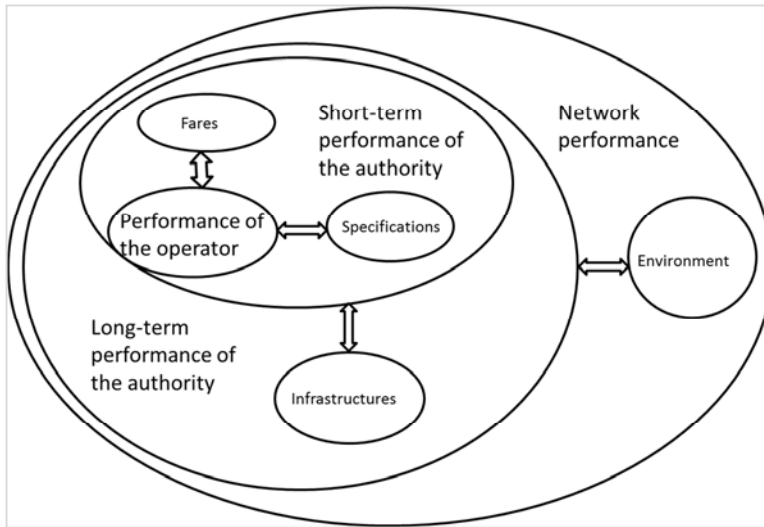
Links between operator performance and competent authority objectives

- 3.31 A study led by Baumstark⁴ in 2005 proposed that efficiency of transport systems should not be measured solely in terms of productive efficiency, but also in terms of whether demand can be accommodated by the service offer. The authors noted wide local variations, and the important role of competent authorities in defining transport services and associated operating conditions. In many cases, competent authorities are responsible for the key elements of the overall performance of their networks, such as pricing, choice of routes, definition of the levels of service and investment profiles (infrastructure and rolling stock). When operating conditions are highly prescriptive, outcomes in terms of usage are largely the result of the choices made by the competent authority.
- 3.32 The authors therefore proposed to distinguish several levels of performance, as illustrated in Figure 3.3, according to the nature of the stakeholder involved (authority or operators) and time period (short/medium term) over which performance is observed.

³ “Mesure de la performance des lignes de transport urbain”, APEROL, 2012

⁴ “Modes de gestion et efficience des opérateurs dans le secteur des transports urbains de personnes”, Baumstark, 2005

Figure 3.3: Illustration of performance and its relation with stakeholders

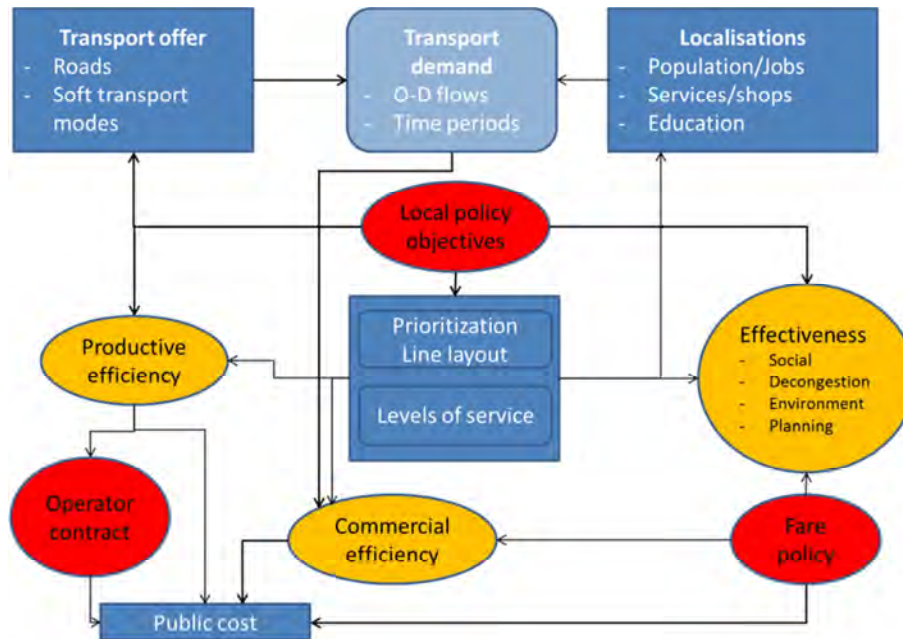


Source: "Modes de gestion et efficence des opérateurs dans le secteur des transports urbains de personnes", Baumstark, 2005

3.33 Measuring the performance of a network or of a transport service is therefore a complex exercise which cannot be based solely on financial or productivity measures. In particular, measurement must take into account the policies defined by the relevant transport authority as they drive the service definition and resulting outputs recorded.

3.34 The figure below illustrates the numerous interactions that may influence network/transport services performance.

Figure 3.4: Interactions between the factors that influence performance of a network



Source: "Mesure de la performance des lignes de transport urbain", APEROL, 2012

3.35 The upper part of the figure highlights the fact that a network/transport service operates within a territory with defined characteristics. There is little that the operator can do to influence these characteristics which tend to be a “given” framework. The lower part highlights the importance of political objectives, ranging from fares policy through to the approach to securing the operator. All these factors influence the economic and financial performance of the network.

Conclusions on performance and objectives for public transport

3.36 Assessing the performance of public transport cannot be done in isolation and only focussing on the outputs achieved. Performance of a public transport system should be assessed against the operational objectives given to the operator by the competent authority but also with some consideration of the general policy objectives of the authority. The performance of a transport system appears to be the performance of a pair: the authority and the operator.

Factors affecting the performance of public transport

3.37 Given the importance of economic, social and political objectives and the different weight placed on different factors across Member States, it is difficult to make robust comparisons between public transport operations in different countries, or even between operations within the same country, region or city. Drawing conclusions from such comparisons is further complicated by the impact of various exogenous factors, including the level of economic development (e.g. the level and distribution of household income), the market environment (e.g. the level of car ownership and preferences for travel by private car) and geographical and demographic factors (e.g. topography and the distribution of the population).

3.38 The table below summarises the range of factors likely to affect economic and financial outcomes as well as the extent to which public transport operations meet broader policy objectives. Note that we use the term exogenous to mean factors that are external from the perspective of decision-makers, whether public or private, within the transport sector.

Table 3.4: Range of factors affecting performance

Factor category	Specific factor	Exogenous	Endogenous
Economic development	Wealth of the population, state of the local and national economy	✓	
	Origin-destination flows around areas of residence and areas of employment and leisure	✓	✓
Market environment	Visitor numbers, types and transport needs	✓	✓
	Car ownership trends and environmental awareness of the population	✓	✓
	Attitude of the local population towards public transport and the image of public transport	✓	✓
Geography	Location and distance between centres of population	✓	
	Topology	✓	
Demographic factors	Population density and distribution	✓	
	Age distribution of population	✓	
General policy environment	Urban and rural planning policy	✓	

Transport policy environment	National and local taxation	✓	
	Governance and effectiveness of the transport authority		✓
	Level and type of fares, availability of social fares, fare policy on interchanges, employee subsidy schemes, and availability of integrated fare policies		✓
	Broader transport policy, e.g. in relation to congestion charging, rural accessibility, parking		✓
Quality of public transport management and delivery	Network design, such as design of the transport lines, type of lines, length and spacing between stops		✓
	Inherited infrastructure and vehicle assets	✓	
	Internal organisation and cost efficiency of the operator(s)		✓
	Quality of the supply offer, such as type of transport modes on offer, service frequency, accessibility, average commercial speed, type vehicle, age, comfort and information provided		✓

Source: Steer Davies Gleave

View of stakeholders consulted

3.39 A significant number of the stakeholders consulted confirmed that many factors influence performance. They quoted a very large number of factors including:

- The urban density (population/jobs/schools/services) around the stops served;
- The social policy;
- The demography;
- The spatial competition between private vehicles (such as cars) and public transport related to streets and parking issues;
- The environmental conditions;
- The cost of labour (collective and company agreements);
- Traffic conditions which also influence the cost of production;
- The quality and age of the infrastructure;
- The political choices made and the political priorities defined by the political authorities (the extent to which the political authorities are willing to prioritise public transport);
- The fiscal incentives and disincentives for private car use and public transport uptake;
- The politically/socially accepted level of prices, taxation of fuels, VAT rates, taxation of company cars, deductibility of commuting travel expenses;
- The network design and inter-modality requirements;
- The pricing policy in use;
- The urban planning (including the involvement of the operator in the definition of this planning);
- The rolling stock selected or specified;
- The policy on fraud control;
- The degree of integration between transport modes;
- The continuity of the financing;
- The structure of the contract, risk allocation in the contract, fares policy;

- The corporate performance and governance;
 - The ability of those responsible for procuring and for providing the service to understand and respond to consumer needs and aspirations;
 - The degree to which the product, tariff and distribution policy are designed to align with customer needs;
 - The public passenger transport market (diversity of operators on the supply side, for instance);
 - Productivity levels;
 - Ridership and occupancy rates;
 - The direct and indirect costs of operations;
 - The wealth of the society, particularly given that public transport is often perceived by many as an inferior mode relative to private car transport in many European countries;
- 3.40 Some stakeholders commented that the factors that determine economic and financial performance of the local public transport could be divided into different categories, based on where the responsibilities lie: with the competent authorities, with the operators and their management or with the investment policies chosen.
- 3.41 Nonetheless, explanations were provided to explain overall public transport trends in some cases, for example:
- “The main factor determining public transport of passengers by bus in Bulgaria is the heavily reduced passengers flow caused by the shrinkage of the economy, the spread of the migration processes from smaller to bigger cities, and last but not least the use of a larger number of personal vehicles”;
 - A “long tradition of public transport in the Czech Republic”;
 - Finland: “Low population density affecting potential demand, long distances, relatively low number of service providers, labour law provisions, previous monopolies”;
- 3.42 Pan-European stakeholders confirmed that factors of performance could not be identified at national level but must instead be assessed “in the light of the specific obligations imposed by the competent authorities. They enjoy a wide margin of discretion when defining the PSOs of their network and have therefore a very important influence on the performance”.
- Findings from academic studies*
- 3.43 Stakeholders also pointed out to academic research related to performance in public transport. Didier van Velde from Delft University pointed out that a key factor was “adequate governance of the public sector itself” and that it was “more important to focus on efficiency of the authority than on the use or not of competition in disciplining the operator”.
- 3.44 Anne Yvrande-Billon indicated that the results of various empirical tests and studies (reference provided) indicate that the key drivers of public transport performance relate to the organisational and regulatory framework of the transport system. They include:
1. The ownership structure of the transport operator (state-owned company vs. private operator);
 2. The contractual choices of the authority in charge of procurement (cost plus vs. fixed price contract; contract duration, etc.);
 3. The skills of the competent authorities in procurement;
 4. The characteristics of the procurement procedure (e.g. transparency of the procedure, discretionary power of the procuring authority, etc.); and

5. The degree of competitiveness of the environment (number of bidders, degree of contestability, etc.).

Conclusions on the factors affecting the performance of public transport

- 3.45 The analysis undertaken and supported by the views of stakeholders does not suggest a defined and definitive number of criteria that may determine performance. Instead the analysis points towards a large number of individual factors.
- 3.46 It is not easily possible to identify “the key factors” explaining performance in public transport. Many external factors and local circumstances are not under the control of the parties in charge and a number of other factors also depend on the policy choices made by the competent authorities.

Performance analysis

- 3.47 We have presented above the issues associated with performance assessment. In the following section we present our overall findings on performance based on the research and analysis undertaken for the country fiches. However, the evidence gathered did not prove to be very conclusive.
- 3.48 We also undertook a case study analysis for Sweden’s Södermanland County, which provides particularly detailed, route-by-route information (not available elsewhere). Based on this ‘bottom-up’ cross-sectional analysis, we tried to identify the factors that may determine the economic and financial performance of individual routes.
- 3.49 We then present the findings of the comparative analysis of the KPIs we collected at Member State level. Based on this ‘top-down’ cross-sectional analysis, we try to see if factors that may determine economic and financial performance can be found.

Country fiches

Member State fiches

- 3.50 The Terms of Reference required that the study provides an analysis of the economic and financial situation of the public transport sector across Europe.
- 3.51 We have undertaken some research and established country fiches (as set out in Appendix B) covering each of the EU Member States. The purpose of these fiches has been to gather in one place the knowledge that we have found related to the institutional framework for transport, key statistics at national level encompassing traffic and operational data, financials outputs and passenger satisfaction. The fiches also include the analysis of one or two networks, including, where possible, rural networks. At a network level we have also generally been able to provide an analysis of the underlying factors of performance.
- 3.52 Key findings from the Member States fiches are displayed in paragraphs 3.3 to 3.13 of this Chapter.

Case study analysis

- 3.53 The case study described below is based on an analysis of the detailed report by Sweden’s Södermanland County (Sörmlands län) on operating, cost and revenue data at the level of individual bus routes. This report was one of the most comprehensive of the reports submitted by authorities under Article 7.1. We used this data to investigate the variability of

measures of “performance” within a single competent authority and, in many cases, under the same contract with the same contractor using the same depot and vehicles.

3.54 As summarised in Figure 3.5 to Figure 3.7, we found average variations of:

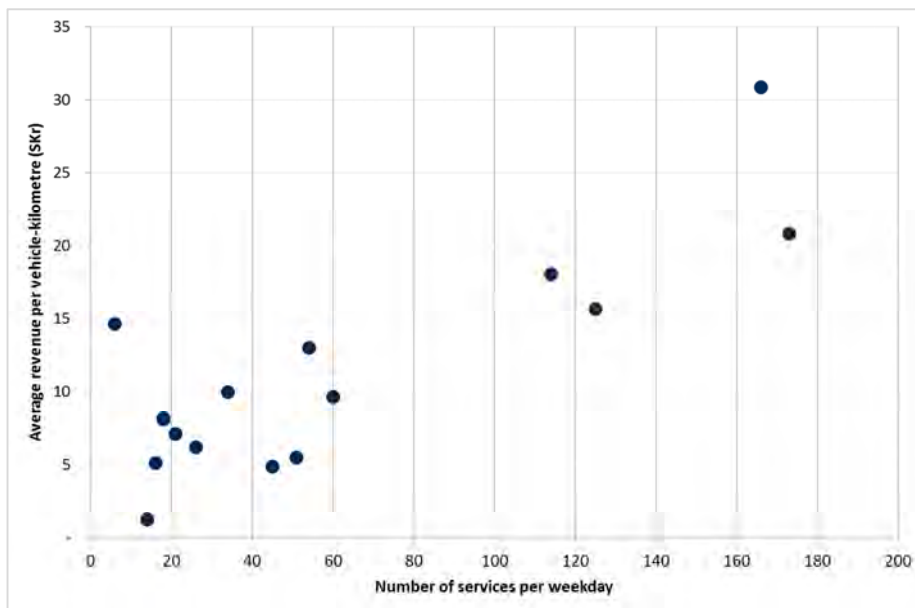
- 25 to 1 in average (estimated) revenue per vehicle-kilometre;
- 18 to 1 in average kilometres per vehicle per year;
- 4 to 1 in average cost per vehicle-kilometre.

3.55 These variations suggest that, even within a single Member State, or competent authority, or contract with an operator, there may be enormous variation in the calculated KPIs. On inspection, the reasons for this variation are largely self-evident, as we discuss in turn below on a couple of examples.

Average revenue per vehicle-kilometre

3.56 Figure 3.5 illustrates the wide variation in average revenue per vehicle-kilometre. We caveat that revenue appears to have been estimated as a fixed amount per passenger journey and that different assumptions would result in a different allocation of revenue to different routes.

Figure 3.5: Sörmlands län: average revenue per vehicle-kilometre by route length



Source: Sörmlands län, Steer Davies Gleave analysis, sample of 16 lowest-numbered bus routes, revenue appears to have been estimated as a fixed amount per passenger or school journey, see text for details

3.57 However, the chart suggests that revenue per vehicle-kilometre is highest on routes with frequent services, and this is consistent with the inevitable variation of demand between routes:

- On routes with low demand, it may be considered essential to provide a minimum service frequency, whether a bus every two hours or every hour, or a pattern such as early bus, bus to school, bus to work, bus from school, bus from work, evening return bus. This means that the level of provision may be fixed, to preserve social standards, in a way which results in only one of two passengers per bus.

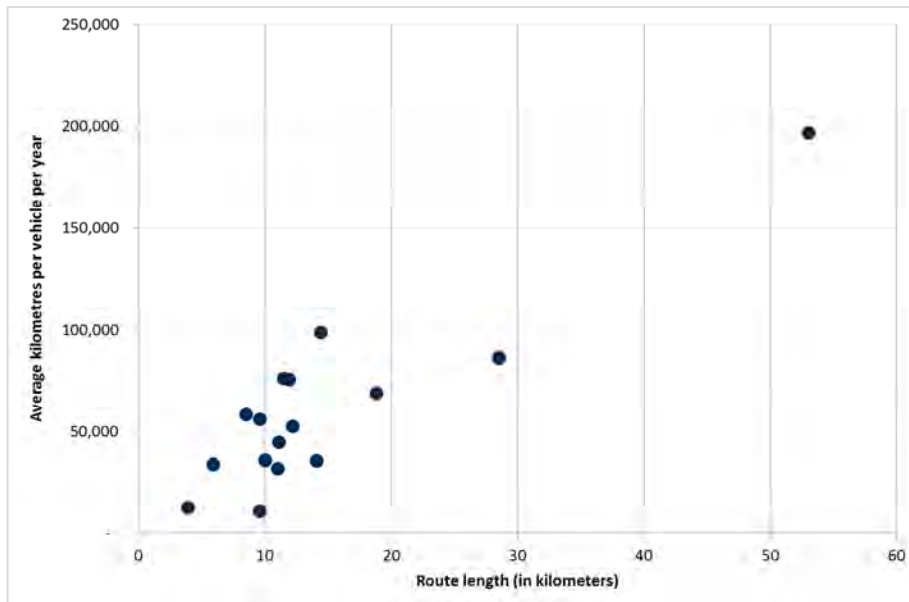
- On routes with high demand, in contrast, it may be possible to vary the frequency of service to reflect the pattern of demand at different times of day. The most frequent route shown, for example, have over 80 services each way per weekday, equivalent to more than one every fifteen minutes over a 20 hour day. In practice, we would expect that the frequency varied over the day, possibly with intervals of 30, 20, 15, 12, 10, 7½ and 5 minutes at different times, to provide a minimum frequency at quiet times and sufficient but not excessive capacity at busy times.

3.58 Figure 3.5 illustrates how a policy decision by the competent authority, such as to provide a minimal level of service to a particular community, may directly dictate that the service appears to have very poor operational KPIs, even though it may be highly valued by the passengers.

Average kilometres per vehicle per year

3.59 Figure 3.6 illustrates the wide variation in kilometres per vehicle per year and shows how this is largely a function of route length.

Figure 3.6: Sörmlands län: average kilometres per vehicle per year by route length



Source: Sörmlands län, Steer Davies Gleave analysis, sample of 16 lowest-numbered bus routes, see text for details

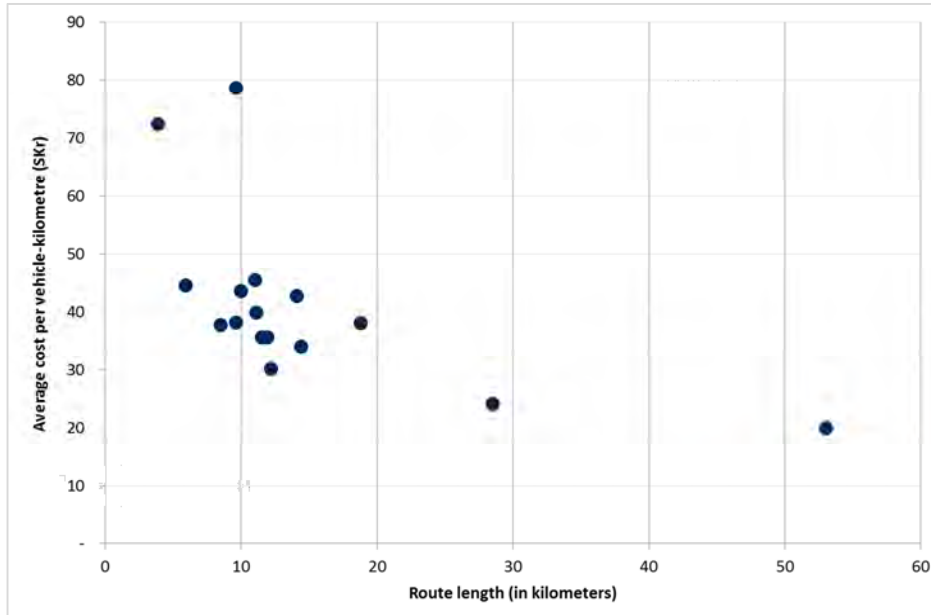
3.60 The longest route in the sample, over 50 kilometres, can be operated on relatively high speed road, enabling a bus making five round trips, or ten single journeys a day, to cover almost 200,000 kilometres in a year. In contrast the shortest route in the sample, less than four kilometres long, is operated by vehicles covering only 25,000 kilometres in a year. In practice, on a remote route, requiring only a relatively infrequent service, vehicle and driver may spend considerable time waiting at the ends of the route, but with no productive opportunity to provide another service on an adjacent route.

3.61 This suggests that an extremely wide variation in average kilometres per vehicle per year may be explained purely by details of the route length, the average speed achievable on it, and the extent of “dead” time at the ends of the route.

Average cost per vehicle-kilometre

3.62 Figure 3.7 illustrates the wide variation in average cost per vehicle-kilometres and shows how this is also largely a function of route length.

Figure 3.7: Sörmlands län: average cost per vehicle-kilometre by route length



Source: Steer Davies Gleave analysis of Sörmlands län data, sample of 16 lowest-numbered bus routes, see text for details.

3.63 Most of the costs of bus operation, including vehicle ownership and crew costs, are broadly time-based, and so unit costs fall with average speed. The Figure shows that average costs per vehicle-kilometre vary from around 20 SKr on the longest route in the sample to up to 45 SKr for most short routes and nearly 80 SKr on two of the shortest routes.

Conclusion on the analysis of the Sörmlands län case study

3.64 If an analysis of KPIs is undertaken without any consideration of local issues (such as the rural nature of the bus operations in this case), the wrong conclusions can be reached. For instance variations in average costs per vehicle-kilometres may in some cases be more dependent on route length than on the cost efficiency of the operator.

KPI analysis

Choice of KPIs

3.65 The Member State fiches include a number of Key Performance Indicators (KPIs) that were agreed with the Commission at the start of the study and that we have attempted to estimate at the national level and for the networks studied. Table 3.5 below shows the list of these KPIs.

Table 3.5: Key Performance Indicators (KPIs)

KPI	Indicators
Passenger-kilometres per vehicle-kilometre	Indicative of the average load on each vehicle/unit/train
Vehicle-kilometres per staff member	Indicative of the vehicle/unit/train activity for each person directly employed by the operator, and not subcontractors
Fare revenue per vehicle-kilometre(€)	Indicative of the average revenue for each vehicle/unit/train kilometre
Operating cost per vehicle-kilometre(€)	Indicative of some elements of the costs or providing each vehicle/unit/train kilometre
Proportion of operating cost covered by fares	Indicative of the proportion of costs reported as “operating costs” covered by fares paid direct by passengers
Proportion of operating cost covered by subsidy	Indicative of the proportion of costs reported as “operating costs” covered by subsidies provided by or through a competent authority
Operating speed (kilometres per hour)	Indicative of the average speed of public passenger services

Source: Steer Davies Gleave analysis, note that “vehicle” may refer to a vehicle, unit or train providing a service

3.66 Given the bottom-up analysis of the bus routes in Sörmlands län set out above, we would in any case expect that KPIs calculated top down from data on whole networks or Member States would be an average of a wide range of route-level KPIs, each of which was determined by the policy and social objectives of the relevant competent authorities. Unless the mix of features such as route length, density and passenger loads was identical in each competent authority and Member State, there would be no prima facie reason to expect any consistency or comparability between KPIs of this type.

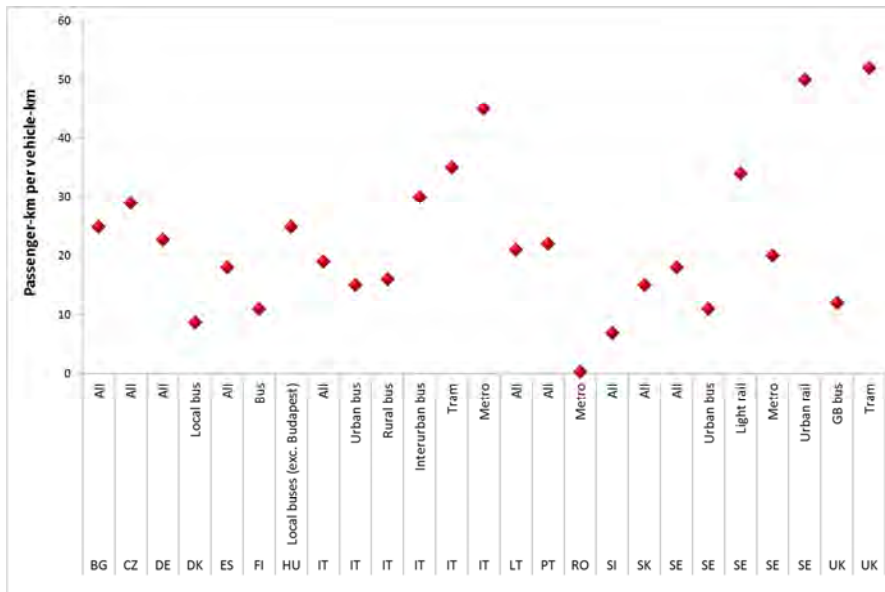
3.67 Nonetheless, we have estimated as many of these KPIs as we could and discuss each in turn below.

Passenger-kilometres per vehicle-kilometre

3.68 Figure 3.8 shows our estimates of passenger-kilometres per vehicle-kilometre where we have been able to estimate them from data available. We note that many competent authorities do not directly measure passenger-kilometres so that, even where these are reported, they may be based on passenger journeys, or ticket sales, and an assumption regarding the average journey length.

3.69 We observe that the KPI varies over a wide range, with the highest values generally being absorbed on urban metro systems which may have space for up to 1,000 passengers per train.

Figure 3.8: KPI: Passenger-kilometres per vehicle-kilometre



Source: Steer Davies Gleave analysis, note that passenger-kilometres may be estimated from passenger journeys

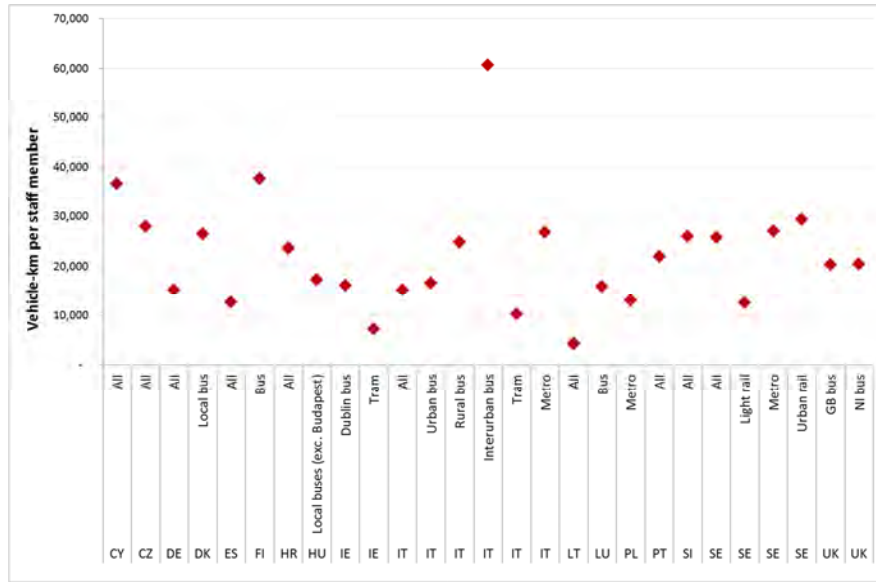
Vehicle-kilometres per staff member

3.70 Figure 3.9 shows our estimates of annual vehicle-kilometres per staff member where we have been able to estimate them from data available. Note that:

- Vehicle-kilometres may relate to single vehicles, units or whole trains; and
- Staff numbers are based on the number of staff directly employed by the operator, where this is available, and do not include those employed by subcontractors, who cannot normally be identified.

3.71 We observe that there is a wide variation in the KPI, with the highest apparent values being for interurban bus services, where a single driver can cover several hundred kilometres per shift.

Figure 3.9: KPI: Annual vehicle-kilometres per staff member

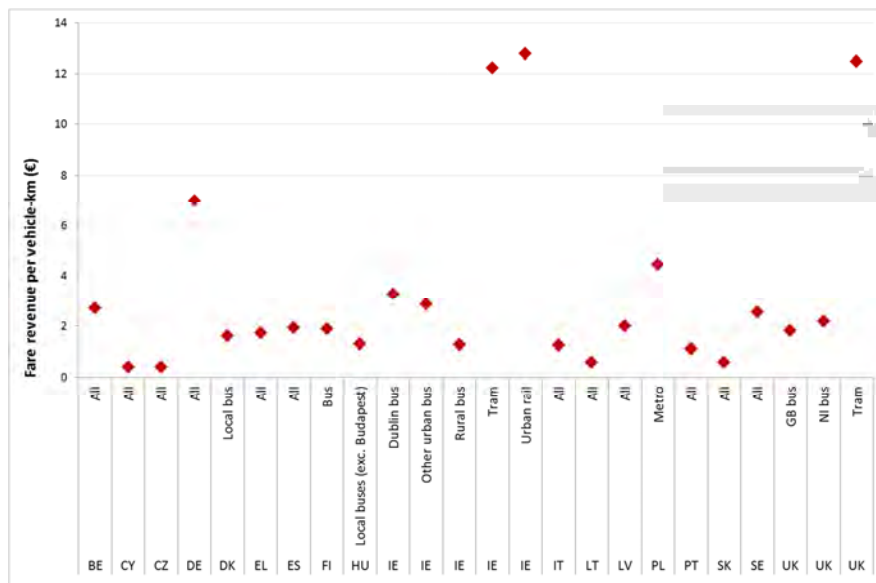


Source: Steer Davies Gleave analysis

Fare revenue per vehicle-kilometre

- 3.72 Figure 3.10 shows our estimates of fare revenue per vehicle-kilometre in euros. Note that competent authorities allocate revenue to services on a number of different bases, including in some cases as a fixed amount per journey, so the KPI cannot be calculated on a consistent basis.
- 3.73 However, we note that the highest apparent values of the KPI relate mainly to urban rail and tram systems which have a relatively high carrying capacity per vehicle-kilometre.

Figure 3.10: KPI: Fare revenue per vehicle-kilometre (€)

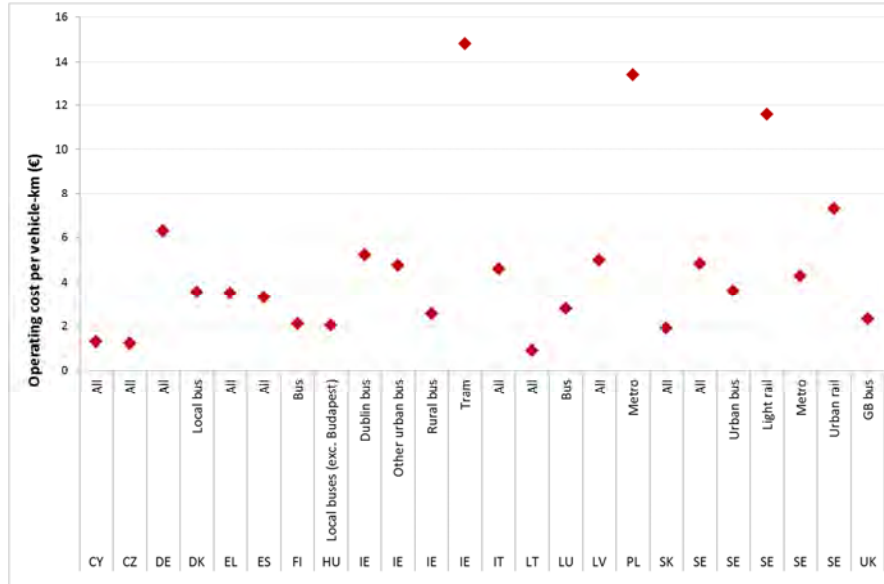


Source: Steer Davies Gleave analysis

Operating cost per vehicle-kilometre

- 3.74 Figure 3.11 shows our estimates of operating cost per vehicle-kilometre in euros. Note that competent authorities use different definitions of operating costs, which may or may not include any infrastructure costs of the costs of ownership and provision of vehicles.
- 3.75 The highest operating costs are generally on urban tram or metro systems.

Figure 3.11: KPI: Operating cost per vehicle-kilometre (€)

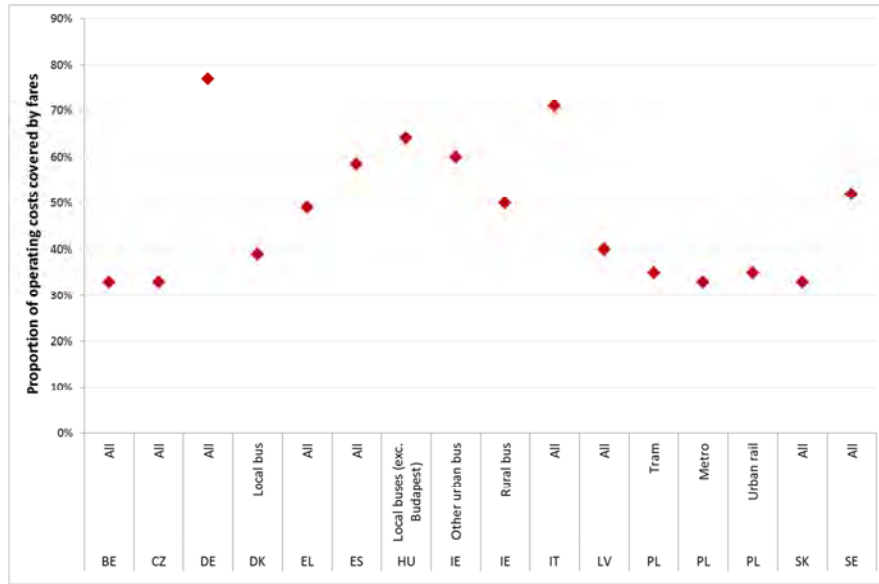


Source: Steer Davies Gleave analysis

Proportion of operating cost covered by fares

- 3.76 Figure 3.11 shows our estimates of the proportion of operating cost covered by fares. Note that:
 - Competent authorities use different definitions of operating costs, which may or may not include any infrastructure costs of the costs of ownership and provision of vehicles.
 - Competent authorities use different definitions of passenger revenue, which may include items other than fares, or may exclude items such as direct payments to provide free or reduced cost travel to certain classes of passenger.
- 3.77 A major determinant of the proportion of costs covered by fares is the fare policy of the competent authority or the national, regional or local political body which determines its policy.

Figure 3.12: KPI: Proportion of operating cost covered by fares



Source: Steer Davies Gleave analysis

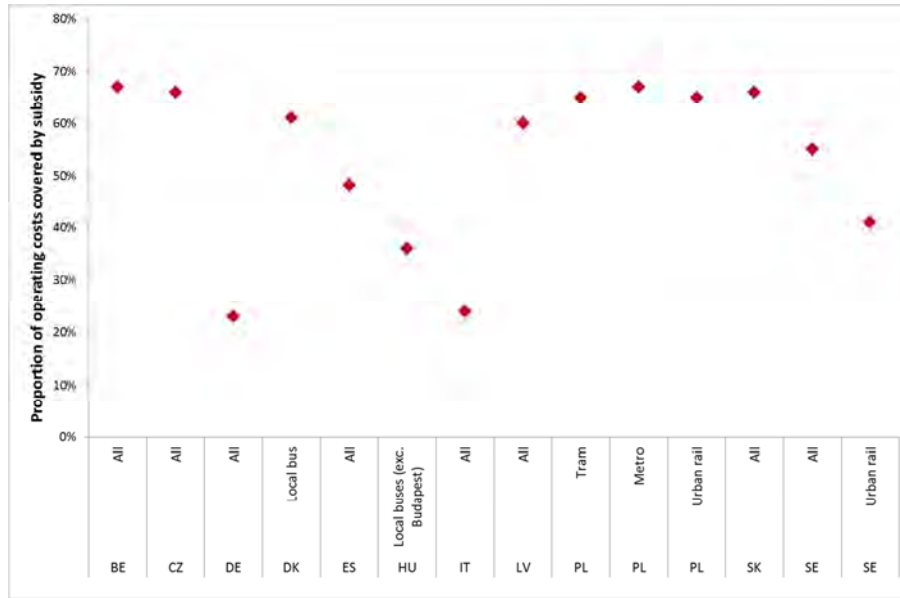
Proportion of operating cost covered by subsidy

3.78 Figure 3.11 shows our estimates of the proportion of operating cost covered by subsidy. Note that:

- Competent authorities use different definitions of operating costs, which may or may not include any infrastructure costs or the costs of ownership and provision of vehicles.
- Competent authorities use different definitions of subsidy, which may or may not include tax allowances or capital funding from different tiers of government, payments to provide free or reduced cost travel to certain classes of passenger, or a range of “free” inputs made available to the competent authority or the operator at less than their full cost.

3.79 There is a wide variation in the apparent subsidy levels, reflecting differences in both policy and calculation methods.

Figure 3.13: KPI: Proportion of operating cost covered by subsidy



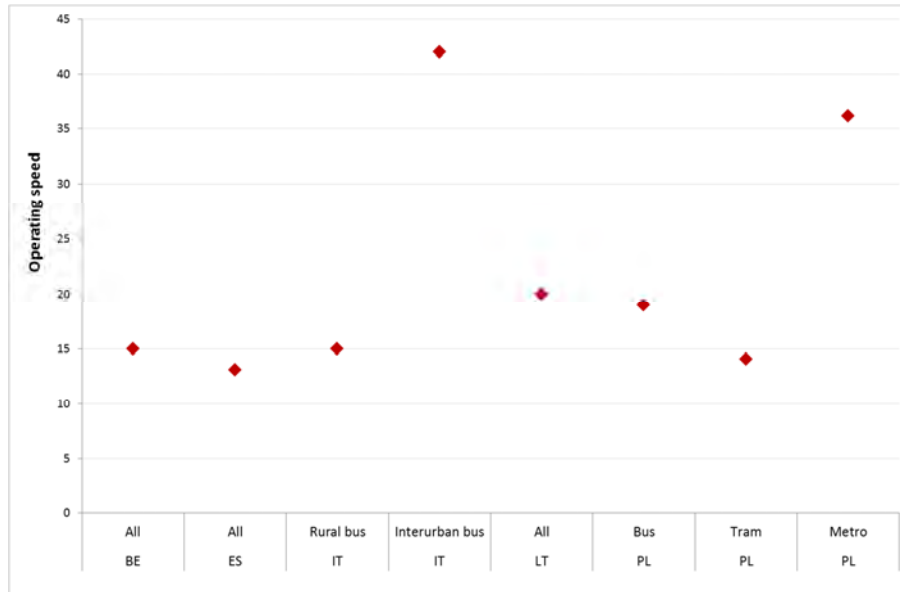
Source: Steer Davies Gleave analysis

Operating speed (kilometres per hour)

3.80 Figure 3.11 shows our estimates of the average operating speed in kilometres per hour of the public passenger services provided.

3.81 The average speed is highest on interurban bus services.

Figure 3.14: KPI: Operating speed (kilometres per hour)



Source: Steer Davies Gleave analysis

Conclusions on the analysis of KPIs

- 3.82 Given the limited information available, it is only possible to estimate KPIs for a limited number of the Member States we have examined, and not possible to calculate them on a consistent basis. The same finding applies to networks or transport services considered in the country fiches.
- 3.83 Whilst KPIs can be compared, it remains nonetheless particularly difficult to draw meaningful conclusions from these comparisons or, as a result, on the state of the performance of the individual transport systems without undertaking much more detailed – and focussed analysis beyond the scope of this study.
- 3.84 As Table 3.6 summarises, it would also be desirable to source sufficient data to adjust for these and a range of other factors to identify any “underlying” measure of productivity and performance. However obtaining this underlying information is likely to be complex and lengthy.

Table 3.6: Factors which may influence KPIs

Factor	Sub-factor	Passenger-kilometres per vehicle-kilometre	Vehicle-kilometres per staff member	Fare revenue per vehicle-kilometre	Operating cost per vehicle-kilometre	Operating costs covered by fares	Operating costs covered by subsidy	Operating speed
Economic and demographic	Urban density may determine network design, vehicle size and hence cost	✓	✓	✓	✓		✓	✓
	Fares may need to be corrected for local costs or incomes			✓		✓	✓	
	Costs may need to be corrected for local costs or incomes				✓	✓	✓	
Public choices	Fares are often determined by policy, inertia or consensus			✓		✓	✓	
	Contracting and subcontracting may conceal effective staff numbers		✓					
	Old infrastructure may constrain vehicle size and operating speed and hence costs	✓	✓	✓	✓	✓	✓	✓
Inherited infrastructure	New infrastructure may have higher depreciation and financing costs				✓	✓	✓	
	Infrastructure is sometimes a “free input” with depreciation excluded				✓	✓	✓	
Other factors	Passenger-kilometres are not always estimated	✓						
	Fares are often not allocated to modes			✓		✓	✓	
	Contractors rarely reveal actual operating costs				✓	✓	✓	

Source: Steer Davies Gleave analysis

- 3.85 As a specific example, rather than estimate vehicle-kilometres per staff member, and then normalise for mode and vehicle size, the effect of subcontracting, and the constraints on

operating speed imposed by old infrastructure, it might be more effective to identify the specific benchmark of hours in service per employed driver, which measures directly how efficiently bus, tram or train drivers are used. This KPI, however, would need to be estimated on the basis of specific data on timetabled service hours and numbers of drivers employed, which for most operators, is unlikely to be readily available.

- 3.86 However, as the analysis of Sörmlands län shows, there is no reason to suppose that public passenger services designed for different communities with different objectives would ever result in directly comparable operational KPIs, except coincidentally where the overall mix of objectives and services resulted in a similar average.

Conclusions

- 3.87 The literature on performance suggests that measures of economic and financial performance would ideally take into account a wide range of measures:

- The objectives of the competent authorities;
- The geography and demography of the area;
- Policies on land use, available transport infrastructure and services;
- Direct measures of the operational efficiency of delivery of the services; and
- Direct measures of satisfaction as reported by residents and passengers.

- 3.88 An extremely wide range of exogenous and endogenous factors are involved in the planning and operation of passenger transport services, meaning that any measures of performance are highly subject to a local context, and should be assessed in the light of the specific obligations imposed by the competent authority, since authorities have some discretion when defining PSOs and corresponding performance requirements.

- 3.89 We note that networks or transport services that perform best share a number of factors making for high levels of operational efficiency such as dense markets with adequate spatial distribution of demand, constraints on car use, opportunities to exploit economies, good quality infrastructure and other assets, etc. These networks also benefit from authorities who have the correct skills and tools and are able to lead transport policies highlighted by stakeholders as effective for improved performance of public transport, such as:

- Policy encouraging the use of public transport;
- Effective monitoring of customer satisfaction; and
- Positive and effective relationship between transport authority and service provider, including transparency.

- 3.90 In addition, there may be some merits of doing time series analysis in order to assess changes in performance over time within the same network or transport service rather than trying to compare across. With time-series, it may become slightly easier to monitor evidence of improvements over time (provided that most exogenous variables stay stable), and understand, after detailed analysis, whether such improvements could be attributed to particular explanatory or success factors.

4 Background information of the provision of public transport services

Introduction

- 4.1 In this chapter we present some basic notions of public transport markets and in a second part of this chapter we review some of the key provisions and requirements of Regulation 1370/2007.

Key aspects of public transport operations

Ownership and management of transport operations

- 4.2 Transport services are provided under a wide range of ownership, management, procurement and regulatory arrangements, often determined by legacy practice as well as new policy initiatives designed to deliver improved services through new investment and competition for the market. For example, established metro or tram services are often provided directly by municipal authorities, while new metro, tram or light rail lines may have been introduced under Public Private Partnership (PPP) arrangements in which the private sector initially finances some or all of the required infrastructure investment.
- 4.3 Examples showing the range of approaches applied in different cities and/or networks and reflecting in some cases historic circumstances are provided below. These serve to illustrate that, although public transport infrastructure is often publicly owned, there are nevertheless various approaches to its management involving more or less private sector involvement.

Public sector owned infrastructure

- 4.4 **Public sector infrastructure and public sector management:** Rotterdam (Netherlands): In 2013 the Municipality and Rotterdam City Region jointly made a direct award to municipally-owned RET for the operation of the tram network and metro services for a 12 year term to 2026. The approach is permitted under the 2012 “Wet Aanbestedingsvrijheid OV grote steden”, which provides freedom for such procurement in the case of large city public transport provision. The justification given for the direct award is the desire to have a single organisation responsible for operations and infrastructure maintenance.
- 4.5 **Public sector infrastructure and separate contract managing agent:** Rome (Italy): the former bus and tram contract for bus and tram services in Rome was tendered by the Municipality of Rome and won by the incumbent, the city-owned ATAC. The most recent contract was the subject of a direct award to ATAC. However, the monitoring of the service was the responsibility of a public agency (a branch of the city government “Roma servizi a la Mobilità”) rather than the Municipality of Rome itself. A similar structure applies to the integrated bus and tram network in Milan. This model is also used in Budapest and in London.

4.6 **Public sector infrastructure and private sector management:** there are many examples of this type of operating environment.

- Lyon (France): The metro, tram and bus network in Lyon is subject to a management contract (public service delegation). The authority, Sytral, awarded the contract to TCL (Keolis) following competitive tendering. The contract is for a period of 6 years, and began in January 2011. Public sector infrastructure and private sector management is particularly prevalent in France (outside Paris) where, in 2013, 90% of the Authorities delegate the management of public transport networks to the private sector.
- Utrecht (Netherlands): Utrecht is one of the first examples of a fully integrated bus and light rail contract let to the private sector. The regional authority Bestuur Regio (BRU) (Greater Utrecht Authority) invited competitive tenders for the operation of a tram line (10 km, 26 vehicles) and bus network (300 buses) in and around Utrecht. The incumbent operator was Connexion, which had originally obtained the contract by direct award. The new 10 year operating contract was awarded to Qbuzz.
- Sheffield (UK): Sheffield Supertram was originally operated by the public sector but the concession was sold to Stagecoach at the end of 1997 and now extends to 2024. Stagecoach acquired a wider network of commercial (deregulated) bus services in the city in 2005 and has since added three SupertramLink feeder bus services in Sheffield.

Private sector owned infrastructure

4.7 **Private sector infrastructure and public sector operations:** In Belgium the light rail systems are operated by publicly-owned regional Public Transport Authorities (De Lijn in Flanders, MIVB/STIB in Brussels and TEC in Wallonia) under direct award contracts. A number of tram lines have been built under a PPP-type contract, where the entire infrastructure including signalling, track and depots are supplied and maintained by the concessionaire, typically for a period of 25 years. The contract may also require supply of trams. The public sector operator is then responsible for the operations.

4.8 In principle, contracts of this kind involve a substantially higher degree of risk transfer than a conventional operating contract, with the private sector service provider taking risk on the construction, renewal and maintenance of the infrastructure as well as the associated financing risk. Where the public sector is responsible for operations, the private sector must also manage the interface risk relating to the impact of operations on infrastructure maintenance and renewals. An important issue for the study is how the limits on contract length specified by the Regulation have influenced the prevalence and form of this kind of contractual arrangement.

4.9 **Private sector infrastructure and private sector operations:** The tramway lines opened in 2004 in Barcelona have been developed under a particular BOT (Build-Operate-Transfer) scheme. In 2000 under the ATM (Public Transport Authority in the area of Barcelona), the contract was awarded to a consortium made of the manufacturers, financing groups and operators. The contract for a period of 25 years, encompasses the construction and the operation of the tramway. It incorporates various elements of commercial and industrial risks as well as quality commitments. Other tenders have been made with a similar model (such as the Metro of Sevilla and Málaga).

Compensation payments

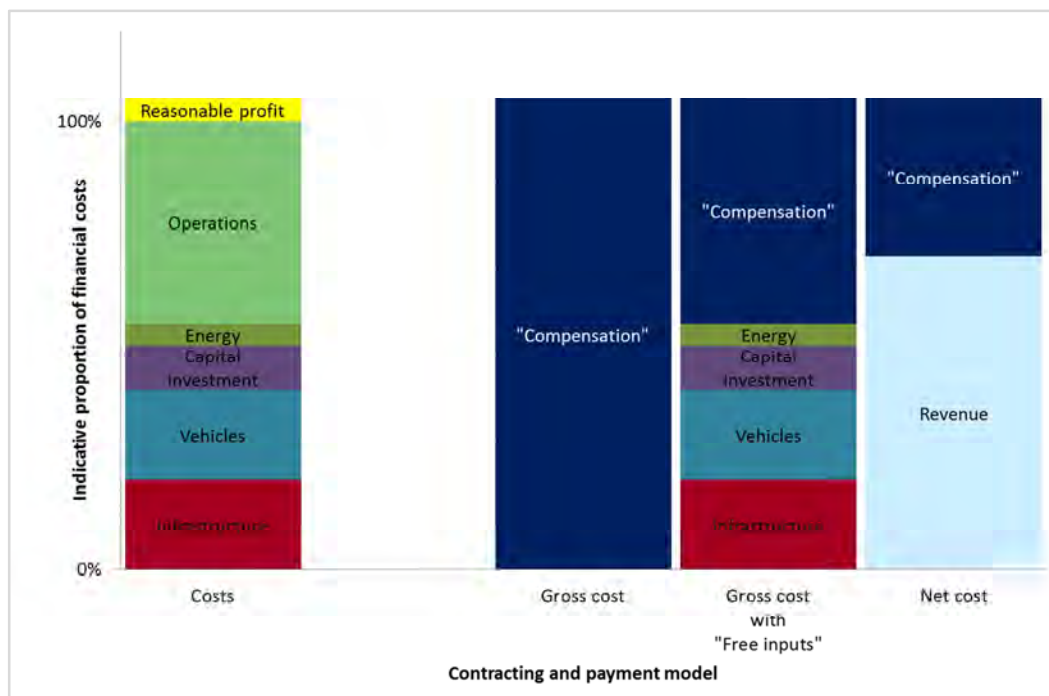
4.10 There are two main types of compensation payments in use in public passenger transport: gross costs and net costs. In practice, there are some other variations to these two approaches

that may be used by competent authorities for compensation payments. The Regulation does not seek to limit these but its aim is to ensure transparency as well as a fair transfer of risk and compensation between parties.

4.11 Before detailing each approach to compensation payments below, we illustrate in Figure 4.1 the approaches we have detailed.

- On the left of the Figure, we have represented on an illustrative basis, the typical costs which may be associated with provision of a public service contract, including road or metro infrastructure, vehicles, capital investment, fuel and other operating costs including staff.
- On the right, we show a number of different ways in which the PSO compensation may be calculated.

Figure 4.1: Calculation of compensation payments: illustrative examples



Source: Steer Davies Gleave

Gross cost

4.12 In this type of contract, the Operator is paid for the production of services by the competent authority based on an agreed pricing structure. The volume and nature of the services is determined by the competent authority. In these contracts, the passenger can be viewed as the customer of the competent authority, and the Operator is a sub-contractor or agent. All rights to the customer, revenue and associated information generally belong to the competent authority.

4.13 It is the simplest compensation mechanism where the competent authority pays the public service operator all the financial costs, plus a reasonable profit as provided for in Article 6 and the Annex, but where the authority collects the revenue for the operation of the service.

4.14 Gross cost contracts are widely used by transport authorities in large urban areas where tickets, typically valid for any journey within a fixed period of validity, are not specific to a particular route, public service contract or even mode.

4.15 Rather than attempt to apportion revenue to modes or individual public service contracts, competent authorities may instead procure transport services on a gross cost basis and set fares, sell and inspect tickets and retain revenue themselves.

Gross costs with “free inputs”

4.16 The compensation payments paid by competent authorities may, however, be reduced if they, or other authorities, provide some or all inputs to the contract either free or at discounted rates. Some examples of this include:

- Competent authorities which pay rail infrastructure charges direct to the infrastructure manager rather than via the public service operator, or which provide infrastructure such as bus priority measures or guided busways free of charge;
- Competent authorities which provide rail or road vehicles free of charge to the operator, either from their own fleet, or by procuring these directly from another party;
- Competent authorities, or other urban, regional or national authorities, providing capital investment in infrastructure such as bus stops, stations, depots outside the framework for compensation defined in the public service contract; and
- Local and national schemes to provide subsidised energy for public service operations, in the form of diesel fuel for bus services or traction electricity for tram, metro or urban rail services.

4.17 Any of these types of contribution to costs will reduce the costs to be borne by the public service operator and hence the gross cost compensation required.

Net cost

4.18 Another approach to the calculation of compensation payments is on the basis of net costs, with the public service operator retaining revenues from the sale of tickets. In this type of contract, the public service operator is paid an agreed amount on the basis of the expected difference between the revenue and the total operating costs.

4.19 All revenues, information and customer relationship belong to the public service operator. The Transport Authority is involved in a societal role such as assuring service quality or providing funds to modify the volume, type or price of services that would otherwise have been provided commercially.

4.20 A net cost compensation system may occur with an internal operator collecting and retaining all ticket revenue, or through competitive tendering in which each bidder must forecast the ticket revenue as part of their bidding process. Therefore, the public service operator carries both the production risk and the revenue risk.

4.21 In the case of competitive tendering, it is often assumed that the competitive process will mean that the compensation requested will result in only a “reasonable profit”, given the commercial risk involved, although the authority retains its obligation to ensure that there is no overcompensation.

4.22 In practice, many net cost contracts have variants similar to those for gross cost contracts. Any substantial increase in revenue above the target will usually be subject to a revenue sharing agreement so that the public service operator does not receive excessive windfall gains.

Equally, some protections will usually be offered by the Transport Authority against high key-cost inflation, or external disruptions to the operating environment.

Risks and risk allocation between the operator and the competent authority

- 4.23 The allocation of risks in a public service contract is a point that is particularly important. The objectives of risk allocation mechanisms are usually to:
- Allocate risk efficiently between the authority and the operator, so that the operator is only at risk for factors that it can manage (such as the collection of ticket revenue), and the authority retains risk for other factors (such as overall performance of the economy, inflation, etc.). In principle, risk should be assigned to the party best able to influence or mitigate it. If transport operators are required to carry risks that they cannot control, they will tend to increase their price to reflect the degree of risk; and
 - limit the total amount of risk transferred to the operator: operators may be unwilling or unable to take risk beyond a certain level.

4.24 Risk allocation is a contractual mechanism which allocate risks (such as production, revenue, planning, financial or environmental risks) between the operator and the authority. In principle, risk should be assigned to the party best able to influence or mitigate it. If transport operators are required to carry risks that they cannot control, they will tend to increase their price to reflect the degree of risk.

Production risk

- 4.25 Production risk refers to all aspects of the production of the transport service that could impact on the costs and performance of the transport services. The production risk is the difference between the real cost to produce and what the operator has agreed to in the public service contract.
- 4.26 In principle this has the advantage that it should provide the operator with an incentive to ensure cost-effective service provision and/or to maximise revenue, and therefore it should improve the financial performance of the sector.
- 4.27 There are two specific aspects of production risk:
- Internal risks: risks that are within the domain of the internal processes of the operator (such as production process decisions, maintenance of vehicles to avoid breakdown, internal management, process control, etc.);
 - External risks linked to external operating environment (e.g. traffic congestion, road-works, energy prices, etc.) or the availability of facilities or services from other entities;

Table 4.1: Typical allocation of production risk

Contract type	Gross cost	Gross costs with "free inputs"	Net cost
Allocation of production risk	Operator	Operator	Operator

Source: Steer Davies Gleave

Revenue risk

4.28 Revenue risk relates to patronage and passenger revenues. The revenue risk is the difference between the actual and the expected revenues. It is a function of the demand for the

transport services, the attractiveness of the services compared to alternatives, the applicable fare products and tariffs, and the effectiveness of the revenue collection mechanisms.

Other risks

- 4.29 Other risks include financial risks, linked to interest rates, currency exchange rates, and availability of capital, as well as environmental risks such as those associated with meeting the environmental standards required of the fleet.
- 4.30 Another key risk is the planning risk, related to changes to the urban planning that may impact the demand (such as its volume, location, patterns, introduction of new transport mode, etc) and therefore have an impact on the revenues as well as the organisation of the supply. The assignment of planning risk is normally directly linked to whether contracts are gross or net cost.

Table 4.2: Typical allocation of revenue risk

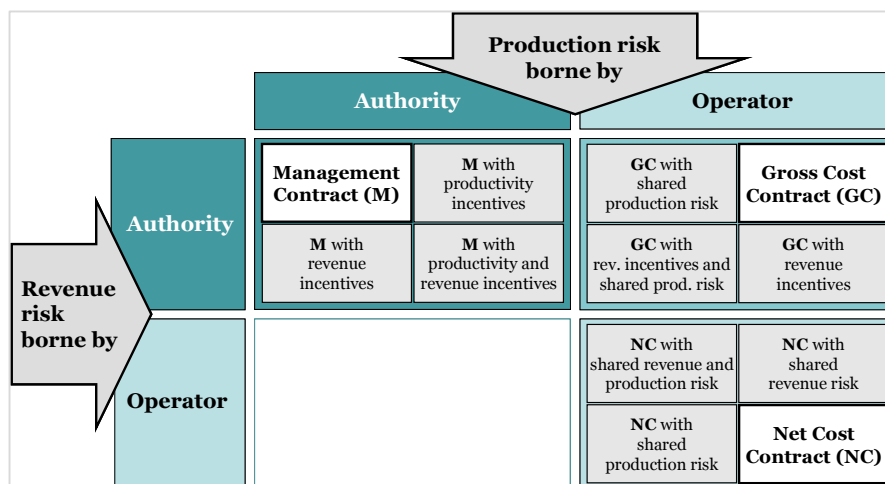
Contract type	Gross cost	Gross costs with "free inputs"	Net cost
Allocation of revenue risk	Competent authority	Competent authority	Operator

Source: Steer Davies Gleave

Allocation of risks

- 4.31 The following observations of the World Bank provide a good illustration of the factors determining the allocation of risk: "the allocation of initiative will usually determine who carries the different revenue risk elements.
- 4.32 Where the Transport Authority specifies the service in detail and the operator is simply a unit of production, then it is usual for the Transport Authority to carry the revenue risk since the operator cannot greatly influence the patronage".
- 4.33 "However, if the operator has freedoms or responsibilities in the design of the service, then it is more usual to transfer at least some of the revenue risk to him. If services have been offered at the initiative of the operator, then it is normal to expect him to carry all of the revenue risk". The resulting contract would most likely be a net cost contract as illustrated in the figure below.
- 4.34 "Also, if the services under a contract are part of a broader or integrated tariff structure, then the operator has very little opportunity to influence the revenue volume or yield since the key market and pricing mechanisms have been taken away from him. In these cases, the Transport Authority will usually carry all of the revenue risk". The resulting contract would most likely be a gross cost contract as illustrated in the figure below.
- 4.35 Where the operator bears no risk at all (and where the authority bears all risks) then these contracts are described in Contracting in urban public transport as "management contract".

Figure 4.2: Allocation of risk between the competent authority and the operator and resulting type of contract



Source: Contracting in urban public transport, 2007

Risk sharing mechanisms

4.36 Beyond the allocation of risks described above, there can be various risk-sharing mechanisms in contracts so that seek to ensure efficient allocation of risk between the competent authority and the operator.

4.37 Examples of risk sharing mechanisms for financial risks may include the following:

- Payments by the competent authority being linked to inflation (so that inflation risk is retained by the authority even where other risk is transferred);
- Contractual terms that define that where specific events occur (for example if there is a change to infrastructure charges or taxation) this will cause a change to the contract;
- Payments based on an economic indicator such as GDP, so that operators are compensated for changes in overall economic activity which they cannot influence, but still have incentives to maximise ticket revenue which they can influence;

Incentives for quality of service

4.38 Incentive mechanisms can provide an additional financial incentive to improve performance. In some cases, contracts may have incentive mechanisms, so that the operator automatically receives an additional payment or pays a penalty depending on its performance against pre-defined metrics. In some contracts, the level of the additional payments or penalties may be such that the operator has the potential to either incur losses or make profits (which could raise issues of overcompensation if no other mechanism is in place to address this).

4.39 The objective of incentive mechanisms is to influence the behaviour of the operator during the contract term, and provide a more effective day-to-day incentive than can be provided in contracts where the only remedy for breach is the threat of potential termination of the contract or imposition of contractual penalties.

4.40 Incentive mechanisms can cover a wide range of service characteristics, including:

- Operational performance metrics (for example punctuality, cancellations or frequency);
- Passenger satisfaction, either in terms of overall satisfaction or satisfaction with particular elements of the service such as information, based on passenger surveys;

- Service quality, based on ‘mystery shopper’ surveys (by which the mystery shopper records or scores particular service characteristics);
- Automatically measured availability or capability metrics, for example the proportion of ticket machines that are functioning correctly; and
- Commercial metrics, such as the proportion of passengers found to be travelling without a ticket, which can be measured based on surveys.

4.41 Incentive mechanisms often partly seek to replicate the incentives that would be provided by market forces, if the service was operated in a fully competitive market. Therefore, there may be less need for incentive mechanisms where the public transport operator is exposed to greater demand and revenue risk: all other things being equal, fewer passengers will use public transport services where the service quality is poorer, and if the operator is taking revenue risk it should have a commercial incentive to provide quality services. However, transport services are often not provided in fully competitive markets, and there may be market failure in certain cases. As a result, incentive mechanisms may still be necessary even in net cost contracts.

Type of procurement methods

4.42 We detail below that Article 5 of Regulation (EC) No 1370/2007 allows local competent authorities (unless prohibited by national law) to provide public passenger transport services using two procurement instruments:

- Either award a public service contract directly to an internal operator (which must be ‘a legally distinct entity over which a competent local authority exercises control similar to that exercised over its own departments’); or
- Use a competitive tendering procedure.

4.43 Note that there are a variety of models in use across Europe related to how public transport is procured, and there is no requirement (unless prohibited at national level) or best practice to use only one of the two procurement instruments. We can distinguish:

- Networks procured as a whole, either under direct award (such as Brussels where STIB manages all transport modes, i.e. buses, metros and tramways), or under competitive tendering such as in Grenoble.
- Mode-specific procurement, where an operator (internal or competitively sourced) is responsible for a given transport mode (such as Luas light rail operations operated by Transdev in Dublin).
- Services procured individually or in bundles of various sizes, with a variety of operators (internal or competitively sourced) within a network.
- A mix of the above (apart from network tendering as a whole) can also be in place: this is the case in London, where the metro is operated by an internal operator (London Underground wholly owned by Transport for London (TfL) the competent authority), whilst DLR (light rail service) is operated and maintained by KeolisAmey Docklands after competitive tendering. Buses are competitively tendered line by line on a rolling basis and there are in total 18 bus operators.

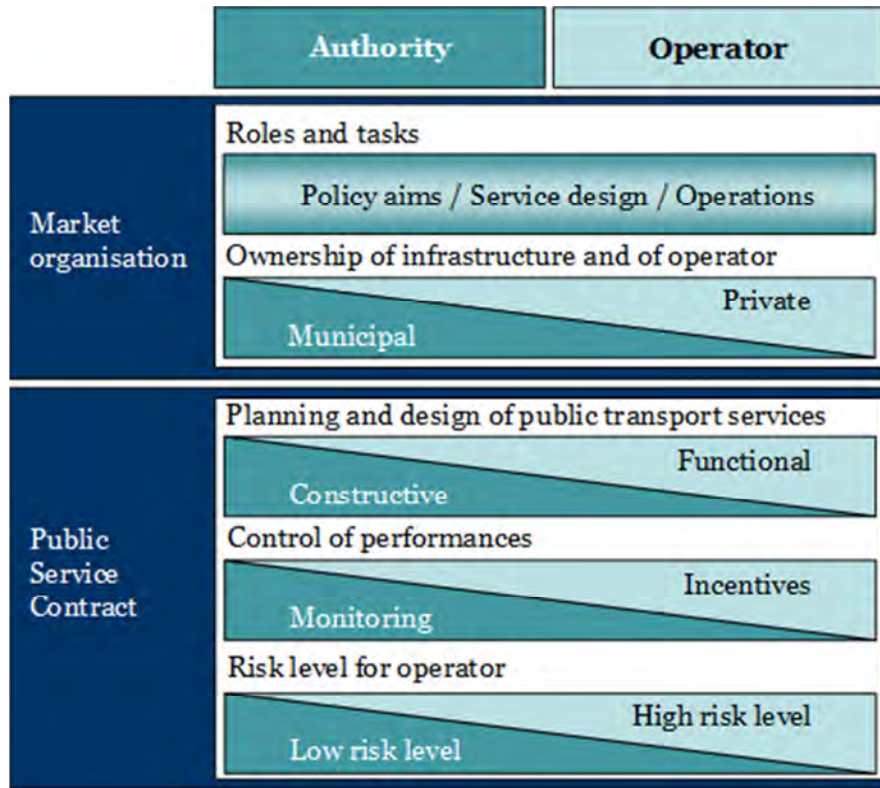
4.44 The decision to use a certain type of procurement method as well as the precise details of how services, modes or networks may be split up into parts is supposed to be that of the Competent Authority, however there is no doubt that in most cases the Authority makes recommendations that are followed –or not – by the relevant competent government.

4.45 Key elements that Competent Authorities typically base their recommendations on include:

- **Service integration:** if the transport service in question operates as part of a wider, integrated network, the authority may require more control over the timetable, service quality and fares structure offered as well as the way in which the service is branded and marketed. This is likely to influence the type of award and the way in which the contract is specified.
- **Profitability required:** a private sector bidder will require a profit margin, varying with the level of risk transferred (and the level of investment, if any, to be undertaken), which must be considered alongside the expected efficiency gains from awarding a contract under competitive tendering arrangements.
- **Degree of innovation, adaptability and reactivity required by the authority:** the degree of innovation, flexibility or adaptability that will be required from the operator may influence to an extent the choice of award type - some authorities may prefer to ensure that the service specification is flexible over the life of the contract. This may be more or less feasible depending on the type of contract award; a highly flexible contract is likely to be difficult for private sector bidders to price.
- **Extent of internal skills and know-how:** ensuring adequate control/monitoring and transport planning strategy requires skills and experience. Authorities need to assess the skills available to them before determining the appropriate type of award.
- **Degree of public-private partnership:** private partners may be permitted or not, and rules regarding the public/private ownership of capital may vary.
- **Staff employment terms:** the staff may be employed under private employment contracts or civil servants working under standard (or modified) public sector contracts. The practical implications of changing employment terms may influence the choice of award type.
- **Degree of budget autonomy:** the level of financial control expected of, or required by, the authority may determine whether, and under what conditions, it is prepared to award contracts providing for some degree of autonomy on the part of the operator. This is linked to the issue of whether contracts are output-based (with considerable autonomy for the operator in terms of how operating resources are allocated) or input-based (with the resource allocation specified in some detail and a requirement for open book accounting).
- **Legal aspects:** the risks of litigation regarding the tender process and/or the calculation of the compensation may also be taken into account by the authority. In general, the more complex the contract the greater the likelihood of legal disputes over the appropriate interpretation of particular clauses and mechanisms.
- **Taxation:** depending on the legal form of the operator, different tax requirements may exist that could be more or less favourable to the operator and/or the authority.

4.46 In addition, the **appropriate transfer of operating and revenue risk** is one of the key considerations that must be carefully considered by authorities: as highlighted in a NEA study of 2008, “the first step for the authority is to become aware of the issue of risk management”. However, it may only be possible to determine the appropriate degree of risk transfer after consideration of the other criteria outlined here. The degree to which revenue risk, in particular, is transferred may depend on whether fares are governed by an integrated fares structure covering a number of other transport modes and specified in detail by the authority. The transfer of risk therefore influences the relationship that the authority will establish with the operator, as illustrated below.

Figure 4.3: Relationship between the authority and the operator



Source: Contracting in urban public transport, 2007. Study for DG TREN

Key aspects of Regulation 1370/2007

4.47 The Regulation and the interpretative guidelines leave Member States wide margin of manoeuvre in defining public service obligations and to enact them at local, regional or national levels to meet the mobility needs of the population. Nevertheless, the Regulation states that direct awards correspond to an exception to the general rule of public tenders.

4.48 In case of competitive award of public service contracts, the Regulation and the Commission's Guidelines⁵ (of 2014) allow for more flexibility when applying the provisions of the Regulation to take into account the specificities of the Member State. In case of direct awards, the guidelines are generally rather strict.

Article 1 – Purpose and scope

4.49 The Regulation governs the award of public service contracts in the field of public passenger transport by road and by rail (except for services which are operated mainly for their historical interest or their tourist value). Member States may apply the Regulation to public passenger transport by inland waterways and national sea waters.

Work concessions

4.50 As a result of Article 1.3, works concessions for public passenger transport services by rail and other track-based modes and by road are governed solely by Directive 2014/23/EU, and the requirements of Directive 1370/2007 do not apply.

Service concessions

4.51 Directive 2014/23 does not apply to concessions for public passenger transport services within the meaning of Regulation (EC) No 1370/2007. The award of service concessions for these public passenger transport services is solely governed by Regulation (EC) No 1370/2007.

4.52 Article 5.1 of Regulation (EC) No 1370/2007 specifies that the award of (public) service contracts for transport services by bus or tram is governed by Directives 2014/24/EU and 2014/25/EU, except where such contracts take the form of service concessions. The award of (public) service contracts for public passenger services by bus or tram is thus solely governed by Directive 2014/25/EU.

Table 4.3: Summary of the applicable legal basis

Public transport services (by mode)	Works concessions	Service concessions (as defined by Directive 2014/23/EU)	(Public) service contracts as defined in Directives 2014/24/EU and 2014/25/EU
Railway and metro	Directive 2014/23/EU	Regulation 1370/2007	Regulation 1370/2007
Bus and tram	Directive 2014/23/EU	Regulation 1370/2007	Directive 2014/24/EU Directive 2014/25/EU

4.53 It is therefore important to distinguish between service contracts and service concessions (see table below) in order to understand whether or not the provision of public service transport fall within the scope of Regulation 1370/2007.

⁵ Communication from the Commission (2014/C 92/01) on interpretative guidelines concerning Regulation (EC) No 1370/2007 on public passenger transport services by rail and by road.

Table 4.4: Definitions of service contracts and concessions

Item	Definition	Source
Service concession	<p>A contract for pecuniary interest by means of which one or more contracting authorities or contracting entities entrust the provision and the management of services other than the execution of works to one or more economic operators, the consideration of which consists either solely in the right to exploit the services that are the subject of the contract or in that right together with payment.</p> <p>Art 5(1) specifies further that 'the award of a works or services concession shall involve the transfer to the concessionaire of an operating risk in exploiting those works or services encompassing demand or supply risk or both. The concessionaire shall be deemed to assume operating risk where, under normal operating conditions, it is not guaranteed to recoup the investments made or the costs incurred in operating the works or the services which are the subject-matter of the concession. The part of the risk transferred to the concessionaire shall involve real exposure to the vagaries of the market, such that any potential estimated loss incurred by the concessionaire shall not be merely nominal or negligible.</p>	Article 5.1.b of Directive 2014/23/EU
Service contract	<p>A contract for pecuniary interest between one or more contracting entities and one or more economic operators and having as their object the provision of services.</p> <p>When these contracts involve 'contracting authorities' within the meaning of Article 2(1) point (1) of Directive 2014/24/EU, they are considered as 'public service contracts' in accordance with Article 2(1) points (6) and (9) of Directive 2014/24/EU.</p>	Article 2 points (1), (2) and (5) of Directive 2014/25/EU

4.54 We observe that the notion of operating risk is at the centre of Regulation 1370/2007.

Article 2 – Definitions

4.55 Article 2 clarifies that the notion of 'public service contract' as defined by Regulation (EC) No 1370/2007 also covers public service concessions. To take account of the different legal regimes and traditions in the Member States, the definition of a public service contract provided by Regulation (EC) No 1370/2007 is very broad and includes various types of legally binding acts.

4.56 A 'public service obligation' means a requirement defined or determined by a competent authority in order to ensure public passenger transport services in the general interest that an operator, if it were considering its own commercial interests, would not assume or would not assume to the same extent or under the same conditions without reward.

Local competent authority

4.57 A 'competent authority' means any public authority or group of public authorities of a Member State or Member States which has the power to intervene in public passenger transport in a given geographical area or anybody vested with such authority.

4.58 The general rule measure is restricted to the geographical area for which a competent authority is responsible, but does not necessarily need to cover the entire geographical area. A general rule can also be a regional or national law applicable to all existing or potential transport operators in a region or a Member State.

4.59 To reduce distortions of competition, Article 5.2.b requires that the transport activities of internal operators and anybody or bodies under their control should be geographically

confined within the competent authority's territory or jointly controlled by a local competent authority.

Article 3 - Public service contracts and general rules

- 4.60 Where a competent authority or a Member State decides to grant the operator of its choice an exclusive right and/or compensation, of whatever nature, in return for the discharge of public service obligations, Article 3 states that it must do so within the framework of a public service contract.
- 4.61 This obligation does not exist when general rules establish maximum tariffs for all passengers or for certain categories of passengers. In that case, there is no obligation to conclude a public service contract and the compensation mechanism can be defined on a non-discriminatory, generally applicable basis.
- 4.62 Article 3.3 allows the Member States to exclude from the scope of the Regulation general rules on financial compensation for public service obligations which establish maximum tariffs for the transport of pupils, students, apprentices and persons with reduced mobility.

Article 4 – Mandatory content of public service contracts and general rules

Definition of public service obligations - Article 4.1.a

- 4.63 Public service contracts must clearly define the public service obligations with which the public service operator is to comply, and the geographical areas concerned.

Compensation payment and exclusive rights - Article 4.1.b

- 4.64 They must be established in advance, in an objective and transparent manner. Arrangements must be determined for the allocation of costs connected with the provision of services, as well as for the allocation of revenue from the sale of tickets which may be kept by the public service operator, repaid to the competent authority or shared between the two.
- 4.65 Public service contracts must set in a way that prevents over-compensation:
- The parameters on the basis of which compensation payment if any is to be calculated; and
 - The nature and extent of any exclusive rights granted.

Allocation of costs – Article 4.1.c

- 4.66 Public service contracts and general rules shall determine the arrangements for the allocation of costs connected with the provision of services. These costs may include in particular the costs of staff, energy, infrastructure charges, maintenance and repair of public transport vehicles, rolling stock and installations necessary for operating the passenger transport services, fixed costs and a suitable return on capital.
- 4.67 This Article deals with two distinct issues:
- The categories of costs for which the authority and the operator shall be responsible.
 - The calculation of compensation associated with those costs.
- 4.68 For direct awards, Article 6.1 requires that the compensation be calculated in accordance with rules set out in the Annex to the Regulation. For competitive tenders, in contrast, compensation is determined by the winning operator's bid, and the competitive tendering process is assumed to prevent overcompensation.

Contract length – Articles 4.3 and 4.4

- 4.69 The duration of public service contracts shall be limited and shall not exceed 10 years for coach and bus services and 15 years for passenger transport services by rail or other track-based modes. The duration of public service contracts relating to several modes of transport shall be limited to 15 years if transport by rail or other track-based modes represents more than 50 % of the value of the services in question.
- 4.70 There are some provisions to extend contract length beyond the durations quoted above:
- Provision of transport services in the outermost regions may justify to extend the duration of the contracts by a maximum of 50%;
 - The provision of assets may justify extending the duration of public service contracts by a maximum of 50%. It was clarified by the Guidelines that “provision of assets” should not only cover the acquisition of new rolling stock, but also the revamping of existing rolling stock;
 - If justified by the amortisation of capital in relation to exceptional infrastructure, rolling stock or vehicular investment and if the public service contract is awarded in a fair competitive tendering procedure, a public service contract may have a longer duration.
- 4.71 In addition, we observe that these Articles are silent on the legality of contracts with “break points”, such as a ten-year contract with a “break point” after five years. It could be argued that this is a ten-year contract, or conversely that it is a five-year contract with an extension which does not comply with Article 4.4.

Social protection – Article 4.5

- 4.72 Where competent authorities require public service operators to comply with certain social standards, tender documents and public service contracts shall list the staff concerned and give transparent details of their contractual rights and the conditions under which employees are deemed to be linked to the services.
- 4.73 In addition, competent authorities may require the selected public service operator to grant staff previously taken on to provide services the rights to which they would have been entitled if there had been a transfer within the meaning of Council Directive 2001/23/EC of 12 March 2001. This means that Regulation 1370/2007 leaves to competent authorities the choice:
- Not to ask for any specific requirements on staff protection;
 - To require a transfer of staff previously taken on to provide services with the rights to which they would have been entitled, if there has been a transfer within the meaning of Directive 2001/23/EC;
 - To require the operator to respect certain social standards for all staff involved in the provision of public transport services “in order to ensure transparent and comparable terms of competition between operators and to avert the risk of social dumping”; or
 - A mix of the above.

Subcontracting – Article 4.7 and Article 5.2.e

- 4.74 Article 4.7 states that tender documents must indicate in a transparent manner, whether, and if so, to what extent, subcontracting may be considered. The Article also states that the operator shall be required to perform “a major part” of the public passenger transport services itself.

- 4.75 The Commission’s interpretative guidelines clarified that public service contracts directly awarded to an internal operator may be subcontracted under strict conditions. It clarified that in such a case, the internal operator must provide “the major part” of the public passenger transport services itself, so that there is no “false internal operator”. The guidelines also *inter alia* defines the “major part” as two third in value terms of the public transport service. In any case, subcontracting by internal operators must be carried out respecting relevant public procurement legislation.

Article 5 - Award of public service contracts

- 4.76 Regulation (EC) No 1370/2007 allows local competent authorities (unless prohibited by national law) to provide public passenger transport services by rail and by road themselves or to award a public service contract directly.

Direct award

- 4.77 If competent authorities choose the second option, they must respect a number of strict rules and conditions set out in Article 5.2. For instance, the conditions require, among others, that an internal operator must be ‘a legally distinct entity over which a competent local authority exercises control similar to that exercised over its own departments’.
- 4.78 For the purposes of determining whether the competent authority exercises control, a number of factors will be taken into consideration. 100% ownership by the competent authority is not a mandatory requirement for establishing control within the meaning of this Article, nor are public/private partnerships ruled out.
- 4.79 In any case the internal operator must perform their public passenger transport activity within the territory of the competent local authority, and must not take part in competitive tenders for public passenger transport services organised outside the territory of the competent local authority. This means that an authority cannot directly appoint an operator that is taking part in other public passenger transport services elsewhere, but the Regulation provides some flexibility in catering for transport between neighbouring regions.

Competitive tenders

- 4.80 Any competent authority which wishes to award a tender to a third party, other than an internal operator, shall award public service contracts on the basis of a competitive tendering procedure, except in a limited number of cases (such as in case of a small contract volume or a Small or Medium Enterprise or some rail services).
- 4.81 Article 5.3 stipulates that, if a competent authority uses a third party other than an internal operator to provide public passenger transport services, it shall award public service contracts through a fair, open, transparent and non-discriminatory competitive tendering procedure.
- 4.82 As laid out under point 2.4.1 of Article 5.3, contract award procedures must be designed so as to create conditions for effective competition. The application of the general principles of the Treaty, such as the principles of transparency and non-discrimination, implies, for instance, that the assessment criteria for the selection of offers must be published with the tender documents.
- 4.83 However, according to Article 5.3 of Regulation (EC) No 1370/2007, the competent authority may also choose to negotiate with the pre-selected parties, after a pre-selection of tenders, in the case of specific or complex requirements. An example of this is when bidding operators must come up with technologically innovative transport solutions to meet the requirements

published in the tender documents. Even when using pre-selection and negotiation, the selection and award procedure must nevertheless comply with all the conditions set out in Article 5.3.

- 4.84 The guidelines also clarified that in order to provide potential tenderers with fair and equal opportunities, the period between the launching of the competitive tendering procedure and the submission of the offers, as well as the period between the launching of the competitive tendering procedure and the moment from which the operation of the transport services has to start, shall be of appropriate and reasonable length.
- 4.85 To make the competitive tendering procedure more transparent, the guidelines clarified that competent authorities should provide all the relevant technical and financial data, including information about the allocation of costs and revenues if available, to potential bidders to assist in the preparation of their offers. However, this shared information cannot undermine the legitimate protection of the commercial interests of third parties. Railway undertakings, rail infrastructure managers and all other relevant parties should make available appropriate accurate data to the competent authorities to enable them to comply with their information obligation.
- 4.86 Member States shall take the necessary measures to ensure the decisions taken to award contracts may be reviewed effectively and rapidly at the request of any person having or who has had an interest in obtaining a particular contract and has been or risks being harmed by an alleged infringement on the grounds that such a decision has infringed Community law or national rules implementing that law.

Modifications of public service contracts

- 4.87 Amendments to running public service contracts is not covered by Regulation 1370/2007 and it could be debated under which situations a competent authority should start a new award procedure or whether the contract can be amended without a new award. The guidelines have clarified that the principles of the European Court of Justice case-law⁶ are fully applicable to modifications of public service contracts. These principles are that “substantial amendments to essential provisions of contracts require the award of a new contract in certain cases”. This is the case, in particular, if the new provisions are materially different in character from the original contract.

Article 6 – Public service compensation

- 4.88 Article 6.1 provides that in the case of directly awarded public service contracts or general rules compensation must comply with the provisions of Regulation (EC) No 1370/2007 as well as with its Annex to ensure the absence of overcompensation.

Absence of overcompensation

- 4.89 The annex specifies that compensation must ensure the absence of overcompensation and compliance with the Treaty rules. The annex states that the effects shall be assessed by “comparing the situation where the public service obligation is met with the situation which would have existed if the obligation had not been met”.

⁶ Case C-337/98, Case C-454/06 and Case C-91/08

Net financial effect

- 4.90 Compensation must be limited to the net financial effect of the public service obligation. Net financial effect is calculated as incurred in relation to the PSO minus revenues whilst fulfilling the PSO, minus potential revenues induced by network effects, plus a reasonable profit.

Reasonable profit

- 4.91 Reasonable profit is defined in the Annex as “a rate of return on capital that is normal for the sector in a given Member State and that takes account of the risk, or absence of risk, incurred by the public service operator by virtue of public”.

Efficiency incentive

- 4.92 The Annex also states that the method of compensation must promote effective management by the operator and provision of services to a sufficiently high standard. The guidelines clarified that efficiency incentives should be proportionate and remain within a reasonable level, taking into account the difficulty in attaining the efficiency objectives. Parameters of these incentive schemes must be fully and precisely defined in the public service contract.

Separation of accounts

- 4.93 The accounts must be presented so that the operating accounts and costs of public services and other activities are separate.
- 4.94 Alongside Article 4.2 on the rules for allocation of revenue from the sale of tickets between the operator, the competent authority or both, these requirements are aimed at avoiding the cross-subsidisation of commercial activities with revenues from public service operations.

Absence of overcompensation in the case of directly awarded public service contracts

- 4.95 The guidelines clarifies that the annex to the Regulation establishes an ex post check to ensure that the compensatory payments are not higher than the actual net cost for the provision of the public service over the lifetime of the contract. Additionally, the Commission considers that regular checks are in principle needed during the lifetime of the contract in order to detect and avoid at an early stage clear overcompensation situations from developing. This is the case, in particular, for long-term contracts. The Commission also clarified that ex-ante checks of control of compensation cannot be enough and that ex-post controls are required.

Financial compensation of certain categories

- 4.96 Article 3.3 allows the Member States to exclude from the scope of Regulation (EC) No 1370/2007 general rules on financial compensation for public service obligations which establish maximum tariffs for the transport of pupils, students, apprentices and persons with reduced mobility.

Article 7 – Publication

Reporting on performance, quality and financing - Article 7.1

- 4.97 Article 7.1 requires that each competent authority publishes each year details of:
- Public service obligations;
 - Public service operators;
 - Exclusive rights granted; and
 - Compensation payments.

4.98 Contracts should all be individually identified and reported upon (while ensuring the protection of the legitimate commercial interests of the operators concerned). Reports should distinguish between bus transport and rail transport, allow the performance, quality and financing of the public transport network to be monitored and assessed and, if appropriate, provide information on the nature and extent of any exclusive rights granted.

Notice of invitations to tenders and direct awards - Article 7.2

4.99 At least one year before the launch of the invitation to tender procedure or one year before the direct award, Competent Authorities should publish information related to public service awards and tenders in the Official Journal of the European Union.

Direct award for transport by rail - Article 7.3

4.100 Article 7.3 states that within one year of the direct award of a public service contract for rail services, competent authorities shall publish certain information on the awarded contract.

Publishing the reasons for a direct award - Article 7.4

4.101 Article 7.4 states that at the request of an interested party, a competent authority shall forward to it the reasons for its decision for directly awarding a public service contract.

Article 8 - Transition

4.102 The award of public service contracts must comply with Article 5 (Award of public service contract) as from 3 December 2019. The Regulation states that during the transitional period Member States shall take measures to gradually comply with Article 5 in order to avoid serious structural problems in particular relating to transport capacity.

4.103 The Commission further clarified in its guidelines that the obligation imposed on Member States to gradually comply with Article 5 is reasonable only if it concerns the obligation to apply open, transparent, non-discriminatory and fair procedures when granting public service contracts. It does not make sense that Member States introduce more lenient provisions to “gradually” apply the notion of internal operator or the exceptions defined in paragraphs 4, 5 and 6 of Article 5 of the Regulation.

4.104 Contracts tendered according to the times indicated below are exempt from complying with Article 5 of the Regulation according to the following rules:

Table 4.5: Transitional arrangements: contract validity

Type of contract	Contracts awarded before 26 July 2000	Contracts awarded between 26 July 2000 and 3 December 2009
Fair competitively tendered procedure	Contract can continue until it expires	Contract can continue until it expires - but for no longer than 30 years.
A procedure other than a fair competitive tendering procedure (e.g. direct award)	Contract can continue until it expires - but for no longer than 30 years.	Contract can continue until it expires - provided they are of limited duration comparable to the durations specified in Article 4.

4.105 The Commission considers that the term ‘comparable to the durations specified in Article 4’ should be interpreted restrictively and that the duration of public service contracts should be similar to those indicated in Article 4.

5 Case studies

Introduction

- 5.1 The Commission's Terms of Reference required us to undertake an analysis of eight case studies.
- 5.2 The first step concerned the choice of case studies, as there were a large number of potential cases in Europe that could have been considered for this study. We explain in the first part of this chapter how we selected the eight case studies for our analysis and the criteria used for their selection.
- 5.3 We then detail our findings case study by case study. As we gathered a large amount of detailed material, we have used a standardised reporting structure across all case studies to aid comparison. Conclusions for each case study are provided in this chapter, as well as overall conclusions across the case studies. Selection of case studies
- 5.4 The terms of Reference required that six to eight case studies were selected and researched in depth in order to:
- Assess the economic and financial impact of applying the new regulatory framework;
 - Determine the success factors with respect to the economic and financial performance of public transport operators of each type of contract award procedure (direct or contract award); and
 - Populate a knowledge base related to contract awards.
- 5.5 In order to select relevant case studies, covering a large number of European practices, we discussed and agreed with the Commission a number of requirements:
- Different types of contract award (competitive award or direct award to internal operators);
 - A range of transport authorities with local, regional and national mandates;
 - A range of national and local transport policy objectives (where this information was available), including associated economic, financial, social and environmental objectives;
 - Different sorts of compensation mechanisms and degrees of risk transfer, including contracts which transfer most or all revenue and operating cost risk to the operator (where compensation can be fixed in advance), simple operating and management contracts and other arrangements involving risk sharing mechanisms of different kinds;
 - A range of legal powers and competences that transport authorities are able to exert within their respective legal frameworks in order to ensure service quality and efficiency;
 - A selection of transport systems from across the European Union;
 - A range of transport modes; and
 - Transport systems serving a range of large, medium and small centres of population.

5.6 We aimed to select a limited number of case studies that provided coverage across a range of characteristics. After discussion with the Commission and consultation of some key pan-EU stakeholders (UITP and EMTA) and a number of national representatives (UTP and VDV), we selected the following case studies, based on their characteristics presented in Table 5.1.

Table 5.1: Case studies: key characteristics

Name	Stockholm Metro	Emilia-Romagna	Budapest	Burgas	Grenoble	Ulm	Manchester Metrolink	Bus Éireann
Member State	Sweden	Italy	Hungary	Bulgaria	France	Germany	United Kingdom	Ireland
Population (millions)	0.9 city 2.1 total	4.3 total	1.5 city 3.3 total	0.2 city 0.4 total	0.15 city 0.5 total	0.1 city 0.15 total	2.7 city	4.1 total
Authority	Storstockholms Lokaltrafik (SL)	Local Public Transport Agencies	Centre for Budapest Transport (BKK)	Burgas Municipality	SMTC	Stadtwerke Ulm (SWU)	Transport for Greater Manchester (TfGM)	Irish National Transport Authority (NTA)
Operator	MTR	TPER & others	BKV	Burgasbus	SEMITAG	Stadtwerke Ulm (SWU)	Metrolink	Bus Éireann
Modes: Urban rail (U), Metro (M), Light rail on street (L), Trolleybus (T), Bus (B)								
Modes	M	B	U/M/L/T/B	T/B	L/B	L/B	L	B
Type of authority: National (N), Regional (R), Local (L)								
	R	R	L	L	L	L	L	N
Services provided: Urban (U), Commuter into urban (C), Rural (R)								
	U/C	U/C/R	U	U	U/C/R	U	U	U/C/R
Sizes of urban area covered: Large (L), Medium (M), Small (S)								
	L	M	L	M	M	M	L	M/S
Award types: Direct award (D), Competitive tender (C)								
	C	C	D/C	D	C	D	C	D
Assets owned and maintained by operator: Network (N), Depots (D), Terminals (T), Stops (S), Vehicles (V)								
Owned	None	Mixed	V	Some V	None	All	None	Mixed
Maintained	V	Mixed/V	V	N/D/V	All	All	N/V/T/S/V	Mixed/V
Risks borne by operator: Network Cost (NC), Network Performance (NP), Operations (O), Revenue (R)								
	NP/O	O/R	O	NP/O/R	NP/O/(R)	NC/NP/O/R	NC/NP/O	O/R
Exclusive rights awarded to operator								
	NA	Yes, by area	Yes	Yes, by route	No	No	NA	No
When was the contract date? Was it within the scope of Regulation 1370/2007 (after December 2009)?								
Contract	Nov-09	Varies	Varies	Jun-14	Jul-13	Nov-09	Jul-07	Dec-14
In scope?	No	Some	Yes	Yes	Yes	No	No	Yes

Source: Steer Davies Gleave analysis

5.7 While the objective of the study was to examine the economic and financial effects of the implementation of Regulation 1370/2007, the Regulation allows a transition period to December 2019 for provisions on contract award. In some cases, the contracts pre-date the Regulation.

One consequence, as the final rows of Table 5.1 show, is that few of the contracts studied in the case studies either reflect practice adopted in response to the Regulation or needed to be compliant with the Regulation at the time they were let.

Stockholm metro (Sweden)

Overview and context

- 5.8 Sweden is currently divided into 21 counties which are in turn subdivided into communes. Local public transport provision is generally devolved to the county level. Stockholm County has a population of 2.1 million including 900,000 in the Stockholm commune and 25 other communes shown in Figure 5.1. Transport is managed by Storstockholms Lokaltrafik (SL).

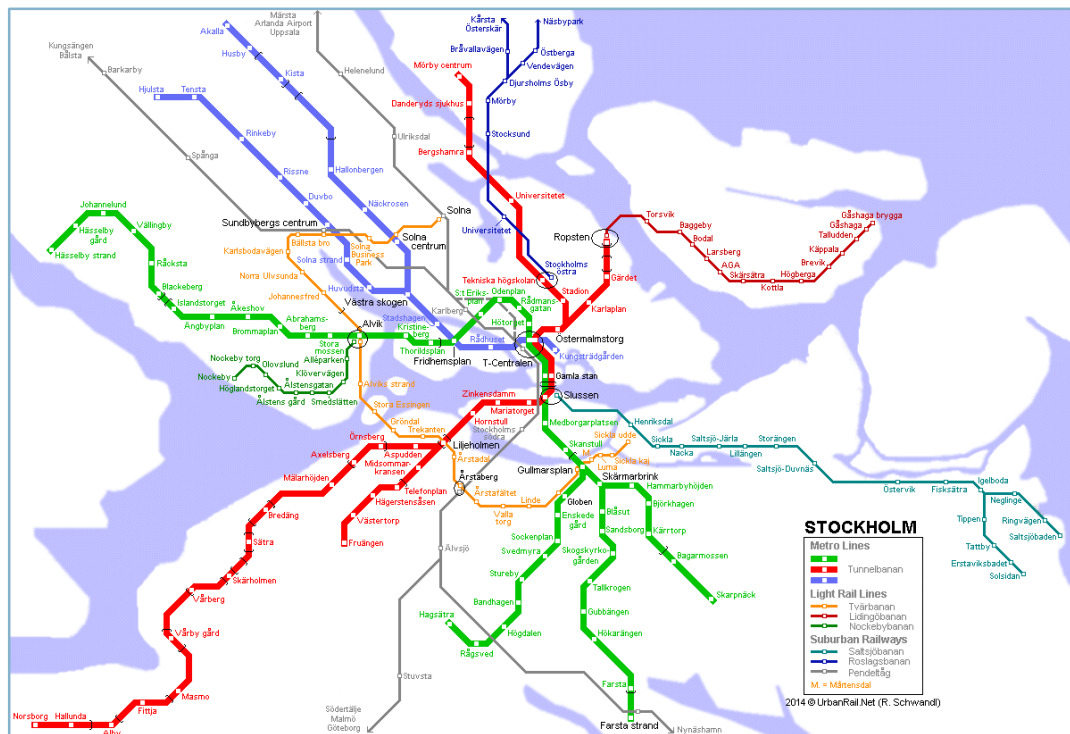
Figure 5.1: Stockholm Metro: map of Stockholm County



- 5.9 The Stockholm public transport system is a complex and varied environment. SL controls four main modes of public transport:
- Urban rail or Pendeltåg services which focus on central Stockholm but include some services beyond the (red) County boundary operated in conjunction with neighbouring counties (such as to Uppsala in Uppsala County, to the north);
 - Metro, dating from 1950 with 100 stations on three lines (Green, Red and Blue) largely within the Stockholm Commune;
 - Light rail, including two local lines, the Roslagsbanan and Saltsjöbanan, and four light rail lines including the 18-kilometre Tvärbanan; and
 - Bus.

5.10 Figure 5.2 shows the Stockholm Metro network as thick lines and the urban rail and light rail networks as thin lines.

Figure 5.2: Stockholm Metro: map of Stockholm Metro



5.11 Other services operated include the Arlanda Express rail concession and the commercially operated airport buses including Flygbussarna.

5.12 Fares and ticketing are highly integrated with a range of annual, period and zonal tickets and the city also has a congestion charging scheme (which may be extended) and a deregulated taxi market.

5.13 In common with other Swedish county authorities, since before Regulation 1370/2007 came into force SL had been contracting for many of its transport services, including urban rail, metro, light rail and bus. At present:

- Urban rail or Pendeltåg services are operated under contract by Stockholmståg;
- Metro is owned by the Stockholm County Council but operated under contract by the private operator MTR;
- Light rail lines are operated by private companies including Arriva which operates the Roslagsbanan, Saltsjöbanan and Tvärbanan; and
- Bus services are provided under contract by a number of operators.

This case study

5.14 The scope of this case study is the contract with MTR to operate the Stockholm Metro.

Contract specification and procurement

5.15 Table 5.2 summarises the main features of the contract specification and procurement. The contract for metro services is competitively tendered for a duration of eight years (until 2017) with a possible extension of six years to 2023.

Table 5.2: Stockholm Metro: contract specification and procurement

Topic	Description	Details and comments
Specification and contract design		
Modes	Metro only	Stockholm Metro has three lines (Green, Red and Blue) operated by a range of rolling stock.
Service specification	<p>Storstockholms Lokaltrafik (SL) developed the specification as part of its overall responsibilities.</p> <p>The operator is able to make proposals for service variations, although these may not be accepted or affordable.</p>	Work on further extensions to the Metro network is expected to start in 2016, but that activity is not part of this operating contract.
Coordination of services with regional, provincial and local plans	SL is the transport authority responsible for operating or coordinating all PSO modes within Stockholm County (see Figure 5.1).	The Metro lies wholly within Stockholm County, and largely within Stockholm Commune (see Figure 5.1) so there is limited need for coordination with other authorities. SL's Pendeltåg commuter services, in contrast, are in some cases operated jointly with neighbouring authorities such as Uppsala County.
Procurement		
Selection procedure	<p>Competitive tender.</p> <p>The Metro had previously been operated under contract by Veolia, but this contract came to an end in November 2009.</p> <p>SL provided a range of data under a "data room" procedure.</p> <p>There was a Best And Final Offer (BAFO) phase to the competition, but not formal negotiation phase.</p>	<p>We understand that there were at least five participants in the tender.</p> <p>In 2008, SL initiated the procurement process. In January 2009, SL announced that MTR (the Hong Kong based transport group) had been awarded the contract. Veolia challenged the award, but the challenge was rejected, and MTR proceeded but with reduced time available for mobilisation</p> <p>In November 2009, MTR began operations.</p>
Authority responsible	Storstockholms Lokaltrafik (SL).	
Type of award	Competitive procurement.	
Contract size	<p>We understand that the contract size is approximately</p> <ul style="list-style-type: none"> • SKr 2.4 billion value per year • 7 lines grouped into three (Green, Red, Blue) • 100 stations • 520 vehicles • 3,000 staff including train crew, ticket barrier staff, sales staff and cleaners 	<p>Most staff transferred from the previous operator Veolia, but transfer was not obligatory.</p> <p>MTR therefore had to recruit new staff to replace those not transferring and to provide for expanded requirements.</p>
Duration	<p>Eight year contract (to 2017)</p> <p>Six year optional extension (to 2023)</p>	

Source: Steer Davies Gleave analysis

Contract finances, responsibilities and risk allocation

5.16 Table 5.9 summarises the contract finances, responsibilities and risk allocation. The contract is a gross cost contract with a range of incentives and a performance regime.

Table 5.3: Stockholm Metro: contract finances, responsibilities and risk allocation

Topic	Description	Details and comments
Finances		
Financing	SL finances the contract.	
Financial flows	SL pays the operator, MTR, subject to any adjustments for performance.	
Type of contract	The contract is gross cost, reflecting the highly integrated nature of ticketing between the various modes within Stockholm.	The contract allows for variations in service level by elements of payment related to train-kilometres and driver hours.
Fares setting	SL defines the overall fares structure for the Metro and other modes on an integrated basis.	SL's fares policy does not involve peak fares to discourage peak travel, so MTR is exposed to risk on how much demand is peaked.
Responsibilities and risk allocation		
Risk allocation	The contract is gross cost but with a range of incentives and a performance regime.	MTR bears price and volume risk on electricity for traction, incentivising efficient driving and cost-effective refitting with energy-efficient equipment.
Ownership of vehicles	SL retains ownership of the Metro rolling stock but MTR maintains and operates it.	Maintenance of the 500 vehicles was transferred from the joint venture of SL and Veolia (the previous contractor) to MTR. MTR established a new joint venture, TBT, with Norwegian train maintenance company, Mantena. MTR bears risk on the maintainability and reliability of new stock ordered by SL and delivered during its contract, such as the C30 fleet SL has procured from Bombardier, which is under construction in China.
Ownership of other assets	SL retains ownership of the rail network infrastructure, the rolling stock depots and the stations and terminals. SL also subcontracts the maintenance of the infrastructure through a separate contract with Strukton.	MTR bears risk on the performance of the infrastructure, for which there is no formal track access agreement or performance regime. This leaves it potentially exposed to the choice and performance of SL's contractor, which it does not supervise or control. One of the three lines is also being fitted with Automatic Train Operation (ATO): again, SL has contracted directly for this work.

Source: Steer Davies Gleave analysis

Contract management and monitoring

5.17 Table 5.10 summarises the contract management and monitoring.

Table 5.4: Stockholm Metro: contract management and monitoring

Topic	Description	Details and comments
Management		
Calculation of the final level of compensation	Calculated as the contractual compensation less any penalties applied.	The contract provides for a fixed payment of SKr 2.4 billion per year plus incentives of up to SKr 145 million per year based on key indicators such as trains run, cleanliness, punctuality and customer satisfaction. For example, MTR is responsible for staffing station gate lines, and there are metrics related to the correct hours and levels of staffing.
Monitoring		
Monitoring authority	SL monitors the contract.	
Quality and performance monitoring	SL publishes some key performance measures but we understand that many of the detailed metrics are confidential.	Since 2007, SL has published in its Annual Report a consistent series of performance indicators of reliability, cancellations, and service disruptions of more than 3 minutes, for each of the three metro lines. We understand that crowding on the Metro is sufficient to affect performance directly. Demand may change at least slightly when the Citybanan line opens in 2017.

Source: Steer Davies Gleave analysis

5.18 Some performance information is published annually by SL. However we note that there are some significant limitations in the data available for recent years including:

- Passenger revenues are not specific to a mode, and hence neither revenues nor subsidy can be calculated by mode;
- Approximately two-thirds of services are bought in, and so SL's costs are the contracted price rather than the operators' own costs (similarly, SL cannot identify the operators' employees);

5.19 This results in an incomplete set of KPIs for the case study and therefore inhibits an assessment of economic and financial performance.

Table 5.5: Stockholm Metro, KPIs

Performance indicator	2013
Passenger-kilometres per vehicle-kilometre	20
Vehicle-kilometres per staff member	27,067
Operating cost per vehicle-kilometre (€)	4.3

Source: Storstockholms Lokaltrafik (SL) Annual Report 2013

The effects of Regulation 1370/2007

5.20 Table 5.40 summarises our understanding of the effect of Regulation 1370/2007 on Stockholm metro.

Table 5.6: Stockholm Metro: Regulation 1370/2007

Issue	Conclusion
Was the Regulation in force at the time that the current contract was signed?	No. SL's contract with MTR was awarded in January 2009 and began in November 2009, before the Regulation came into force.
Has the Regulation influenced the design of the contract?	No. Sweden has a long-established framework of contracting for the provision of local public transport. The 2009 contract with MTR was preceded by a contract with Veolia.
Is the contract compliant with the requirements of the Regulation?	Yes. As far as we have been able to establish, the contract award process initiated in 2008 would be consistent with the requirements of the Regulation.
Does the competent authority comply with Article 7.1?	No. We have not been able to identify "an aggregated report" by SL containing all the information listed in the definition.
Does the competent authority comply with Article 7.2?	N/A. The current contract lasts until 2017, so SL will not need to publish such information in respect of the Stockholm Metro contract until at least 2016.

Source: Steer Davies Gleave analysis, stakeholder clarifications

5.21 In summary, Sweden developed a regime of competitive procurement in advance of Regulation 1370/2007, which has therefore had little or no effect. However, stakeholders in Sweden confirm that SL does not appear to comply with the publication requirements of Article 7.1.

Conclusions of findings on Stockholm Metro case study

5.22 Stockholm Metro operations have been let on the basis of a competitive tender for a gross cost contract, with a separate contract for the maintenance of the infrastructure (note the different approach used for Manchester Metrolink, see Table 5.33 below). The system is maturing and appears broadly compliant with the requirements of Regulation 1370/2007, with the exception of the reporting arrangements specified in Article 7.1. This contrasts with the best practice of reporting seen elsewhere in Sweden, and the Swedish government's own guidelines⁷. We discuss this further in Chapter 8.

⁷ "Vägledning för regionala kollektivtrafikmyndigheter: Begrepp och metoder för den årliga rapporten" (Guidance for the regional public transport authorities: Concepts and methods for the annual report), Sveriges Kommuner och Landsting

Emilia-Romagna (Italy)

Overview and context

- 5.23 Emilia-Romagna, an administrative Region of Northern Italy, consists of 348 municipalities grouped into the nine provinces of Piacenza, Parma, Reggio Emilia, Modena, Bologna (the regional capital), Ferrara, Ravenna, Forli-Cesena and Rimini. It has 4.3 million inhabitants and is one of the wealthiest and most developed regions in Europe, with the third highest GDP per capita of the Italian regions.

Figure 5.3: Emilia-Romagna: map

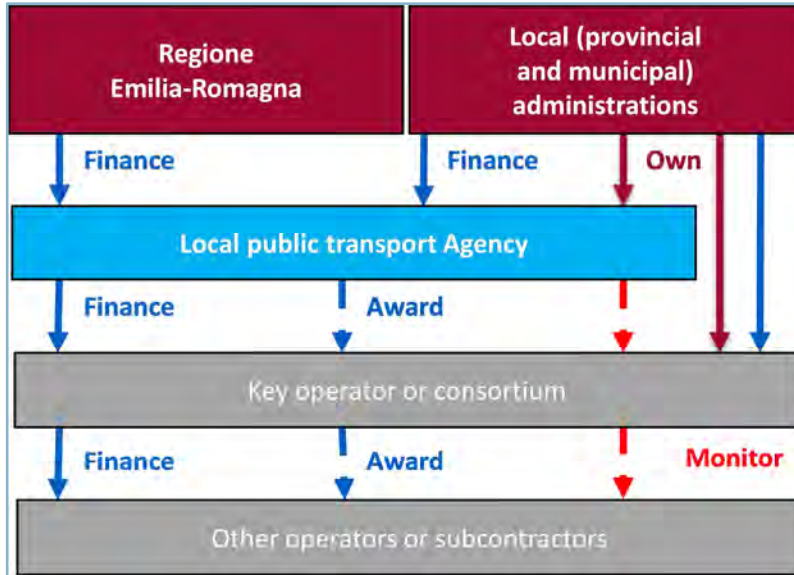


- 5.24 There are no urban rail, metro, tram or light rail services in the region and so public transport services are limited to bus and trolleybus services in urban and suburban areas.
- 5.25 Arrangements within Emilia-Romagna have continued to evolve in response to national law and local requirements, as we discuss briefly below.

Original arrangements

5.26 The arrangements for finance, ownership, contract award and monitoring are shown in Figure 5.4.

Figure 5.4: Emilia-Romagna: local public transport governance framework



Source: Steer Davies Gleave analysis

5.27 Each of the nine provinces of Emilia-Romagna was a “reference area” for local public transport services, with a public transport Agency responsible for procurement and management of the service contract for transport in the area. All nine areas used to award the provision of services to a consortium, led by an operator more than 50% owned by municipalities, province or region, and with a number of supporting operators typically focusing on suburban services.

Consolidation of operators

5.28 In 2012 the operators were consolidated into four publicly-owned transport companies, as shown in Table 5.7.

Table 5.7: Emilia-Romagna: principal operators since 2012

	Parma	Piacenza	Modena	Reggio Emilia	Bologna	Ferrara	Ravenna	Forlì-Cesena	Rimini
Leader	TEP SpA	SETA SpA			TPER SpA		START Romagna SpA		

Source: Steer Davies Gleave analysis

Planned changes

5.29 In 2012, by Regional Council Resolution 908/2012, the Region decided to reduce the number of areas from nine to five to promote efficiency and obtain, although despite a notional deadline of the end of 2014, no mergers had been finalised by June 2015.

This case study

5.30 In this case study we:

- Review the general forms of contracts now being adopted in Emilia-Romagna; and
 - Provide additional detail on the contract in Bologna, to illustrate some of the key issues and variations.
- 5.31 In 1997, Italian national legislation (the “Decreto Burlando”) introduced a framework for competitive tendering in local public transport services. This anticipated many of the key features of Regulation 1370/2007, including the treatment of, and compensation for, public service obligations, and the awarding and duration of public service contracts. In addition, the legislation made competitive tendering the sole award procedure.
- 5.32 Following the adoption of the Decreto Burlando, regions were required to introduce local legislation, which Emilia-Romagna did in 1998 (Regional Law 30/98), which also defined the responsibilities for, and governance and organisation of, the local transport system.
- 5.33 Both national and regional laws have since been amended: for example from 2008 the local law has required mandatory replacement of gross cost contracts with net cost contracts.
- 5.34 The introduction of Regulation 1370/2007 has therefore had only a very limited additional impact, although local Agencies have referred to specific provisions of the Regulation:
- Article 5 (4) to award minor or innovative services
 - Article 5 (5) to extend existing contracts in emergency circumstances
- 5.35 We discuss below the general features of the current contracting structure, with comments on the arrangements in Bologna where these are different.

Contract specification and procurement

5.36 Table 5.8 summarises the main features of typical contract specification and procurement. The contract for bus services (urban and rural) was competitively procured (as required by Italian law) for a duration of six years (until 2017) with a possible extension of three years (to 2020).

Table 5.8: Emilia-Romagna: contract specification and procurement

Topic	Description	Details and comments
Specification and contract design		
Modes	Bus: urban and rural.	
Service specification	Local public transport Agencies specify services as required by the province and municipal administrations responsible for the planning of services in their areas.	Some Agencies provide detailed service specifications, leaving operators to suggest or request modifications at tender stage or during the contract. These Agencies also takes an active role in modifying the service during the course of the contract. Other Agencies specify only general requirements, and the operator must provide detailed service plans in the tender. This gives the operator more flexibility.
Coordination of services with regional, provincial and local plans	L.R. 30/98 makes planning of local public transport services a joint activity between the Region and Provincial administrations. The regional transport plan sets aims and guidelines within which the provinces prepare local public transport plans for their reference area. The local public transport Agencies act at a more operational level, regulating the service and providing detailed timetables according to local requirements.	Recent national legislative provisions have substantially modified the scope of activity and mandate of the provinces in the Italian institutional framework. Yet provinces are still in charge of planning transport services in their area of reference. The government is also promoting the creation of “wider areas” governing bodies able to aggregate more than one province. The attempt made in recent years by the Region aimed at aggregating Agencies in some way anticipated this national strategy.
Procurement		
Selection procedure	Open tender, as is required by national law.	
Authority responsible	Local Public Transport Agency	Authority will be transferred to the five new Agencies (see 5.29) once established.
Type of award	Competitive procurement for all local public bus contracts across the region, as specified by regional law (L.R. 30/98 as modified by L.R. 10/2008).	A number of contracts tendered in 2005 were extended on a temporary basis to allow for the reorganisation of the sector in the Region.
Contract size	Total size of the contracts in Emilia-Romagna is approximately <ul style="list-style-type: none"> • 3,169 vehicles (2013) • 111 million vehicle-kilometres (2012) • 5,488 staff (2012) 	Individual contract sizes are smaller and vary.
Duration	Since 2008 all contracts have been notionally for 10 years, but this has been interpreted as a maximum duration and many are shorter.	

Source: Steer Davies Gleave analysis

5.37 In Bologna province, after a two-stage tendering procedure (Expression of Interest, followed by Tender) in 2011, a contract was awarded to TPB Scarl, owned for 85% by TPER Spa (see

Table 5.7) with the remaining shares owned by private operators. We understand that TPB Scarl was the only company to bid for the tender in the first stage (we discuss below, see Table 5.23, how bidders in Grenoble who reached the last round of procedure but were not selected were eligible for €300,000 compensation.) This limited the benefits of competition, as the incumbent lacked incentives to provide more than the minimum required in the tender documents.

- 5.38 The contract is for six years (to 2017) with a possible extension of three years (to 2020).
- 5.39 The Bologna local public transport Agency (SRM) informed us that extensive work was carried out in preparing the procurement procedure and drafting the contract clauses, building on SRM's experience from the previous procurement. SRM indicated that the overall process required between 6 and 8 years of study to refine the final tender documents.
- 5.40 SRM decided that, with a net cost contract structure, its role in service planning should be limited specifying routes, hours of service and frequencies, planning and that the operator should plan the exact timetable within this framework. This leaves operator TPB considerable flexibility to plan the service. In other Provinces, in contrast, the competent authority also specifies the exact timetable.

Contract finances, responsibilities and risk allocation

5.41 Table 5.9 summarises the contract finances, responsibilities and risk allocation. The contract is a net cost contract.

Table 5.9: Emilia-Romagna: contract finances, responsibilities and risk allocation

Topic	Description	Details and comments
Finances		
Financing	The region funds the net cost of the so-called “minimal services” identified by the Agency as public service obligations (PSO), partially with funding from central government. The compensation for minimal services is in some cases topped up by local administrations. Other or additional services are financed by local administrations.	In some cases compensation from the region is sufficient to cover the cost of “minimal services”, in other cases it is not. This might be an indicator of different level of efficiency of transport operators, though other factors (e.g. volume of service revenues; type of service provided; features of local transport network) can also lead to these differences.
Financial flows	Funds from the region and the local administrations to the Agencies, and from the Agencies to the operators (see Figure 5.4). Local administrations may make additional payments to operators to cover the costs of concessionary fares set in their territories.	Payments to operators are sometime delayed. Agencies may have difficulty paying operators if the region or local administration does not provide funds on a timely basis.
Type of contract	All new contracts are net cost.	Some gross cost contracts in place in 2008 were converted to net cost contracts before ending. This left some contract terms which had originated in gross cost contracts but less relevant to net cost contracts. All future contracts will set out clearly the allocation of risks between Agency and operators in a net cost context, taking into account any flexibility given to operators over setting fares.
Fares setting	The Region defines the fares structure, including concessionary fares, for which the region must compensate the operator. Provinces and municipalities can refine the fares locally and can also decide to specify and fund additional concessionary fares if these would reduce operator revenues. Operators can also propose additional commercial schemes/tariffs.	Some operators would like a more active role in fare setting.
Responsibilities and risk allocation		
Risk allocation	Operational risk is shared between operators and Agencies/Region/local administrations according to the provisions of the contract. Revenue risks are assigned to the operators, although they usually have limited role in setting fares.	
Ownership of vehicles	Operators own buses and must make available the fleet needed to comply with the contract. Fleet renewal is often co-financed with national or regional funds.	In 2010-2013 the state provided limited resources, targeted on methane-fuelled vehicles, which resulted in poorer performance of the vehicle fleet, which now has an average age of 12 years.
Ownership of other assets	Most other asset are owned by the Agencies. Contracts specify the terms on which they are made available to operators.	Exceptionally, in Ravenna the assets are owned by a holding company involving the municipality of Ravenna.

Source: Steer Davies Gleave analysis

- 5.42 In Bologna, the contract specifies that SRM would only pay the operator after it had received funding from the Region and the local municipalities, and that SRM could revoke the contract if this funding was not provided.
- 5.43 At the procurement stage, SRM proposed that the payment mechanism would be based on a basket of prices, proposed by bidders, for each type of vehicle and time of day, but that bidders could also suggest one overall average price. In the event, TPB elected to use the basket structure, meaning that its basket prices applied to any new service. With hindsight, a simpler structure based on an average price might have been easier to implement.
- 5.44 Local administrations must approve any fares changes proposed by an operator and can also request changes to fares, provided that the overall effect compensates the operator for the effects of inflation. Uniquely in Emilia-Romagna, TPB's contract gives it the right to an adjustment of fare levels every two years to take into account inflation since the previous adjustment, but this must still be approved by the city council. The first increase did not in practice take place until after three years (in 2014, instead of 2013), partly because of delays after the municipality of Bologna asked TPB to amend its proposal.
- 5.45 TPB is also incentivised to improve integration with other public transport and to improve the quality of service.
- 5.46 The Bologna contract appears sufficiently flexible to allow for the adjustment of the services over time. It also includes strong incentives to improve quality and economic or financial performance. For instance TPB is entitled to fares increases when certain goals in term of service quality have been fulfilled.
- 5.47 The contract also appears to balance the allocation of risks between the operator and the local transport Agency. The contract provisions offer a flexible basis for the establishment of a good relationship and minimisation of conflict between the parties.

Contract management and monitoring

5.48 Table 5.10 summarises the contract management and monitoring.

Table 5.10: Emilia-Romagna: contract management and monitoring

Topic	Description	Details and comments
Management		
Calculation of the final level of compensation	Calculated as the contractual compensation less any penalties applied.	
Monitoring		
Monitoring authority	The Agency collects and verifies information from operators and sends monitoring reports to the Region.	The type and level of control exercised by the different transport Agencies is not consistent.
Quality and performance monitoring	<p>Each contract specifies monitoring and penalties.</p> <p>Sometimes processes are automated through equipment (AVM) on vehicle fleets (Forli-Cesena).</p> <p>Sometimes monitoring is by random human checks and reporting (Rimini).</p> <p>The region also monitors quality through an annual user survey but this has no impact on contractual obligation and performance.</p>	<p>Some operators claim that some Agencies' systems are too stringent and generate a high level of conflict.</p> <p>Conversely, some Agencies, largely through lack of resources, exercise very little control over the operator.</p> <p>In future, the Region will support a harmonisation of the type and level of quality and performance monitored.</p>

Source: Steer Davies Gleave analysis

- 5.49 An unusual feature in Italy has been the need for contracts to be renegotiated to deal with a shortage of funds to pay for the contracted service levels.
- 5.50 In 2010 the Region promoted a 3 year agreement ("Patto per la mobilità") with Agencies, local authorities, local administrations, operators unions that allowed for a reduction of 5% in vehicle-kilometres operated and a phased increase in fares to increase revenue. The agreement also required operators to act to improve efficiency.
- 5.51 In 2013, as a result, the Region and Provinces adopted plans reorganising local bus and rail services to improve efficiency and economic and financial sustainability. This was carried out within the existing contracts, and so focused on:
- Eliminating overlap between rail and bus connections
 - Introducing "on demand services" in low density areas
 - Action on fare evasion
- 5.52 In 2013, a national provision introduced criteria for the allocation of funds targeted at public transport, with the aim of improving the efficiency of the sector and increasing the share of costs covered by revenues. Further national legislation may be put forward.
- 5.53 As part of the ongoing reorganisation, the Region plans a new financing mechanism, based on the definition of standard costs, to define the regional contribution for "minimal services" across the Region. This is expected to provide stronger incentives to operators to improve their efficiency.
- 5.54 We reviewed a range of published performance indicators over the period 2008-2013 but found no major variations over this period. However:

- Both passenger numbers and nominal revenue grew slowly over the period
- There appeared to be a reduction in total drivers and offsetting gains in driving hours per driver
- Around two-thirds of operating costs are covered by public funds and around one-third from revenues from fares, fines and advertising

5.55 The Bologna contract differs slightly from the others, as it is supported by a parallel contract for “rent of the asset business unit” between SRM, which owns depots, bus stops and shelters and provides capital investment, and TPB, which maintains and operates them.

5.56 Under the Bologna contract, and unlike some of the other contracts, SRM undertakes detailed monitoring of the services and applies both fines and penalties under the incentive regime, which has resulted in an average bonus of approximately €1 million per annum. SRM reported that one particularly effective clause relates to fare evasion: TPB is paid an additional €20 for every check on fare evasion over and above a base number of 65,000 checks per annum. SRM reported that this mechanism significantly helped the operator to reduce the evasion rate.

5.57 The Bologna contract also makes provision, at the end of the contract, for TPB to provide a list of vehicles which SRM must buy and transfer to any new operator following the retendering of services. National guidelines have been issued on how vehicles transferred in this way are to be valued.

The effects of Regulation 1370/2007

5.58 Table 5.40 summarises our understanding of the effect of Regulation 1370/2007 on Emilia-Romagna.

Table 5.11: Emilia-Romagna: Regulation 1370/2007

Issue	Conclusion
Was the Regulation in force at the time that the current contract was signed?	The case study deals with a range of contracts of different dates.
Has the Regulation influenced the design of the contract?	No.
Is the contract compliant with the requirements of the Regulation?	The Bologna contract appears compliant, but we have not examined all the others.
Does the competent authority comply with Article 7.1?	No. Regione Emilia-Romagna produces an annual report but it does not provide all the information specified in the Article and the interpretative guidelines.
Does the competent authority comply with Article 7.2?	Yes, we understand that the Agencies always give the required notice.

Source: Steer Davies Gleave analysis, stakeholder clarifications

5.59 In summary, Italy’s national legislation had anticipated the principal provisions of Regulation 1370/2007 by many years and has adopted stricter approaches to contracting than the Regulation requires. The legislative framework in place in Emilia Romagna is compliant, and recent provisions adopted by the National Transport Authority restate the need for local transport authorities to comply.

Conclusion of findings on Emilia Romagna case study

- 5.60 Emilia-Romagna's bus operations are increasingly being let on the basis of competitive tenders for net cost contracts, with specific provision for exclusive rights. The system is maturing.

Budapest (Hungary)

Overview and context

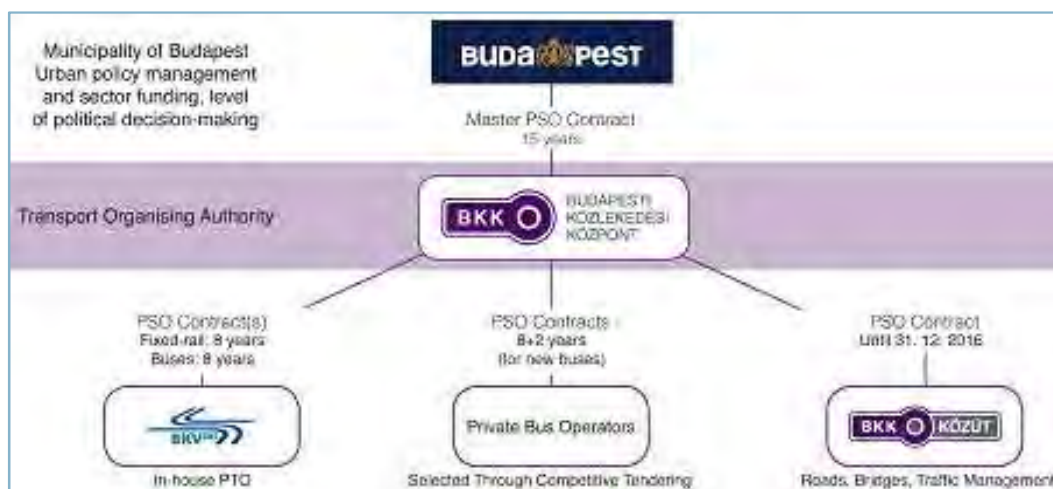
- 5.61 Budapest is the capital and largest cultural, commercial and industrial city of Hungary, with a 2014 population of 1.75 million. The Budapest Metropolitan Area, including areas from which there is significant commuting to Budapest, has an overall population of 3.3 million, making it the tenth largest urban region in Europe.
- 5.62 Budapest's transport system consists of commuter rail lines, which are outside the scope of this study, and metro, light rail, trolleybus and bus. By 2010, the scale of the bus operation was approximately 1,400 buses operating 93 million vehicle-kilometres on 240 routes and carrying 550 million passengers.
- 5.63 Until 2010, Budapesti Közlekedési Zártkörűen Működő Részvénytársaság (BKV, "Budapest Transport Company"), owned by the Municipality of Budapest, was the sole local public transport service operator in Budapest. However, BKV faced a number of problems:
- The bus fleet was ageing, with an average age of 17 years, undermining service quality.
 - Only 15% of the buses were equipped with air-conditioning, and 80% of them were high-floor vehicles, often with unacceptable interior and exterior appearance.
 - BKV was undercapitalised and its business strategy focused on rail transport, with the aim of developing the infrastructure and enlarging the rolling stock fleet through funding from the EU Cohesion Fund.
- 5.64 In 2010, governance of local passenger transport in Budapest was reformed to reflect Regulation 1370/2007 and national regulations.
- 5.65 On 27 October 2010, by Local Government Decree No. 1829/2010, the General Assembly of the Municipality of Budapest established a wholly-owned subsidiary Budapesti Közlekedési Központ (BKK, Centre for Budapest Transport). The aim was to reform the transport governance previously fragmented by mode and integrating them into an umbrella organisation to ensure coordination.
- 5.66 On 14 March 2012, by Local Government Decree 20/2012, the Municipality of Budapest awarded BKK a new service provision contract.
- 5.67 From 1 May 2012, BKK became the competent authority with a 15-year contract from the Municipality giving it responsibility for public transport, cycling, walking, public road and bridge infrastructure management, parking and taxi services and transport development projects. Its public transport tasks include planning, integration, regulation, tendering and awarding, and management, control and marketing. Its policy objectives are:
- To increase the quality of urban transport and transport-oriented development.
 - To use resources in an efficient and integrated way.
 - To promote social and civil participation, cooperating effectively with civil organisations in the best interest of the city.
- 5.68 BKK renewed its public service contract for the provision of rail and bus services with the internal operator BKV as a direct award for a period of 8 years. Under this existing contract, BKV had two sub-contractors, VT-Transman (now VT-Arriva) and Nógrád Volán, whose combined total share of urban bus services never exceeded 5% of total volume.

5.69 The direct award contract appears to comply with the requirements of Regulation 1370/2007 Article 4 and includes:

- Exclusive rights for all rail-based transport, trolleybuses and the existing bus services.
- A monetised performance incentive mechanism.

5.70 Ticket sales and revenue protection are the responsibility of BKK, which takes all revenue risk. BKK is also letting PSCs for new buses, as shown in Figure 5.5, and a separate contract for roads, bridges and traffic management expires in 2016.

Figure 5.5: Budapest: local public transport governance framework



Source: EMTA

5.71 BKK is funded from:

- Fares, which it sets and collects and which cover around 40% of operating costs
- State and municipal subsidies of public transport
- Road maintenance subsidies
- Parking revenues
- Heavy traffic charges
- Real estate developers' contributions
- Potentially, in the future, a congestion charge

5.72 Investment in new bus lanes and traffic signal priority has made bus services faster and more reliable and increased capacity, including more radial routes. As of June 2015, 65% of the bus fleet are new low floor air-conditioned vehicles, operated mostly under PSO contracts by operators other than BKV.

5.73 In addition, tram lines have been rebuilt and metro line No. 4 has been opened, and there have been improvements in real-time passenger information system, maps, cleanliness, CCTV provision, ticket vending machines and customer service centres.

This case study

5.74 The scope of this case study is the direct award contract to operated bus services awarded by BKK directly to internal operator BKV from May 2012, and the subsequent competitive tenders for bus services.

5.75 The urban rail services included in the contract are outside the scope of this study.

Contract specification and procurement

- 5.76 Following a decision of the Municipality Assembly, bus operational contracts are to be split:
- 34% will continue to be operated by BKV; and
 - 66% will be contracted out through competitive tendering during the first half of the 8-year contract.
- 5.77 The contract defines service quality measures and a bonus-malus performance regime.
- 5.78 The process for the competitive tendering of 66% of bus services has been modelled on the experience of Transport for London and has two stages:
- First stage, which began on 21 October 2011, for a four-year period, shortlisting qualified applicants. By the end of 2014 ten companies had prequalified (INTER TAN-KER Zrt. INTER TAN-KER CITY Kft., LIV Intertrans Kft., COLOR TOURS Idegenforgalmi és Szállítmányozó Kft., Orangeways City Kft., Volánbusz Zrt., Kontakt-Busz Kft., T & J Busz Projekt Kft., Kravtex Kft., VT-ARRIVA Kft).
 - Second stage, which began in January 2012, tender competitions for each new service contract. Contracts typically require a fleet of 30-300 buses, the largest that can be accommodated in a typically-sized Budapest bus depot and ten tender competitions had been completed, by mid-2015.

5.79 Table 5.12 summarises the main features of the contract specification and procurement. The contract for the provision of urban (and limited suburban) bus operations uses two different models, with around a third of the operations directly awarded to BKV, and the remaining two-thirds awarded after competitive tendering to other operators.

Table 5.12: Budapest: contract specification and procurement

Topic	Description	Details and comments
Specification and contract design		
Modes	Urban and one case suburban (crossing city borders) local bus transport.	
Service specification	The routes and timetable are specified in the service contracts.	
Coordination of services with regional, provincial and local plans	BKK has all planning responsibilities.	
Procurement		
Selection procedure	Direct award to BKV and competitive tenders.	
Authority responsible	BKK	
Type of award	<ul style="list-style-type: none"> • Direct award • Competitive public procurement 	A midibus tender had to be re-launched and split
Contract size	Typical size 30-300 buses.	The contract size is limited by the size of fleet which can be operated from the depots available.
Duration	8 years for BKV direct award. For competitive tenders, typically: <ul style="list-style-type: none"> • 2 year +1 year option for used buses • 8 years +2 years option for new buses 	

Source: Steer Davies Gleave analysis

5.80 Table 5.13 summarises the competitive contracts let since 2012.

Table 5.13: Budapest: competitive bus contracts let since 2012

Date contract let	Type/number of buses in service	Characteristics	Operator
2012, May	Used buses	2 year +1 year option contract, with: <ul style="list-style-type: none"> • Euro3 emission level • Air conditioning • Partly low-floor 	VT-Arriva
2012, October	150 new buses	In operation May 2013	VT-Arriva
2012	167 new buses	Cross-border routes In operation May 2013	Volánbusz
2013, July	25 articulated hybrid buses 1.9 million vehicle-kilometres per year	Option for an additional 20% of vehicle-kilometres In operation February 2015	T&J
2013, October	195 new buses	In operation June 2015	VT-Arriva

Source: Steer Davies Gleave analysis. Note that contracts are based on the number of buses in operation, so the vehicle fleet required by the operator typically includes an extra 6% to provide spares and maintenance cover.

5.81 In May 2012 there was a need to let a number of new contracts immediately to replace these sub-contractors. With insufficient time and funds to procure new buses, a contract for used buses was let for two years, with a possible one-year extension. This was won by VT-Arriva, but the tender specifications included provisions to increase service quality:

- Euro3 emission level;
- Air conditioning; and
- Partly low-floor.

5.82 In October 2012 the General Assembly of Budapest Municipality voted in favour of a new competitive bus tender and VT-Arriva won a further contract to operate a total of 150 new buses from May 2013.

5.83 Later in 2012 a second major tender was launched for 167 new buses to serve the suburban routes, crossing the city border of Budapest, previously operated by BKV. The tender winner was Volánbusz, the biggest state-owned Hungarian regional and long-distance bus company which already operated most of the suburban buses to Budapest and provides services for Eurolines.

5.84 In July 2013, the third bigger tender was launched, for 25 articulated hybrid buses for 1.9 million service-kilometres (with a +20% option) which was won in March 2014 by T&J, which also provides coach services to Volánbusz. The new buses entered into service in January and February 2015 on three trunk bus lines crossing the downtown from the suburbs.

5.85 The fourth bigger tender “group” was launched in October 2013 for 195 new buses (in daily traffic) and the tender was won by VT-Arriva who operates the new buses from June 2015.

Contract finances, responsibilities and risk allocation

5.86 Table 5.14 summarises the contract finances, responsibilities and risk allocation.

Table 5.14: Budapest: contract finances, responsibilities and risk allocation

Topic	Description	Details and comments
Finances		
Financing	BKK is responsible for all funding, but receives compensation from Central Government for discounted tickets.	There is a regular debate about the costs of internal operator BKV.
Financial flows	BKK payments to operators are based on service volume data uploaded into its traffic management system.	Operators invoice BKK separately for special or replacement services.
Type of contract	Service contract.	The detailed document has 200-300 pages.
Fares setting	Specified by BKK and set out in the contract.	
Responsibilities and risk allocation		
Risk allocation	BKK bears all revenue risk. Operators bear only operational risk.	BKK operates the dispatcher and traffic management system.
Ownership of vehicles	Vehicles are owned by the operator or a subcontractor.	
Ownership of other assets	Other assets are owned by BKK or BKV and/via local government or the state.	

Source: Steer Davies Gleave analysis

Contract management and monitoring

5.87 Table 5.15 summarises the contract management and monitoring.

Table 5.15: Budapest: contract management and monitoring

Topic	Description	Details and comments
Management		
Calculation of the final level of compensation	BKK payments to operators are based on service volume data uploaded into its traffic management system.	
Monitoring		
Monitoring authority	BKK	
Quality and performance monitoring	BKK imposes a bonus-malus system.	BKK can check services at any time and check any vehicle at 24 hours' notice. Performance indicators such as delays and failed services are reported in every 3 month.

Source: Steer Davies Gleave analysis

5.88 The information we obtained for the performance of the transport system in Budapest was rather limited but is displayed below. It is not broken down by operator or by mode of transport rendering an analysis of performance of each PSC particularly difficult.

Table 5.16: Budapest KPIs

Indicator	2014
Vehicle-kilometres per staff member	13,471
Fare revenue per vehicle-kilometre (€)	1.06
Operating cost per vehicle-kilometre (€)	2.50
Proportion of total operating costs covered by fares	44%
Proportion of total operating costs covered by subsidy	59%

Source: BKV, BKK, KSH

The effects of Regulation 1370/2007

5.89 Table 5.17 summarises our understanding of the effect of Regulation 1370/2007 on Budapest.

Table 5.17: Budapest: Regulation 1370/2007

Issue	Conclusion
Was the Regulation in force at the time that the current contract was signed?	Yes. The Regulation was in force at the time of the direct award to BKV and a number of competitive tenders have been let since.
Has the Regulation influenced the design of the contract?	Not clear, but the Regulation appears to be reflected in current procedures.
Is the contract compliant with the requirements of the Regulation?	As far as we have been able to establish, all contracts are compliant.
Does the competent authority comply with Article 7.1?	No. We have found no evidence of such a report.
Does the competent authority comply with Article 7.2?	Not clear: we have not been able to check for every contract.

Source: Steer Davies Gleave analysis, stakeholder clarifications

Conclusions on findings of the Budapest case study

5.90 The situation in Budapest is in some respects similar to that with Bus Éireann, which we describe below (see 5.160). Since the Regulation has come into force, the competent authority has formalised arrangements with an internal operator through a direct award but has also progressively subjected elements of the service to competitive tender and is now showing a better degree of maturity.

Burgasbus (Bulgaria)

Overview and context

- 5.91 Burgas Municipality is the fourth most populous Bulgarian district, with over 400,000 inhabitants including the city of Burgas, a smaller town, Balgarovo, and twelve villages. More than half the population of the Municipality live in Burgas, the fourth largest city in Bulgaria and the second largest on the Bulgarian Black Sea Coast.
- 5.92 Transport policy is implemented by the City Council through three divisions of the Municipal administration: Urban Planning, Economic Activities and European Policies.
- 5.93 The city is currently implementing a reorganisation of the public transport system including the construction of a 15 kilometre Bus Rapid Transit (BRT) line, costing approximately €67 million and funded by:
- EU (71%)
 - Burgas Municipality (16.5%)
 - Ministry of Regional Development and Building (12.5%)
- 5.94 The project also includes investment in a new bus fleet, an electronic ticketing system and upgrades of bus stations and terminals.
- 5.95 Burgas Municipality owns an internal operator, Burgasbus, which operates 31 bus and two trolleybus lines comprising 80% of the routes, the remainder of which are operated by private bus companies Comfort and Burgas Volan. Burgasbus is a separate entity with its own budget, and also receives some funding from the state authorities. As part of the reorganisation programme, Burgas Municipality concluded a PSC for Burgasbus in June 2014.

Figure 5.6: Burgasbus: map of services



- 5.96 Legislation of transport in Bulgaria includes:
- The Automobile Transportation Act (ATA), which is amended from time to time.
 - Ordinance No. 33, of 3 November 1999, on the public transport of passengers and goods.
 - Ordinance No. 2, of 15 March 2002, on the conditions and the procedure for approval of transport schemes and for providing public passenger transport by bus.
- 5.97 Before Regulation 1370/2007, Ordinance No. 2 of 2002 was the main act regulating passenger public transport. It defines the conditions and the procedures for assignment of transport schemes and the organisation of regional and local bus and minibus transport.
- 5.98 Ordinance No. 2 was amended in 2011. Direct awards are still permitted for internal operators, and competitive tenders are let by either:
- The municipalities at the end points of any service crossing boundaries; and
 - The municipality concerned where a service does not cross its boundary.
- 5.99 The municipalities set criteria for eligibility and evaluation, which may include:
- Vehicle environmental standards;
 - Fares and concessionary fares;
 - Vehicle equipment;
 - Vehicle equipment for Persons with reduced mobility (PRM); and
 - Other criteria devised by the municipal council.
- 5.100 The amended Ordinance prohibits municipalities from including conditions or requirements that may prevent, restrict or distort competition. The mayor of the municipality is responsible for compliance.
- This case study**
- 5.101 The scope of this case study is the direct award contract with the internal operator, Burgasbus, signed in June 2014.

Contract specification and procurement

5.102 Table 5.18 summarises the main features of the direct award contract specification and procurement.

Table 5.18: Burgasbus: contract specification and procurement

Topic	Description	Details and comments
Specification and contract design		
Modes	Urban, suburban and rural bus and trolleybus services.	
Service specification	Standards of continuity, frequency, regularity and capacity are specified under the PSO Transport Plan and PSO Operation Plan. The PSO Transport Plan is published by the Municipality by 15 September each year. It lists lines to be served, number and locations of stops, proposed service frequency and passenger forecasts by line and tariff category.	The Municipality can change the PSO Reference Framework, including the introduction of new routes or changes to the existing ones, after giving the operator specified notice.
Coordination of services with regional, provincial and local plans	The Municipality has commissioned a comprehensive review of the network shown in Figure 5.6, including the introduction of Bus Rapid Transit (BRT), which Burgasbus will operate.	Burgasbus provides advice to the Municipality on operational issues related to the proposed changes to the network.
Procurement		
Selection procedure	Direct award by the Municipal Council on behalf of itself and the Burgas Municipality.	PSC contract was signed in June 2014.
Authority responsible	The Municipality is responsible for contract specification and direct award of the public transport service to the operator.	The Municipality used external advisors to prepare the direct award PSC contract to be compliant with domestic law and Regulation 1370/2007.
Type of award	Direct award	
Contract size	Burgasbus has 125 vehicles of which 99 are used for PSO services.	The remaining buses are used for dedicated student and company services and private hire contracts.
Duration	10 years with possible extension of 5 years.	

Source: Steer Davies Gleave analysis

Contract finances, responsibilities and risk allocation

5.103 Table 5.19 summarises the contract finances, responsibilities and risk allocation.

Table 5.19: Burgasbus: contract finances, responsibilities and risk allocation

Topic	Description	Details and comments
Finances		
Financing	Before 15 October each year the operator submits to the Municipality a PSO Operation Plan and a Draft PSO Reference Framework based on the Municipality's PSO Transport Plan.	We are concerned that the overall process is unclear. In particular, while formally the Council approves funding, this is done on the basis of annual submissions by the operator, which at first sight makes the overall process difficult to distinguish from a "cost plus" or "deficit financing" arrangement.
	The Draft PSO Reference Framework includes a proposed unit price per vehicle-kilometre, by vehicle type, from which compensation, if any, is to be calculated.	
	Within 15 days from the receipt of the Draft PSO Reference Framework the Municipality comments to the operator on the proposed unit price.	
	After negotiations, the PSO Reference Framework for the following year and the PSO Transport Plan assigned to the operator are finalised and approved by the Municipal Council no later than 20 December.	
Financial flows	PSO costs are balanced by the revenues generated within the PSO and the compensation payments from the Municipality. The operator cannot use these payments for activities outside the PSO.	
Type of contract	Public Service Contract.	On a yearly basis the parties determine a PSO Reference Framework. The Municipality submits to the Operator the PSO Transport Plan specifying the services to be delivered by the Operator under the contract. The PSO Operation Plan is prepared by the operator and submitted to the Municipality to specify the operational details of the services to be delivered in line with the PSO Transport Plan.
Fares setting	<p>The Municipality sets fares including discounted and preferential fares for eligible social groups of passengers. One concern is that fares have not risen since 2008, gradually reducing Burgasbus's real fares income.</p> <p>The operator has the right to propose a tariff policy for regular passengers to the Municipality by 15 September each year, and at any other time during the duration of the contract.</p>	If the cumulative effect of the changes proposed for tariffs would change the compensation by 10% or more, the Municipal Council's Commission have 15 days to discuss the proposal with the operator and suggest it to the Municipality for approval.
Responsibilities and risk allocation		
Risk allocation	The contract is net cost.	Operator Burgasbus also bears the risk of maintaining the depot, delays on the network, and maintenance and operation of vehicles.

Topic	Description	Details and comments
Ownership of vehicles	Vehicles may be owned by the Municipality of the operator.	We understand that some buses were grant-funded and are leased by the Municipality to Burgasbus at a market rate. We are less clear as to the financing of trolleybuses under the programme and the conditions under which they are operated by Burgasbus.
Ownership of other assets	The Municipality is responsible for finance and construction and renewal of the urban transport infrastructure. The operator is responsible for maintenance and repairs to any infrastructure provided to the operator by the Municipality.	

Source: Steer Davies Gleave analysis

Contract management and monitoring

5.104 Table 5.20 summarises the contract management and monitoring.

Table 5.20: Burgasbus: contract management and monitoring

Topic	Description	Details and comments
Management		
Calculation of the final level of compensation	During the contract year, the Municipality pays for the service kilometres reported in the previous month report. If the result is that the operator has made a profit, this is paid back to the Municipality.	Each month, Burgasbus reports what it has operated and is paid on that basis. If it has made any cumulative profit, that is paid back to the Municipality. This appears to be a disincentive on the operator to improve efficiency.
Monitoring		
Monitoring authority	The Municipality is the monitoring authority.	
Quality and performance monitoring	The PSO Reference Framework defines a monitoring regime. The Municipality has the right to comment to the operator on its efficiency against other operators and international benchmarks when available. The indicators reviewed include: <ul style="list-style-type: none"> • Percentage of costs covered by revenue • Vehicle-kilometres per vehicle • Vehicle-kilometres per driver • Vehicle-kilometres per employee • Staff cost per vehicle-kilometre • Fuel cost per vehicle • Maintenance and repair costs per vehicle • Vehicle technical compliance 	The operator must maintain a certified system for quality management in compliance with the requirements of standard ISO 9001:2008 and European Standard EN 13816:2002. The operator is expected to inspect and certify the technical conditions and cleanliness of the vehicles and as the physical and psychological condition of the drivers. The operator is expected to provide the Municipality with at least monthly operational information on the execution of the PSO Operation Plan and any change to traffic organisation and road network condition.

Source: Steer Davies Gleave analysis

5.105 Burgasbus provided us with recent examples of the KPIs listed in Table 5.20, from which we have derived the data shown in Table 5.21 below.

Table 5.21: Burgasbus: KPIs

Key Performance Indicator	2012	2013	2014	
Percentage of costs covered by revenue	77%	77%	77%	
Distance travelled				
Vehicle-kilometres per vehicle per year	69,000	57,200	54,700	
Vehicle-kilometres per driver per year	30,100	31,200	32,600	
Vehicle-kilometres per employee per year	25,200	26,300	26,300	
Illustrative unit costs (Bulgarian Lev)				
Staff costs per vehicle-kilometre	0.67	0.80	0.83	
Fuel cost per vehicle per year	Bus	55,400	36,000	33,600
	Trolleybus	37,400	41,400	17,400
Maintenance costs per vehicle per year	Bus	20,500	12,700	7,800
	Trolleybus	23,000	28,800	15,800

Source: Burgasbus, Steer Davies Gleave analysis, Bulgarian Lev is approximately €0.51 in July 2015

5.106 We understand that the sharp reduction in some maintenance and energy costs between 2012 and 2014 results from the renewal of the bus and then the tram fleet. This highlights a potential difficulty of agreeing payments for the entire contract period in advance: if Burgasbus had continued to be remunerated on the basis of fuel and maintenance costs in 2012, by 2014 it would be over-compensated relative to the methodology set out in the Annex to the Regulation.

The effects of Regulation 1370/2007

5.107 Table 5.22 summarises our understanding of the effect of Regulation 1370/2007 on Budapest.

Table 5.22: Burgasbus: Regulation 1370/2007

Issue	Conclusion
Was the Regulation in force at the time that the current contract was signed?	Yes.
Has the Regulation influenced the design of the contract?	Yes. We understand that the Municipality's advisors were instructed that the direct award contract should be consistent with the Regulation as well as with domestic law.
Is the contract compliant with the requirements of the Regulation?	Yes. We understand that it was prepared on this basis.
Does the competent authority comply with Article 7.1?	No. We have seen no evidence of reports complying with the Article 7.1 requirements.
Does the competent authority comply with Article 7.2?	We understand that this is the case, but have not confirmed details for the most recent contract.

Source: Steer Davies Gleave analysis, stakeholder clarifications

Conclusions

- 5.108 Burgas direct award contract of June 2014 appears to be evolving towards greater consideration of the Regulation's requirements. Requirements of Regulation 1370/2007 were considered when the contract was drafted.

Grenoble (France)

Overview and context

5.109 The Grenoble public transport network, shown schematically in Figure 5.7 consists of:

- 5 tram lines;
- 46 bus routes; and
- 18 park and ride facilities.

Figure 5.7: Grenoble: schematic map



5.110 The competent authority is Syndicat Mixte des Transports en Commun de l'Agglomération Grenobloise (SMTC), representing the Municipality of Grenoble and the Department of Isère.

5.111 SMTC is responsible for developing and implementing transport policy in the Grenoble area. It owns the tramway infrastructure and all bus and tram vehicles, and determines the supply of transport, service levels and quality and the pricing policy through a public service contract.

5.112 SMTC has three main sources of funding: a transport tax (*Versement Transport*) paid by companies located in the region, a contribution from the municipal and departmental authorities, and passenger fares. The overall mix of funding is:

- Transport tax: 47%;
- Regional and municipal authorities' contribution: 37%; and
- Passenger fares: 16%.

- 5.113 In 2013, following a competitive tender, a PSC was awarded to *Société d'économie mixte des transports publics de l'agglomération grenobloise* (SEMITAG), with a 40% shareholding of Transdev, 52% shareholding of SMTC and with the remaining shares owned by local entities (such as Chamber of Commerce and banks) to operate the public transport service on a seven and a half year contract. Under this contract:
- SMTC pays an annual fixed financial contribution to SEMITAG to manage the network. The amount of the contribution varies slightly each year but is in the order of €75-78.6 million.
 - Under the agreement with SEMITAG, 75% of any revenue shortfall is borne by Transdev, up to an annual cap of €1 million, after which it is all borne by the other shareholders. This effectively means that shortfall beyond this cap is borne mainly by SMTC as shareholder.

This case study

- 5.114 Between 1974 and 1990, a convention was in place between SMTC and SEMITAG for the management of public transport. It was renewed in 1990 without competitive tendering for another 16 years. In 2006 the first contract was issued for 7 years, after a competitive tender where SEMITAG was the only bidder.
- 5.115 The first contract (2006-2013) was critically audited by the French Court of Auditors in 2012 who highlighted a number of points of concern and made some recommendations. In particular it highlighted that the share of costs covered by user fare was very low at 16% (over the period) and needed to be better managed.
- 5.116 The Court recognised that the Authority had improved its control over the operator (particularly on operational and financial performance) but recommended that efforts should be maintained so that the asymmetry of information between both parties could be reduced.
- 5.117 The Court also highlighted some legal and economic bias related to the competitive environment and recommended that the authority creates the conditions for an effective and optimal competition. It also wished to ensure that the authority retained know-how and skills in the case of use of contractors.
- 5.118 The Court also required improved governance in some areas, so that there would be no conflicts of interest.
- 5.119 The scope of this case study is the most recent 2013-2020 public service contract awarded by SMTC to SEMITAG by competitive tender for the management of the network.

Contract specification and procurement

5.120 Table 5.23 summarises the main features of the contract specification and procurement under a competitive tender.

Table 5.23: Grenoble: contract specification and procurement

Topic	Description	Details and comments
Specification and contract design		
Modes	Tram and bus Park-and-ride facilities are also included	
Service specification	SMTC develops and implements transport policy in the Grenoble area and determines the supply of transport, service levels and quality and the fares policy through a public service contract.	
Coordination of services with regional, provincial and local plans		
Procurement		
Selection procedure	<p>Award criteria include:</p> <ul style="list-style-type: none"> • Company registration • No criminal conviction • No outstanding tax payments • Satisfactory insurance • Company organisation and resources • Registered as a transport operator • Compliance with nomination procedures • Ability to ensure continuity of service and non-discriminatory treatment of customers of a public service <p>Bids must also include various affidavits, supporting documents and guarantees.</p>	<p>In the 2004/5 selection for the previous contract, there was only a single bid.</p> <p>In the 2013 selection, bidders who reached the last round of the procedure but were not selected were eligible for €300,000 compensation.</p> <p>Bidders were also encouraged to see the network as a “showcase” with which to demonstrate their ability and experience.</p>
Authority responsible	SMTC	
Type of award	Net cost, subject to some risk-sharing.	
Contract size	<p>The approximate contract size, to operate 5 tram lines, 46 bus routes and 18 park and ride facilities, is:</p> <ul style="list-style-type: none"> • €78.6 million fixed annual contribution • €30 million annual passenger revenue • 17.1 million of service.km in 2014 • 1,430 Full-time equivalent employees • 293 buses and 95 trams 	
Duration	7½ years from July 2013 to December 2020	

Source: Steer Davies Gleave analysis

Contract finances, responsibilities and risk allocation

5.121 Table 5.24 summarises the contract finances, responsibilities and risk allocation.

Table 5.24: Grenoble: contract finances, responsibilities and risk allocation

Topic	Description	Details and comments
Finances		
Financing	<p>Operator SEMITAG receives funding from:</p> <ul style="list-style-type: none"> • 47% transport tax • 37% regional and municipal authorities' contribution • 16% passenger fares 	
Financial flows	<p>Transport tax and regional and municipal contributions are paid via the competent authority SMTC.</p> <p>Passenger fares are collected direct by the operator SEMITAG.</p>	
Type of contract		The contract can be amended if requirements change.
Fares setting	The operator SEMITAG takes revenue risk, but submits annual proposals for fares structures to SMTC.	The contract specifies that average fares rise by inflation plus 1%, but the mix of fares is determined by SMTC. SEMITAG may make suggestions on fares.
Responsibilities and risk allocation		
Risk allocation	<ul style="list-style-type: none"> • The contract is notionally net cost, but the risk allocation mechanism within SEMITAG means that, once Transdev's risk cap of €1 million per year is reached, almost all further revenue risk is borne by SMTC. 	SEMITAG is not permitted to change staff terms and conditions.
Ownership of vehicles	<p>SMTC owns:</p> <ul style="list-style-type: none"> • Tram vehicles • Bus vehicles • Depots and buildings 	SEMITAG does not provide material assets.
Ownership of other assets	SMTC also owns the tramway infrastructure.	

Source: Steer Davies Gleave analysis

Contract management and monitoring

5.122 Table 5.25 summarises the contract management and monitoring.

Table 5.25: Grenoble: contract management and monitoring

Topic	Description	Details and comments
Contract Management		
Calculation of the final level of compensation	Compensation is calculated from the base payment, but note that SMTC effectively also bears most revenue risk through its shareholding in SEMITAG.	Compensation is based on unit rates per vehicle-kilometre and per driver-hour. Negotiation of the compensation is provided for in the event of extensions to the area covered or the opening of tramway lines other than at the dates envisaged in the contract. We understand, however, that the contract does not specify deadlines by which negotiation must be completed.
Monitoring		
Monitoring authority	SMTC is the monitoring authority.	
Quality and performance monitoring	The previous contract had a bonus/malus scheme, but the current (2013) contract has only a malus scheme with a penalty cap of €700,000 a year, or approximately 1% of the contract value.	SMTC informed is that it would be desirable to have the resources to monitor the contract in greater detail.

Source: Steer Davies Gleave analysis

5.123 We obtained some information related to KPIs for Grenoble, as presented in the Table below.

Table 5.26: Grenoble, KPIs

	2008	2012
Proportion of total operating costs covered by fares	26%	27%
Kilometres produced (000s)	16,475	15,928
Kilometres (000s) per employee	10.5	10.3
Kilometres (000s) per inhabitant	40.9	39.3
Staff per vehicle	2.37	2.36
Annual public grant (€) per inhabitant in the public transport perimeter	164.39	187.06

Source: UTP data, Steer Davies Gleave analysis

5.124 The Grenoble area benefits from a high level of public transport usage, one of the highest daily rates of mobility by public transport in France. The network offers a strong and frequent service offer of buses and tramways. The car market share falls slightly below 50% helped by a long-term political commitment to other transport modes. Grenoble also benefits from a wealthy base for the collection of the French public transport tax Versement Transport. However, the operating costs per inhabitant in Grenoble is one of the highest in France (€267 in 2011 according to Cerema). Operating costs per inhabitants have been contained since 2008 (+1%) to the proportion of the increase of the population (+1% between 2008 and 2012). Overall the network's costs per km are higher than other French networks with tramways.

The effects of Regulation 1370/2007

5.125 Table 5.27 summarises our understanding of the effect of Regulation 1370/2007 on Grenoble.

Table 5.27: Grenoble: Regulation 1370/2007

Issue	Conclusion
Was the Regulation in force at the time that the current contract was signed?	Yes.
Has the Regulation influenced the design of the contract?	No. The authority informed us that its approach to funding and letting PSCs has not been affected by the Regulation.
Is the contract compliant with the requirements of the Regulation?	Yes. We have not examined the contract, but understand that the processes are compliant with the Regulation.
Does the competent authority comply with Article 7.1?	SEMITAG produces an annual report but it does not appear to comply with all the requirements of Article 7.1.
Does the competent authority comply with Article 7.2?	As far as we are aware, SMTC complied with Article 7.2

Source: Steer Davies Gleave analysis, stakeholder clarifications

Conclusions of the findings of the Grenoble case study

5.126 The structure of SEMITAG, as a company majority owned by the competent authority, is unusual. However, following the 2004/5 selection for which SEMITAG was the only bidder, SMTC has taken active steps to encourage other bidders through the offer of compensation for those reaching the final stage of the competition. We also note that:

- The arrangements limiting Transdev’s exposure to revenue risk mean that there is little effective risk transfer from SMTC if there is a large revenue shortfall, and Transdev has no further incentives to increase revenue.
- The removal of the “bonus” elements of the previous bonus/malus system means that the contract is now one of penalties rather than a mix of penalties and incentives.

5.127 We also note that the current contract is a development of arrangements introduced before Regulation 1370/2007 came into force, and SMTC, the competent authority, informed us that the Regulation had not affected their current approach.

Ulm Stadtwerke (Germany)

Overview and context

- 5.128 The German city of Ulm lies in Baden-Württemberg on the north bank of the river Danube, but is closely linked to Neu-Ulm, immediately opposite it on the Bavarian side of the river.
- 5.129 From 1897 Ulm has had an internal city works department (Stadtwerke) which over time has acquired responsibility for electricity generation and public transport provision.
- 5.130 From 1982 the Ulm Stadtwerke became an independent limited company SWU (Stadtwerke Ulm/Neu-Ulm GmbH) and it is now the internal operator of the city. SWU has also created a subsidiary company by which a number of its staff are employed.
- 5.131 From November 2009, immediately preceding the coming into force of Regulation 1370/2007, SWU has had a formal contract with the city to provide public transport services. This covers the bus and tram services in both Ulm and Neu-Ulm as shown in Figure 5.8.

Figure 5.8: Stadtwerke Ulm: map



- 5.132 Ulm is also served by long-distance rail services operated by Deutsche Bahn (DB) which are outside the scope of this study.

This case study

- 5.133 The scope of this case study is the bus and tram services operated by SWU in Ulm and Neu-Ulm.

Contract specification and procurement

5.134 Table 5.2 summarises the main features of the contract specification and procurement (under direct award).

Table 5.28: Stadtwerke Ulm: contract specification and procurement

Topic	Description	Details
Specification and contract design		
Modes	Bus and tram.	
Service specification	The city defines the broad standard of coverage, based on services extending to within 400 metres of 80% of the urban area. SWU has then prepared detailed proposals based on this framework.	The November 2009 contract was proposed by SWU, which has the detailed service and operational planning skills, and accepted as a proposal by the city with little negotiation. Had the city required additional services, it might have been required to provide subsidy of capital investment.
Coordination of services with regional, provincial and local plans	SWU currently carries out most of the service planning within the framework and the November 2009 contract. There is relatively little need to coordinate frequent local services with infrequent long-distance rail services.	
Procurement		
Selection procedure	The November 2009 contract was a direct award to the internal operator, SWU.	
Authority responsible	The competent authority is the city of Ulm.	
Type of award	The award was a direct award.	SWU is an internal operator of the city of Ulm permitted, under Article 5(1)(a) of the Regulation, to operate “outgoing lines or other ancillary elements which enter the territory of neighbouring competent local authorities”, which in this case includes operations in Neu-Ulm in the adjoining German Land (state).
Contract size	The contract size is approximately: <ul style="list-style-type: none"> • 300 staff • 10 trams • 62 buses • Associated tram network and bus infrastructure The system carried around 36 million passengers in 2014.	
Duration	The contract is for 10 years, to 2019.	

Source: Steer Davies Gleave analysis

Contract finances, responsibilities and risk allocation

5.135 Table 5.9 summarises the contract finances, responsibilities and risk allocation.

Table 5.29: Stadtwerke Ulm: contract finances, responsibilities and risk allocation

Topic	Description	Details
Finances		
Financing	SWU covers cash operating and maintenance costs from its own resources but some capital investment is provided, typically through co-funding, by city, Land (state) and Bund (federal government).	Like many operators, SWU can cover cash operating costs, and so the separate provision of capital assets means that it does not appear to require direct finance.
Financial flows	There are no direct financial flows under the PSC.	
Type of contract	Direct award to internal operator.	The contract requires SWU to make quarterly reports on passenger numbers and annual reviews of the costs and benefits of each line.
Fares setting	The structure of fares is set by the local Tarifverbund comprising authorities and operators. Requests for fares rises have to be made by operators and may be declined by the authorities if they wish to pay support.	Fares increases are in principle linked to a cost inflation metric index agreed by the Tarifverbund. SWU can ask for further increases if it cannot cover its costs, but the whole Tarifverbund would need to agree. Conversely, any surplus from fares could be used to improve quality. We also understand that there may be scope for some cross-subsidy from SWU's electricity business to the bus and tram business.
Responsibilities and risk allocation		
Risk allocation	SWU bears all risks.	The only financial responsibility of the city of Ulm is when there is a need for capital investment.
Ownership of vehicles	SWU owns all buses and trams.	
Ownership of other assets	SWU owns all the assets used to operate the bus and tram system.	The system also involves bus priority, which may involve roadside sensors and software provided, installed, maintained and operated by other agencies of the city.

Source: Steer Davies Gleave analysis

Contract management and monitoring

5.136 Table 5.10 summarises the contract management and monitoring.

Table 5.30: Stadtwerke Ulm: contract management and monitoring

Topic	Description	Details
Management		
Calculation of the final level of compensation	NA. The contract does not require any direct compensation on a routine basis.	
Monitoring authority	City of Ulm.	In practice, SWU carries out most monitoring activities internally and hands over limited reports to the city. As owner of SWU, the city could always request more information if required.
Quality and performance monitoring	SWU monitors delays and complaints, and carries out regular surveys of quality.	

Source: Steer Davies Gleave analysis

5.137 The contract is not publically available and we were unable to talk with the competent authority. Due to being unable to obtain performance information from the operator it has not been possible to provide an assessment of the economic and financial performance of the contract.

The effects of Regulation 1370/2007

5.138 Table 5.40 summarises our understanding of the effect of Regulation 1370/2007 on Stadtwerke Ulm.

Table 5.31: Stadtwerke Ulm: Regulation 1370/2007

Issue	Conclusion
Was the Regulation in force at the time that the current contract was signed?	No. We understand that the contract was drafted with the intention of being compliant with the Regulation, but that it was signed before the Regulation to avoid any uncertainties associated with the Article 4(7) and Article 5(2)(e) requirement that the operator “perform the major part of the public passenger transport services itself”.
Has the Regulation influenced the design of the contract?	Yes. The contract was drafted with the aim of compliance.
Is the contract compliant with the requirements of the Regulation?	Yes, subject to any clarification of the materiality of SWU subcontracting some activities to a subsidiary. The Commission’s interpretive guidelines on the Regulation suggest that “it would seem reasonable to consider that subcontracting more than one third of the public transport services would require a strong justification”. On one reading of these guidelines, it may not be permissible for internal operators to have extensive subcontracts even with their own subsidiaries or, for example, to provide and maintain rolling stock.
Does the competent authority comply with Article 7.1?	No. SWU generates detailed internal information, and the city of Ulm as its shareholder could acquire it and then publish it, but as far as we can establish it does not do so.
Does the competent authority comply with Article 7.2?	NA The current contract predates Regulation 1370/2007 coming into force.

Source: Steer Davies Gleave analysis, stakeholder clarifications

5.139 In summary, the competent authority was aware of the requirements of the Regulation but completed the contract before it came into force to avoid any difficulties over Article 5(2)(e). We have not identified how it will comply with the restrictions on subcontracting when the contract is next renewed, in 2019.

Conclusions of the findings of the Ulm case study

5.140 Ulm Stadtwerke’s bus and tram operations are under a direct award to an internal operator let on the basis of a net cost contract.

Manchester Metrolink (United Kingdom)

Overview and context

- 5.141 Greater Manchester was created in 1974 and since 2011 has been designated a city region. After Greater London, it has the second highest population in the United Kingdom, with 2.7 million inhabitants.
- 5.142 Transport in Greater Manchester is organised by Transport for Greater Manchester (TfGM) which is responsible for:
- PSO bus services to cover gaps in the provision of commercial services in the deregulated model which applies in Great Britain outside London.
 - Rail services in the area provided by franchised train operators contracted by the national Department for Transport.
 - The Manchester Metrolink light rail system, developed in stages since 1992, parts of which have been converted to light rail from former suburban railway lines.
- 5.143 Under the current structure, TfGM has only limited power to coordinate transport services:
- The majority of urban bus services are provided under the deregulated model, under which TfGM has no powers over fares or routes unless it contracts for the services under a PSO.
 - While TfGM is a co-signatory to the two principal rail franchises serving the area, Northern and TransPennine Express (TPE), these are let by the Department of Transport and it has only limited powers to shape services to the needs of Greater Manchester.
- 5.144 On 3 November 2014 the national and Greater Manchester governments signed an agreement to devolve further powers to give Greater Manchester a directly elected city-wide mayor with powers over transport, housing, planning and policing. Specific transport powers will include:
- Responsibility for a devolved and consolidated transport budget, with a multi-year settlement to be agreed at the next Spending Review.
 - Responsibility for franchised bus services (subject to consultation by Greater Manchester), for integrating smart ticketing across all local modes of transport, and urgently exploring the opportunities for devolving rail stations across the Greater Manchester area.
 - Powers over strategic planning, including the power to create a statutory spatial framework for Greater Manchester. This will need to be approved by a unanimous vote of the Mayor's Cabinet.
- 5.145 Details of the new arrangements have not yet been finalised that the Mayor and TfGM will inherit a number of existing contracts which may need to come to term before it is cost-effective to modify them or put in place new arrangements.
- 5.146 Figure 5.9 shows the extent of the current Metrolink light rail network within the borders of the area of Greater Manchester and the boundaries of the ten metropolitan boroughs.

Figure 5.9: Manchester Metrolink: light rail network map



- 5.147 Metrolink has developed in a number of Phases, all procured by competitive tender:
- Phase 1, opened in 1992, through a design, build, operate and maintain (DBOM) contract to the GMA Group
 - Phase 2, opened in 1999-2000, built by the Altram consortium, led by Serco, which also operated the network from 1997 to 2007
 - Phases 3a and 3b, opened in 2013 and 2014, built and still maintained by the MPT consortium
- 5.148 When Serco's contract was coming to an end in 2007, bidders were invited to tender for:
- Maintenance of Phases 1 and 2;
 - Operation and tram maintenance;
 - A combined package of both elements.
- 5.149 Stagecoach and Keolis were shortlisted for the combined package which was awarded to Stagecoach, who then sold the contract to RATP Dev in 2011.
- 5.150 The current arrangements are therefore that:
- Phases 1 and 2 are maintained by RATP Dev, which also maintains the trams and operates the services
 - Phases 3a and 3b are maintained by MPT
 - Ticket machines are provided under a separate contract with Scheidt & Bachmann

This case study

- 5.151 The scope of this case study is these contracts with TfGM to maintain and operate the Metrolink light rail system. TfGM bears revenue risk but most operating risk is borne by the operator RATP Dev.

Contract specification and procurement

- 5.152 Table 5.2 summarises the main features of the contract specification and procurement.

Table 5.32: Manchester Metrolink: contract specification and procurement

Topic	Description	Details
Specification and contract design		
Modes	Light rail only.	Manchester Metrolink runs on street in some locations, but requires high platforms, allowing level access, because much of the network was converted from former rail lines.
Service specification	Transport for Greater Manchester (TfGM) specifies the services.	We understand that the need to deal with engineering work for maintenance and renewals, network expansion, and a range of special events from time to time, mean that the operator has full time staff preparing timetables and the associated staff rosters.
Coordination of services with regional, provincial and local plans	Transport for Greater Manchester (TfGM) coordinates the service specification as well as it can with bus and rail services over which it has only limited control.	In Great Britain, rail services have been specified largely by the national Department for Transport since 1996 and local bus services have been deregulated since 1986. The scope for TfGM to coordinate with other services is therefore more limited than may be the case in other Member States.
Procurement		
Selection procedure	Open tender. Operation of Metrolink was by Greater Manchester Metrolink from 1992 to 1997, contracted to Serco from 1997 to 2007 and then contracted to Stagecoach in 2007.	Current operator RATP Dev bought the Metrolink contract from Stagecoach on 1 August 2011.
Authority responsible	Transport for Greater Manchester (TfGM).	
Type of award	Competitive procurement.	TfGM informed us that they expect to receive at least five bids for successive contracts to operate Metrolink.
Contract size	We understand that the contract size is approximately <ul style="list-style-type: none"> 92 kilometres of line 92 stops 120 vehicles (by 2017) 660 staff including drivers, Customer Service Representatives (CSRs), engineers and technicians and Controllers 	New vehicles are coming into use during the life of the contract. We understand that the operator was extensively involved in the vehicle acceptance and testing.
Duration	Ten year contract (to 2017)	TfGM informed us that the expectation is that the next contract will also be for ten years, from 2017 to 2027.

Source: Steer Davies Gleave analysis

Contract finances, responsibilities and risk allocation

5.153 Table 5.9 summarises the contract finances, responsibilities and risk allocation.

Table 5.33: Manchester Metrolink: contract finances, responsibilities and risk allocation

Topic	Description	Details
Finances		
Financing	TfGM has its own funding provided by central government.	There are proposals for further devolution of powers over transport, including funding, to TfGM.
Financial flows	<p>Funds flow from TfGM to operator RATP Dev and from RATP Dev to its subcontractors. Funds also from direct from TfGM to other providers:</p> <ul style="list-style-type: none"> To the MPT consortium, which designed and constructed and still maintains Metrolink Phases 3a and 3b. To Scheidt & Bachmann, who provide and maintain ticket machines. 	<p>The overall contractual structure is complex:</p> <ul style="list-style-type: none"> Metrolink Phases 1 and 2 are maintained by RATP Dev, which also maintains the tram vehicles and operates the network. Metrolink Phases 3a and 3b are maintained by the MPT consortium, which designed and built them. Metrolink ticket machines are provided under a further direct contract with TfGM by Scheidt & Bachmann.
Type of contract	Gross cost.	The current (2007) contract is not published, but we understand that the next (2017) contract will be.
Fares setting	TfGM sets fares.	Metrolink ticket machines, provided by Scheidt & Bachmann, take credit cards and are being modified to allow the use of NFC smart cards.
Responsibilities and risk allocation		
Risk allocation	The contract is gross cost.	
Ownership of vehicles	TfGM owns the Metrolink rolling stock.	The entire original rolling stock fleet, which began operation in 1992, is being replaced with 120 new vehicles. We understand that operator RAPT Dev leads the Technical Acceptance of new vehicles.
Ownership of other assets	TfGM owns all the principal assets of the Metrolink system.	The principal asset at risk by operator RATP Dev is its performance bond.

Source: Steer Davies Gleave analysis

Contract management and monitoring

5.154 Table 5.10 summarises the contract management and monitoring.

Table 5.34: Manchester Metrolink: contract management and monitoring

Topic	Description	Details
Management		
Calculation of the final level of compensation	<p>There are various elements to the compensation:</p> <ul style="list-style-type: none"> • Payment for the first and last train operated. • Payment for vehicle-kilometres operated (there is no separate element of payment based on hours). • Monitoring of the headways between successive vehicles over the service day. • Separate monitoring of revenue protection activity. • Separate monitoring of quality and cleanliness. 	
Monitoring		
Monitoring authority	TfGM monitors the contract primarily using data generated by RATP Dev.	
Quality and performance monitoring	RATP Dev faces a detailed performance regime.	<p>TfGM's performance management system monitors the location of all trams on the system at all times and provides a range of monitoring data.</p> <p>Automated systems are supplemented or cross-checked by manual inspections. For example, manual passenger counts are used to check passenger numbers modelled from revenue data.</p> <p>Detailed performance reports, by mode, submitted to the monthly meetings of the Transport for Greater Manchester Committee, are also published on TfGM's website.</p>

Source: Steer Davies Gleave analysis

5.155 We asked TfGM whether Metrolink had ever been subjected to retrospective funding cuts, of the type experienced in Emilia-Romagna (see paragraph 5.49). We were informed that Metrolink had well-tested contract change mechanisms and that, for example, the changes to the operations of the network associated with the openings of Phases 3a and 3b were carried out through the operator's contract variation mechanism.

5.156 The current contract between TfGM and RATPDev is not public, and would only provide information on price, not on costs and revenues of the operations. The delivery of public transport in the Manchester area is carried out by a number of operators and reported upon by TfGM without breakdown of information that would enable identification of the performance of individual operators.

The effects of Regulation 1370/2007

5.157 Table 5.40 summarises our understanding of the effect of Regulation 1370/2007 on Manchester Metrolink.

Table 5.35: Manchester Metrolink: Regulation 1370/2007

Issue	Conclusion
Was the Regulation in force at the time that the current contract was signed?	No. The current contract was awarded in April 2007, and began later that year, before Regulation 1370/2007 came into force.
Has the Regulation influenced the design of the contract?	No. Neither authority nor operator identified any impact of the regulation, although TfGM confirmed that the 2017 contract will be checked for compliance.
Is the contract compliant with the requirements of the Regulation?	Yes. As far as we have been able to establish, the contract award process in 2007 would be consistent with the requirements of the Regulation.
Does the competent authority comply with Article 7.1?	No. TfGM produces detailed monthly monitoring reports, by mode, for the TfGM Committee, which are published on its website, but they exclude financial data. TfGM could not name, and we have not been able to identify, “an aggregated report” by TfGM containing all the information listed in the definition.
Does the competent authority comply with Article 7.2?	Yes. We understand that TfGM is compliant, but for a large competent authority this Article can be complied with through publication of regular generic notices.

Source: Steer Davies Gleave analysis, stakeholder clarifications

5.158 In summary, TfGM (formerly GMPTE) had developed a regime of competitive procurement in advance of Regulation 1370/2007, which has therefore had little or no effect. However, TfGM does not appear to comply with the publication requirements of Article 7.1.

Conclusions on the findings of the Manchester Metrolink case study

5.159 Manchester Metrolink is now on its fourth operations contract, and is preparing for its fifth, awarded on the basis of competitive tendering. It currently has two major contracts, for operations and the maintenance of existing infrastructure, and for the construction and maintenance of new infrastructure (note, in contrast, that infrastructure and operations contracts are completely separate for Stockholm Metro, see Table 5.3).

Bus Éireann (Ireland)

Overview and context

5.160 Ireland is divided into 26 counties as shown in Figure 5.10.

Figure 5.10: Bus Éireann: map



Note: Bus Éireann services operate in all the counties of the island of Ireland except Dublin, where services are provided by Dublin Bus. Antrim, Armagh, Down, Fermanagh, Londonderry and Tyrone are part of the United Kingdom.

5.161 The majority of transport services in Ireland are provided by C oras Iompair  ireann (CI ), which is the holding company for three principal operators:

- Iarnr d  ireann (I , Irish Rail), the national vertically-integrated railway group
- Dublin Bus, operator of buses in and around Dublin
- Bus  ireann, operator of coaches and buses through the remainder of Ireland

5.162 Bus  ireann operates three main types of services:

- Expressway, commercial interurban routes.
- PSO services including the city services in Galway, Cork, Limerick and Waterford and some commuter services into Dublin from the surrounding areas, which in some cases overlap with Dublin Bus’s PSO services.
- School transport services.

5.163 Until 2009, PSO services in Ireland were specified in Service Level Agreements (SLAs) between the Department of Transport and the operators. In 2009, legislation established the National Transport Authority (NTA) which now has the equivalent of 70-80 staff including secondees, contractors and agency staff.

- 5.164 In 2009 the NTA replaced these SLAs with 5-year direct awards on a formal contractual basis. We understand that, while the 2009 direct awards preceded the date at which Regulation 1370/2007 came into force, the Regulation was taken into account in their design.

This case study

- 5.165 The scope of this case study is Bus Éireann’s PSO services and school transport services, and excludes the services operated by Bus Éireann on a commercial basis.
- 5.166 We understand that, given that NTA is the national competent authority that Bus Éireann operates wholly within the (national) area for which NTA is responsible, Bus Éireann meets the definition of an “internal operator” set out in Regulation 1370/2007.
- 5.167 The Dublin Transport Authority Act 2008, as amended, specifies that before a subsequent direct award can be entered into, the NTA must prepare and publish a report detailing the operation of the public bus services under the current direct award contract. In 2013, as the 5-year direct award from 2009 was coming to an end, it procured a “Performance Report on Current Bus Éireann Direct Award Contract”. This concluded that “Overall, Bus Éireann achieved a very high level of compliance with the required performance obligations for this reporting period.” There was, therefore, no evidence that the direct award for the period 2009 to 2014 was resulting in an unsatisfactory service.
- 5.168 Nonetheless, the NTA decided to renew the direct award, with refinements to the contractual arrangements, based on the experience of first direct award, and with provision for 10% of the services to be subject to competitive tender from 30 June 2016. Details of the proposals were set out at a media briefing on 22 April 2015.

Contract specification and procurement

5.169 Table 5.36 summarises the main features of typical contract specification and procurement (under direct award).

Table 5.36: Bus Éireann: contract specification and procurement

Topic	Description	Details and comments
Specification and contract design		
Modes	Bus: urban, suburban and rural.	
Service specification	The National Transport Authority (NTA) developed the service specification for the November 2014 contract on the basis of the previous November 2009 contract, taking into account factors such as economic and population growth.	NTA is a new organisation and, prior to its creation, much network and service planning work had been carried out by Bus Éireann. We understand that during the life of the 2009 contract the NTA has built up skills and experience in service planning. With future competitive tendering (see below) it may no longer be realistic to expect small operators to have service planning skills.
Coordination of services with regional, provincial and local plans	NTA is a national authority which also lets the direct award contract for buses in Dublin to Dublin bus. There is, however, some need to coordinate the provision of services in communities such as Galway, Cork, Limerick and Waterford to reflect local needs.	We understand that some services may sometimes need to be procured or modified at short notice in response to emerging gaps in the provision of commercial services, particularly on interurban routes. NTA has established 18 Transport Coordination Units (TCUs) which broadly relate to the local authorities, among other things with the aim that these have a more local focus on specification.
Procurement		
Selection procedure	Direct award, permitted as Bus Éireann is an internal operator. NTA has carried out detailed market testing on the type and scale of future competitive tenders, with the aim of ensuring that they attract a range of bids.	NTA carried out detailed studies of Bus Éireann's efficiency before proceeding with the first direct award contract in 2009. Bus Éireann's services are a direct award, but the 2014 contract, building on the 2009 contract, is intended to reflect the contractual arrangements which would be required with a fully commercial competitive tender.
Authority responsible	NTA	
Type of award	Direct award	The 2014 contract to 2019 makes provision for competitive tendering of approximately 10% of Bus Éireann's services from 2016.
Contract size	We understand Bus Éireann's size to be approximately: <ul style="list-style-type: none"> • €34 million subsidy in 2014 on a net cost basis • 1,300 coaches and buses, of which 700 are allocated to school transport services • 150 million bus-kilometres • 2,500 staff based in 17 locations • 10,000 staff including subcontractors providing services such as school buses 	
Duration	Five years, November 2014 to November 2019.	The preceding contract, let by the NTA on its creation in 2009, was also for five years.

Source: Steer Davies Gleave analysis

- 5.170 We understand that the 2014 Bus Éireann contract is more detailed than the 2009 contract, and is now approximately 75 pages long with 250 pages of supporting schedules.

Contract finances, responsibilities and risk allocation

- 5.171 Table 5.37 summarises the contract finances, responsibilities and risk allocation. The contract is a net cost contract.

Table 5.37: Bus Éireann: contract finances, responsibilities and risk allocation

Topic	Description	Details and comments
Finances		
Financing	NTA provides funding for transport, as allocated by the Department of Transport	
Financial flows	Funds from the NTA to Bus Éireann. Funds also flow from Bus Éireann to any subcontractors it uses, such as to provide school services.	NTA also funds accessibility and information provision.
Type of contract	Both Bus Éireann and Dublin Bus contracts are net cost.	Cost savings relative to a target can be shared between Bus Éireann and NTA. We understand that it is possible that some future competitively-tendered contracts may be gross cost. We note that this will dilute the incentives to operators to optimise services, revenues or benefits.
Fares setting	Bus Éireann must produce an Annual Business Plan (Schedule 17) in July each year, setting out forecasts and a range of scenarios and changes in services and quality. It can also propose changes to fares, but these must be approved by the NTA.	We understand that fares vary between areas and that the NTA is now attempting to increase the level of standardisation. We understand that, as yet, there has been only limited research into issues such as ticket price elasticities. We understand that NTA will set fares in the future competitive contracts.
Responsibilities and risk allocation		
Risk allocation	Bus Éireann bears revenue risk and operational risk including the maintenance of the bus fleet.	Service quality was not incentivised in the 2009 contract but is now incentivised in the 2014 contract.
Ownership of vehicles	Bus Éireann generally owns and maintains buses. The contract specifies that buses must not be more than 14 years old.	NTA has funded some of Bus Éireann's buses since 2009 with capital grant, and has the right to call these buses back if needed for services tendered competitively in the future.
Ownership of other assets	Ownership of other assets is complex. CIÉ owns depots and depot equipment which are operated by Bus Éireann. CIÉ owns stations which are often shared between rail and bus. Bus Éireann owns and maintains some bus stops and shelters, but some are also owned by local authorities.	NTA funds the provision of new bus shelters by local authorities. NTA has introduced a standardised bus stop and may gradually take control of stops and shelters to ensure that these are provided on a neutral basis independent of Bus Éireann as an operator.

Source: Steer Davies Gleave analysis

5.172 The current division of responsibilities appears to reflect the historic situation in which services were provided by Bus Éireann, a subsidiary of CIÉ, which was wholly owned by the Department of Transport. In this situation, responsibilities for funding, planning, ownership and operations did not need to be clearly separated between “authority” and “operator”. We note that the NTA appears to be managing a transition to the situation more normal for competitively tendered services, where:

- The competent authority provides funding, planning and fares policy, and owns assets which need to be shared between operators, which may or may not include vehicles
- The operator may own some vehicles but is otherwise primarily responsible for operations, fare collection and some marketing

Contract management and monitoring

5.173 Table 5.38 summarises the contract management and monitoring.

Table 5.38: Bus Éireann: contract management and monitoring

Topic	Description	Details and comments
Management		
Calculation of the final level of compensation	Calculated as the contractual compensation subject to the bonus incentive regime.	NTA has access to detailed financial reporting from Bus Éireann at a disaggregate level. We note that financial data at this level might not be available in relation to future tendered contracts.
Monitoring		
Monitoring authority	The NTA is the monitoring authority.	Monitoring is assisted by Automatic Vehicle Location (AVL) data, but may be difficult for rural buses which do not operate from a large depot or regularly pass through a common point.
Quality and performance monitoring	Bus Éireann is subject to a range of detailed monitoring measures, as set out in the contract schedules.	Under the contract, Bus Éireann produces quarterly bulletins monitoring detailed aspects of performance on individual routes. Bus Éireann also attends regular monitoring meetings with the Department of Transport, Tourism and Sport.

Source: Steer Davies Gleave analysis

5.174 We understand that, over the life of the first formal direct award contract from 2009 to 2014:

- Net subsidy was cut from €49 million to €34 million;
- Customer satisfaction with Bus Éireann has risen from 84% to 89%.

5.175 Only a limited amount of performance information could be obtained in relation to Bus Éireann. For instance the data provided in the company’s annual report for 2013 differs significantly from the information provided by the Irish Department of Transport related to urban bus services outside Dublin and to rural and long distance buses. This is mainly because the public transport services operated (and reported) by Bus Éireann do not only cover PSO routes but also other services such as school transport operations. KPIs obtained from the Ministry for PSO routes are displayed below:

Table 5.39: Bus Éireann, KPIs

Indicator	Urban bus outside Dublin	Rural and long distance bus (PSO)
Fare revenue per vehicle-kilometre (€)	2.86	1.27
Operating cost per vehicle-kilometre (€)	4.76	2.56
Proportion of total operating costs covered by fares	0.60	0.50

Source: Department of Transport, Tourism and Sport

5.176 Given incomplete and inconsistent data it is difficult to assess the performance of this.

The effects of Regulation 1370/2007

5.177 Table 5.40 summarises our understanding of the effect of Regulation 1370/2007 on Bus Éireann.

Table 5.40: Bus Éireann: Regulation 1370/2007

Issue	Conclusion
Was the Regulation in force at the time that the current contract was signed?	Yes. NTA let contracts in 2009 before the Regulation came into force, but these have been replaced with a contract let in 2014.
Has the Regulation influenced the design of the contract?	Partly. Bus Éireann is an internal operator, and could have been given a direct award on the same basis as the preceding contract. However, it was agreed that it would be good practice to adopt a full commercial contract, and this includes provision for competitive tendering of some services from 30 June 2016.
Is the contract compliant with the requirements of the Regulation?	Yes. As far as we have been able to establish, the contract is consistent with the requirements of the Regulation.
Does the competent authority comply with Article 7.1?	Not clear. This information may be available through the contract, which is published, and the accounts of the NTA. However, we have not been able to identify “an aggregated report” by SL containing all the information listed in the definition.
Does the competent authority comply with Article 7.2?	Yes. NTA reports that on 30 November 2014 it send notices to the European Journal regarding both the follow-on direct award of 1 December 2014 and the future competitive tendering.

Source: Steer Davies Gleave analysis, stakeholder clarifications

5.178 In summary, while we understand that the NTA is entitled to treat CIÉ and its subsidiaries as an internal operator, it had initiated a policy of moving towards competitive tendering before Regulation 1370/2007 came into force. The situation is in transition, with provision to tender 10% of Bus Éireann’s services competitively from 2016. As far as we are aware, the mix of direct award and competitive tendering after the current contract expires in November 2019 has not yet been determined.

Conclusions on the findings of the Bus Éireann case study

- 5.179 The situation in Ireland is in some respects similar to that with Budapest, which we describe above (see 5.61). Bus Éireann is an internal operator but, following the introduction of the Regulation, has a direct award for a net cost contract. The awarding authority, the NTA, is relatively recently established but is improving the contracting basis and has provision in the contract to open part of the market to competitive tendering from 2016.

Overall conclusions from the case studies

A wide variety of starting points

5.180 The case studies show that arrangements for public transport varied widely before Regulation 1370/2007 came in force and still do today, even where the contracting arrangements are compliant with the Regulation 1370/2007. Variations include:

- The number of tiers of government involved in specifying and/or funding services, which ranges from the three tiers of government (national, regional and local) in Italy and Germany, to a single national authority in Ireland.
- The need for, and extent of, service re-specification and re-planning, whether to deal with funding reductions, to adapt to emerging demand, to deal with planned expansion works or predicted events, or to deal with disruption and emergencies. We discuss this further in Chapter 6.
- The extent of contracting and sub-contracting. This ranges from none, with an internal operator, for Ulm, to second and third generation arrangements for contracting different elements of the provision of rail-based networks and services in Stockholm and Manchester, both of which began developing contracting arrangements many years before the Regulation came into force.
- Partly in consequence of the above, the location of planning and service specification skills, which in some cases lie with the internal operator and in others with the competent authority (exceptionally, in Great Britain outside London which is not included in the case studies, most active planning of bus services is carried out directly by the deregulated operators).
- Partly in consequence of the above, the extent to which the competent authority has the information, skills and certainty over future requirements necessary to define in advance the compensation arrangements, and the extent to which the operator is there able or expected to dictate compensation requirements without adequate scope for informed challenge.

5.181 Given this diverse range of starting points, it may take considerable time for Member States either to arrange legislation and funding in response to the Regulation or for competent authorities to identify the most effective approach. Among the case studies, we observed that:

- Burgas appears to be heavily reliant on operator Burgasbus both to plan the network and to determine the compensation it should be paid each year;
- Stadtwerke Ulm has not yet needed to shift any functions to the competent authority;
- Bologna's SRM indicated (see 5.37) that it has taken between 6 and 8 years of study to refine the final tender documents for services;
- Bus Éireann's involvement in service planning and ownership of bus stops is gradually being reduced to remove any "asymmetry" between it and potential competitors, but both 2009 and 2014 contracts are transitional and it will be at least 2019 before its position is that same as its competitors;
- Grenoble has taken steps to encourage active competition, but the mixed structure of SEMITAG means that effective risk transfer is limited, and the potential benefits of a bonus/malus system are blunted;
- Stockholm and particularly Manchester appear to have completed the transition to a contract-based system, although in each case the competent authority contracts with more than one party and the "operator" is dependent on other contractors for its inputs;

A wide variety of outcomes

5.182 In all of the case studies, interviewees appeared to consider that their adopted model was, or was in transition to, the most appropriate for the local circumstances, but there is relatively little commonality between them:

- At one extreme, SWU in Ulm carries out almost all activities except the specification of services at a strategic level.
- At the other extreme, TfGM has contracts not only with an “operator” which also maintains older infrastructure, but also with a provider of new infrastructure and a provider of ticket machines.
- Bus Éireann still retains some of the network infrastructure and stops, which will ultimately be the responsibility of the NTA, and the NTA retains control of some vehicles, which will ultimately be the responsibility of the future operators.

5.183 Figure 5.11 below summarises some elements of the finding related to the roles of parties, focusing on the responsibility for maintenance of assets including the network (where appropriate), stations and stops, vehicles, and ticket machines (which are the subject of a separate contract on Manchester Metrolink).

Figure 5.11: Case studies: summary of roles of parties

		Planning and specifying	Network	Stations or stops	Vehicles	Ticket inspection systems	Ticket sales machines
Net cost	Stadtwerke Ulm Ownership Maintenance Operation	City of Ulm	SWU (capital expenditure funded by city, state or federal government)				
	Emilia-Romagna Ownership Maintenance Operation	Region / Province / Municipality	Operators				
	Bus Éireann Ownership Maintenance Operation	NTA	NTA	NTA	Bus Éireann		
Gross cost	Stockholm Metro Ownership Maintenance Operation	Storstockholms Lokaltrafik (SL)		Strukton	MTR		
	Manchester Metrolink Ownership Maintenance Operation	Transport for Greater Manchester (TfGM)				Scheidt & Bachmann	
		MPT	RATP Dev				

Source: Steer Davies Gleave analysis, table is simplified, see text for further details.

5.184 We also examined the extent to which competent authorities had transferred revenue risk elsewhere, as summarised in Table 5.41

Table 5.41: Case studies: scope for transfer of revenue risk

Case study	Exclusive rights	Features
Authority has no revenue risk		
Emilia-Romagna	Yes	Operator runs all modes, exclusive rights on area basis
Risk share		
Grenoble	No	All urban modes included, fares are far below cost-recovery
Authority has revenue risk		
Budapest	Yes	Internal operator
Burgasbus	Yes	Internal operator, exclusive rights on route basis
Bus Éireann	No	Internal operator, but no effective scope for commercial entry
Stadtwerke Ulm	No	Internal operator, authority bears risk irrespective of contract
Stockholm Metro	No, not practicable	Other urban modes compete directly
Manchester Metrolink	No, not practicable	Other urban modes compete directly

Source: Steer Davies Gleave analysis

5.185 In Emilia-Romagna, where net cost contracts are required by law, all modes within the network are operated by the same contractor, which also has exclusive rights throughout the area. In contrast, the authority effectively retains revenue risk:

- Wherever there is an internal operator, as with Budapest, Burgasbus, Bus Éireann and Stadtwerke Ulm. Budapest’s internal operator BKV has been awarded exclusive rights, although it is not clear how these will be defined once the majority of urban bus services are competitively tendered. Bus Éireann faces limited competition in practice, as competing coaches have focused on interurban services along motorways and pose little commercial threat to slower regional and local PSO services.
- Where the existence of multiple modes means that it is not practicable to grant exclusivity to one mode, as with Stockholm Metro and Manchester Metrolink. Manchester Metrolink faces competition from deregulated bus services, but even Stockholm Metro competes to some extent with urban rail, light rail and bus services provided by other contractors.

5.186 In Grenoble, exclusive rights are not required, partly because fares are far below cost recovery and competitive entry would be impracticable on these grounds alone.

Identifying best practices from the case studies

5.187 It is difficult to identify lessons that can be learned regarding best practice for direct awards:

- In the case of Bus Éireann, there is a policy of competitive tendering, and both the 2009 and 2014 direct awards have been used as a means of testing contractual mechanisms which will eventually be used in competitive tenders. Ownership and management of assets is also being changed to ensure that Bus Éireann’s position will be the same as its competitors.
- In the case of SWU, if the policy of the city of Ulm is to continue to use its internal operator, there is no particular reason to make any changes to the existing arrangement, and there is no reason why SWU should not retain its ownership of assets and responsibilities for detailed planning, if that is found to be an efficient approach.
- The case of Burgasbus raises some questions as it is unclear to us the extent that the authority is effectively able to monitor and supervise the operator.

6 The impact of Regulation 1370/2007

Introduction

6.1 In this Chapter we discuss our assessment of the impact of the Regulation through:

- The evidence of our case studies;
- A more detailed review of compliance with the reporting requirements in Article 7.1
- To obtain a wider perspective, stakeholder views on the impact of the Regulation

Influence of the Regulation on the case studies

The design of Public service contract

6.2 Not all the case studies had been procured according to Regulation 1370/2007. In fact, only five of them involved contracts which had been completed after December 2009 and were therefore within the scope of Regulation 1370/2007. We nonetheless examined the arrangements of the case studies against the most important requirements of the Regulation in order to provide an assessment of the influence that the Regulation had.

6.3 We present in Table 6.1 our findings on whether the Regulation has influenced significantly the design of the contract in each of the case studies.

Table 6.1: Case studies: the influence of the Regulation

Case study	Contract in scope?	Has the Regulation influenced the design of the contract?	
Stockholm Metro	No	No	Sweden has a long-established framework of contracting for the provision of local public transport. The 2009 contract with MTR was preceded by a contract with Veolia.
Emilia-Romagna	Some	No	This case study covered a number of contracts of varying ages.
Budapest	Some	Not clear	The Regulation appears to be reflected in current procedures.
Burgasbus	Yes	Yes	We understand that the Municipality's advisors were instructed that the direct award contract should be consistent with the Regulation as well as with domestic law.
Grenoble	Yes	No	The authority informed us that its approach to funding and letting PSCs has not been affected by the Regulation.
Stadtwerke Ulm	No	Yes	The contract was drafted with the aim of compliance.
Manchester Metrolink	No	No	Neither authority nor operator identified any impact of the regulation, although TfGM confirmed that the 2017 contract will be checked for compliance.
Bus Éireann	Yes	Partly	Bus Éireann is an internal operator, and could have been given a direct award on the same basis as the preceding contract. However, it was agreed that it would be good practice to adopt a full commercial contract, and this includes provision for competitive tendering of some services from 30 June 2016.

Source: Steer Davies Gleave analysis, summarised from Chapter 5

6.4 We observe from the table above that the Regulation has played a role in some instances whilst it does not seem to have had a material impact in others.

- Sweden, the United Kingdom and France all had very established national frameworks for public service contracts that were not particularly affected by the provisions of the Regulation (for the case study considered).
- In some countries, the introduction of the Regulation resulted in significant change which explains why it was specifically required by the authority that the contract needed to comply with the Regulation in the case of Burgasbus for instance.
- In the remaining case studies the impact of the Regulation is less clear. It could be that the national framework had already been changed as a result of the Regulation (as has been the case in Italy for instance with the possibility to procure through direct awards which was not the case in the country pre-Regulation) and that for the case study selected the impact had therefore been very limited.

6.5 We discuss in further detail below our comparison findings from the case studies.

Definition of public service obligations - Article 4(1)(a)

6.6 The principle of a clear statement of the service requirements is straightforward, and sounds logical, and for instance some competent authorities specify the exact timetables to be operated, at least over relatively short contract periods. However, it became clear from the case studies, that this is not always straightforward, for reasons such as:

- Internal events, particularly for rail-based systems, where even minor maintenance or enhancement works change the capability of the infrastructure to support services, and special or temporary timetables need to be devised while work is carried out.
- External events, including adverse weather conditions, disruptions and closures, and major cultural or sporting events, where the operator is expected or required to provide different services to meet a specific pattern of demand.
- Change over the life of the contract, as infrastructure and developments open and close and the demand for travel changes.
- Incentive structures in which operators are given latitude to vary services within a broad framework, such as:
 - Service specifications based on an accessibility metric (a proportion of the urban areas or population to be within a certain distance of a service, as in Ulm) rather than a timetable.
 - The super-incentive contract in the Netherlands, in which the competent authority effectively offers to pay an uplift on any revenues the operator can earn in the market.

6.7 If for, any of the above reasons, the competent authority concludes that it is not possible, or not appropriate, to set out a detailed specification for the entire contract period, it is likely that “clearly define the public service obligations” will necessarily only provide a more general description of what is required. Given the wide range of reasons why flexibility might be required, it does not appear likely to be practicable for legislation to attempt to specify exactly what information must, may or may not be included in the service specification.

Compensation payment - Article 4(1)(b)(i)

6.8 The case studies show that, given the flexibility in the output required from PSCs as described above, many of the contracts calculate payment on the basis of vehicle-kilometres, or vehicle-hours, or other metrics as illustrated in the Table below. This is consistent with Article 4(1)(b), and appeared to be broadly accepted by operators, although one operator commented that there was no specific compensation for the sometimes costly activity of continuously preparing new timetables to deal with network maintenance, renewal and expansion as well as external events. In two case studies, it was unclear to us if parameters on the basis of compensation payments were established in advance.

Table 6.2: Case study findings: compensation payment structure

Case study	Type of compensation	Compensation payment structure
Stockholm Metro	Gross cost, reflecting the highly integrated nature of ticketing between the various modes within Stockholm.	The contract allows for variations in service level by elements of payment related to train-kilometres and driver hours.
Emilia-Romagna	Net cost	Compensation is calculated as the contractual compensation less any penalties applied.
Budapest	Gross cost	Compensation is based on service volume data uploaded into the traffic management system.
Burgasbus	Net cost	Each year, Burgasbus submits a Draft PSO Reference Framework which includes a proposed unit price per vehicle-kilometre, on which the competent authority comments and may then negotiate. Each month, Burgasbus reports what it has operated and is paid on that basis. If it has made any cumulative profit, that is paid back to the Municipality.
Grenoble	Net cost, although the competent authority bears some of the risk through its internal operator which is part of the contractor.	Fixed annual payment for the specified level of service. Payment for small variations includes agreed rates per vehicle-kilometre and driver-hour.
Stadtwerke Ulm	Net cost	None: the contract is arranged so that Stadtwerke Ulm is broadly profitable, given its responsibilities.
Manchester Metrolink	Gross cost	There are various elements to the compensation: <ul style="list-style-type: none"> • Payment for the first and last train operated. • Payment for vehicle-kilometres operated (there is no separate element of payment based on hours). • Monitoring of the headways between successive vehicles over the service day. • Separate monitoring of revenue protection activity. • Separate monitoring of quality and cleanliness.
Bus Éireann	Net cost	Calculated as the contractual compensation subject to the bonus incentive regime.

Source: Steer Davies Gleave analysis

6.9 In addition, where the contracts include a bonus/malus or performance regime, this is normally set out in detailed schedules listing the performance standards and the basis on which compensation will vary with over- and/or under-performance. We found that not every case study contract had an incentive scheme. Some schemes were symmetrical (with the same scope for rewards than for penalties) whilst in some cases there was more scope for the operator to receive penalties than rewards. We believe that this could dis-incentivise the operator from innovating.

6.10 Our detailed findings are displayed in the table below.

Table 6.3: Case study findings: incentive schemes

Case study	Incentive schemes
Stockholm Metro	+/- 6% of annual compensation, based on key indicators such as trains run, cleanliness, punctuality and customer satisfaction.
Emilia-Romagna	Contracts specify monitoring arrangements and penalties, but details vary between contracts.
Budapest	BKK imposes a bonus-malus system. BKK can check services at any time and check any vehicle at 24 hours' notice. Performance indicators such as delays and failed services are reported in every 3 month.
Burgasbus	Burgasbus has a monitoring and a detailed penalty (malus) scheme.
Grenoble	Semitga faces a malus only system based on 56 KPIs covering punctuality, supply, reliability, safety and security, driving skills, cleanliness, fraud and fare evasion, information to passengers and complaints.
Stadtwerke Ulm (SWU)	No incentive scheme is in place. SWU monitors and reports on delays and complaints and carries out regular surveys of quality.
Manchester Metrolink	There is a detailed performance regime and incentive scheme, but no details were provided to us.
Bus Éireann	Service quality was not incentivised in the 2009 contract but is now incentivised in the 2014 contract. Schedule 19 of the contract sets out a detailed set of performance payments and deductions.

Source: Steer Davies Gleave analysis

Exclusive rights - Article 4(1)(b)(ii)

6.11 We found relatively little reference in the case studies to exclusive rights (see Table below), for a number of reasons. Exclusive rights are not necessary:

- If competitive entry is not operationally viable, such as in the rail-based systems of Stockholm Metro and Manchester Metrolink (both of which are also gross cost contracts), it would not be possible for another operator to use the system.
- If competitive entry is not commercially viable, such as where revenue covers only a small proportion of operating costs, whether due to insufficient demand or a policy of low fares.
- Where operators bear no revenue risk, because contracts are gross cost.

Table 6.4: Case study findings: exclusive rights

Case study	Exclusive rights?
Stockholm Metro	NA
Emilia-Romagna	Yes, by area
Budapest	Yes
Burgasbus	Yes, by route
Grenoble	No
Stadtwerke Ulm	NA
Manchester Metrolink	NA
Bus Éireann	No

Source: Steer Davies Gleave analysis

- 6.12 The Commission’s interpretative guidelines state that:
- “To ensure the smooth functioning of the internal market for public transport services, the competent authorities should give a precise definition of exclusive rights as rights that do not exceed what is necessary to provide the required economic protection for the services in question, while leaving room, where possible, for other types of services.”*
- 6.13 The British Office of Rail Regulation (now the Office of Rail and Road) attempted to apply a similar philosophy in 1995, by identifying the station pairs between which any individual train operator would have exclusive rights. However, with over 2,500 stations on the network there were over six million possible station pairs, and it would have been impracticable to create schedules of which of these six million “flows” would be exclusive. The approach adopted, but since abandoned, was to allow operators to nominate a number of station pairs, accounting for not more than a certain proportion of their revenue (which could be verified through the common industry revenue system), on which they were granted exclusivity. In the same way, it would not appear practicable to produce an exhaustive list of exclusive rights within an urban area with several thousand bus stops.
- 6.14 In Emilia-Romagna, the approach adopted has been to provide exclusive rights over an entire area. This has the benefit of being simple and could, in principle, be refined to permit entry within certain corridors or to certain points.
- 6.15 In contrast, the contract in Burgas grants “exclusive rights to carry out public transport services on the routes of the municipal transport scheme defined in the annually determined and approved PSO Transport Plan that excludes other transport operators supplying the same services on the same routes”. This approach is more specific, but by limiting the rights to specific routes might allow other operators to introduce new services which still abstracted revenue from the PSO operator, Burgasbus.
- 6.16 Whatever the approach used, given the potential for millions of potential connections even within an urban area, it does not seem likely to be possible to prove or to disprove that any given set of exclusive rights “do not exceed what is necessary”, particularly when removal of exclusivity between a single pair of bus stops would appear unlikely to be sufficient to trigger competitive entry.
- 6.17 The need to define exclusive rights clearly and robustly may become more important if there were further liberalisation of the domestic bus and coach markets.

Allocation of costs - Article 4(1)(c)

- 6.18 In all the case studies, we have found that the arrangements for allocation of costs have been made explicit, according to the competent authorities where they have provided a response.
- 6.19 For direct awards, Article 6(1) requires that the compensation be calculated in accordance with rules set out in the Annex to the Regulation. Among the case studies, we understand that the NTA carried out an efficiency analysis of Bus Éireann before the direct award to ensure that it was efficient and that the proposed compensation was not excessive.
- 6.20 For competitive tenders, in contrast, compensation is determined by the winning operator’s bid, and the competitive tendering process is assumed to prevent overcompensation. However, it is not normally possible to identify the operator’s actual costs, except where contracts involve a ring-fenced operating company and the operator is required to provide detailed management accounts to the competent authority.

Duration and extension - Articles 4(3) and 4(4)

- 6.21 The Stockholm Metro contract, which predated the Regulation, was for eight years with an optional extension for six years (see Table 5.2). One authority had considered the use of such break points but had concluded that they might represent bad value, if they effectively gave one party the option to continue with the contract if it was on disproportionately advantageous terms.

Table 6.5: Case study findings: contract length and extensions

Case study	Start date	Length (year)	Possible extensions	Details
Stockholm Metro	Nov-09	8 year (to 2017)	Yes	Six year optional extension (to 2023)
Emilia-Romagna	Varies	6 years (to 2017)	Yes	3 years (to 2020)
Budapest	Varies	2 years	Yes	1 year (typical for used buses)
Burgasbus		8 years	Yes	2 years (typical for new buses)
Grenoble		8 years		For BKV direct award
Stadtwerke Ulm	Jun-14	10 years (to 2024)	Yes	5 years (to 2029)
Manchester Metrolink	Jul-13	7½ years (to 2020)	No	-
Bus Éireann	Nov-09	10 years (to 2029)	No	-

Source: Steer Davies Gleave analysis

Reporting requirements - Article 7.1

- 6.22 Taken together, the Article and the guidelines imply a number of specific requirements, as we summarise in Table 6.6.
- 6.23 For the case studies, we have not found reports drafted according to Article 7 (1) to be publically available. However, we know that these reports exist in a number of cases, but they are sent directly from the operator to the Authority and are not necessarily public. Many of the authorities who took part in the study were not aware of the requirement to make these reports publically available either.

Table 6.6: Case study findings on reporting requirements (Article 7.1)

Requirement	Steer Davies Gleave interpretation	Observations
Once a year	The report must be annual.	Where published, generally met.
An aggregated report	The report must be a single document.	TfGM, for example, produces separate documents for each mode.
The selected public service operators	Operators must be named.	Where published, generally met, but individual contracts may not be listed.
Compensation payments	Payments must be identified.	Often not met. Additionally, in some cases, compensation payments can only be calculated in arrears.
Distinguish between bus and rail transport	Modes must be identified.	Often not met. The Article is unclear on whether tram and light rail should be included in bus, or rail, or reported separately.
Performance	Issues such as reliability and punctuality.	Illustrative data are sometimes published.
Quality	Not clearly defined, but might include issues such as air-conditioning, WiFi, service frequency and likelihood of gaining a seat.	Illustrative data are sometimes published.
Financing	Fares revenue, other revenue, compensation from different levels of government, capital contributions from different levels of government, and (in the case of an internal operator) costs.	Rarely provided. The costs of competitively tendered bus services are rarely known by the competent authority, even for gross cost contracts.
Exclusive rights	Where exclusive rights exist, they may be defined in many ways.	Only provided in Emilia-Romagna, Budapest and Burgas
Contracts shall be individually identified	Some individual routes may have multiple contracts	The most detailed report we have seen lists 124 routes but does not list distinct contracts on each route. We have identified routes with up to four contracts, which may change one or more times within a year.

Source: stakeholder comments, Steer Davies Gleave analysis of sample competent authority reports

- 6.24 We note, based on the case studies, that taken together, the requirements of the Regulation imply a high standard of reporting, as we discuss further below.

Publishing the reasons for a direct award - Article 7(4)

- 6.25 We have not systematically identified whether a competent authority making direct awards has complied with this requirement. We note, however, that in Ireland the NTA commissioned and published a study⁸ on the efficiency of Bus Éireann before making a direct award in 2009.

⁸ “Cost and Efficiency Review of Dublin Bus and Bus Éireann”, Deloitte, January 2009

Impact of the Regulation across the EU

Overall findings

- 6.26 We present in the table below the responses received about the economic and financial impact of the Regulation according to the stakeholders consulted (Member States, transport representative organisations, academics). To obtain an understanding of wider perceptions of the impact of the Regulation, we asked for their views on the overall, economic and financial impact of the Regulation.
- 6.27 A small proportion of stakeholders either did not respond or stated that, as their Member State had not yet taken any steps to implement the Regulation (Greece and Slovenia), they had no basis on which to comment on its impact.
- 6.28 Overall, a little under half of respondents with a view said that the Regulation had no significant impact in their Member State, often because the Member State's existing practice had been compliant with the Regulation and that no change was either expected or necessary. Some of them (~20%) also stated that it was difficult to isolate the economic or financial impacts to the implementation of Regulation 1370/2007 in times of economic uncertainty, general budget restraints and a number of other accompanying measures (such as environmental measures).
- 6.29 Of the remaining respondents expressing a view, in general there were more positive responses than negative ones. Some stakeholder expressed mixed views citing positive and negative impacts, but no stakeholders said that the impact of the Regulation had only been negative.
- 6.30 The Member States where the impact had been felt to be positive (overall) include:
- Finland: overall the impact in Finland appeared to have been generally positive for competitive tenders according to a recent study (2014). Fares seemed to have decreased whilst profitability of operators had been stabilised or improved. However the Ministry stated that it was early days in the contracts procured according to the Regulation and that the results were "slightly unreliable".
 - France (not according to all stakeholders, some thought there was no impact): For all internal awards (in *régie* or *sociétés publiques locales*), the regulation has resulted into the formalization of the relationship between the competent authority and the internal operator in a contract, which usually had the effect of creating greater economic and financial rationalisation. Overall the Regulation has helped to bring more legal certainty and transparency to the procurement process, and has facilitated the adoption of more balanced provisions.
 - Malta: positive impact in Malta, both economic and financial.
 - Netherlands (not according to all stakeholders, some thought there was no impact): The Regulation has brought increased transparency to the tendering process and the calculation of compensation amounts. Its implementation has empowered commissioning authorities and led to steady, long term contracts being agreed, with less risk of political interference.
 - Poland: overall the Regulation had a positive impact in Poland. The necessity to notify the intention to award a contract a year in advance had an influence and increased the competitiveness of the sector.
 - Portugal: contracts that have been drafted under the requirements of Regulation 1370/2007 (which is the case for rail and light rail services) and where they had been

awarded by competitive tender, in general, the social and financial impacts had been positive.

6.31 No Member States responded that the impact had been felt to be entirely negative. The Member States where the impact had been felt to be mixed (overall) include:

- Austria: The introduction of competitive tendering for bus services has driven some smaller companies out of the market; pure price competition between providers is responsible for driving down quality and innovation. However, there is a higher degree of transparency and increased awareness of commissioning procedures, costs and resources in the public transport sector among operators.
- Cyprus: A positive impact of the regulation was the possibility to use (private) operators who can bring their own expertise. A negative impact of the Regulation is the difficulty for the competent authority to make adjustments in the contract.
- Hungary: there had been some positive impacts in the case of direct awards. No difference had been witnessed for competitive tenders.
- Italy: Until Regulation 1370/2007, direct awarding in public transport sector was forbidden in Italy. This meant that after Regulation 1370/2007 entered into force, the chances for new operators to enter the market through a competitive tender dropped dramatically. However, Regulation 1370/2007 may have produced positive effects by providing incentives to design efficient public compensation schemes.
- Latvia: The economic and financial impact for competitive tenders had been positive whilst it had been negative for direct awards.

6.32 There were also some countries where the Regulation had no impact (according to the Ministries contacted): Belgium, Croatia, Czech Republic, Denmark, Estonia, Germany, Netherlands, Slovakia, Spain and UK. In the other Member States (Bulgaria, Ireland, Lithuania, Romania, Sweden), the respondents were unclear as to the impact of the Regulation.

6.33 Stakeholders identified the following impacts of the Regulation:

Table 6.7: Possible impacts of the Regulation across Europe, according to stakeholders

	Possible positive impacts	Possible negative impacts
For both competitive tenders and direct awards	<p>Higher degree of transparency in the tendering process and in the calculation of compensation amounts;</p> <p>Increased awareness of costs and resources in the public transport sector, led to more balanced contract terms;</p> <p>Clearer definition of the authorities' policy objectives;</p> <p>Greater legal certainty and reduced risk of political interference;</p> <p>Provided incentives for the design efficient public compensation schemes;</p> <p>Provided incentive for innovation in transport services;</p> <p>Necessity to notify awards in advance has increased the competitiveness of the sector;</p> <p>Facilitated the introduction of more balanced contract terms between the authorities and the operators.</p>	<p>Allowed direct awards in countries where competitive tendering procedures were mandatory. This resulted in a loss of competitive opportunities for operators;</p> <p>Could have driven smaller operators out of the market;</p> <p>Forced selected undertaking to provide a major part or the service itself, which forced many operators to get rid of their subcontractors;</p> <p>Did not increase competition greatly;</p>

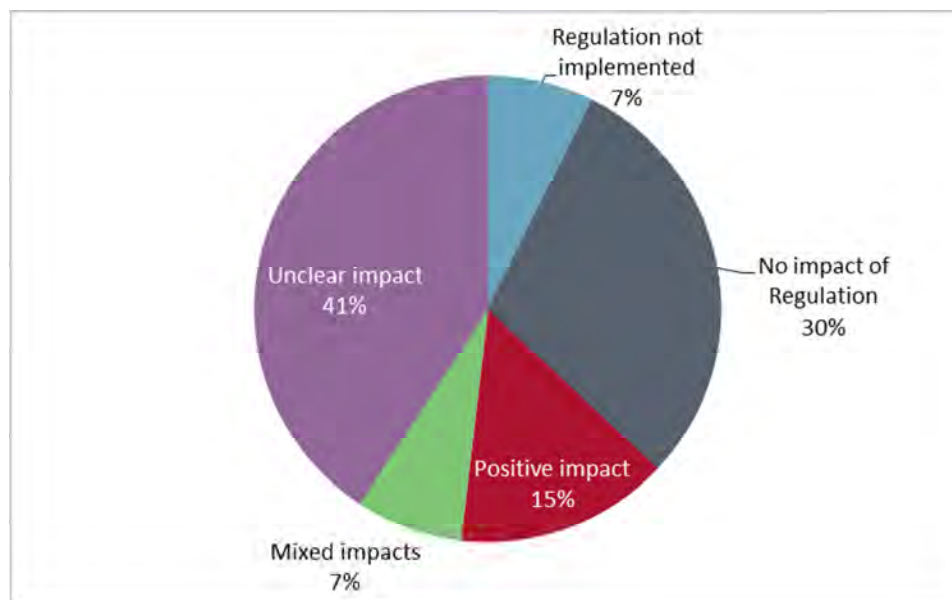
Competitive tenders only	Introduction of competitive tendering of new lines in some cases.	
Direct awards only	Clarified the conditions for direct awards; Formalisation of the relationship between authority and operator in the case of direct awards, which resulted in greater economic and financial rationalisation.	Required internal operators to have to self-deliver the majority of the services which may have economically impacted the operators and led to subcontractors losing their business.

Source: Steer Davies Gleave analysis

- 6.54 Even where specific respondents did not identify a precise economic or financial impact, the evidence suggests that the Regulation has brought a number of positive impacts (as listed above). These impacts vary depending on the legal framework that was in place in each Member State before the Regulation was implemented. However there was no disagreement that the Regulation had the merits to clarify the conditions attached to direct award for instance. The Directive also insisted on fair and transparent competition, and this is recognised by most stakeholders. However the Directive may also have some negative impacts on two issues: in Italy for instance, direct awards were not allowed pre-Regulation and the possibility for an authority not to use competitive tendering has been seen as a step back. In addition, operators who had been subcontracted by an internal operator to a large extent have been negatively affected by the requirement of the Directive that subcontracting should be minimised.
- 6.55 Specifically on economic impacts in each Member State, it remains unclear in many Member States as to what the impact of the Regulation has been. Around a third of respondents thought that the Regulation had had no impact (Belgium, Croatia, Denmark, Slovakia, Spain, United Kingdom).
- 6.56 Four Member States reported a positive impact:
- Finland: According to a recent study (2014) the economic impacts of the PSO (competitively tendered) have been in general positive in bigger cities and regions around them. The level of service has increased and, in some areas, also the prices have decreased. In the sparsely populated areas, the level of service has decreased, but that is, according to the study, mainly due to the demographic changes and lower level of state funding.
 - Malta: The Ministry explained that the Regulation had resulted in increased mobility, accessibility and inclusion (including more jobs in the public transport sector).
 - Poland: the Ministry stated that Article 7 (2) helped to increase the competitiveness of the sector. An additional positive effect of concluding contracts in competitive tenders was that Authorities obtained market prices and market information for their services. This allowed an authority in one instance to have a better knowledge and greater opportunities to negotiate rates for services entrusted to an internal operator. The Ministry also stated that a positive impact of the regulation had been to “slow down the decrease in public transport participation and, in certain cases, impacting on a growing demand”.
 - Portugal: The Ministry explained that for light rail contracts (and rail) drafter under 1370/2007 and tendered competitively, there had been a positive impact in principle.
- 6.57 No Member State reported a negative impact.
- 6.58 Impact was mixed in some Member States:

- Hungary: Direct awards: Positive economic impacts witnessed in Hungary came from enhanced predictability of planning for operators, enhanced ability of authorities to achieve their objectives through PSO contracts, more effective quality requirements formulated, price subsidy system could be partially transformed and more transparent and objective manner related to the financing of transport services. For competitive tenders no impacts were stated.
- Latvia: the Ministry mentioned that the economic impact for competitive tenders had been positive whilst it had been negative for direct awards, but did not explain further why this was the case.

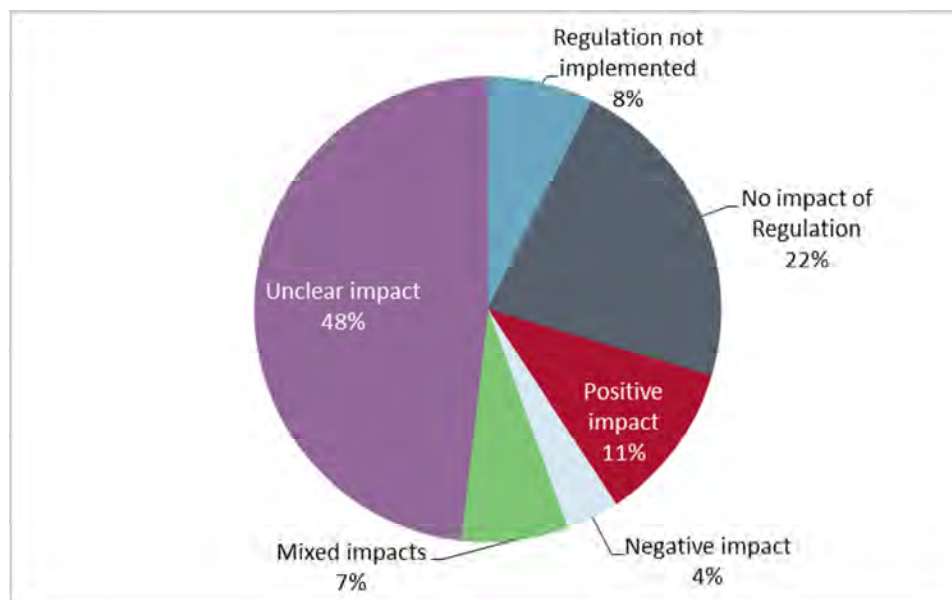
Figure 6.1: Economic impact of the Regulation, according to Member States



Source: Steer Davies Gleave analysis of stakeholder responses

- 6.59 Specifically on financial impacts in each Member State, we observe that in the vast majority of the cases (excluding countries where the Regulation has not yet been implemented or who did not respond to the consultation), Member States have found it difficult to assess the impact of Regulation. They explained that it was still early days in a number of cases, or that the vast number of national competent authorities made it hard for Member State to have a comprehensive national view.
- 6.60 In some Member States, the impact had been positive (Poland, Malta, Portugal), whilst for some others it had been negative (Cyprus). In some other Member States the impact had been positive for direct awards, whilst negative or with no impact for competitive tenders (Hungary). In Latvia, it was the opposite (positive for competitive tenders and negative for direct awards).

Figure 6.2: Financial impact of the Regulation, according to Member States



Source: Steer Davies Gleave analysis of stakeholder comments

Specific issues

Reports issued in accordance with Article 7.1 of the Regulation

6.61 Our analysis indicated that competent authorities had not always prepared these reports or, if they had, they had not been collated or published centrally by the Member States. We present in the Table below the Article 7.1 reports that Member States have indicated for us or that we found directly ourselves:

Table 6.8: Article 7.1 reports reported to be available

Member State	Reports
Czech Republic	Annual reports are available online, but are extremely succinct http://www.mdcz.cz/cs/verejna-doprava/prehled_o_objednavkach_verejnych_sluzeb/prehled_o_objednavkach.htm
Denmark	Annual reports are available here: http://www.trafikstyrelsen.dk/DA/Kollektiv-Trafik/Statistik-fra-regionale-trafikselskaber/Offentlig-bustrafik.aspx
Estonia	The Ministry informed us that reports from the national authority was available on the Estonian Road Administration webpage (but we were unable to find the reports). The Ministry indicated that local competent authorities may have their reports published on their own websites.
Ireland	Reports on the performance of PSO services are available on the website of the national transport authority: https://www.nationaltransport.ie/public-transport-services/bus/
Latvia	Reports on public transport performance are published quarterly on the Road Transport Administration website: http://www.atd.lv/lat/sabiedriskais%20transports/?doc=2139
Lithuania	The Ministry mentioned that the Vilnius authority reports on its website, but did not provide more details. www.vilniustransport.lt
Poland	The Ministry stated that reports are published on the website of the Office of rail transport (http://www.utk.gov.pl/en). These reports are brief and only cover heavy rail.

Member State	Reports
Spain	Some reports are reported to be available here http://www.fomento.gob.es/MFOM/LANG_CASTELLANO/DIRECCIONES_GENERALES/TRANSORTE_TERRESTRE/SERVICIOS_TRANSPORTISTA/DESCARGA_SOFTWARE/acotravi.htm
Sweden	Two competent authorities, Sörmland and Värmland, were reported to have published reports at these links. http://www.lanstrafiken.se/Gemensam-information/Om-Lanstrafiken/Om-Lanstrafiken/Sormland-/Arsredovisning-Sormland/ http://www.regionvarmland.se/arbetar/kollektivtrafik/regionalt-trafikforsorjningsprogram/uppfoljning No information was provided about other authorities.
United Kingdom	The Department of Transport stated that this was a matter for each competent authority, and that it did not hold a list centrally.

Source: Member States, Steer Davies Gleave analysis. Reference to a report does mean imply that it complies with Article 7.1 of the Regulation: see text for details.

- 6.62 The table below shows how countries meet the reporting criteria of Article 7.1. We note that some reports distinguish between transport modes, but sometimes only focus on one mode (Czech Republic for instance only reports on rail, whilst Denmark only reports on buses).
- 6.63 Some Member States have indicated to us that they do meet Article 7.1 requirements, but in some cases we have been unable to find the relevant reports. This is indicated in the table below by an asterisk after the Member States name.

Table 6.9: Analysis of Article 7.1 reports available

Member State	Present PS Obligations	Present PS Operators	State exclusive rights granted	Compensation payments detailed	Distinguish between modes	Assesses performance quality and financing
Czech Republic	✓			✓	✓	
Denmark				✓	✓	✓
Estonia*						
Ireland	✓	✓	✓	✓	✓	✓
Latvia		✓		✓		
Lithuania*						
Poland*						
Spain*						
Sweden				✓	✓	
United Kingdom*						

Source: Steer Davies Gleave analysis. (*) means that we were unable to find the relevant reports.

The reporting of compensation

- 6.64 Depending on contract types and specific conditions, compensation can be provided in different ways, and therefore reported in different ways. There is the need for additional financial information in addition to compensation to be able to form a clear view of the costs, reasonable profit, revenues and compensation associated with each public service contract.

6.65 We also note that while Article 7 imposes a duty on competent authorities to publish information by contract, we are aware of a number of different ways in which it is actually reported, as summarised in Table 6.10.

Table 6.10: Reporting: levels of aggregation at which compensation may be published

Reporting unit	Examples	Issues
National	Smaller Member States may report a single national PSO for bus operations. Pending the Fourth Railway Package, several Member States identify only a single national PSO for rail services.	Aggregated reporting at national level may conceal variations in approach and effectiveness at the level of the competent authority or individual PSC.
Competent authority	Some competent authorities may arrange all services through a single PSC covering more than one mode.	Some PSCs are joint between competent authorities, which complicates the mapping between them.
Contract	Some competent authorities may arrange services through a large number of small contracts.	Deregulation in Great Britain, with competent authorities continually adjusting PSCs to maintain socially necessary services, means that competent authorities may have over many contracts as small as provision of one journey a week.
"Route"	In Great Britain, the rail industry has in some years reported on the basis of varying definitions of "routes" which relate neither to competent authorities nor to PSCs.	PSCs and routes overlap, complicating the mapping of costs, revenues or compensation between them.
Operator	Operators must comply with national financial reporting requirements, but these may be in aggregate rather than relating to individual PSCs.	Many private bus operators do not publish costs and revenues of PSC and commercial services separately.

Source: Steer Davies Gleave analysis

6.66 Similar issues will relate to the reporting of performance, quality and financing also required by Article 7.

Focus on Södermanland (Sörmland) report

6.67 We have examined one of the most comprehensive reports available, that of Södermanland (Sörmland) County in Sweden, where the national authorities produce guidelines intended to be compliant with Article 7.1. However the report :

- Only covers buses;
- Provides no information on performance;
- Provides only limited information on quality;
- Does not identify the contracts individually.

6.68 We estimate that a compliant report for Södermanland County might need to contain at least three times as much quantitative information to be fully compliant with these requirements. A fully-compliant report for a large authority, such as for a large city might need to be many times larger still.

Differences in interpretation

6.69 In addition, it became clear from other sources of information that the reporting requirements set out in Article 7.1 may be open to interpretation. For example:

- Many competent authorities award no exclusive rights, either because national law does not permit exclusive rights (as in Sweden), or because no other operators exist or have been licenced, or because fares are set so low that no commercial operation would be viable, or because no such rights are identified in the contract.
- Some contract models (such as the super-incentive contracting in the Netherlands) do not specifically define either services or compensation payments in advance, but instead offer operators a mark-up on any revenue they earn, subject to providing minimum levels of accessibility. The services operated and the compensation paid can only be identified after the event.
- Measures of financing are also likely to be limited to the direct payments to operators but may not include “free inputs” such as investment, energy, vehicles or infrastructure. As we discuss further below, once services are contracted out, competent authorities may have no access to information on their actual costs, and once revenue risk is transferred, they may have no access to information on their actual revenues.

Summary of findings

- 6.70 The relatively poor availability of such Article 7.1 reports meant that the set of data intended by the Regulation to allow the performance, quality and financing of the public transport network to be monitored and assessed, is significantly lacking – at least based on the reports that we have been made aware of or were publically available.

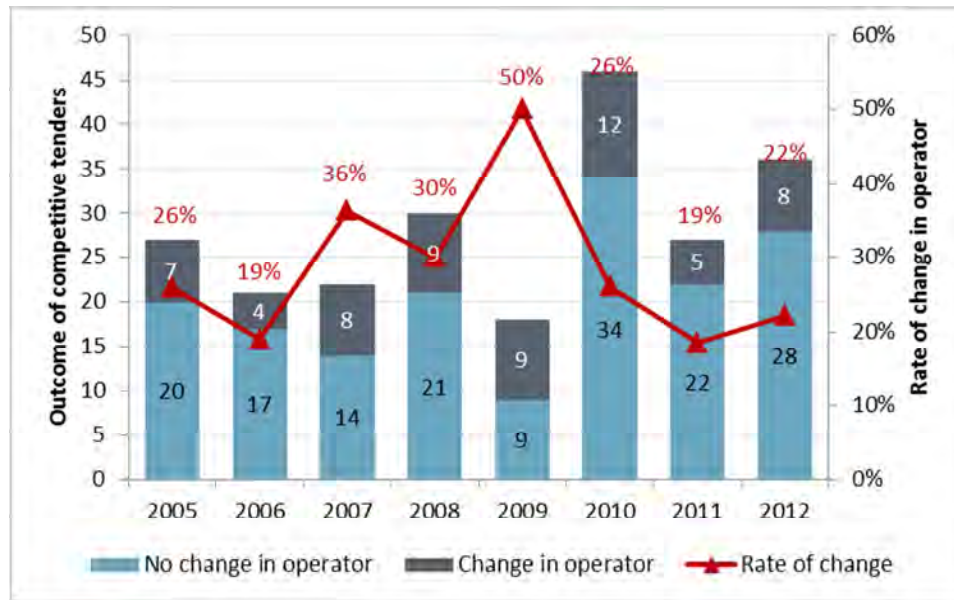
The competitive environment

- 6.71 For competitive tenders, compensation is determined by the winning operator’s bid, and the competitive tendering process is assumed to prevent overcompensation. However, it is not normally possible to identify the operator’s actual costs, except where contracts involve a ring-fenced operating company and the operator is required to provide detailed management accounts to the competent authority.
- 6.72 Therefore for competitive tendering, a key question relates to the effectiveness of the competition, the actual availability of a competitor in addition to the incumbent, and the steps that an authority can take to encourage competition. Some information is available for France on these issues and provides some interesting insights:

Availability of a competitor in addition to the incumbent

- 6.73 In France, between 2005 and 2012, the competent authorities did not renew the incumbent operator on average in only 27% of competitive tendered procedures. After a peak in 2009 where half the tenders were awarded to new operators, in 2012 the rate of renewal of the incumbent remained high at 78%.

Figure 6.3: Change of operator in France (excluding Paris) during competitive tenders



Source Steer Davies Gleave analysis of GART 2012 data. Note: the numbers above do not include networks that have switched from competitive tendering to direct award.

How to stimulate the competition

- 6.74 A key concern for the authorities in wanting to ensure an adequate competitive environment is the availability of competitors.
- 6.75 In France whilst in 2008 there were three major operators (Veolia, Transdev and Keolis), this number fell to two since 2012 after the merger of Veolia and Transdev in 2010. Keolis and Transdev now manage between them more than two-thirds of the competitively tendered networks in France and a resulting 78% in 2012 of public transport trips (due to the presence of these two operators in larger cities) according to GART data.
- 6.76 When the Veolia-Transdev merger was authorised by the French Competition Commission in 2010, the Commission⁹ considered in its decision that the merger created competitive risks on urban and intercity public transport markets outside Ile-de-France. On urban markets outside Ile-de-France, it noted that it may lower the number of candidates in future competitive tenders in 20-25% of cases. As a result the Commission required the two entities to undertake a number of commitments.
- 6.77 Among them, the Commission required the two entities to finance (for €6.54 million) a fund aimed at stimulating the competition in urban public transport. This fund firstly allows competent authorities to compensate unsuccessful bidders (in full or partially) as well as allowing competent authorities (particularly small ones) to hire external experts in order to help them through tendering procedures and through detailed market analysis of their own networks.

⁹ Décision No 10-DCC-198

Number of bids received

- 6.78 The Competition authority estimated in its 2010 decision that in France between 2004 and 2009, on average 50% of tenders received only one offer, 31% two offers and only 19% three. We were not able to source more recent data, particularly for the period post-2010.
- 6.79 This issue of a small number of bids received is not unique to France. The Italian Competition authority stated that “As regards Italy, transport authorities usually receive very few bids during competitive tenders of public transport of passengers. There are rarely more than 2 bids, sometimes only 1 bid”. The Dutch competition authority mentioned that in many cases this information was not systematically made public by local authorities, but that previous research in the Netherlands had shown that “3 bids are submitted on average”.
- 6.80 Reasons put forward by experts in relation to the small number of bidders included:
- Advantage for the incumbent who already knows the market and its economics;
 - The ratio of costs of bidding versus probability to win is higher for external bidders than for the incumbent.
 - Sometimes unclear or barriers to access to assets (such as essential facilities or depots, maintenance facilities, etc.);
 - The degree of transparency of the tender procedure and documents as well as the discretionary power of the competent authority – even where award criteria have been specified; and
 - Geographic synergies where networks/routes are within close proximity: this may allow certain operators already in charge of the management of networks close by to offer better synergies to the authorities;

Summary

- 6.81 In summary:
- The case studies provide limited evidence of the impact of the Regulation, as in many of them the current contract either predates the Regulation or incorporates changes which the competent authority stated were planned before the Regulation came into force.
 - Contracts subject to the Regulation appear to be broadly in line with the key requirements of the Regulation. Some stakeholders also reported that issues of potential non-compliance would be addressed in the next round of contracting.
 - The compliance with Article 7.1 appears to be limited, whilst it could bring some benefits for the entire industry if these reports were more widely available. However, we note that reporting requirements appear to be rather onerous, and that there is - so far- only limited action by Member States to monitor that the reporting takes place.
 - Given the limited sample provided by the case studies, we also considered the wider views of stakeholders on the impact of the regulation.
 - Whilst the majority of stakeholders agree that the Regulation has had an overall positive impact, the actual economic and financial impacts of the Regulation remained unclear for the majority of them. Positive benefits of the Regulation quoted most often include better definition of objectives, enhanced transparency, increased legal certainty and increased awareness of costs and resources. Negative impacts include limited ability to subcontract

and impossibility to prevent the use of direct awards in countries that previously prohibited them.

7 Best practices

Introduction

- 7.1 The Commission’s Terms of Reference required us to “set up a knowledge base (at least related to ways of contract award) that should be suitable for updating through future research activities by sector organisations or other actors”. Particular points of interest also included contract awards and compensation schemes, in particular related to the factors that determine cost-effectiveness of award decisions.
- 7.2 Whilst there can be some difficulties in defining best practices, we have sought to identify what can at least be regarded as good practices. In this chapter we:
- List and briefly review a number of existing sources of information on good practice on contract award;
 - Summarise stakeholder comments on good practice; and
 - Present our findings on good practice.

Existing sources of information

- 7.3 A number of organisations have produced guidance or other documents which point to good practice in contract award, as we summarise in Table 7.1 below.

Table 7.1: Knowledge base: sources of information on good practice

Date	Source	Applicability
2003	Advancing UPT reform in the ECA region	EU-wide
2007	Contracting in urban public transport	EU-wide
2006-2009	Strategies for Public Transport in Cities (SPUTNIC)	EU-wide
2012	Public consultation on 2014 Public Bus Service Contracts	Ireland
2013	Tendering Road Passenger Transport Contracts	United Kingdom
2015	Vergaben von Busverkehrsleistungen nach der EU-Verordnung 1370/2007	Germany

- 7.4 We summarise below some of the key points emerging from these studies.

Advancing UPT reform in the ECA region

- 7.5 This study of 2003, sponsored by the Irish Government and administered by the World Bank was designed to assist reform within the urban passenger transport sector in the Europe and Central Asia Region. The study articulates a broad set of principles to help countries in addressing their urban transport policy agendas and investment priorities.
- 7.6 The focus of the study is to provide a practical implementation of the Bank’s ECA Urban Transport Strategy. While the objective of the study is to review best practices in urban

passenger transport reform throughout the ECA region, it notes that such a study cannot possibly lead to conclusions based on a “one-size-fits-all” approach, nor can it take into account all of the nuances and varying laws and regulations among all of the ECA countries.

- 7.7 In addition, the Urban bus toolkit website¹⁰ offers practical advice to enact reforms. It provides some guidance to evaluate local bus systems, and some options to reform the bus systems, from public monopoly, through various forms of tendered services, such as gross-cost route contracts, to a completely unregulated system.

Contracting in urban public transport

- 7.8 This study for DG TREN¹¹ in 2007 was undertaken by inno-V, KCW, NEA, RebelGroup, TØI, Steer Davies Gleave and TIS. It analysed a number of contractual practices across Europe and provided comparisons of the various organisational forms in use. However, it pre-dates Regulation 1370/2007 and may not fully reflect the requirements of the Regulation.
- 7.9 The report provided general guidance and advice as to the development and awarding of contracts to operators of public transport services. It highlighted a certain number of points which are still useful to reflect upon today.

Fixed vs. flexible service design

- 7.10 The study identified two distinct periods in service design:
- The period during which the contractual relation between operator and authority is established; and
 - The period during which the contract is realised.
- 7.11 For each of these two periods, the report stated that fundamental organisational decisions had to be taken related to the allocation of power of initiative and power of decision between the authority and the operator(s):
- If the authority decides to give a high degree of freedom to the operator, there might be less need to describe several aspects in detail, but this will then have to be balanced by adequate contractual incentives inducing the operator to serve passenger demand and to realise policy objectives. In this case, it will be **functional** planning.
 - If the authority wants to contribute to the service design to a large extent, the operator will have less or no direct involvement with service design. No direct link will exist with passenger ridership and specific operational quality incentives will be needed to induce the operator to provide the services planned by the authority with the adequate level of operational quality. In this case, it will be **constructive** planning.

Recommendations on how to allocate risk

- 7.12 The study made some recommendations on how to allocate risk. It started by recommending the level of risk was assessed as well as the ability and willingness to bear the risk by the two

¹⁰ <http://www.ppiaf.org/sites/ppiaf.org/files/documents/toolkits/UrbanBusToolkit/assets/home.html>

¹¹

http://ec.europa.eu/transport/themes/urban/studies/doc/2008_contracting_urban_public_transport.pdf

parties. A clear description of tasks and responsibilities related to risks should be provided, so that risk uncertainty could be reduced and priced through risk sharing mechanisms.

Other issues

7.13 The report also made some recommendations on how to secure effective competition, equal treatment of competitors, award criteria, bonus and malus schemes and monitoring and evaluation.

Strategies for Public Transport in Cities (SPUTNIC)

7.14 The SPUTNIC project¹², funded by the European Commission under the Sixth Framework Programme for Research and Development (FP6), was coordinated by UITP. The aim was to support knowledge and experience transfer towards the New Member States and Candidate Countries by compiling existing knowledge and best practices.

7.15 The project collected and developed practical tools to support public transport stakeholders in four thematic areas:

- Market Organisation: financing/investment principles and priorities, revenue distribution system, incentives in contracts;
- Customer Relations: the image of public transport, marketing and customer satisfaction
- Equipment and Operational Aspects: infrastructure, rolling stock and related equipment, operational and fleet management;
- Corporate Management: human resource development, business organisation and planning including cost management.

7.16 We summarise some of SPUTNIC’s policy recommendations in Table 7.2 below.

Table 7.2: Knowledge base: summary of SPUTNIC most relevant recommendations

Aspect of contracting	Recommendation
Incentives schemes	Incentives must be designed properly to be effective, and related to the authority’s willingness to pay for improvements.
	In gross cost contracts incentives might be needed to increase demand and revenue, or to improve performance in areas such as customer satisfaction, punctuality or environmental improvements.
	Incentives should include not only penalties for bad performance but also bonuses for good performance.
	In net cost contracts, the threat of competition can also act as an incentive.
	Authorities need to review the costs and benefits of different incentive schemes to identify the most suitable schemes and the appropriate level of incentives.
Effective monitoring systems	Monitoring systems are a necessary part of contract management and can be seen as alternatives or complements to incentive mechanisms: <ul style="list-style-type: none"> • In a monitoring system, the performances are controlled by the authority • With incentives, the performance is “controlled” by the operator in his own interest Usually, a combination of both instruments is necessary.
	The authority must be able to identify poor performance.
	If performance indicators are not met, the authority must be able to impose fines, withhold part of the funds, arrange for compensation or deny extension/renewal.

¹² http://www.transport-research.info/web/projects/project_details.cfm?id=11083

The PSC must clearly specify the monitoring arrangements which will apply.
Targets and measurements must be transparent and verifiable by both parties.

A Handbook for PTAs should be established to make it easier for the PTAs to choose and implement a monitoring system appropriate to the local circumstances.

Improve use of monitoring data

There should be an exchange of best practice not only for the collection of data (through monitoring and evaluation), but also on how it is used and analysed, and how the outcomes are transformed into clear recommendations for the company.

Source: SPUTNIC, summarised by Steer Davies Gleave

Ireland: Public consultation on 2014 Public Bus Service Contracts

- 7.17 This report from 2012 by the Irish Competition Authority highlighted the relative benefits of competitive tendering and direct awards and outlined some practical issues associated with implementing competitive tendering¹³.
- 7.18 In the Irish local context, the Competition Authority made recommendation related to:
- Contract periods;
 - Types of contracts;
 - Performance monitoring;
 - Bid-rigging prevention; and
 - Long-term planning.

United Kingdom: Tendering Road Passenger Transport Contracts

- 7.19 This is a best practice guidance compiled by the UK Department for Transport in October 2013, which should be read in the context of the deregulation of bus services throughout the UK except in London and Northern Ireland¹⁴.
- 7.20 It highlights best practice in the UK through contrasting examples of good and poor delivery, using case studies that have saved money and improved standards. It covers issues such as best value for tendering, quality and value, contract management, partnership and innovation, as well as market understanding for authorities.

Germany: Vergaben von Busverkehrsleistungen nach der EU-Verordnung 1370/2007

- 7.21 This brief May 2015 report by VDV is an updated document providing guidance on the design of public tenders for regular bus services. It does not discuss the relative merits of competitive tenders or internal awards but instead focuses on best practices. The document offers some views related to the design of tenders, tender specifications and evaluation of tenders.

Stakeholder comments on best practice

- 7.22 In the following section we summarise comments made by stakeholders in their questionnaire responses related to best practices. We examine comments relating to:
- Contract specification and design;

¹³ <http://www.tca.ie/images/uploaded/documents/S-12-004%20submission%20to%20the%20National%20Transport%20Authority.pdf>

¹⁴ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/254392/tendering-road-passenger-transport-contracts.pdf

- Compensation;
- Performance monitoring; and
- Managing specification change.

7.23 We then deal in turn with comments related to competitive tendering and to direct awards. In general, however, most of the comments applicable to competitive tendering are also applicable to direct awards. The specific additional features of direct awards appear to be that:

- Greater effort is required to the calculation of compensation on the basis set out in the Annex to the Regulation.
- Direct awards in principle give contract authorities greater flexibility to make changes to the contract specification, but this should be within the framework of the contractual terms relating to contract change and compensation.
- Competent authorities have, and should make use of, the greater opportunity to monitor internal operators than external contractors.

Competitive tendering: contract specification and design

- Best practices listed included:
 - Early consultation phase with experienced operators in order to foster innovation;
 - Open and transparent objectives to be achieved;
 - Knowing what can be afforded. It is also important to provide clear financial details such as whether or not the compensation includes the cost of depreciation of rolling stock required for the services;
 - Clear allocation of risks between operator and authority;
 - Clear definition of the service from the outset;
 - A level playing field: full transparency of market information, treating all bidders equally, sharing answers to information requests with all bidders;
 - Requirement for a compliant bid before any “added value” alternative is even considered;
- A number of stakeholders also detailed local practices to improve contract design:
 - A defined procurement process and standard documents for purchasing and contracting exist in Sweden. The process and the documents are produced and published through a joint venture between PTAs and operators;
 - Although responsibility for procurement is decentralised to local governments in the Netherlands, the actual procurement process is often centralised. This speeds up the learning process and allows for quick exchange of best practices.
- Other best practices include:
 - To avoid legal challenges from losing bidders, focus on quality and consistency of procurement procedures;
 - Contract specification that focuses on outcomes rather than on the detailed inputs required of a transport undertaking, the latter usually is being better placed than the procurement authority to make the most effective judgements about the efficacy of particular inputs;
 - One of the essential success factors is to ensure a full integration of any contract in citywide or regional ticket schemes.
 - Contractual provision for a continuous dialogue with passengers and inhabitants;
 - Contractual provision to establish a public transport system that meets the city’s current and future needs;

- An academic in this field explained that a key lesson of academic developments on this issue is that contract design should be adapted to the characteristics of the service. “In particular, it has been shown that local authorities should reduce the duration of contracts as service complexity and/or uncertainty on demand increases. Additionally, a core determinant of performance is the way that competition is organised. A competitive tendering process does not ensure intense ex-ante competition for the market as it could be associated with a small number of bidders and/or anti-competitive behaviours, depending on the way competition is organised.
- The comparison of the French and the London models highlights, for example, the diversity that exists in Europe regarding the rules of the game imposed on bidders. A recent empirical study (Amaral, Saussier and Yvrande 2009) pointed out that these two models differ strongly with respect to the transparency of the tendering procedure and the discretionary power of the local authority. The French model is characterised by the wide discretionary power of local governments and a low level of transparency, whereas the London bus model combines a strong discretionary power and a transparent tendering process. The results indicate that the London model exhibits better results in terms of competition intensity, by using the transparency of auction procedures and the discretionary power of the regulator as complementary instruments to foster competition and to prevent anti-competitive behaviours”.

Competitive tendering: design of compensation schemes to promote efficiency and calculation of compensation amounts

7.24 Best practices quoted include:

- The vast majority of stakeholders who responded thought that it was important to include within the contract some means of incentivising (such as bonus/malus for over or under-performance) operational cost efficiencies and increasing revenues (where applicable). In the case of net cost contracts, incentives should motivate operators to attract additional passengers for public transport to reach traffic targets.
- A transport organisation also noted that incentive clauses can introduce more risks for the operator but also greater flexibility to adapt its offer.
- A stakeholder mentioned that the division of risks and control to the correct party must be clearly stated in tendering procedure documentation.
- The question of external factors influencing the outcome of the contract was noted and a stakeholder mentioned that there should be some indexation clauses that vary with external factors that can affect both parties. Another stakeholder also stated that commercial speed, for instance, is a cost driver not directly controlled by the operator but rather by the competent authority, so it is recognised that operators may incur extra costs resulting from significant unpredictable exogenous factors of production (including insurance and fuel).
- Another stakeholder also thought that to create transparency, grant should be divided into compensation for public service obligations and for other activities outside these obligations.
- An academic quoted Stockholm, Copenhagen, Amsterdam suburban, Arnhem-Nijmegen, London as good examples of best practices on compensation;
- Another academic explained that the academic literature usually examines the relative performance of two polar contractual schemes: cost-plus contracts and fixed-price

contracts (see, for instance, Gagnepain and Ivaldi 2002, Pianceza 2006 or Roy and Yvrande-Billon 2007).

- In the French case, two variants of the fixed-price contracts exist: net costs contracts and gross costs contracts. The basic theoretical argument is that fixed price contracts provide higher incentives than cost-plus regimes and the empirical tests performed on data on the French urban public transport networks corroborate this hypothesis (Gagnepain and Ivaldi 2002, Roy and Yvrande-Billon 2007).
- Results also indicate that transport operators regulated through a gross cost contracts shows higher performances (measured in terms of productive efficiency) than operators under net cost contracts, suggesting that transferring revenue risks leads to lower performance.
- However, academic developments (for instance Amaral 2009) have highlighted that, in order to reach efficient outcomes, a fixed price contract requires a high level of expertise in the procuring authority and may, in particular, help to mitigate winner's curse effects associated with the transfer of demand risk.

Competitive tendering: performance monitoring

7.25 We summarise below some interesting comments by stakeholders related to best practices on performance monitoring for competitive tenders.

- All stakeholders who responded agreed that the performance of the operators should be closely monitored by the authority. Different timeframes for monitoring were proposed from annual, to monthly or quarterly. Most stakeholders also stated that service quality indicator data should be provided. A Member State also explained that evaluation of operators' reports should be on the basis of standard reporting forms and on-site control. Audits should also be realised on a regular basis.
- Stakeholders mentioned that KPIs should be clearly defined, be realistic and linked to local needs and circumstances.
- Some stakeholders mentioned that performance should be incentivised in the contract either through bonus payments or through participation in revenue growth;
- A stakeholder highlighted that contracts must contain the provisions necessary for adequate monitoring of the operator;
- A competition authority also highlighted that if there was a failure of the operator to provide to economic, financial or traffic data, then there should be some penalties.
- In order to do the monitoring, a Member State suggested that technology was a good way forward (such as use of GPS technology or control of passengers through entry and exit checks).
- Other best practices quoted included:
 - Contractual provision for the fight against fraud: in Dublin, if fraud exceeds 8%, the operator must pay the equivalent of 50% of the losses incurred to the organising authority.
 - The use of a standard database for monitoring vehicle performance and, in some cases, other KPIs, such as the "FRIDA" database used in Sweden by the competent authorities.
- An academic quoted Stockholm and Copenhagen contracts as good examples, but noted that each situation was different. Contracts monitor different things depending on the type of contract, so Copenhagen or London contracts will not be directly comparable to the ones of Lyon or Paris for example.

- Another academic explained that “recent developments of the academic literature highlight that the procuring authorities should be able to define audit and penalty clauses. Information collected by the procuring authority should be complete and reliable in order to supervise the operator properly. One could recommend that procuring authorities define and implement standardised reporting procedures based on fine-tuned performance/quality indicators. Quality in the urban public transport sector can largely be contractualised, as highlighted by the quality incentive contracts introduced in London since 2001. These include a number of bonuses and penalties depending on the quality delivered by the transport operator (e.g. excess waiting time or percentage of buses on time for departure) and it has been shown that service quality significantly increased since their introduction (see Amaral, Yvrande and Saussier 2009). In the French case, a database assembles the results of two annual surveys conducted by:
 - The Centre d’Etude et de Recherche du Transport Urbain (CERTU), a ministerial agency.
 - The Groupement des Autorités Responsables du Transport (GART), a nationwide trade organisation that gathers most of the local authorities in charge of a urban transport network.

The database gather a large volume of disaggregated information for most French transport networks on input, output, physical properties of the network, modes of organisation and, to some extent, operating costs. This database has been frequently used for monitoring purposes but also by academics analysing the performance of the French urban public transport sector. However, this database suffers from a classic problem in public procurement: the lack of data on auction results (the number and identity of bidders and their bid prices) and on service quality”.

Competitive tendering: managing specification change

7.26 We summarise below some interesting comments by stakeholders relating to best practices on managing specification change.

- Many stakeholders including a competition authority highlighted that the scope for specification changes should be minimised. As a general rule no changes should be made during the life of the contract apart in well-defined circumstances. Another competition authority mentioned that competent authorities need to obtain expert information in order to articulate realistic wishes, because specification changes often result from (additional) political wishes, often causing a need for extra subsidies. A Member State stated that some consideration should be given to understanding the effects that changes in transport capacity would have on the compensation.
- Multiple stakeholders pointed out that contracts should envisage from the inset change situations or provisions indicating under which circumstances a contract amendment will have to be drafted (such as increase in patronage above certain thresholds, which implies that there should be additional buses, which necessitates the drafting of an amendment to the contract). More than one stakeholder also pointed out to the necessity to have a detailed negotiation process described in the contract, so that negotiations could be balanced and not last too long.
- An academic explained that as highlighted by numerous academic developments, a classical rationale behind renegotiation is the need for ex-post adaptation. In other words, renegotiation could be needed to modify the terms of the initial contractual agreement when parties face unanticipated hazards. However, the potential for renegotiation may

lead opportunistic bidders to make strategic and aggressive bids, thus reducing the merits of competitive tendering mechanisms. One could therefore recommend that procuring authorities define precisely the conditions under which contractual terms could be renegotiated. In addition, in order to prevent corruption, renegotiations of initial contractual terms must be transparent.

Direct awards: contract specification and design

7.27 We summarise below some interesting comments by stakeholders relating to best practices in contract specification and design.

- A competition authority stated that best practices on contract specification and design came from regular renewal of contracts, from efficiency measurement of incumbent operators as well as from awarding authorities open to learn from competitive tenders.
- Supervised negotiation between the authority and the operator were also thought to be able to foster innovation (such as careful negotiations during a preparatory phase).
- Regular control of the performance as well as provision for the management of change were also quoted and are further developed below.
- A member State stated that it was important to monitor the specified service levels closely, to avoid lack of clarity and to ensure transparency in payments for services provided. Financial penalties for poor performance, a transparent variation mechanism to facilitate changes to service levels associated with evolving demand patterns or changes in available funding for public transport services over the lifetime of the contract are also best practice.
- Customer-focused metrics, KPIs or use of surveys were also thought important by more than one stakeholder. Senior management personal remuneration schemes that are linked to passenger satisfaction performance were thought to be a good tool to incentive customer focus in transport operations.
- The Amsterdam city contract was quoted as an example of a best practice contract.

Direct awards: compensation

7.28 We summarise below some interesting comments by stakeholders relating to best practices in the calculation of compensation amounts and schemes to promote efficiency.

- The vast majority of stakeholders who responded thought that it was important to include within the contract some means of incentivising (such as bonus/malus for over or under-performance) operational cost efficiencies and increasing revenues (where applicable). In the case of net cost contracts, incentives should motivate operators to find additional passengers for public transport to reach traffic targets.
- A transport organisation also noted that incentive clauses can introduce more risks for the operator but also greater flexibility to adapt its offer.
- For the purchase or upgrading of vehicles a competition authority thought that fixed amounts of compensation were best practice.
- A transport organisation also stated that compensation should be linked to customer satisfaction.
- The question of external factors influencing the outcome of the contract was noted and a stakeholder mentioned that there should be some indexation clauses that vary with external factors that can affect both parties.
- At least three stakeholders focussed on the evaluation of the bids and the “value-for-money”. They explained that it was very important to check that compensation is equal to

the difference between costs and revenues, and that profit margins do not exceed the normal market margins. They also stated that it is important that information regarding the profitability, efficiency and level of compensation required is made available by the incumbents to the regulator and potential entrants.

- Another stakeholder also thought that to create transparency, grant should be divided into compensation for public service obligations and for other activities outside these obligations. The internal accounting of the transport operator should also permit identification of what is public service obligation and what is not. This would remove the potential for the incumbent to use subsidies unfairly to cross-subsidise bids to operate routes being opened up to competitive tender for instance.

Direct awards: performance monitoring

7.29 We summarise below some interesting comments by stakeholders relating to best practices in performance monitoring for direct awards.

- All stakeholders who responded agreed that the performance of internal operators should be closely monitored by the authority. Different timeframes for monitoring were proposed from annual, to monthly or quarterly. Most stakeholders also stated that service quality indicators data should be provided. A stakeholder also explained that the authority should be able to directly check vehicle quality (such as cleanliness) and have access to statistical data concerning punctuality for instance.
- A stakeholder highlighted that contracts must contain the provisions necessary for adequate monitoring;
- A competition authority also highlighted that if there was a failure of the operator to provide economic, financial or traffic data, then there should be some penalties.
- In order to do the monitoring, a Member State suggested that technology can make it possible to provide data uniformly and enhanced monitoring (such as with the use of a centrally-tendered ITS to avoid duplications and for the whole system to be provided to the operators).

Direct awards: managing specification change

7.30 We summarise below some interesting comments by stakeholders relating to best practices in managing specification change.

- A Member State remarked that it is generally easier to make changes in direct awards than with tendered contracts. However, according to the stakeholder it remains necessary to ensure that compensation is adequate to cover the additional demands of the competent authority.
- Multiple stakeholders pointed out that contracts should envisage from the outset change situations or provisions indicating under which circumstances a contract amendment will have to be drafted (such as increase in patronage above certain thresholds, which implies that there should be additional buses, which necessitates the drafting of an amendment to the contract).
- A competition authority also highlighted that for direct awards it is crucial there is a clear ex-ante definition of the most relevant clauses and conditions.
- More than one stakeholder pointed out the necessity to have a detailed negotiation process described in the contract, so that negotiations could be balanced and not last too long.

- A stakeholder explained that cooperation happened between authorities to optimise passenger flows and to remove overlapping routes. He also explained that in the Netherlands, there is the possibility for “public authorities to pool their public powers in a separate public entity that may procure public transport” which appears to be an interesting possibility for small authorities to pool their expertise together, especially when contract procedures occur at irregular time intervals.
- Modifications leading to specification change may arise when the overall policy objectives of the competent authority change which may be the case after elections. A stakeholder commented that parallelism between the duration of the public transport contract and the term in office of a local government may explain, as has been the case in Flanders, that there have been no cases of fundamental modifications during the life of a public transport contract.

Knowledge base summary

Our findings on good practice

- 7.31 In the remainder of this Chapter we summarise our own findings drawn from analysis of the existing sources of information, the stakeholder comments described above, case studies as well as Steer Davies Gleave’s own experience. We propose good practice in contracting, including a number of comments made on a confidential basis by stakeholders whom we have not identified.
- 7.32 Unless specified, best practices apply to both competitive tendering procedures and direct awards.

Organisation of the database

- 7.33 We have decided to organise the database according to the possible timeline of the issues that authorities may be faced with. :
- Preparing for competitive tendering;
 - Contract specification and design;
 - Compensation;
 - Performance monitoring;
 - Managing specification change; and
 - Contract close.
- 7.34 We note that this appears to be the way most used in the documents we have reviewed as part of our work for this Chapter. The UK Department for Transport for instance used the following approach:
- Best value from tendering: covering packages and contract bundles, tender and contract timelines, direct awards and procurement procedures, contract scope and scale, over-specification, post-tender negotiations;
 - Quality and value: covering costs versus quality, objective measurement of quality;
 - Contract management: covering monitoring, feedback, planning and managing variations, emergency/short-term arrangements, penalty points, disputes, auditing;
 - Understanding the market: operator lists, market analysis, in-house provision, previous competition levels, market development; and
 - Partnerships and Innovation: operator contribution, information provision, infrastructure provision, revenue risk, stimulating innovation, sharing benefits of growth.

Format of the database

- 7.35 All the documents that we have reviewed have been developed in a text format, with comments accompanying each of the headings in most cases. As the organisation of public transport is complex, very linked to local circumstances and requires a detailed understanding of many variables, there is only limited potential for using a schematic approach based on tree diagrams or other logic tools. Instead accompanying text helps to justify the best practices proposed.
- 7.36 Some documents include very limited “do” and “don’t” lists based on best and worst practices found. This is interesting but cannot be very lengthy in the case of a European analysis with a considerable range of European practices.
- 7.37 Consistently with the text format used in other studies, we have chosen to use this format as well which allows for a simple and transparent update of the database in the future.

Preparation for competitive tendering

Control of infrastructure

- 7.38 An internal operator may have had responsibility for provision of infrastructure including bus stops, signage and passenger information systems. If services are planned to be competitively tendered it is unlikely to be appropriate for one operator to retain this responsibility or own these assets. In the case of competitive tenders, the control of infrastructure should be the responsibility of the competent authority.
- 7.39 Competent authorities may need to consider whether they, or a body independent of operators, should specify, own, maintain and replace infrastructure which will be used by all operators, and how the costs of these activities should be funded and financed. In some instances the provision of such facilities may be contracted out to a third party, sometimes in return for advertising rights.

Control of vehicle maintenance depots

- 7.40 Access to suitable maintenance depots may be critical to operators wishing to enter a market. Where depots are owned by an operator, particular in large urban areas with restrictive planning controls, this can act as a barrier to entry, as new entrants may need to establish and work from more remote depots, requiring additional empty running, which put them at a cost disadvantage relative to the incumbent. Lack of depot space has been a major constraint to new entry in London.
- 7.41 Conversely, a large incumbent or former internal operator may be disadvantaged when it is committed to owning, leasing, maintaining or operating a depot which becomes larger than is necessary for its activities once some of its services have been replaced by competitors.
- 7.42 Competent authorities may find it good practice to own or lease suitable depots and make them available to successful tenderers to operate services in the case of competitive tenders. This is not strictly necessary for direct awards but would not be a problem either if in place. If there is the possibility of a transition at some point in the future from direct award to competitive tender, then this should be implemented.

Control of vehicles

- 7.43 Competent authorities are likely to need to ensure that a range of bidders have access to suitable vehicles. Competent authorities may need to take steps to ensure that restrictive

specifications and past investment does not unduly benefit the internal or incumbent operator. In the case of competitive tenders, authorities must be responsible for the control of vehicles. It is not strictly necessary in the case of direct awards, but it would nonetheless be a good idea that the control of vehicle by the operator or the authority is made very explicit in a written document.

- 7.44 A range of funding, financing, ownership and leasing models are available for buses, but light rail or trolleybuses may be more difficult to procure for a contract which is normally shorter than potential vehicle life.
- 7.45 Particularly for metro or light rail contracts, it may be necessary for an operator to be involved in the technical acceptance of new vehicles being delivered during the course of its contract, even if ownership of the vehicles remains with the competent authority.

Control of monitoring systems

- 7.46 It is not good practice for an internal or incumbent operator to own, manage or operate systems used to control or monitor multiple operators. Monitoring systems and control rooms should be run independently of operators by the competent authority, and no operator should have access to more information than its competitors or than the authority itself.

The skills of the competent authority

- 7.47 The competent authority responsible for contracting PSO services requires a range of skills including demand forecasting, network and service planning, contract design and award and contract monitoring.
- 7.48 In the case of competitive tenders, competent authorities cannot rely on the operator to provide these skills. Small competent authorities may not find it cost-effective either to maintain these skills in house or to retain staff when there is only a small and infrequent contracting workload. It may be inefficient for a competent authority to retain staff to handle brief peaks in contracting workload:
- One approach is for the authority responsible for contracting PSO services to pool resources to cover a larger area, which in some Member States might include the whole state, as is the case with Ireland's NTA.
 - Another approach is for small competent authorities to use secondees or contract staff, either from a national specialist body or from suitably qualified consultants, to ensure that a pool of experienced and motivated individuals is available to provide the relevant skills.
- 7.49 In either case, there may need to be a dialogue within the Member States regarding the size of competent authority which can reasonably be expected to manage contracting processes and, for smaller competent authorities, the means by which they should do so.
- 7.50 If a competent authority has skills in demand forecasting, network and service planning, contract design and award and contract monitoring, and these are not duplicated at a higher level of government, it is likely to be most effective for it to have sufficient autonomy to make its own decisions in these areas, within an overall funding and policy framework.
- 7.51 In the case of direct awards, the need for the authority to have these skills is less important than in the case of competitive tenders and the authority can rely to an extent on the operator but would need to ensure that there is enough transparency.

Demand forecasting

- 7.52 Particularly for long PSCs, or in areas experiencing significant development or economic change, it may be necessary to develop forecasts of demand based on data including projections of demography, land use, network development and urban and regional policy. Such studies may be carried out or procured by the competent authority as part of its overall responsibility, or provided to it by other bodies.
- 7.53 In the case of competitive tenders, the authority should be able to undertake or procure these studies itself and not rely on bidders or operators. This will ensure that the authority is able to assess independently the assumptions of bidders.
- 7.54 Although most PSCs will include the potential to make incremental adjustments to the service patterns and level of resources employed, the scale of these adjustments must be modest if there is not to be a material impact on the overall cost base. Incorporating a cost for marginal changes at the outset is likely to be more appropriate than amending contract payments on an average cost basis.
- 7.55 However, growing demand may also create a need for additional capacity. The impact may not be linear, as there may be a requirement for substantial investment in infrastructure to provide adequate space in depots, terminals or facilities such as power supply equipment.
- 7.56 Demand is also dependent on pricing and fares policy, and competent authorities may also benefit from access to studies on factors such as the elasticity of different market segments to fares levels, and also to factors such quality and marketing. It will not normally be desirable for relevant data to be available only to an internal or incumbent operator. In net cost contracts, substantial changes to a fares policy determined by the authority could have either positive or negative impacts on revenues, which may require adjustments to the contract price.

Network and service planning

- 7.57 Internal operators may, in the past, have taken on a number of functions of network and service planning which it will no longer be appropriate for them to have if some or all of their workload is won by new entrants.
- 7.58 This is particularly likely to be the case for small contracts, operated by SMEs, who are unlikely to be able to maintain in-house all the relevant expertise, and whose skills may be limited to general management and vehicle driving, operation, cleaning and maintenance.
- 7.59 With a regime of competitive tenders, it is likely to be essential that these functions, data and the skills required to perform them, lie with the competent authority, as no individual operator can provide the necessary assurance of independence, authority or stability over time to carry them out.

Use of the transition period provided in Regulation 1370/2007

- 7.60 Competent authorities should make full use of the transition period to 2019, provided for in Regulation 1370/2009, which offers a valuable opportunity for both competent authority and potential suppliers to develop experience of the processes. Areas in which experience can be built up include:
- Transferring assets such as infrastructure, depots and vehicles from internal operator to competent authority;

- Transferring skills, such as network design and service planning, from an internal operator to the competent authority;
- Planning and specifying contracts of appropriate scale and duration;
- Testing and operating performance and monitoring regimes;
- Identifying the optimum size and duration of contracts (small contracts may be appropriate for SMEs but are potentially more costly to administer and may not attract credible external bidders, at least not until they have already entered the market through larger contracts); and
- Identifying the optimum level of risk transfer to external contractors.

7.61 In addition, a gradual introduction of competition may allow new operators:

- To develop their understanding of the market;
- To establish operating and maintenance facilities;
- To recruit staff and buy or lease vehicles;
- To establish relationships with potential subcontractors; and
- To assess whether, how and when they could expand by offering additional services.

7.62 It may also allow existing operators:

- To subdivide their operations and to understand their costs at a more disaggregate level;
- To practice bidding for new work while limiting their risk;
- To develop techniques for efficient deployment of staff and resources and to develop contingency plans in the event that they do not retain all their existing workload; and
- To reassure employees and their representatives that any reduction in overall workload can be handled efficiently and, ideally, without compulsory redundancies.

7.63 The transition may be managed better by introducing, monitoring and re-letting a series of small contracts, allowing mistakes to be corrected and improvements to be made, rather than a single large contract. A particular issue with large contracts is that, without detailed reporting or monitoring, it may be difficult either for the competent authority to identify what parts of the contract are working well or for future bidders to make informed estimates of the costs of providing particular services.

7.64 We note, for example, that in Ireland provision has been made for 10% of services currently let as a direct award to be subject to competitive tender on or after 30 June 2016.

7.65 Conversely, there are risks associated with a gradual and disaggregated approach to introducing competitive tendering. Large companies may be deterred from bidding if the scale of opportunity is too small or there is little or no foreseeable potential for growth.

Staff transfers

7.66 The issue of staff transfer between operators only arise in the case of transfer of operations resulting from competitive tenders, or from transfers between direct awards and competitive tenders.

7.67 Article 4 (5) and 4 (6) provide a legal basis on which the competent authorities can include social standards and transfer of staff requests as part of the tender documents and public service contracts.

7.68 In many cases competent authorities will need to consider the transfer of staff between contractors at the end of one contract and the start of another. It is not effective either for the outgoing operator to be left with a surplus of staff, or for the incoming operator to be unable

to recruit suitable staff, especially for light rail or metro systems where specific skills are required and the only realistic approach may be for staff to transfer, on existing conditions, from one contractor to another.

Contract specification and design

- 7.69 Formal contracts with operators, including an internal operator, can give greater clarity than service level agreements and, by their nature, can also be applied to external operators providing services under contract.

Specification of vehicles used

- 7.70 Competent authorities should also consider the extent to which specific vehicles should be operated on specific routes. While this can help improve consistency and the “brand” of the route, rigid specification of vehicles can require operators to retain additional vehicles which may not always be required for a significant amount of operations.

Subdividing services into packages

- 7.71 If competent authorities are willing to segment their transport services into packages, in the case of both competitive tenders or less frequent direct awards, the packages of services to be tendered need to be designed carefully:

- To allow efficient operation;
- To be attractive to a reasonable number of potential tenderers;
- To reflect the requirements of the competent authority over the contract period, such as fleet renewal, network changes or improvements in quality.

- 7.72 While small and brief contracts may be appropriate to test new arrangements, or to ensure that they can be met by SMEs, they may not be attractive to bidders from other Member States or even from elsewhere in a large Member State.

- 7.73 It is good practice for the competent authority to consult potential entrants and to seek their views on the scale of contract which might attract them to the market. Once established locally, they might be able and willing to bid for smaller contracts provided that it remained viable to maintain a local presence. We note, for example, the Irish National Transport Authority (NTA) held a Media Briefing on bus market opening on 22 April 2015 explaining the overall process and next steps.

- 7.74 In addition:

- Smaller contracts will, all other things being equal, result in a larger total volume of workload for both competent authorities and bidders, but may favour SMEs.
- If net cost contracts are used, particularly in urban areas with dense networks, small contracts may result in direct competition between contractors on overlapping routes. This may be a legitimate part of the contract design process, but may also result in poor value for money for the competent authority, if each operator discounts their expected revenue on the basis of competition by the other.

Choice of net or gross cost contracts

- 7.75 The choice of net cost and gross cost contract are not linked to the choice of awarding procedure but a number of factors need to be taken into consideration.

- 7.76 Favouring net cost are, in principle:

- Incentives to operators to grow revenue, provided that they have the means to do so; and
- Potentially, less need for detailed monitoring.

7.77 Favouring gross cost are:

- Where contracts overlap, or commercial services operate in the same area (as is the case even in some urban areas), or where no exclusive rights will be awarded;
- Where fares are determined by the competent authority; and
- Where a large proportion of revenue comes from multi-operator or multimodal tickets.

7.78 Nonetheless, the balance of advantage between net and gross cost may vary with location and over time, and the preferences of existing and potential bidders to operate services should also be taken into account. Operators comfortable with operation of gross cost contracts may perceive net cost contracts as high risk and be reluctant to bid for them. Conversely, some operators may see the lower margins typically available on gross cost contracts as unattractive. A hybrid model with a per passenger incentive (not directly linked to fares revenue) or incentive for passenger growth above a threshold is also possible.

7.79 Where competent authorities have designed “output-led” contracts focusing on the services and quality actually delivered, it should not be necessary for them also to monitor, or expect the operator to provide data on, “inputs” such as the number of buses or staff actually assigned to the contract.

7.80 A competent authority may need to act as an “informed buyer”, and may retain staff familiar with the operation of bus or rail services, but should focus on monitoring contractors’ outputs and not interfere with their management approach. Where competent authorities have given contractors incentives to improve quality, grow revenue and reduce costs within a clear contract specification, they should generally leave the contractors to decide and manage the process of delivery.

Design of performance regimes and incentives

7.81 This is a key element of best practice for competitive tenders. For direct awards, inclusion of performance regimes and incentives can also be considered, especially where there is a planned move in the future towards a competitive tender process. However, the competent authority should be able to steer and incentivise performance through its management levers with the operator.

7.82 Attracting passengers depends critically on reliability and punctuality, particularly in rural areas where services are infrequent. Under these circumstances, it is good practice to measure punctuality en route, as experienced by passengers making intermediate journeys, rather than only on arrival at the end of the route. Vehicle location and tracking technology is now widely available and may be used for monitoring both the operation of services and their performance against the timetable specification.

Competition process

7.83 This only applies to competitive tenders.

7.84 Competent authorities are unlikely to obtain good value if they provide insufficient information for anyone other than the incumbent to make a credible bid. Without sufficient information to model costs and, where necessary, revenue with reasonable certainty, potential competitors may be reluctant to bid for contracts.

- 7.85 A high quality tendering process is a necessary (but not only) condition to the delivery of high quality transport services.
- 7.86 The competent authority in Grenoble awarded compensation to unsuccessful bidders who reached the last round of the procedure. This may be worth considering as a means of encouraging a reasonable number of bids: in other areas the number of tenders has declined when it is observed that incumbents retain a high proportion of the work.
- 7.87 The use of standardised templates related to route and network statistics, resources, assets employed, production and output measures, staffing levels and cost data should also be considered by the competent authorities. Standardised templates provide visibility into expected cost trends and can help the evaluators to identify early warning of potential problems. These templates can also be used for the operator monitoring afterwards and can provide a good repository of data, benchmarks, etc.
- 7.88 Obtaining detailed cost data in particular should be very important to the authority, as there can be some significant challenges in administering contracts in the absence of detailed cost data.
- 7.89 The room for specification changes on quality should be minimized. However, there is the need to have a transparent variation mechanism to facilitate changes (such as demand patterns or available funding, etc) which needs to be taken into consideration in the tendering documents.

Evaluation of offers

- 7.90 In order to ensure cost effectiveness in the award decision, operators irrespective of whether a direct award or competitive tender process must demonstrate value for money in terms of the cost of meeting the required service objectives. In order to run a meaningful assessment of offers, authorities need to receive the following information:
- Route and network statistics, resources and assets employed;
 - Production/output measures: peak fleet requirement, bus-km, operated hours;
 - Staffing levels and functions: organisation charts;
 - Employment terms: transfer obligations and protected rights;
 - Contractual obligations: minimum staffing levels, asset replacement rates;
 - Specification, condition and reliability of assets influences costs: need for asset register and performance trends;
 - Detailed network costs;
 - Assumed reasonable profit margin;
- 7.91 Consideration should be given by authorities to the desire of companies to protect commercially sensitive information and proprietary knowledge for competitive advantage, meaning that authorities should be able to provide the necessary insights whilst maintaining confidentiality.
- 7.92 In the case of direct awards or where only one bid is received, it can be particularly difficult for the authority to ensure that it achieves value for money. Creating a virtual “efficient operator” is a way to challenge an incumbent or test the robustness of assumptions underpinning each tender. It can avoid perpetuating legacy inefficiencies in the new contract term as well as challenging incumbent or bidders to be as efficient as possible. An efficient operator model also allows the authority to test during the evaluation stage and throughout the contract phase whether variations in costs are reasonable or not.

- 7.93 Use of an efficient operator requires the authority to obtain the necessary data to populate a financial model, as well as being essential inputs to KPIs for monitoring performance and contract compliance after award. This means that the authority must have obtained this information prior to the evaluation of the offers received. However, it may also incentivise the authority to define early on during the drafting of the tendering procedure the data that will need to be made available to all bidders. This would help to ensure a level playing field in a competitive tender, with less advantage to an incumbent and lower risk for the other bidders.

Compensation

Clarity of approach

- 7.94 A clear approach is needed both for competitive tenders and direct awards to the calculation of compensation for direct awards to meet the requirements of the Regulation:
- The process for calculating “reasonable profit” as required in Article 4 (b) or Article 6 (1) of Regulation 1370/2007;
 - The definition and estimation of “positive financial effects” in the Annex to the Regulation; and
 - Combining the requirement to avoid over-compensation with a performance regime in which an operator could be paid bonuses for higher performance.
- 7.95 Lack of a clear approach for the calculation of compensation in the case of direct awards may result in “deficit financing” by the authority, rather than a financing of a value-for-money public service.

Incentive and bonus/malus systems

- 7.96 Incentives and bonus/malus schemes are particularly relevant to competitive tendering, but can also apply to direct awards, although in the case of direct awards, the competent authority should be able to incentivise desired behaviours and outcomes through its management oversight of the operator.
- 7.97 The best designed incentives are the ones that incentivise compliance with the contract requirements and encourage desired behaviours. Perverse incentives can arise in poorly-designed systems. We are aware of a case where an operator with a gross cost contract received a proportion of penalty fares as an incentive to enforcement, giving it a net incentive to increase (but then detect) ticketless travel.
- 7.98 In addition, penalties should be proportional to the cost of compliance, to avoid “budgeting for failure”. Exposure to bonus/malus payments should reflect the ability of operators to manage risks and influence outcomes. Similarly, reward payments should be calculated as such that there is no possibility of overcompensation.
- 7.99 Bonus/malus systems should not be limited to “hard” measures such as punctuality and cancellations but should also monitor and reward “soft” factors such as staff courtesy and dealing with unusual situations. However, the assessment of soft measures is always more difficult and less reliable than “hard” ones, so this should be taken into consideration.
- 7.100 Regular reporting of performance is necessary for an adequate system of performance incentives. Regular monitoring can also contribute to the identification of factors contributing to failures.

Simplicity of approach

- 7.101 Over-complex compensation mechanisms should be avoided, as they can require additional administrative effort which will only be worthwhile if the mechanism improves incentives.

Performance monitoring

- 7.102 Particularly on gross cost contracts, it is a valuable to have an effective regime for specifying, reporting and monitoring service quality.
- 7.103 One example of such a regime is the published 2014-2019 contract for Bus Éireann, which includes a number of detailed schedules that specify aspects of quality and how they shall be measured, reported, monitored and incentivised.
- 7.104 Collecting information for monitoring purposes imposes costs, but is a necessary part of the contracting framework if good value is to be obtained for the customer and the competent authority. This is a key best practice for both competitive tenders and direct awards.

Design of performance monitoring

- 7.105 Good design of performance monitoring procedures is equally relevant to both types of tendering procedures. Monitoring of the number of required services that have actually been operated, and which vehicles that have actually been used to operate them, can be difficult unless the competent authority is able to access actual operating data. Where performance regimes specify issues such as the internal and external cleanliness of vehicles, the cost of monitoring may also rise if the vehicles cannot readily be monitored at a central point.
- 7.106 On rural services, it may therefore be expensive to monitor any aspect of service unless vehicles are equipped with devices to provide location information. Where there are no systems to record vehicle location, competent authorities may need to decide the extent to which it is necessary to rely on self-reporting by the operator or on spot checks.
- 7.107 One approach is for the competent authority, or a single contractor, to own, install and maintain vehicle location equipment on all buses used for PSO services, rather than for small operators to do so individually, particularly if they would not normally have the skills to maintain or replace the equipment.

Monitoring

- 7.108 Monitoring is most likely to be effective if it is conducted regularly and close to the market. Merely gathering and filing performance data is unlikely to enable the competent authority either to maintain a good understanding of how contractors are performing or to base future contracts on a clear understanding of what is achievable.
- 7.109 It may be helpful for the competent authority to standardise contract terms, KPIs and reporting procedures across all operations, to minimise the cost of complexity and to allow potential bidders to become familiar with the contract terms and how they operate.
- 7.110 To support the provision of an effective replacement competition at the end of the contract, it is desirable for the competent authority to collect sufficient information from the operator to allow future bidders to assess and price the contract. It is good practice to collect and review this information throughout the life of the contract, rather than only as the contract comes to an end. Performance monitoring applies equally to both types of tendering procedures.

Publication

- 7.111 If operators are required to provide statistical bulletins on metrics such as cancellations (reliability), delays (punctuality) and other factors such as customer satisfaction, it is good practice to publish these where they can be examined by customers, stakeholders and future bidders to take over the operation. This should be particularly the case, but not restricted to, the case of direct awards, where compared to competitive tenders, there is less issues related to data confidentiality.

Managing specification change

Specification change

- 7.112 No contract can foresee every event or change in requirements over a period of 10-15 years, and change mechanisms are needed in competitive tenders to force agreement in a reasonable timescale. Operators might be unwilling to bid for contracts with an inexperienced competent authority or where regulation or arbitration mechanisms and practices were poorly developed. We are aware of a situation (outside the EU) in which bidders are not satisfied that a government agency will make future contract payments.
- 7.113 In a number of Member States, we identified processes by which contracts could be adjusted from year to year to take into account of changing requirements. One mechanism which has been used is to link contract payments on operated mileage, which can be varied between a defined minimum and maximum, but allow the competent authority flexibility to transfer resources between routes according to emerging demand.
- 7.114 Provision for specification changes are less essential in the case of direct awards to an internal operator but should nonetheless be considered good practice.

Unexpected events

- 7.115 Provision may also be necessary for emergencies such as road repairs affecting the route of buses.
- 7.116 One competent authority informed us that it required operators to prepare, and publish in the online journey planner, revised timetables to take into account any disruption expected to last more than two weeks.
- 7.117 For rail and light rail modes, it may be necessary to devise temporary timetables to deal with planned maintenance and renewal, network expansion, emergency blockages and major events effecting demand. It may be necessary to include the costs of staff preparing timetables and associated staff rosters, agreeing the changes with the competent authority, and posting advance information on changes on stations, journey planners and social media.

Providing real-time updates

- 7.118 It may be appropriate for the competent authority to run the public website and journey planner for the transport system, but for the operator to manage real-time information and social media such as Twitter feeds, so as to be able to respond in real time on the basis of information in the control room.

Contract close

Asset management

- 7.119 Some competent authorities require assets to be maintained by operators and handed back in good condition. Under competitive tenders this may add to costs if assets are replaced before the end of their useful life, as bidders will need to price asset replacement risk into their bids. . A better approach is to identify the optimum asset management strategy and to replace assets only when cost-effective to do so. In some cases, the competent authority might itself maintain the assets and optimise their replacement internally, or through separate contracts with different incentives.
- 7.120 It is not good practice for competent authorities to require operators to buy assets to use during the contract without a clear commitment to buy them back.

Capturing learning

- 7.121 In addition to monitoring the operators' performance against the contract, it can be beneficial for competent authorities to "debrief" outgoing operators (in the case of competitive tenders but also for direct awards), if necessary through an independent third party, to understand what aspects of the contract they consider have worked well. The experience of both authorities and operators can be fed back into the design of future contracts with the aim of improving the trade-off between cost and quality.

Summary

- 7.122 This chapter provides a repository of best practices that we have identified for passenger services contracting.
- 7.123 There is no single best way to procure public passenger transport services, and competent authorities must define their procurement strategies to reflect their local circumstances and plans. To do so requires clear policy objectives and an understanding of the potential supplier market. In addition, well-managed services can generate considerable additional income, so procurement is unlikely to be effective if it is based solely on the supplier offering the lowest cost. Procurement therefore needs to select the optimum balance of cost, quality and revenue.
- 7.124 A range of guidance on good practice is available (see Table 7.1) and the stakeholders who completed questionnaires provided a wide range of views and insights into how both competitively tendered contracts and direct awards should be designed and monitored.
- 7.125 We also identified a range of other areas of good practice in relation to:
- Preparation for competitive tendering, in particular to ensure that the assignment of roles and responsibilities between the competent authority and internal operator does not either favour or handicap the internal operator relative to potential competitors; and
 - Closing of contracts, in particular to learn lessons learnt in the course of the contract to improve subsequent contracts.
- 7.126 While a number of public service contracts are published, or obtainable, differences of local requirements, legal and institutional arrangements, or language make it difficult to "illustrate" good practice. Our findings therefore focus on identifying issues which will need to be considered, rather than examples of specific contract clauses, or award or monitoring processes.

- 7.127 The area of greatest disagreement among stakeholders related to the need for specification change during the life of a contract:
- Some stakeholders considered that specification change should be avoided through rigorous and unambiguous specification of requirements for the whole contract period.
 - Some stakeholders considered that specification change was inevitable, and that flexibility was desirable, and in some cases that contracts should allow for annual reviews of the exact obligations of the contractor.
- 7.128 A particular concern was that, without a clear, unambiguous and enforceable contract specification, contracts might be subject to political interference, particularly in areas such as planned reductions in services or increases in fares. An alternative approach was to align contract durations with the democratic cycle, to enable incoming administrations to ensure that contracts reflected their priorities and mandate.
- 7.129 Examples of good practice in this area appear to include:
- Compensation payments which reflect, as closely as possible, the reasonable costs of providing variations in the overall levels of services, so that operators' compensation reflects the increased or reduced costs of minor changes, whether requested by the competent authority or necessitated by factors outside the control of either party.
 - Clearly-defined conditions under which contract change clauses are triggered, so that there is no ambiguity of whether a change has been requested.
 - Continuous and constructive engagement between competent authorities and operators, with the focus on delivering quality services.

8 Conclusions and Recommendations

Key findings

Introduction

- 8.1 Regulation (EC) No 1370/2007 of the European Parliament and of the Council on public passenger transport services by rail and by road entered into force on 3 December 2009 and was intended to create an internal market for the provision of public transport services, complementing the general rules on public procurement.
- 8.2 Steer Davies Gleave has been asked to review the Regulation five years after implementation and assess its contribution to the provision of efficient, high quality public transport services that meet the needs of EU citizens. Following initial discussion with the Commission, we have focused on bus, tram, metro and urban rail services that are not covered by the proposals of the Fourth Railway Package. As part of the study, we have prepared an overview of the economic and financial situation of the sector, identifying the factors determining its performance, and assessed its impact through investigation of eight case studies. We have also established a knowledge base of best practice, which can be updated as more evidence becomes available.

Economic and financial situation of the public transport sector

- 8.3 We have provided a general overview of the structures of the market for public transport in the EU in Chapter 3. Our review of the economic and financial situation of the sector across the 28 Member States (as reported in the country fiches and Chapter 3) has demonstrated wide variations in terms of:
- Economic and demographic conditions;
 - The extent to which transport services are provided by the market and/or subject to competition for the market, within the market or from other modes;
 - The definition of applicable regulatory and governance arrangements (for example, where the number of competent authorities within one Member State can vary from one to many hundreds);
 - Approaches to funding of services;
 - Interpretations of the term “economic and financial performance” itself (which vary considerably according to the model of ownership and funding applied).
- 8.4 However, a common feature of most Member States is the financial pressures faced by the sector. Specifically a number of Member States have faced severe pressure on the financing of their public transport as a result of the 2008 financial crisis (examples include Italy and Ireland). These are detailed in the country fiches which are available in Appendix B. As a

consequence these Member States have had to achieve significant cost savings and identify new sources of funding.

8.5 Our review has also highlighted the lack of reliable data allowing comparisons of the economic and financial performance of the public transport sector across Member States. Our specific findings on data quality and availability are as follows:

- Data is collected by a wide range of organisations, subject to different disclosure standards and reporting according to different formats and levels of disaggregation.
- The different ways in which public transport is organised and funded inhibits comparisons on a meaningful basis.
- The information that is available tends to be focused on larger urban transport systems, and there is a general lack of data on rural services.
- There is insufficient granularity and information to enable reliable interpretation of the data or a confident assessment of the financial sustainability of services.

8.6 Hence, while it is possible to define economic and financial performance, at least at a high level, by reference to economic efficiency (providing cost efficient transport services that are valued by users and other citizens in a way that is financially sustainable), we have not been able to draw firm conclusions on levels of performance achieved in different Member States. One of the objectives of this study was to use 6-8 case studies to assess the economic and financial impact of applying the new regulatory framework, in particular by determining the success factors with respect to the economic and financial performance of public transport operators of each type of contract award.

8.7 In the event, the eight case studies we have carried out as part of this study do not enable a clear assessment of the economic and financial impact of the Regulation to be made. Our analysis of the detailed report by Sweden's Södermanland County (Sörmlands län) in Chapter 3 illustrates the practical difficulties of measuring "performance" in a single year, even among the services provided by a single competent authority in an area in which currency, wages and other costs are likely to be consistent. Measuring changes in economic and financial performance over time, and comparing the effect of a new regulatory model and a discontinued one, has proved particularly difficult, for a number of reasons we summarise below:

- Some of the case studies were selected to study performance in markets which had been deregulated before the Regulation came into force and, in consequence, could not be expected to demonstrate any clear changes resulting from it.
- In case studies where the Regulation did require change, we found only limited time series information extending over the period since before it came into force. Even where this was the case, in some examples (such as Bus Éireann) the competent authorities have acted in anticipation of the Regulation, and in others they may take advantage of the transition period before introducing major change. This means that the timing on any impacts of the Regulation is uncertain, and direct causality between the Regulation and change can only be established where stakeholders have confirmed that it was a driver of specific initiatives or changes.
- Transition from a model in which services are provided by an internal operator to one in which services are subcontracted inevitably makes it more difficult to define the boundaries of provision of public transport, for a number of reasons:

- Multiple sources of funding, the provision of “free inputs”, and the lumpiness of capital investment all mean that it can be difficult to identify clearly the underlying costs incurred by competent authorities or internal operators.
- While it may be possible to observe operators’ contract prices, but these may not be the same as their underlying costs.
- Information on inputs such as number of employees, or the size of vehicle fleet employed, becomes progressively less clear once services are provided under contract.
- Notwithstanding the requirements of Article 7.1 which we discuss below, PSCs can be extremely complex contracts, details of which may be kept confidential for legitimate reasons, and the volume of information available by which to identify performance or success factors, is often extremely limited.
- Determining a counterfactual “what the competent authority and/or operators would have done otherwise” can be particularly difficult. For example, the extent to which competitive tendering results not in cost reductions, which with suitable data can be identified over time, but in quality improvements, which may be of value to passengers but may not be directly quantifiable.

The economic and financial impact of Regulation 1370/2007

- 8.8 As the Regulation has only been in force since 2009, there is insufficient evidence at this stage to determine its economic and financial impact with confidence. While the regulation is affecting the approach to service provision in all of the eight case study Member States, in some cases the contracts for services covered by the legislation have only just been awarded or have not yet been renewed. We also note that some national competent authorities do not appear to be familiar with all aspects of the legislation, and that some local level authorities were unaware of it.
- 8.9 Overall, there is some uncertainty about the impact of the Regulation among a wide range of stakeholders. Our case study analysis has nevertheless identified a number of benefits, which could be expected to contribute to improved economic and financial performance over the longer term. More specifically, it has:
- Encouraged a clearer definition of policy objectives as a basis for specifying service requirements and other contractual obligations;
 - Resulted in greater transparency, particularly of methods and levels of compensation, including in the case of direct awards;
 - Reduced uncertainty for both the competent authority and the service provider over legal obligations; and
 - Led to a more considered approach to the design of public service contracts, for example in the development of effective incentives on operators to deliver services in line with public sector objectives.
- 8.10 In our view, these improvements are likely to lead to greater cost efficiency, by ensuring that contractual obligations are better aligned with policy objectives, and greater financial sustainability, by enabling transport operators to assess contractual risks more accurately and price accordingly. At the same time, we note that these are necessary rather than sufficient conditions for improved performance, and that actual outcomes will depend on exogenous factors (such as economic conditions) as well as the broader capabilities of competent authorities (as summarised in Table 8.1). It will therefore be important to collect further evidence on outcomes as experience of applying the requirements of the Regulation grows.

- 8.11 We have also observed that, in a limited number of Member States, the Regulation has allowed a more flexible approach to the award of contracts than was previously the case under the relevant national legislation. For example, in Italy it is now possible to award contracts directly whereas formerly authorities were obliged to procure services through competitive tender. At present, it is unclear how far these Member States will make use of this additional flexibility.
- 8.12 In principle, the Regulation should also greatly improve the information on public transport services and supporting contracts, not least because of the reporting requirements of Article 7.1. This should be expected to result in greater transparency and accountability, benefitting both users of transport services and tax payers who fund them. However, our investigation indicates that reports prepared in response to Article 7.1 are not always prepared regularly, may not be published and often do not comply with its requirements.
- 8.13 Discussions with stakeholders suggest that there are a number of reasons for this:
- It is possible that the requirements of the article are being ignored as there is no consequence for Member States that fail to comply with it.
 - The article requires a relatively high standard of reporting, and authorities may lack the data collection and monitoring capability to implement it in full.
 - Some authorities are not aware of the requirements of the Regulation more generally (a number having asked us for a summary of its requirements in the course of the study). It is therefore possible that the reporting requirements have simply been overlooked in some cases, particularly in those Member States where the broader framework introduced by the Regulation had already been anticipated by national legislation.
- 8.14 We also conclude that there may be other reasons that help to explain why the requirements of Article 7.1 have not been complied with:
- Confidentiality: both competent authorities and operators may wish to keep some information commercially confidential, particularly where this could be material to holding an effective future tender competition.
 - Consistency: the Article does not provide a detailed specification of what data should be collected, and in what form, as we discuss above.
 - Collection: competent authorities have not all complied with the requirement to produce aggregated reports.
 - Collation: Article 7.1 imposes obligations only on the individual competent authorities, which may be small and local, with no obligation on any regional or national authority to limit confidentiality, impose consistency, monitor collection or produce any aggregate regional or national reporting.

Best practices conditions for the award of a PSC and the design of the scheme for compensation

- 8.15 We have found and highlighted in the course of this study a number of best practices for the award of PSCs under direct award and competitive tendering. These best practices cover all aspects of the contract timeline from first high-level design to hand-over, however, their suitability for adoption or application by other Competent Authorities will depend significantly on local and individual circumstances and therefore cannot be readily translated into universal best practices.

8.16 Instead, we have identified a number of key capabilities that competent transport authorities will require if they are to award cost efficient transport service contracts capable of meeting economic, social and environmental objectives. They include skills required during the procurement process and others needed while contracts are in operation and some are required whether an award is made directly or through competitive tendering. These capabilities should be seen as being as important as the best practice conditions for the award of PSCs and the design of the scheme for compensation.

Table 8.1: Capabilities required by competent authorities

Task	Issues
Forecasting transport demand	May require a range of data collection and modelling skills.
Preparing transport plans	Planning skills may lie with an internal operator, but can be transferred back to the competent authority.
Subdividing services into contracts	May require operational knowledge and commercial skills in contract design.
Preparing notices	Requires knowledge of procurement legislation and procedures
Preparing tender documents	May require legal advice if contracts are bespoke or complex.
Preparing data room	May require technical advice to ensure that sufficient information is assembled to enable bidders to make informed bids.
Carrying out tender process	May be complex if criteria other than overall price are involved.
Negotiating contract award	May require commercial acumen and negotiating skills
Monitoring performance	Typically requires planning and specification in the contract schedules. Also requires resources to monitor, interpret and challenge monitoring information.
Monitoring quality	
Monitoring financing	
Publishing reports	Potentially technically complex, for multiple contracts or where contracts change within a year.

Source: Steer Davies Gleave analysis of Regulation 1370/2007 and interpretative guidelines

8.17 In the course of the study, a number of interviewees noted that many competent authorities do not have sufficient resources, skills and experience to support all these capabilities. This is a particular concern for small urban and rural authorities procuring a small number of bus services at infrequent intervals. However, some interviewees commented that even relatively large urban authorities may not have the skills to design and manage the repeated procurement of complex light rail services.

Recommendations

8.18 Based on the findings summarised above, we make the following recommendations.

Competent authorities

8.19 In our view, competent authorities will need to develop stronger capabilities in contract procurement, management and monitoring if the full benefits of Regulation 1370/2007 are to be realised. This could be encouraged by greater interaction among authorities, particularly those in Member States where responsibility for ensuring the provision of public transport services is devolved to a large number of local organisations.

8.20 At a European level, there is an association of large competent authorities (EMTA), but there is no equivalent association for smaller authorities who lack the level of access to resources that the larger authorities benefit from. An EU platform of competent authorities or national

associations of them that would include the smaller authorities would be useful so that best practices could be exchanged between members and to ensure that issues specific to the smaller authorities can be circulated to the policy-makers.

- 8.21 We therefore recommend the creation of an EU cooperation platform possibly encouraged by the Commission representing also the smaller competent authorities and/or their national associations. Such a cooperation platform could undertake actions to support the dissemination of information about best practice in the implementation of the requirements of the Regulation and to enhance the administrative capacity of competent authorities. These could include the development of forums for information exchange, exchange of authority staff through secondments and formal briefing sessions on the Regulation and supporting guidance.
- 8.22 We also recommend that Member States consider what support could be given to smaller authorities that do not have the skills or resources needed to implement procurement processes and manage contracts in accordance with the Regulation (including the capabilities identified in Table 8.1). We believe inexperienced Competent Authorities could benefit from guidelines in good procurement practice. Such guidelines should be drawn from best practice experience and cover key topics such as:
- key skills required at each stage of the procurement process
 - market engagement and how to attract a sufficient number of bidders
 - creating and maintaining competitive conditions
 - merits of gross versus net cost contracts
 - effective risk allocation
 - methods of integrating broader requirements of local transport needs (e.g. service quality and fares regulation) with other quantified metrics such as cost and performance
 - contract management and monitoring performance
- 8.23 To facilitate this, we recommend that associations of competent authorities develop or facilitate the development of good practice guidelines through enlisting the support of authorities including Competition Authorities in those Member States who already have significant experience of procuring and managing public service contracts.

Data collection

- 8.24 In order to improve data availability we recommend that consideration is given to consistent collection of data in respect of Article 7.1 reports and other national or local databases based on:
- Service-kilometres (rather than vehicle-kilometres) and/or service-hours. This would be to avoid uncertainty as to whether the vehicle is, for example, a coach with a capacity for 50 passengers or a metro train with a capacity for 900 passengers.
 - Passenger boardings, which can be inferred with reasonable certainty from the sale or validation of tickets, rather than passenger-kilometres, which are not measured directly and are often derived from multiplying passenger boardings by an assumed average journey length. Estimates of passenger-kilometres may be particularly unreliable for bus services, where the combination of a wide variety of trip lengths and lack of any record of where passengers alight contribute considerable uncertainty.
 - Capital contributions from national, regional and local tiers of government, which may not either appear in the accounts of either competent authorities or operators or be allocated or apportioned to the PSO and non-PSO services which benefit from them. As a first step,

it would be desirable for the competent authorities to be provided with clear information on such inputs, to enable them to apportion their costs to any PSO services to which they contributed.

- Similarly, subsidy payments from all tiers of government and consolidated based on actuals, possibly separating base, volume-related and performance-related elements.
- Auxiliary revenue (such as renting out space and kiosks, advertising on stations and shelters).
- Ticket revenues (for gross costs contracts), although we note that where tickets are valid on services provided under multiple contracts, whether by the same or different modes, the competent authority may not attempt to apportion ticket revenue to individual routes, contracts or even modes.
- We further recommend that internal operators should be required to provide the following information:
 - Costs apportioned to each contract;
 - Staff numbers (full time equivalent figures) apportioned to each contract;
 - Vehicles apportioned to each contract; and
 - A summary of the apportionment mechanisms used.

Article 7 reports

- 8.25 Article 7 reports are intended by the Regulation to allow “the performance, quality and financing of the public transport network to be monitored and assessed”. These reports should therefore be more than a compliance exercise. They should be drafted with the objective of providing transparency with information compiled in a consistent and comparable form for the benefit of the industry and the general public.
- 8.26 It would appear useful to have a single source of information listing, at a national level all the public service contracts in scope of Regulation 1370/2007. This could take the form of an internet portal, or a national report listing and linking all the competent authorities’ reports. This is not a requirement of the Regulation, but would nonetheless be useful. The Commission has made a proposal in this sense in a proposed amendment of Regulation 1370/2007 in the framework of the 4th Railway package of January 2013.
- 8.27 These reports should not only cover heavy rail, as is currently the case in a number of Member States, but also other modes of transport in urban areas and rural districts.
- 8.28 An initial and analogous requirement could be that all new contracts entered into should be uploaded by the competent authorities into a standard national and searchable register, which in the first instance might include only basic information. However, and as we indicate in Table 8.2, accurate recording of some information, which even if apparently simple, may present some practical challenges.

Table 8.2: Illustrative practical issues with standardising the provision of information on PSCs

Potential standard information	Issues which may emerge
Identify of the competent authority.	Services may be specified by more than one competent authority. Responsibility may be transferred between authorities during the life of a PSC. Authorities may be merged, subdivided or abolished.
Start and end of the PSC, possible extension periods.	PSCs may require existing services to be taken over, or new services to be introduced, at a range of different dates. Start, end and potential termination dates may be related to the introduction, modification or closure of infrastructure on which the PSC is dependent.
Description of the PSO obligations.	These can be extremely complex. In the case of Bus Éireann, the schedules to the contract extend to over 200 pages.
Whether exclusive rights are granted or not.	In a number of contractual arrangements, such as the rail franchises in Great Britain, exclusive rights may not be defined in advance but instead revealed by regulatory responses to proposed new entry.
Type of award procedure.	A wide variety of award procedures are used.
Compensation payment details.	Payment, performance regimes and incentive mechanisms can be extremely complex and, while contractualised, not readily summarised.
Name of operator and largest shareholders.	Operators may change name, merge or be subdivided. Ownership of operators may change, and there may be no dominant shareholder. Operators may, for a number of legitimate reasons, subcontract a large part of their inputs, and the apparent operator may be responsible for only a small part of the overall value-added.
Performance, quality and financial reporting.	These typically take the form of complex schedules or of data systems which may be populated automatically (such as timetable monitoring is carried out through automatic vehicle location, for bus and light rail, or the signalling system, for heavy rail).
Transport modes covered by PSO.	Some PSCs cover a number of modes. Some PSCs specify a service but may not require that it is provided by a particular mode.

Source: Steer Davies Gleave analysis. See also Table 6.10 for issues associated with the level of aggregation.

- 8.29 Nonetheless, over time it should be possible to codify more information in a standardised format, with some quantitative information stored in database format. This would allow local, regional and national authorities to extract statistics and, potentially, performance measures on a standardised basis.
- 8.30 While a requirement to establish a register could be a component of a revision to the Regulation, we recommend in the first instance that Member States create such registers, or compile national annual reports, which should provide a comprehensive list of the all the transport public service contracts awarded or tendered according to the requirement of Regulation 1370/2007. This would also help Member States to better assess the state of the sector in their country as we have found that many were fairly unclear about it.
- 8.31 We therefore suggest that, while every PSC should be listed, Member States should also gather and publish more details on the largest PSCs as measured by market size, revenue, capital expenditure, operating subsidies or level of risk.

- 8.32 In parallel, the Commission could clarify as much as possible the requirements of Article 7.1, for instance, through interpretative guidelines to make sure that reporting is made on a consistent basis (Table 6.10 illustrates a number of issues). For example, while the Regulation states “this report shall distinguish between bus transport and rail transport”, clarity is required on how a single contract involving both modes or a mixture of modes, should be reported and, if necessary, subdivided.
- 8.33 We do, however, foresee a number of practical issues which would need to be addressed. First, we are aware that codification of all details of complex PSCs might be difficult, particularly at the extremes:
- Small and temporary contracts, such as to provide an additional single bus service, requiring less than one full-time vehicle, potentially on a short term basis for months or even weeks.
 - Large and complex contracts, in the case of PSCs for complex light rail networks such as Manchester Metrolink, urban networks such as Stockholm Metro, or rail services provided on the national rail networks. In each case the PSC may specify not only an initial level of service but also a range of changes to the network, the rolling stock and the services provided, in some cases contingent of the completion of new infrastructure which is not directly part of the PSC contract.
- 8.34 Second, the legislation presupposes that a clear distinction can be made between PSO and non-PSO services, which may not be the case where a PSC sets a minimum level of service and the operator is permitted, or encouraged, to provide additional services.
- 8.35 Third, it might prove difficult to codify, on a consistent basis, all the contractual parameters of a PSC. In the case of Bus Éireann, for example, the schedules for the direct award contract for 2014 to 2019 extend over 200 pages, and specify a number of outputs of the PSO which may be unique to Bus Éireann and not included in any other PSC in Europe. It would probably not be practicable to devise a database structure which enabled all the elements of all PSCs across Europe to be held in a common format.
- 8.36 We also note that there is a potential tension between attempting to specify reporting standards from the centre, such as through additional legislation or through interpretative guidelines, and allowing the industry to develop its own practices as has happened, for example, in areas such as describing public transport services in a way which allows external parties to build real-time journey planner apps.
- 8.37 We recommend that the Commission encourages a working group made up of competent authorities, operators and Member States to work on this issue.



A Expert workshop presentations



Expert workshop

Economic and
financial impact of
Regulation
1370/2007

Expert workshop on the economic
and financial impact of Regulation
1370/2007

Presentation of the study

13 May 2015

Today's workshop



Introduction



10h30 – 11h30 Session 1

Economic & financial performance of public transport



11h30 – 12h Coffee break



12h00 - 13h15 Session 2

Cost effectiveness of the award decision



13h15 - 14h45 Lunch



14h45 – 16h Session 3

Delivering high quality in public transport



16h – 16h30 Conclusions

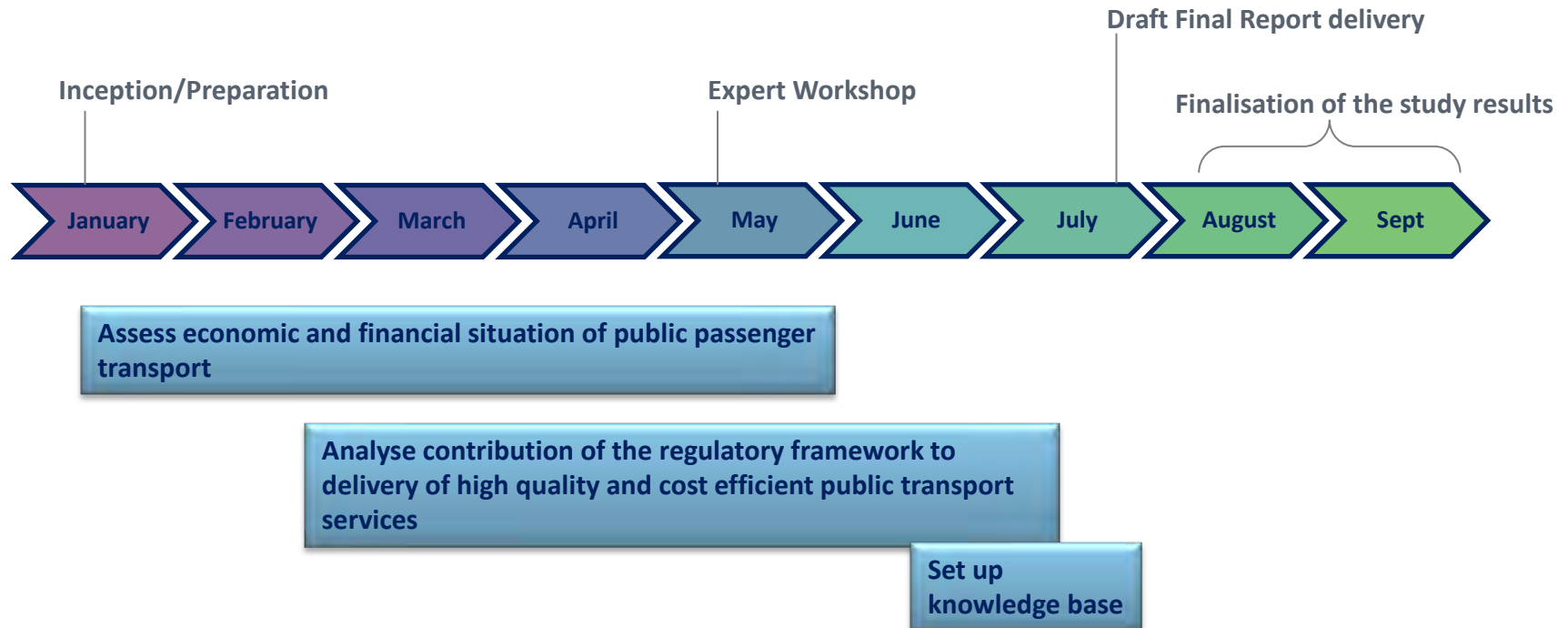
About Steer Davies Gleave

- Europe's largest wholly independent transport consultancy with over 330 consultants.
- Established reputation as effective advisers to governments, regulators, service providers, developers and other stakeholders in different parts of the transport sector.
- Relevant experience:
 - Policy and economic regulatory studies for the European Commission;
 - Advisors to competent transport authorities;
 - Advisors to private sector bidders and operators for public transport contracts;
 - Significant UK rail franchise expertise.

Objectives of the study

- The objectives of the study are to:
 - Assess the general economic and financial situation of the public passenger transport sector in urban agglomerations and rural districts in the EU;
 - Identify factors that have contributed to the economic and financial success of the sector;
 - Analyse the extent to which the implementation of the regulatory framework of Regulation 1370/2007 has contributed to the provision of public services of high quality, meeting the needs of citizens, operational efficiency of operators and cost-effectiveness in public spending for public transport; and
 - Set up a “knowledge base” of best practices related to contract awards and compensation schemes.

Timeline of the study



Today's workshop

	Introduction
	10h30 – 11h30 Session 1 Economic & financial performance of public transport
	11h30 – 12h Coffee break
	12h00 - 13h15 Session 2 Cost effectiveness of the award decision
	13h15 - 14h45 Lunch
	14h45 – 16h Session 3 Delivering high quality in public transport
	16h – 16h30 Conclusions



Expert workshop on the economic and financial impact of Regulation 1370/2007

Session 1 - Factors that determine economic and financial performance of the public transport sector

13 May 2015

How do you define economic and financial performance in public transport?

- Performance needs to be measured against objectives;
- What are the objectives of public transport provision across Europe, and how are they converted into specific and operational objectives?
- To which extent is the performance of the operator linked to the performance objectives in the contract established by the Competent Authority?
- What is performance for non-profit publicly owned company and what is it for a private multinational company?

A long list of factors that all play a part...

- Quality of the supply offer: transport modes, service frequencies, quality and age of existing public transport infrastructure
- Political priorities defined by the political authorities;
- Continuity of the financing, tax systems;
- Fares policy, Fraud and fare evasion control;
- Labour agreements and labour laws;
- State of the road network, congestion management measures, competition management of road space with other transport modes;
- Structure of the contract and risk allocation;
- Spatial distribution of OD flows between areas of residency, work, leisure, etc;
- Urban planning;
- Local parking rules and parking policy;
- Demography;
- Wealth;
- Topography and landscape;

... and a wide variety in the actors' ability to influence performance

Factors that influence performance	Authority's influence	Operator's influence
Quality of the supply offer	Yes	Sometimes
Political priorities	Yes	No
Financing	Yes	Sometimes
Fares policy	Yes	Sometimes
State of the road network, congestion management measures	Not always	Sometimes
Competition management of road space	Not always	Sometimes
Structure of the contract and risk allocation	Yes	Rarely
Urban planning	Not always	Rarely
Local parking rules and parking policy	Not always	Rarely
Demography, wealth	No	No
Topography and landscape	No	No

Comparing performance across networks is not simple

- Performance needs to be assessed in the light of the specific obligations imposed by the competent authority, as authorities have a wide margin of discretion when defining the PSOs and corresponding performance requirements.
- It is difficult to compare performance across networks;
- There are some ways in which comparability can be enhanced: KPIs can be normalised or clusters can be examined to try to remove exogenous factors;
- However it still remains difficult as detailed financial information (e.g debt, depreciation, etc) is required and not always available.

Round-table discussion



- Q1: Is there an approach that allows for a consistent assessment of the economic and financial performance across networks and contracts ?
- Q2: How can the authorities have confidence that they deliver a good performance to the transport users and taxpayers?
- Q3: If economic and financial performance cannot be easily measured beyond the competent authority level, what is the purpose of benchmarking exercises?

Thank you

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Questionnaire on economic and financial performances of public transport

Overview of UITP's answer

Thomas Avanzata
UITP Europe Director

Brussels, 13 May



- More than 400 urban, suburban and regional public transport operators and authorities in the EU
- Perspective of short distance passenger transport services by all modes:
 - Bus
 - Regional and suburban rail
 - Metro
 - Tram
 - Waterborne
 - Light rail



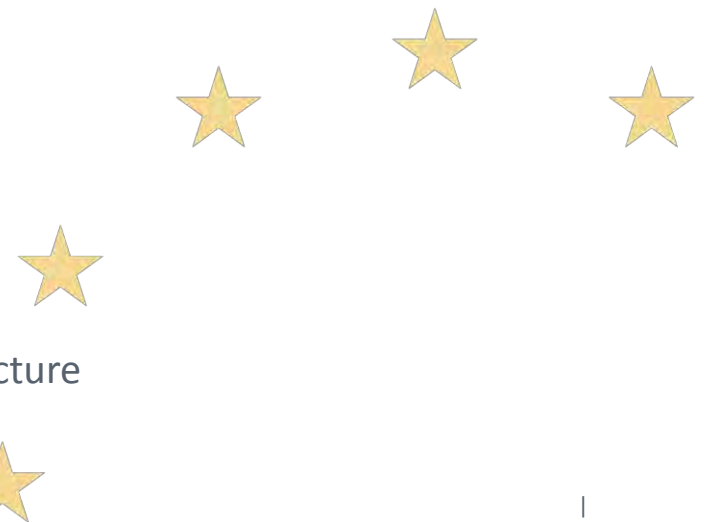
Preliminary remarks

- Sector's need for regulatory stability and legal certainty
- Timing:
 - Insufficient setback
 - Mid-term report
 - 4th Railway Package



How to assess the economic and financial performances of pt?

- Economic and financial performances depend on local specific needs and cannot be horizontally defined □ to be assessed in the light of specific obligations imposed by the competent local authorities
- Proposed criteria:
 - Political priorities defined by the political authorities
 - Continuity of the financing
 - Fares policies
 - Demography
 - Fraud control
 - Urban planning
 - Measures to prioritise PT
 - Quality and age of existing public transport infrastructure



Impacts of Regulation 1370/2007 on the economic and financial performances

- Great flexibility of the Regulation led to a great variety of impacts
- Germany: impacts mostly linked to Altmark
- France: Regulation inspired by the preexisting situation in France

- BUT:
 - **More transparency**
 - **Clarity of the parties obligations**
 - **Contracts of limited duration and hence periodic assessment of PT policies**
 - **More balanced contract terms**



Thank you.



Thomas Avanzata
UITP Europe Director

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***Expert workshop on Regulation 1370/2007:
economic and financial focus, best
practices and lessons learned***

***“What are the factors that determine the
economic and financial performance of the
public transport sector across EU Member
States?”***

13/05/2015

Jan Moellmann
Secretary General

EPTO Objectives

- Development of a competitive market structure
- Support the opening of the passenger transport market for competition
- Watch, monitor and push for fair market development

Key figures

- Founded in 2006
- 8 largest private public transport companies in Europe
- Min. 80% of business won in competition qualify for membership
- 80 000 vehicles operated, 255 000 employees, 12 bn passengers/year
- Services in 22 EU countries

GENERAL COMMENTS

- EPTO's members are home in the world of PSR 1370/2007, concessions and deregulated markets
- General philosophy is
 - open market structure free of state imposed distortions will lead to free competition between providers and thereby greater efficiency of operation.
 - The market will provide for what demand there is - otherwise the players in that market will go out of business
 - Operators in a free market plan to serve market demand (current, unmet, latent) and efficient operation; state network planning is often formulaic or seeks to meet every demand thereby creating indirect and unattractive services

FACTORS THAT DETERMINE THE ECONOMIC AND FINANCIAL PERFORMANCES OF THE PUBLIC TRANSPORT SECTOR (1)

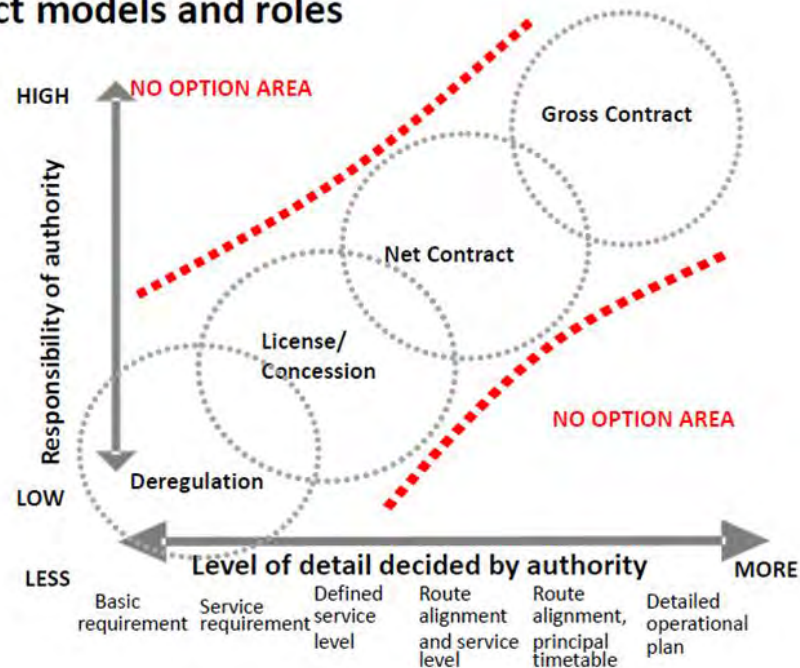
- Policy objectives / Political priorities of modes
- Urban planning - (involvement, push and pull measures)
- Demographic trends – population development
- Degree and quality of priority re infrastructure (Congestion)
- Funding available and continuity of funding
- Legal structures
- Maturity of market

FACTORS THAT DETERMINE THE ECONOMIC AND FINANCIAL PERFORMANCES OF THE PUBLIC TRANSPORT SECTOR (2)

Economic and financial performance depending on the right balance between requirements and risk allocation

© Stenerik Ringqvist

Contract models and roles



FACTORS THAT DETERMINE THE ECONOMIC AND FINANCIAL PERFORMANCES OF THE PUBLIC TRANSPORT SECTOR (3)

Best practices regarding the way public service contracts are specified in tender procedures – impacting economically and financially

- Early consultation phase with experienced operators
- Knowing what objectives to be achieved
- Knowing what can be afforded
- Clear allocation of the risks
- Clear definition of the service from the outset;
- Level playing field ;
- Full transparency of market information
- Structure of the contract (Size, duration)

FACTORS THAT DETERMINE THE ECONOMIC AND FINANCIAL PERFORMANCES OF THE PUBLIC TRANSPORT SECTOR (4)

Best practices regarding the way compensation schemes that cover public service obligations should be designed to promote efficiency, in the case of contracts awarded through competitive tender

- Clearly defined incentive and bonus contracts
- Penalty regime in place

FACTORS THAT DETERMINE THE ECONOMIC AND FINANCIAL PERFORMANCES OF THE PUBLIC TRANSPORT SECTOR (5)

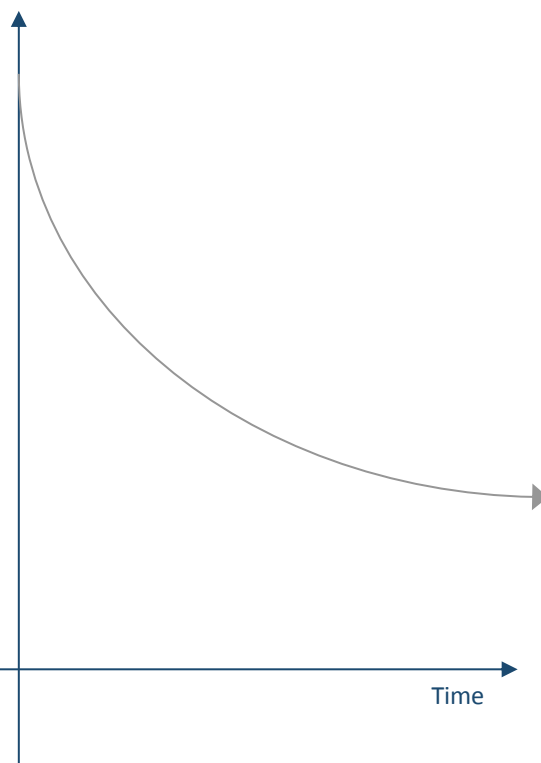
Since the start of tendering we note a trend on contract type



- **Net Cost or Gross Cost?**
- Either can deliver client benefits and be attractive to bidders
- Gross Cost easier to implement but can be inflexible and need more complex performance regimes and change mechanisms
- **Mid-contract migration from Gross Cost to Net Cost can be an attractive option**

ECONOMIC AND FINANCIAL IMPACT OF REGULATION 1370/2007 FOR CONTRACTS PROCURED UNDER COMPETITIVE AWARD

Price



UK, Denmark, Netherlands or Sweden market opening and tendering before 1370

- Results were significant economical public benefits and quality improvements.

After 1370/2007 contracts closed after competitive procedures have shown similar effects.

- Many started with standardised gross cost contracts
- 15%-25 % less + higher revenues
- In some areas (e.g. Copenhagen) bus substantial more savings
- Strong increase of quality of service

CONCLUSION

Factors that determine the economic and financial performance

- Tendering leading to significant rises in quality and better value for money
 - More and better service offers for the user resulting in higher ridership
 - at the same or lower cost for the taxpayer.
- Clearer policy objectives
 - precise quality definitions,
 - controlled on a regular basis with penalties or bonus regimes
- Level playing field and transparency
 - Quality requirements are calculated on a transparent basis

**Thank you for the opportunity
to present our views!**

Jan.moellmann@epto.net

Today's workshop

	Introduction
	10h30 – 11h30 Session 1 Economic & financial performance of public transport
	11h30 – 12h Coffee break
	12h00 - 13h15 Session 2 Cost effectiveness of the award decision
	13h15 - 14h45 Lunch
	14h45 – 16h Session 3 Delivering high quality in public transport
	16h – 16h30 Conclusions



Expert workshop on the economic
and financial impact of Regulation
1370/2007

Session 2 - Cost effectiveness of the award decision

13 May 2015

Key principles of the cost effectiveness of the award decision

- Need to demonstrate value for money, irrespective of whether direct award or competitive tender process;
- Create an “efficient operator” model to challenge incumbent or test the robustness of assumptions underpinning each tender;
- Data needed to populate a model, as well as being essential inputs to KPIs for monitoring performance and contract compliance after award.

Need for an efficient operator assessment

- Avoid perpetuating legacy inefficiencies in new contract term: challenge incumbent / bidders to be as efficient as possible;
- Define potential data needs of bidders to ensure level playing field in competitive tender: less incumbent advantage, lower risk for bidders;
- Provide structure for bid submission: provides visibility into expected cost trends and early warning of potential problems;
- Significant challenges in administering contracts in absence of detailed cost data – how do you tell if cost of variations is reasonable?

Assessment parameters

- Route and network statistics, resources and assets employed;
- Production/output measures: peak fleet, bus-km, operated hours;
- Staffing levels and functions: organisation charts;
- Employment terms: transfer obligations and protected rights;
- Contractual obligations: minimum staffing levels, asset replacement rates;
- Specification, condition and reliability of assets influences costs: need for asset register and performance trends;
- Review current implicit and explicit knowledge of network costs;
- Assumed reasonable profit margin;

Potential limitations and uncertainties

- Desire of companies to protect commercially sensitive information and proprietary knowledge for competitive advantage;
- Authority should be able to obtain necessary insights whilst maintaining confidentiality;
- Develop assumptions for data gaps, based on benchmarked peer systems;
- Infrastructure constraints and local environmental factors can affect potential efficiency / productivity (benchmarks may not always be a reliable guide);
- Input-specifications can limit potential scope for innovation and improvements in cost efficiency;



Round-table discussion

- Q1: Is there a trade-off that can be found between input specifications and output specifications?
- Q2: Is there a knowledge gap for small competent authorities when it comes to tendering public transport services?
- Q3: How can authorities ensure cost-effectiveness when only one offer is received in the case of competitive tendering?

Thank you

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Dr. Michael Winnes

**Ausschreibungen und Direktvergaben
im Verkehrsverbund Rhein-Neckar**

Expertenworkshop zur Verordnung 1370/2007

Brüssel, 13. Mai 2015



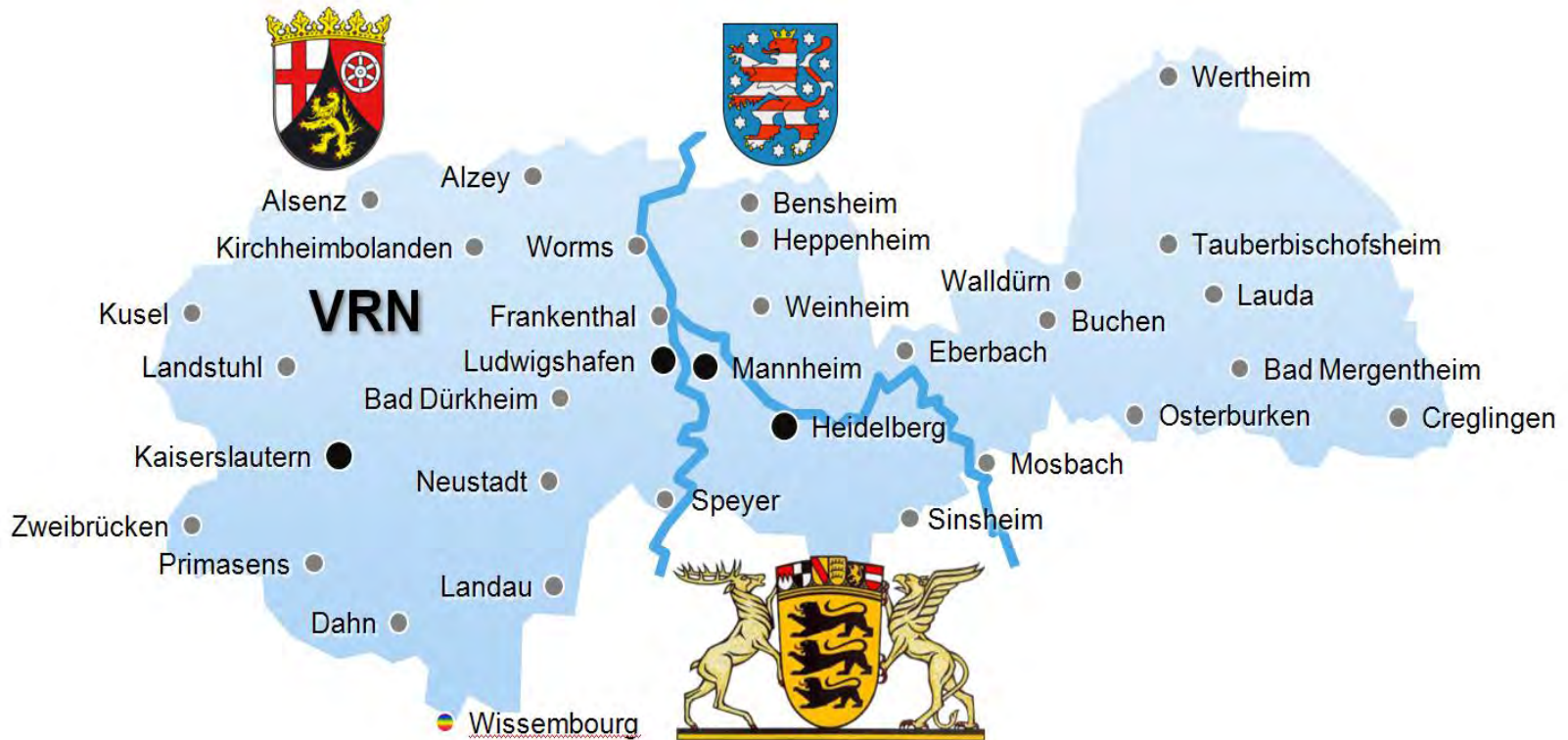
Einfach ankommen.

Gliederung

- I. Der VRN als zuständige Behörde
- II. Das VRN-Wettbewerbskonzept
- III. VRN-Direktvergaben an interne Betreiber
- IV. Wettbewerb und Direktvergabe im Vergleich

Das VRN-Verbundgebiet

3 Bundesländer – 24 Stadt- und Landkreise



VRN als zuständige Behörde

- ▶ VRN ist selbst zuständige Behörde für Bus und Schiene im hessischen Verbundgebiet
- ▶ VRN ist Vergabestelle für alle PBefG-Dienstleistungsaufträge nach VO 1370 im übrigen Verbundgebiet:
 - VRN plant die Vergabe und führt das Vergabeverfahren durch
 - Vertragsabschluss erfolgt im Namen der Stadt- und Landkreise
 - VRN übernimmt nach Vergabe auch das Vertragscontrolling
 - Letztentscheidungsrecht liegt bei den Stadt- und Landkreisen
 - Finanzierung erfolgt durch die Stadt- und Landkreise

VRN-Wettbewerbskonzept

- ▶ Die Verkehrsunternehmen tragen das Kosten- und Erlösrisiko über die gesamte Laufzeit der Dienstleistungsauftrages (öDA), indiziert werden ausschließlich die Energiekosten.
- ▶ Die öDA sind damit Dienstleistungskonzessionen.
- ▶ Die Vergabe erfolgt auf Grundlage des Art. 5 III VO 1370.
- ▶ Zur Ausgestaltung des Vergabeverfahrens wurden von den kommunalen Spitzenverbänden Leitlinien entwickelt, die es ermöglichen, nach einer ersten Angebotsrunde die Anforderungen nochmals anzupassen.

VRN-Qualitätsmanagement

- Die qualitative Steuerung erfolgt über ein System von Vertragsstrafen („Pönalen“):

Nr.	Vorfall	Euro je Vorfall	Ergänzungen
Betriebsablauf			
101	Fahrtausfall (ganz)	500,00 €	
110	verspätete Abfahrt a.d. Start-HS, ab 15 Min.	30,00 €	
Fahrzeug			
200	Nicht funktionieren des elektronischen Fahrkartenverkaufsgerätes	100,00 €	
Fahrpersonal			
351	Personal raucht im Fahrzeug	10,00 €	

- Die Qualität wird von Kontrolleuren vor Ort per Stichprobe überwacht.
- Die Vertragsstrafe reduziert sich auf 25 %, sofern das Unternehmen die Verstöße selbst innerhalb von 48 h meldet.
- Unabhängige Kundenbeschwerden zu Verstößen führen ebenfalls zur Vertragsstrafe.

Direktvergaben an interne Betreiber

- ▶ 5 VRN-Städte sind Eigentümer eines eigenen ÖPNV-Unternehmens, das nach Art. 5 Abs. 2 betraut wurde.
- ▶ 3 Städte davon vergeben ein integriertes Stadtbahn- und Busnetz an ein gemeinsam beherrschtes Unternehmen.
- ▶ Die Finanzierung des Verkehrs erfolgt jeweils im kommunalen Stadtwerkekonzern (Querverbund).

Wirtschaftliche Steuerung bei Art. 5 II

Grundproblem:

- ▶ Die zuständige Behörde ist gleichzeitig zu 100% Eigentümer des internen Betreibers.
- ▶ Jede Form von Anreizsystem oder Vertragsstrafe trifft die zuständige Behörde also immer indirekt selbst!

Lösung VRN:

- ▶ Anreizsystem über jährliche Zielvorgaben an die Unternehmensleitung gekoppelt mit erfolgsabhängiger Entlohnung.

Art. 5 II und Anhang (Überkompensation) I

VRN-Lösung:

- ▶ Der gesamte Verkehrsbetrieb des internen Betreibers ist Gegenstand gemeinwirtschaftlicher Verpflichtungen.
- ▶ Damit sind sämtliche Aufwendungen und Erträge im Jahresergebnis des internen Betreibers Kosten und Erlöse, die aus den gemeinwirtschaftlichen Verpflichtungen resultieren.
- ▶ Das im Jahresabschluss ausgewiesene Defizit ist damit nach den Vorgaben des Anhangs zwangsläufig der exakte beihilferechtlich zulässige Ausgleichsbetrag, der aus den gemeinwirtschaftlichen Verpflichtungen resultiert.
- ▶ Zur Überkompensationskontrolle muss der Abschlussprüfer nur testieren, dass keine Verluste aus Geschäftstätigkeiten einfließen, die nicht vom öDA erfasst sind.

Art. 5 II und Anhang (Überkompensation) II

Beihilferechtlicher Bruch in der VO 1370:

- ▶ Art. 5 II verbietet dem internen Betreiber, andernorts als Wettbewerber aufzutreten
- ▶ Zahlungen an den internen Betreiber können damit niemals den Wettbewerbsmarkt verfälschen, weil der interne Betreiber kein Wettbewerber ist!
- ▶ Eine Überkompensationskontrolle ist bei Art. 5 II daher beihilferechtlich völlig unnötig!

Vorteile Direktvergabe

Flexible Steuerung und Finanzierung komplexer Verkehrsnetze:

- ▶ Ausschreibungen begrenzen vergaberechtlich den Spielraum für die Veränderungen des Vertragsgegenstandes über die Vertragslaufzeit. Nicht einkalkulierte Änderungen sind wirtschaftlich nur schwer umsetzbar.
- ▶ Das eigene Unternehmen kann jederzeit angewiesen werden, Angebote auszuweiten, zu verringern oder umzugestalten. Die Finanzierung erfolgt automatisch über das Jahresergebnis.

Flexible Steuerung in der Praxis

2002: Investor sagt Bau der SAP-Arena zu

2005: SAP-Arena geht in Betrieb

2007: Die neue Stadtbahnlinie zur SAP-Arena nimmt den Betrieb auf.
(ca. 55 Mio. € Investitionssumme)

mit erschlossen:

- Messegelände
- Stadtteil Neuhermsheim
- Gewerbegebiet Fahrlach
- Verknüpfung zur S-Bahn

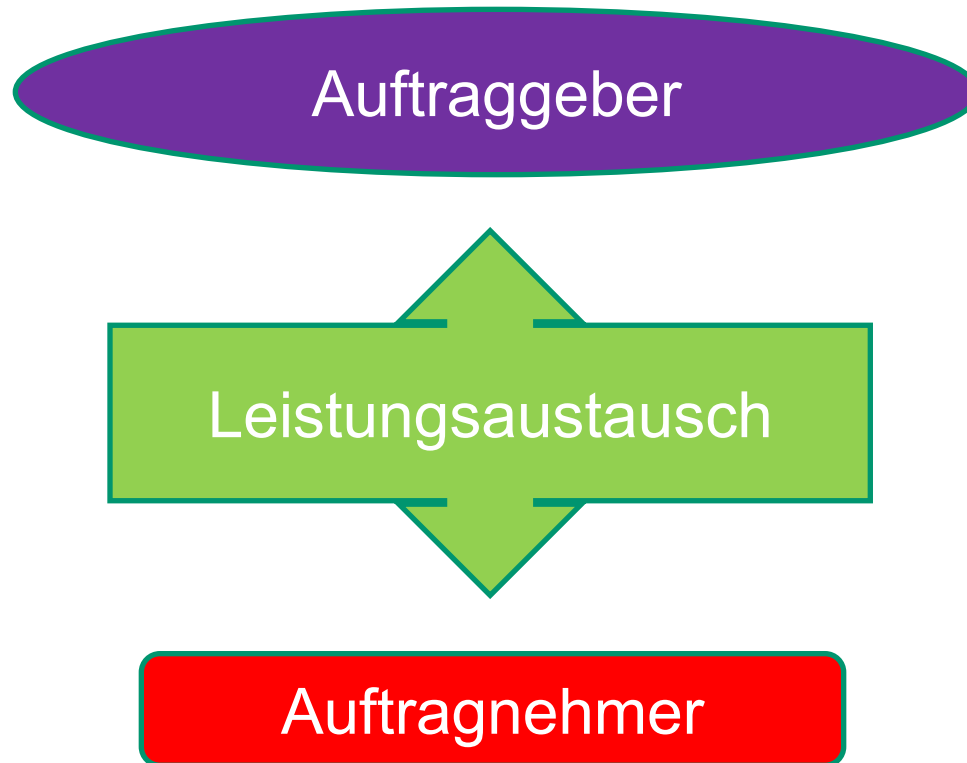


Danke für Ihre
Aufmerksamkeit!

Dr. Michael Winnes
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Begriff Dienstleistungsauftrag



Begriff Dienstleistungskonzession



EuGH zu Betriebsrisiko

6.4.2006, C-410/04:

Konzession wenn sich Betreiber **zumindest teilweise** aus Fahrgeldeinnahmen finanziert

18.7.2007, C-382/05:

Betriebsrisiko muss ganz oder zu wesentlichem Teil übernommen werden

10.9.2009, C-206/08:

Betriebsrisiko ist das Absatzrisiko, auch dann, wenn sektorspezifische Rahmenbedingungen dieses Risiko wirtschaftlich erheblich reduzieren

Fazit Dienstleistungskonzession

- ▶ Im ÖPNV liegt Konzession vor, wenn der Unternehmer das Absatzrisiko trägt (Nettovertrag).
- ▶ Es geht um ein vertraglich-strukturelles Risiko, nicht um die wirtschaftliche Dimension des Risikos.
- ▶ Auf das Verhältnis zwischen Zuschuss und Fahrgeldeinnahmen darf es daher entgegen der BGH-Rechtsprechung **nicht** ankommen.
- ▶ **Das sollte in der VO 1370 durch eine einfache Legaldefinition der Dienstleistungskonzession für den ÖPNV abgesichert werden.**

Expert Workshop on Economic and Financial Lessons Learned from the
Implementation of Regulation 1370/2007

Tendering urban public transport : what can we learn from a Franco-British comparison?

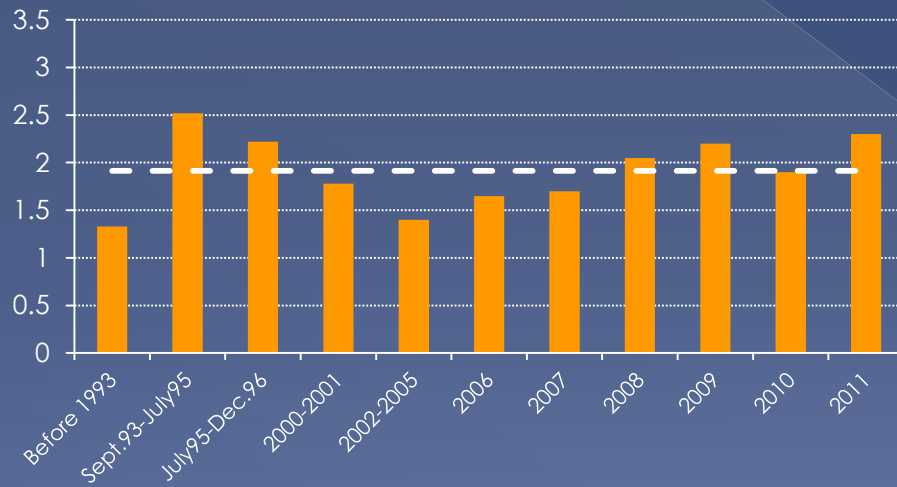
Anne Yvrande-Billon
University Paris Sorbonne
& ARAF

Motivations

- Urban public transport in Europe: a loss-making industry with a decreasing modal share in a context of scarcity of public money and environmental concerns
- Solution to these problems according to the EC: delegated management + franchise bidding ...
- ... a model experienced in France since 1993 and in London since 1995...
- ...but with very different results.

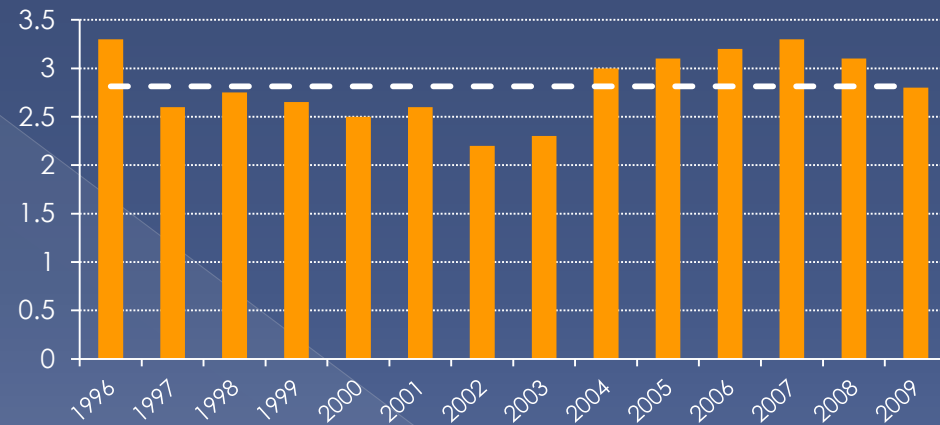
Number of bidders

France:
Average number of bidders per
network



Average number of bidders
over the period = **1.9**

London:
Average number of bidders per
route

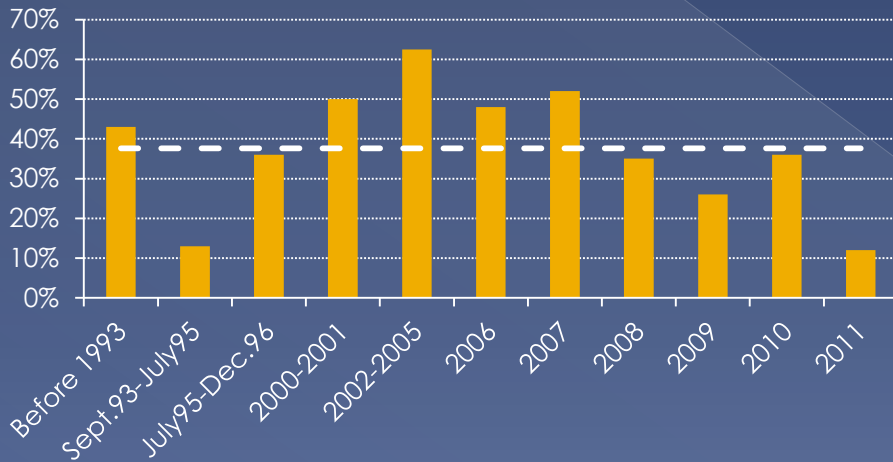


Average number of bidders
over the period = **2.8**

Proportion of tenders with one single bidder

France:

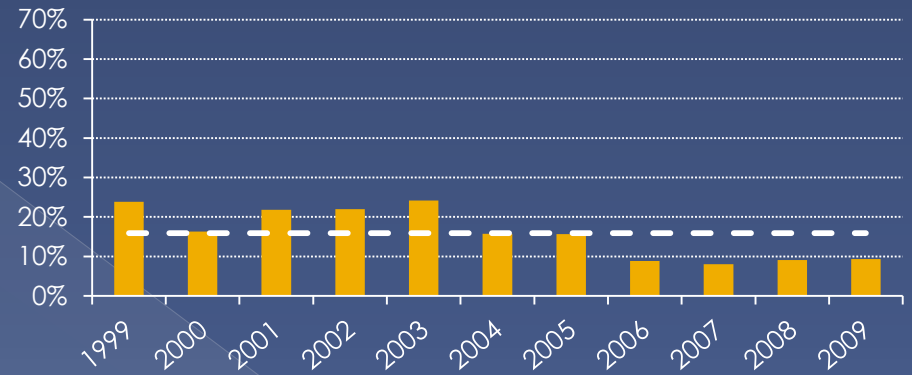
% of tenders with a single bid



Average % of tenders with one single bid = **38%**

London

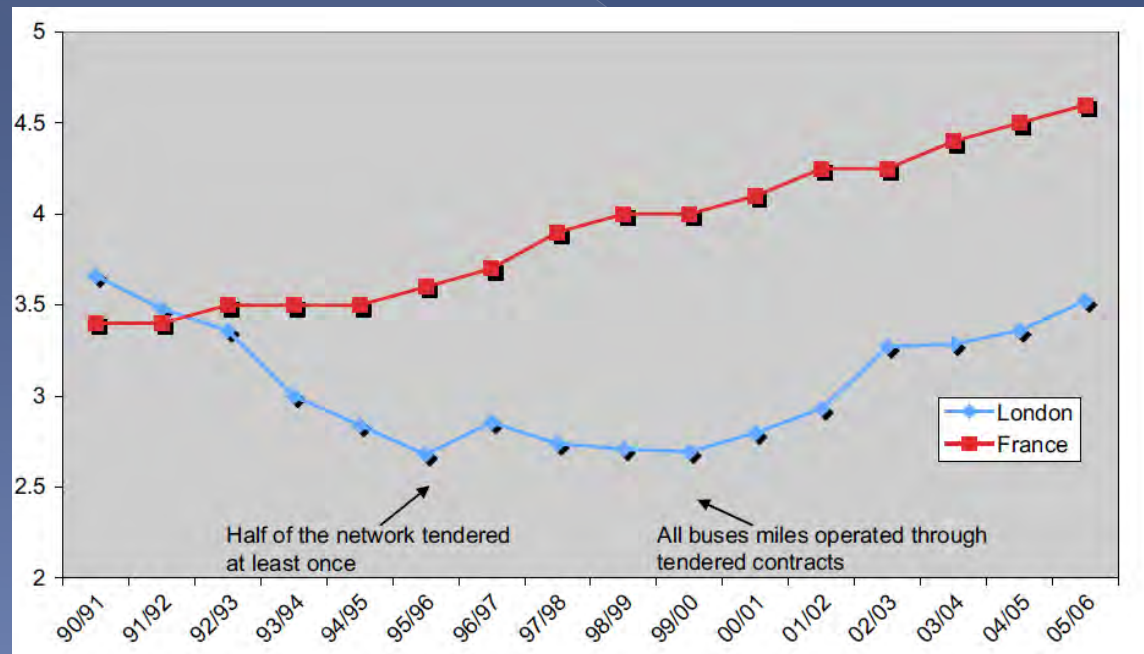
% of tenders with a single bid



Average % of tenders with one single bid = **16%**

Other facts and figures

- Collusion between the 3 main French operators between 1996 and 1999 (CC 05-D-38)
- Similar rates of incumbent renewal
 - > France \approx 70% ; London \approx 65%
- But different cost performances:



Bus operating cost per vehicle-kilometer (€ 2005)

Research questions

- ◉ What are the necessary conditions for franchise bidding to be an efficient mechanism for allocating contracts?
- ◉ Focus on :
 - > Transparency of the procedure
 - > Discretionary power and expertise of public authorities
 - > Auction design

The French model (outside Paris)

● Role of local authorities

- Define the characteristics of the service (network routes, schedules, fares, etc)
- Select the mode of organization of their UPT system (direct or delegated management, cost-plus or fixed-price contracts)
- Organize competitive tendering for the entire network (7 years contracts)

● Peculiarity of the tendering model

- The « *intuitu personae* » principle = discretionary power
- Low levels of control and expertise of public authorities (+ no regulator)
- Big size auctions

The London model

◉ Role of Transport for London

- > Service definition (...)
- > An invitation to tender issued every 2 or 3 weeks

◉ Peculiarity of the tendering model

- > Discretionary power of TfL (best economic value criterion)
- > Public benchmarking and « sunshine regulation »
- > Small size auctions (bus operation contracts auctioned on a route by route basis □ ≈ 800 lots but possible combinations)

What makes the difference?

<i>Issue</i>	French model	London model
<i>Fostering competition</i>		<ul style="list-style-type: none">- small size auctions- transparency
<i>Avoiding collusive behaviours</i>	<ul style="list-style-type: none">- opacity- discretionary power	<ul style="list-style-type: none">- benchmarking- discretionary power
<i>Exploiting economies of scale</i>	<ul style="list-style-type: none">- big size auctions	<ul style="list-style-type: none">- combinatorial auctions

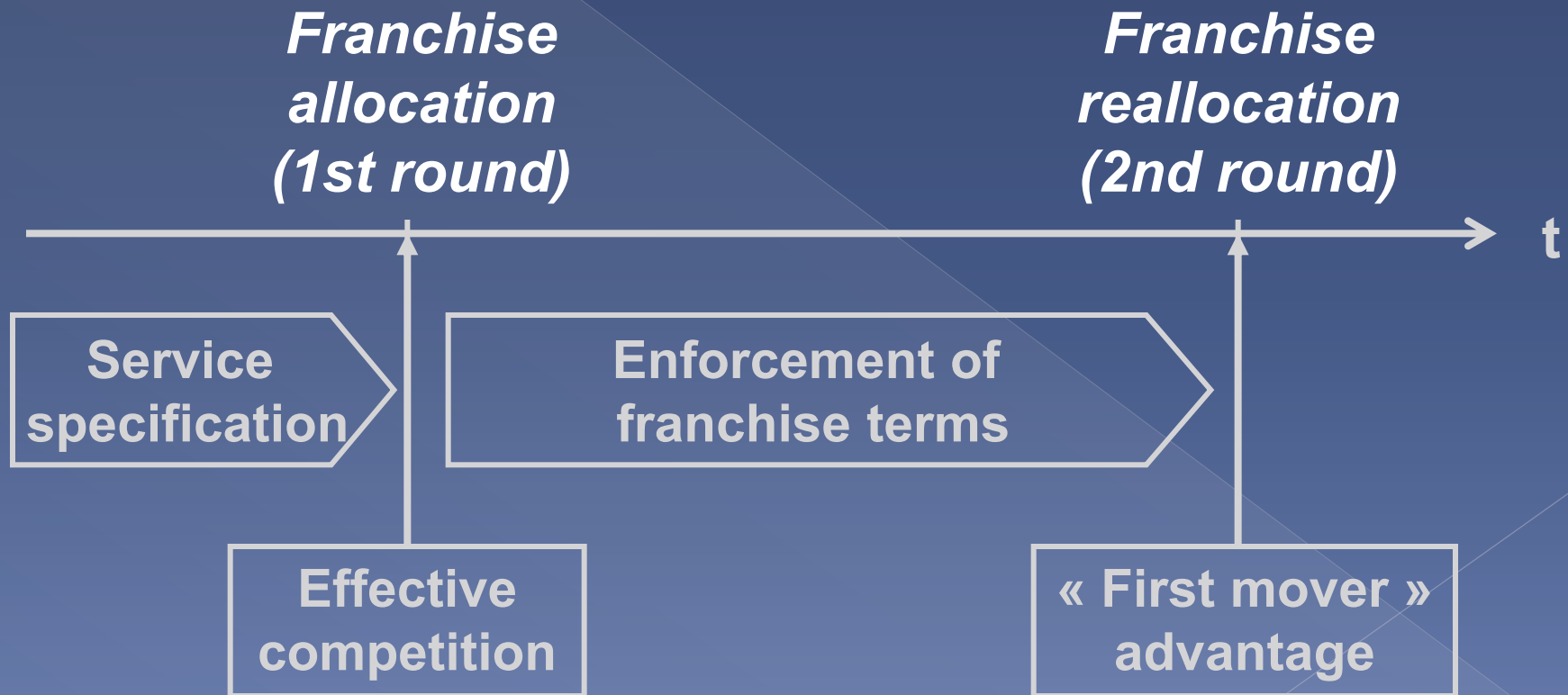
-Transparency and discretion used as **complementary instruments** to foster competition and prevent anti-competitive behaviours
-**Expertise capacities** as a necessary condition

Conclusive remarks

- *Unbundling of a network may be a way to benefit from an increased competition for the market...*
- *... but the main determinants of competitive intensity (hence efficiency) might rather be the way public authorities combine transparency and discretion over the selection process...*
- *... as well as their expertise and control capacities.*

Conclusive remarks

Competitive tendering : Problems to overcome



Competitive tendering : Problems to overcome

● Service specification

- Unprecise specification \Leftrightarrow Uncertainties \Rightarrow Small number of bidders and/or selection of the most opportunistic bidder
- In the French context, several sources of uncertainty may discourage potential candidates to participate (quality of the equipments, past results of the incumbent, political interference).
- In addition, lack of clarity of the award criteria and *intuitu personae* principle.

Competitive tendering : Problems to overcome

◎ Effective competition

- Of course, an important condition for franchise bidding to be an efficient mechanism is the absence of collusion!!!
- In France, the three main operators have recently been imposed fines by the Competition Commission who has proved that bid rigging was common between 1994 and 1999.

Competitive tendering : Problems to overcome

⦿ Enforcement and adaptation

- Credibility of the threats of sanctions and need for adaptations which may lead to costly post contract renegotiations.
- In France, lack of expertise and supervision (no standardized reporting procedures; collected data are incomplete and unreliable) ⇒ high risks of opportunistic behaviours of the operators

Competitive tendering : Problems to overcome

- Refranchising and the first mover advantage
 - On-the-job experience may provide incumbents substantial advantages over potential entrants (valuation of the assets to be transferred)
 - In France, contracts are short term, investments are made by the LAs and employees are transferred ⇒ the advantages of the incumbents are limited.
 - However, they may benefit from their better knowledge of communication idiosyncracies and from the lack of expertise of the LAs

Today's workshop

	Introduction
	10h30 – 11h30 Session 1 Economic & financial performance of public transport
	11h30 – 12h Coffee break
	12h00 - 13h15 Session 2 Cost effectiveness of the award decision
	13h15 - 14h45 Lunch
	14h45 – 16h Session 3 Delivering high quality in public transport
	16h – 16h30 Conclusions



Expert workshop on the economic
and financial impact of Regulation
1370/2007

Session 3 - Delivering high quality in public transport

13/05/2015

How to promote the delivery of high quality (1)

- There is a need to define ex-ante what “quality” means (in contracts and tenders);
 - Production quality or quality relating to customer satisfaction?
- The introduction of performance measures and KPIs associated with financial rewards/penalties can contribute to the delivery of high quality;
- High quality tendering process (information, timescale, etc) is a necessary condition to the delivery of high quality transport services;
- The room for specification changes on quality should be minimized. However there is the need to have a transparent variation mechanism to facilitate changes (such as demand patterns or available funding, etc).

How to promote the delivery of high quality (2)

- Is there a need for enhanced dialogue or cooperation between the Authorities and their Operators, within the contractual relationship framework imposed by the Regulation?
 - If so, is this during the tendering phase (competitive dialogue) or does it hamper fair and transparent tendering procedures?
 - Can the contract be drafted flexibly enough to allow this to happen during the contract period?

Performance incentives

- There is a need for mechanisms to incentivise compliance with contract requirements and encourage desired behaviours;
- Regular reporting of performance is necessary and can also contribute to the identification of factors contributing to failures;
- Penalties should be proportional to the cost of compliance, to avoid “budgeting for failure”;
- Exposure to bonus/malus payments should reflect the ability of operators to manage risks and influence outcomes.



Round-table discussion

- Q1: Are output measures sufficient to determine the achievement of high quality transport services (e.g. customer satisfaction)?
- Q2: What incentives on the operator are needed to ensure high quality of transport services? And on the authority?
- Q3: What part can innovation play in achieving high quality transport services?

Thank you

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***Expert workshop on Regulation 1370/2007:
economic and financial focus, best
practices and lessons learned***

***„Delivering high quality in public
transport”***

13/05/2015

***Piers Marlow,
President***

EPTO – KEY FIGURES

- Founded in 2006
- 8 large private public transport groups in Europe
- Min. 80% of business needs to be won in competition to qualify for membership
- 80.000 vehicles operated, 255 000 employees, 12 billion passengers/year, Services in 22 EU countries
- EPTO founded around discussions on PSR 1370/2007



SUMMARY

- The introduction of the 1370/2007 legislation has proved to be a strong basis for liberalisation across Europe
- Clear evidence exists that liberalisation has produced significant savings in subsidies and better quality
- Tendering focussed on improvements for the customer where operator incentives are linked are now common
- Balanced penalties and incentives with clear and transparent requirements are elements rarely found in extensions/direct awards
- EPTO members continue to support the 1370/2007 initiative and believe that the structure of the liberalised contracts that have resulted provide templates for the future

QUALITY

We have seen that through liberalised markets we can deliver improved quality for customers:

- By responding positively to growth opportunities
- Winning and retaining contracts
- Working in close partnerships with stakeholders, including contract-awarding authorities, and national and local governments
- Improve operations , constant service enhancement and innovation
- Respect and develop the skills of employees
- Involving employees fully in liberalised operations allowing the sharing of risk and reward where possible
- Provide a safe and positive environment for customers and employees alike

TRANSPORT IS A PEOPLE BUSINESS

To deliver the positive results we have seen we must remember that
Transport is a people Business

- Companies must Invest time as well as money
- Encourage a decentralised approach with local leadership
- Value local management expertise backed by central support
- Drive success through an engaged workforce
- Pride ourselves on good employer reputation:
 - Recruit and retain people who are passionate about public transport
 - Attract, appoint and retain talented management and top quality professionals
 - Places the same emphasis on recruiting quality front line employees

QUALITY CRITERIA

- Bonus and malus systems - incentives
- Reliability and kilometres operated – delivery against contractual targets
- Customer feedback and scoring – against set levels in the contract
- Passenger numbers and revenue growth – sharing improvements and penalising lower than expected numbers
- Incorporation of employee retention and working terms as condition of contracts
- Specify minimum levels of employee training and education that a company must provide
- Minimum safety and maintenance levels which carry penalties or contract termination if not delivered
- Integration with other modes and service networks
- Rewards for advanced technology, ticketing and operations

ACHIEVED

We conclude that liberalisation of markets combined with competitive tendering through 1370/2007 has delivered:

- Service developments unlocking private-sector investment-volume and quality (e.g. improved passenger comfort, on board services, punctuality and reliability)
- High levels of safety and security
- Customer-orientated strategy which encourages modal shift
- Innovation which enables organic service/patronage growth
- Positive impact on employment/social conditions
- Greater transparency of contractual relations
- Lower subsidy requirements and improved value for money (typically 20-30% cost saving for transport authorities)
- Reduced revenue risk without removing control of key aspects of transport policy objectives

Thank you for your attention

Piers Marlow
President EPTO
info@epto.net



DELIVERING HIGH QUALITY PUBLIC TRANSPORT

Quality service – quality working conditions

Public transport is a service for people by people; it should be obvious that high quality services can be delivered only when the people are motivated and well trained.

Many public transport workers are front line workers, the face of the company: drivers, ticket sellers, information officers, security guards if any.

But also personnel that is not directly in the front office contributes to a good service: in traffic planning, maintenance, cleaning, etc.

Good working conditions, proper wages, safety and security, training and career opportunities, job security: that creates motivation. Providing good working conditions is an investment in quality services. And quality services are an important pull measure to attract more people to public transport.

Of course there are other criteria for good quality services such as frequency, reliability, accessibility, affordability, punctuality, cleanliness, comfort of the busses and the stations, access to information: But without respecting the human factor they have limited impact.

The reliability can be seriously affected when there are problems in the maintenance workshops. The punctuality and even frequency can be seriously affected when due to bad working conditions there is a high level of absenteeism etc. Dissatisfaction and increasing stress have an impact on politeness and even on safety (accidents) and security (no de-escalation behavior, the contrary).

What is the reality?

Our experience is that employees in public transport are not considered as an asset and a good investment in the future but as a cost. Or in other words: more and more public transport workers are complaining about a

lack of respect for their work. They are just a cost factor that has to be reduced and there are many ways to do so.

That is totally wrong thinking. In every business school today it is mainstream thinking and teaching that people are the most important asset of a company.

It is also wrong thinking because demotivated and over-stressed staff produces more costs for the companies and can reduce revenues by unsatisfied passengers what in the end creates a vicious circle. It is not enough to invest in better rolling stock, improve the infrastructure or increase the frequency. There must be investment in people to deliver a good quality service.

Speaking about cost effectiveness in this workshop: cutting personnel costs is not cost-effective because it produces more follow-up costs at the end.

Politicians, competent authorities and public transport companies should be aware of this.

You might have noticed that up to now I did not speak about competition and competitive tendering because it is true for both types of companies, publicly owned companies with a direct award or companies – publicly owned and private – with a contract obtained through competitive tendering.

But competitive tendering is accelerating this process and increasing the pressure. Competent authorities that withdraw from any responsibility, just define the level of service without caring about the social conditions of the staff delivering the service and then opt for the cheapest offer contribute to this downward spiral and don't get in the end the quality of the services they wish.

It should be considered that long existing public transport companies and socially responsible companies employ staff with long experiences and often establish policies beyond legal minimum requirements like policies to promote women employment and equal opportunities, diversity policies integrating disadvantaged employees in the labour market, work-life-balance policies or career development policies also for lower qualified professions and others.

This is even a contribution to general local employment policies and sets the cost-benefit balance for the local community in a different way. Just an example: A new operator who had won the contract within a tendering procedure, by experience takes over the young and cheaper workers and the older workers get unemployed. This produces higher costs for the community.

What to do to deliver high quality services?

Independently from the awarding procedure, public transport companies and competent authorities have to give more importance to good quality working conditions when they want to receive and deliver good quality services.

But speaking in terms of the PSO Regulation:

It is an illusion to believe that through competitive tendering competent authorities can receive both: good service quality to lower costs.

It is also an illusion to believe that competing companies participating in a tendering procedure provide on their own an offer that fully respects the social requirements for good service quality when they are not forced to do so.

It is true that publicly owned companies previously delivering public transport services are in a disadvantaged position because of good collective agreements they have to respect, longer employed and experienced staff and often company social policies that are at risk when competing with operators without such a background.

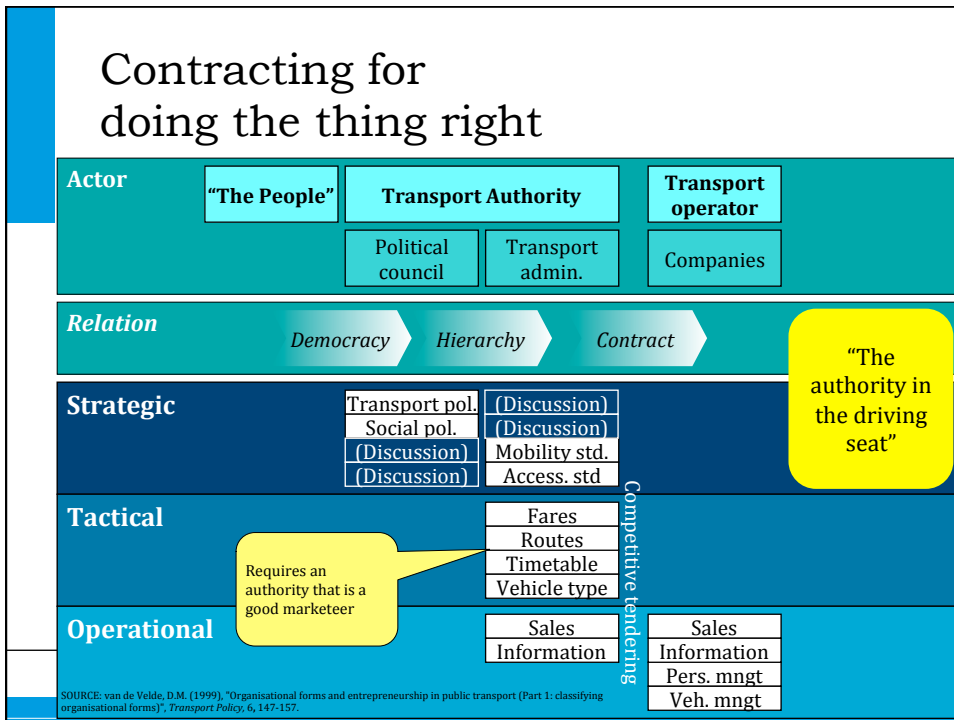
In our opinion the implementation of the EU Regulation 1370/2007 on public passenger transport by road and rail should guarantee a level playing field as regards social conditions and personnel costs for all bidders in competitive tendering procedures for public transport services. For this purpose competent authorities should apply Article 4(5) and Article 4(6) on the transfer of staff and on social standards in tendering criteria.

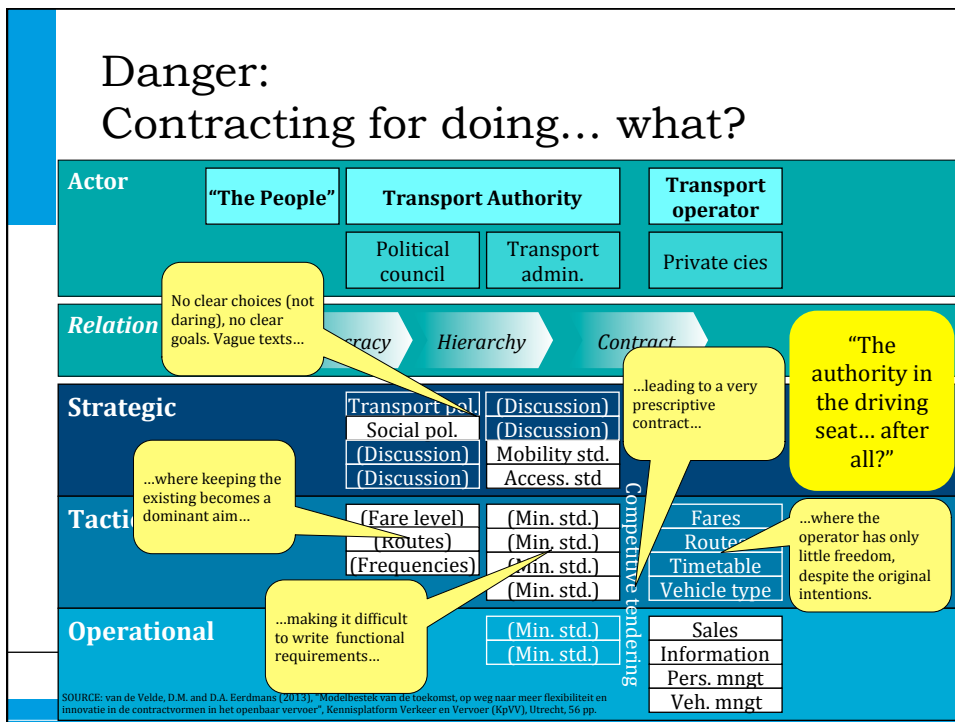
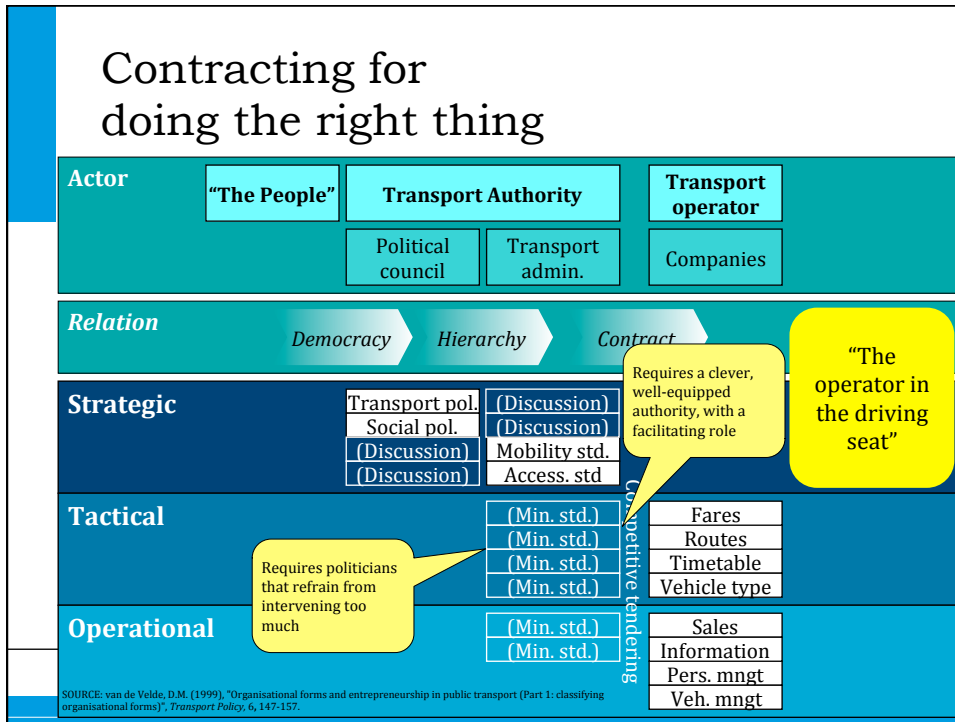
The ETF even demands that the PSO Regulation has to be amended in such a way that competent authorities are obliged to include in tender publications compulsory social criteria and/or the transfer of staff in the case of change of operator.

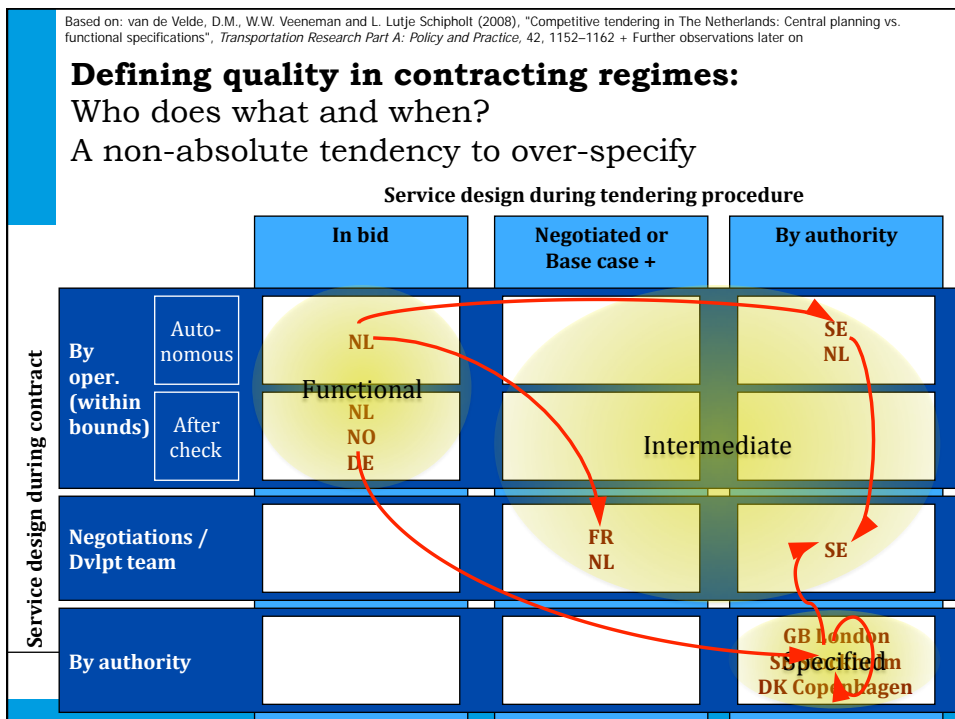
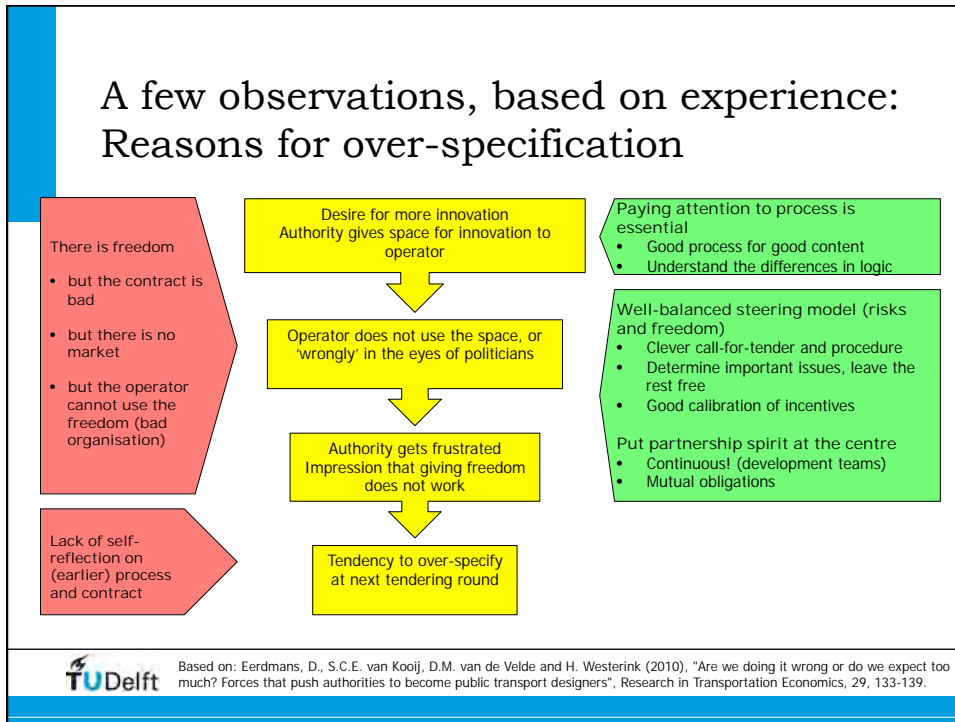
The following elements have to be respected:

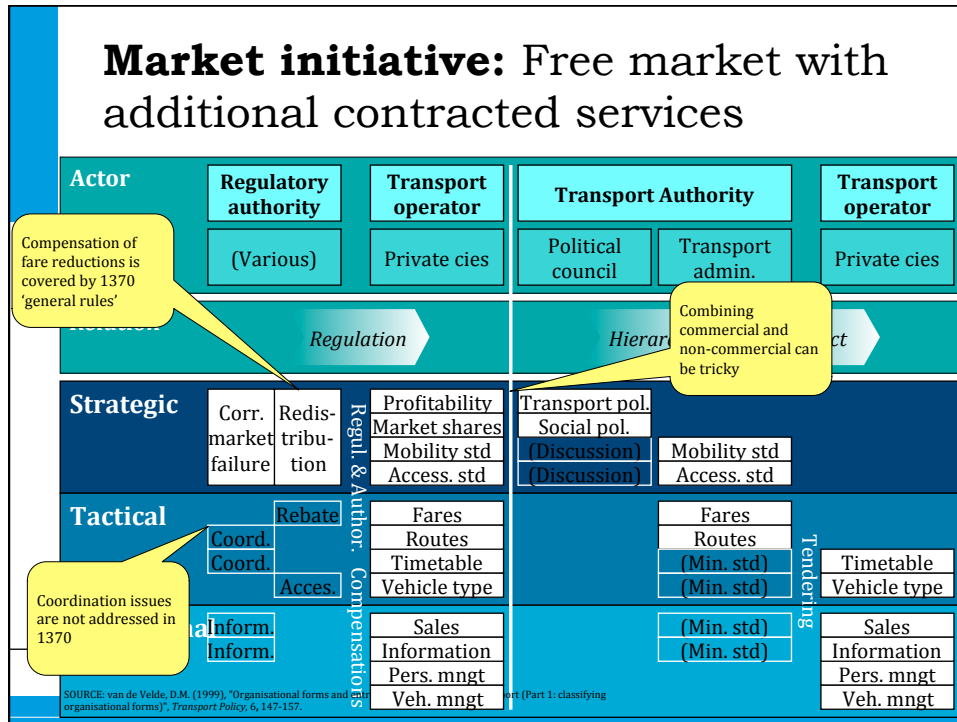
- All bidders have to apply the collective bargaining agreement (CBA) that is valid in the place where the public transport service is provided including all company agreements. This also means, in the case of an existing national sector CBA, that also all existing usually more advantageous company agreements must be applied.
- In the case of transfer of staff, all employees employed by the previous operator for the service have to be transferred to the new operator; all acquired rights including pension rights have to be respected by the new operator during the entire duration of the public service contract.
- The number of personnel employed by any operator has to guarantee a good service. In particular the number of drivers employed have to ensure on the one hand a good service in terms of speed and frequency while at the same time the working, driving and rest time rules of drivers are respected, in particular proper rest at the end of the line.
- Pay and working conditions for public transport workers in sub-contracted services has to be the same as for workers working in the company of the main contract holder. The extent of sub-contracting must be limited.
- For outsourced services such as cleaning, maintenance, security services, customer services etc. the contract holder must have the responsibility to guarantee that the staff employed at the service provider benefits from pay and working conditions established in the representative collective bargaining agreement of the relevant sector or – if applicable – the company CBA precedent applied in the place where the public transport service is provided.

In our opinion this guarantees good quality services.









Conclusions

- Four main families of options [reality is a bit more complex!]
 - Competitive tendering by route (gross-cost)
 - Competitive tendering by network (net-cost)
 - Real market initiative + additional contracting
 - Direct award to public operators
- All can work!...
 - ...If the proper conditions are realised
 - It is a matter of preference in terms of governance
 - It is a matter of trade-offs
 - Size, length, knowledge, flexibility, competition,...

See also: Van de Velde, D.M., A. Beck, J.-C. Van Elburg and K.-H. Terschüren (2008), "Contracting in urban public transport", Report for the European Commission - DG TREN, realised by inno-V, KCW, RebelGroup, NEA, TWI, SDG, TIS,PT, Brussels, 123 pp.

Thank you for your attention!

B Member State fiches

Study on economic and
financial effects of the
implementation of
Regulation 1370/2007
on public passenger
transport services

Appendix B
July 2015

European Commission

Our ref: 22765001
Client ref: MOVE/A5/SER/2014-
356/SI2.698871



Study on economic and financial effects of the implementation of Regulation 1370/2007 on public passenger transport services

Appendix B
July 2015

European Commission

Our ref: 22765001
Client ref: MOVE/A5/SER/2014-356/SI2.698871

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A Expert workshop presentations

B Member State fiches

The Member States fiches included here have been updated for the last time in July 2015. Any changes that took place after this date would not have been recorded in these fiches.

Austria

- B.1 In 2012, Austria had a population of 8.4 million inhabitants, with a population density of 102.3 inhabitants per square kilometre and GDP per capita of €32,200. This had increased by 0.3% over the period 2008-2012. Following a sharp but short-lived recession following the global financial crisis, Austria's economy has been showing positive growth since 2010 onwards, due in part to stimulus spending, stabilisation measures and financial support for the banking sector from the Austrian government.¹

Table B.1: Austria overview

Austria	2012	2008-2012 change
Population (million)	8.4	1.2%
GDP per capita (€)	32,200	0.3%
Population density (inhabitants per square kilometre)	102.3	1.4%

Source: Eurostat

Overview of competent authorities and procurement in Austria

- B.2 *The overview of competent authorities and procurement in Austria that follows is largely derived from UITP Europe's 'Organisation and Major Players of Short-Distance Public Transport: New Developments in the European Union,' published in January 2015.*
- B.3 Two key pieces of legislation govern the right to operate railways and local and regional public transport in Austria:
- The 1957 Railway Act; and
 - The 1999 Federal Law on Organisation of Regional and Local Public Transport (ÖPNRV-G)
- B.4 The Bus Lines Act (1999) sets out preconditions for granting concessions required to operate a bus service in Austria and details tendering standards.
- B.5 Each of Austria's nine provinces has its own transport authority. Each authority operates within the ÖPNRV-G law of 1999, which covers all rail and road passenger transport. The transport authorities are responsible for coordinating public transport services and customer information in their province, setting out what is expected from transport companies in their area, organising transport planning and incorporating quality criteria on the public transport system. Funding for local public transport is ensured by the Austrian Federal Government, which can make further funds available to transport authorities for additional transport services.
- B.6 Public transport in larger Austrian cities is operated by transport companies, which are usually owned by those cities and managed according to their laws and regulations. Public service contracts are awarded directly to these companies by the cities' transport authorities.
- B.7 Regional road travel is provided by Postbus AG, a subsidiary of Österreichische Bundesbahnen (ÖBB), the state-owned national railway operator, and by private bus companies.

¹ CIA Factbook, <https://www.cia.gov/library/publications/the-world-factbook/geos/au.html>

Local public transport trends in Austria

- B.8 Given the fragmentation of responsibilities among regions, little national data on public transport is available. No data was provided by the Federal Ministry of Transport, Innovation and Technology (BMVIT).
- B.9 Car ownership (in 2010) was above the EU average of 477², with 528 cars per 1,000 inhabitants. Over the period 2002-2012, demand for public transport rose by 25%, significantly higher than the EU average of around +8%³.
- B.10 According to UITP, around 19,000 people are employed in the public transport sector. The national bus fleet totals over 3,000 vehicles, with over 850 trams and 3,700 train units providing metro, urban, regional and long-distance rail services.

Table B.2: Public transport KPIs – Austria

Category	Performance indicator	All modes
Raw data	Total number of passengers transported	NA
	Total passenger-kilometres	NA
	Total vehicle-kilometres	NA
Productivity	Passenger-kilometres per vehicle-kilometre	NA
	Vehicle-kilometres per staff member	NA
Financial	Fare revenue per vehicle-kilometre (€)	NA
	Operating cost per vehicle-kilometre (€)	NA
	Proportion of total operating costs covered by fares	NA
	Proportion of total operating costs covered by subsidy	NA
Service quality	Operating speed (km/h)	NA
	Passenger satisfaction	21% High, 45% Good, 21% Median, 13% Low

Source: European Commission, 'European's Satisfaction with Urban Transport', 2014

Vienna

Introduction

- B.11 The city of Vienna has around 1.8 million inhabitants living within an area of around 415 square kilometres.
- B.12 The municipality of Vienna, the contracting authority of local public transport services, has delegated operation and planning services to the local public transport operator Wiener Linien. Wiener Linien is a subsidiary of Wiener Stadtwerke Holding AG, which is fully owned by the municipality of Vienna. In 2013, Wiener Linien received subsidies from the municipality of Vienna of around €332 million to cover operating costs, and of around €301 million for

² European Commission, *EU Transport in Figures: Statistical Pocketbook 2014* (EU average figure of 477 is for 2010)

³ Source: UITP, *Local Public Transport Trends in the European Union*

investments. Wiener Linien also received €82 million of subsidies from the central government. In total, Wiener Linien covers around 60% of its recurring costs by fares.⁴

- B.13 Wiener Linien's network comprises 78.5 kilometres of metro and 172 kilometres of tram lines, the sixth largest tram network in the world, and a bus network of more than 700 kilometres⁵.
- B.14 The network is served by more than 500 buses, 500 trams and 150 metro trains. Wiener Linien employ around 8,700 people including 4,000 are drivers.

Local public transport trends and KPIs

- B.15 In 2013, Wiener Linien reported a total output of 76 million vehicle-kilometres.
- B.16 In 2014, more than 931 million passengers used local public transport services offered by Wiener Linien, an increase of around 25% over the 750 million trips in 2004.
- B.17 Key strategic objectives in relation to local public transport are to achieve 1 billion passengers in 2020, and a 40% share in mode split.
- B.18 Prices of single and short term season tickets (daily, weekly and monthly passes) were increased in 2013 but the price for annual tickets remained unchanged. As a result, sales of annual tickets increased significantly, with a shift of short term season ticket holders to annual tickets. Overall, sales of annual tickets increased from 345,500 in 2009 to 582,100 in 2013, a growth of 68.5%.
- B.19 Wiener Linien are planning and implementing several infrastructure investments to improve the network :
- Metro Line 1: In 2017, a 4.6 kilometre extension of the metro line 1 will open between Reumannplatz and Oberlaa, and will bring residents from southern neighbourhood Favoriten closer to the city centre. The investment of around €600 million includes the construction of five new stations.
 - Between 2014 and 2020, extensive upgrading works are taking place on large parts of Line 4, comprising a total investment of around €335million. The objective of the works is to significantly increase reliability of the line.
- B.20 A further major project is the extension and rerouting of existing parts of the metro Line 2, and construction of the new metro Line 5, which will partly run on existing metro Line 2 tracks. Future metro Lines 2 and 5 will cross at Rathaus and will connect to numerous metro and tram lines. These new line and extensions are due to open in 2023.
- B.21 The reported modal share of local public transport in Vienna amounts to 39%, followed by car (27%), walking (26%) and bicycle (7%).
- B.22 The main performance indicators for local public transport in Vienna are shown in Table B.3.

⁴ <https://wien1x1.at/site/blog/oeffi-finanzierung-in-wien/>

⁵ <http://www.wienerlinien.at/eportal2/ep/channelView.do/pageTypeId/66528/channelId/-47395>

Table B.3: Public transport KPIs – Vienna, Austria

Category	Performance indicator	Bus	Metro	Tram	All modes
Productivity	Passenger-kilometres per vehicle-kilometre	NA	NA	NA	NA
	Vehicle-kilometres per staff member	NA	NA	NA	16,425
Financial	Fare revenue per vehicle-kilometre (€)	NA	NA	NA	3.3
	Operating cost per vehicle-kilometre (€)	NA	NA	NA	6.5
	Proportion of total operating costs covered by fares	NA	NA	NA	60%
	Proportion of total operating costs covered by subsidy	NA	NA	NA	36%
Service quality	Operating speed (km/h) in peak period	17.6	32.5	15.0	NA

Source: Annual report Wiener Stadtwerke 2013, Wiener Linien (2013) Zahlen Daten Fakten

Key factors underlying the performance of local public transport

- B.23 Funding for local public transport operation and investment is secured up to 2031. A new public transport funding contract has recently been negotiated between the municipality and the operator Wiener Linien. The new contract will come into force on 1 January 2017 and establishes the amount of subsidy to around €500 million for operation and investment in infrastructure in the first year, with the amount of subsidy in the subsequent years to be negotiated subject to respective needs.
- B.24 The new contract contains a bonus-malus regime with a reduction in subsidy if targets are not met and bonus payments if targets are exceeded.

Belgium

B.25 In 2012, Belgium had a population of 11.1 million inhabitants, with a population density of 367 inhabitants per square kilometre. GDP per capita in 2012 was €29,600. Belgium's economy was not too badly damaged by the global financial crisis of 2008, despite the country's dependence on exports to EU partners. The Belgian government has pledged to reduce the nation's high levels of debt, and is pursuing a programme of structural reforms to improve Belgium's competitiveness.⁶

Table B.4: Belgium overview

Belgium	2012	2008-2012 change
Population (million)	11.1	4%
GDP per capita (€)	29,600	-2%
Population density (inhabitants per square kilometre)	367	3.9%

Source: Eurostat

Overview of competent authorities and procurement in Belgium

- B.26 Since January 1989, the governments of Belgium's three regions (Brussels Capital Region, Flanders and Wallonia) have been the competent authorities for all forms of local public transport in Belgium. Each region controls one dominant operator.
- B.27 The Federal Decree of 12 February 2004 sets the rule for the "management contracts" which govern the contractual relations between the regions, the operators and other entities. At the federal level, the Federal Public Service Mobility and Transport is in charge of strategy.
- B.28 One of the key features of public transport in Belgium is its lack of competition. The three publicly-owned companies (Brussels MIVB-STIB in Brussels, de Lijn in Flanders and the Groupe TEC in Wallonia) provide local public transport services within their respective regions and are awarded all local public transport contracts directly every five years.
- B.29 According to the Belgian statistical office, around 20,400 people were employed in 2013 by these three regional public transport companies. The combined bus, tram and metro fleet totals around 7,500 vehicles nationally.
- B.30 At the end of 2013 a new Public Service contract was signed by TEC and the STIB covering the 2013-2017 period, while the De Lijn contract expires in 2015.
- B.31 In Brussels, STIB directly operates the entire network without resorting to outsourcing.
- B.32 The public companies in Wallonia and Flanders are permitted to subcontract individual services and often do so for bus services.
- B.33 In Flanders, 47% of bus-kilometres are outsourced under contracts awarded after a competitive tender.
- B.34 In Wallonia, the awards appear to be through indefinitely extended historical contracts.
- B.35 Two major French groups dominate the Belgian contracted market:
- Veolia Transport in Flanders.
 - Eurobus, now 100% owned by Keolis, in Wallonia.

⁶ CIA Factbook, <https://www.cia.gov/library/publications/the-world-factbook/geos/be.html>

B.36 Fares are regulated by the competent authorities. In 2012, public funding covered over 45% of operating costs in Brussels, while Flanders and Wallonia relied extensively on public subsidies (71% and 85% respectively) to cover their costs (in 2009). Flanders and Wallonia finance infrastructure and rolling stock, except for private bus operators who finance their own vehicles when they are responsible for the operation of a line.

B.37 Private operators are subsidised and fully regulated by the public operators, who determine routes, bus stops, schedules and fares, which are entirely transferred to the public operators.

Local public transport trends in Belgium

B.38 In 2013, the local public transport supply in Belgium was approximately 369 million vehicle-kilometres and nearly 1.2 billion journeys were made using local public transport, although private car is the dominant mode of transport motorised travel. In 2011 the mode shares were 80% for passenger cars, 12.9% for buses, coaches, trams and metro, and 7.1% for rail.

B.39 According to UITP, demand for local public transport in Belgium has risen dramatically over the period 2000-2012, with an increase of 114% in local public transport journeys by bus, tram and metro, far above the EU average of +8%⁷.

B.40 In 2012, there were 487 cars per 1,000 inhabitants in Belgium; the same figure as the EU average for that year. The Belgian road network is much larger than other transport networks and is one of the densest in Europe.

B.41 Given the fragmentation of responsibilities among the three regions, national data on public transport in Belgium is only present in the form of bottom-up estimates by network. No aggregate data by specific transport mode is available at the national level or could be provided by the Transport Ministry.

Table B.5: Public transport KPIs – Belgium

Category	Performance indicator	De Lijn	TEC	STIB
Raw data	Total number of passengers transported (mil)	540	297	355
	Total passenger-kilometres (mil)	NA	NA	NA
	Total vehicle-kilometres (mil)	210	118	41
Productivity	Passenger-kilometres per vehicle-kilometre	NA	NA	NA
	Vehicle-kilometres per staff member	2,559	2,404	5,654
Financial	Fare revenue per vehicle-kilometre (€)	0.7	1.1	6.3
	Operating cost per vehicle-kilometre (€)	NA	NA	13.9
	Proportion of total operating costs covered by fares	29%	15%	55%
	Proportion of total operating costs covered by subsidy	71%	85%	45%
Service quality	Operating speed (km/h)	NA	NA	15
	Passenger satisfaction	19% High, 40% Good, 25% Median, 16% Low		

Source: Belgian government statistics on STATBEL website; European Commission, 'European's Satisfaction with Urban Transport', 2014

⁷ Source: UITP, *Local Public Transport Trends in the European Union*

Brussels - STIB

Introduction

- B.42 Brussels-Capital Region has 1,125,728 inhabitants in 19 communes and 162 square kilometres, but the commuting belt of Brussels extends beyond the Capital Region, so STIB serves 30 communes over an area of 242 square kilometres, exceeding the “natural” perimeter of its Organising Authority (the Region).
- B.43 STIB is an internal operator in the form of a public corporation entrusted, by the decree of 22nd November 1990, with the operation of public transport within the Brussels-Capital Region. For 2013-2017 STIB is operating under a new management contract (“*contrat de gestion*”) with its supervisory authority, the Brussels-Capital Region. Its 7,200 staff including 3,000 drivers work under private sector contracts.
- B.44 STIB operates an integrated network (ticketing and mapping) of 4 metro lines, 17 tramway lines and 50 bus lines, with an output of 41.25 million service-kilometres in 2013. In 2013 it recorded a traffic of 354.8 passenger journeys. Metro travel remains the largest mode with 39% of trips (138.4 million), followed closely by trams with 36% (127.8 million) and bus with 25% (88.8 million).
- B.45 The base grant given to STIB for 2013 was €485.5 million of which €292.3 million was for the operation of the company. The base grant is paid by the regional governments, and by the federal government in relation to Brussels-Capital because of its status as capital of the country and seat of many international organisations. In addition the regions also directly fund some investments such as works and maintenance operations.
- B.46 STIB fare revenues reached €258 million, including a grant for social fares, and the company obtained a further €29 million of other revenues from sources including advertising, special events and, financial interest. STIB has more autonomy than TEC and De Lijn for setting its fares, as it is authorised to increase its rates by up to 2% above inflation.
- B.47 The rate of fare cover of STIB (as measured according to European standard SEC 95) has risen from 35% in 2000 to 55% in 2013. This results from increased demand, fare increases and better management focus on operating costs. This also enabled STIB to reduce its debt from 100% in 2004 to 28% in 2013. Staff costs represent 75% of operating costs in 2013.
- B.48 In addition to covering the operating deficit, public grants also pay for new rolling stock, increase service quality, improve network security and offset the shortfall for the operator due to preferential, social and free tariffs imposed by the government. The subsidies allocated to STIB by the regional government now represent approximately 20% of the regional budget, and this has been increasing significantly between 2003 and 2009.

Local public transport trends and KPIs

- B.49 Over the ten years 2003-2013 the number of seat-kilometres provided has risen by more than 51%, with the main changes being to the metro (+76%) and the tram networks (+ 57%), both of which have had major extensions and introduced more and bigger vehicles. Over the same ten-year period, demand and fare revenue have both risen by 61%.
- B.50 The growth in public transport usage may be in part due to demographic change, growing road traffic congestion in Brussels, and higher quality of service delivered by STIB, such as increases in service frequency and better real time information.
- B.51 The main performance indicators for local public transport in Brussels are shown in Table B.6: . No information is available by mode as STIB operates a network-wide fare system.

Table B.6: Public transport KPIs – Brussels, Belgium

Category	Performance indicator	2010	2013
Productivity	Passenger-kilometres per vehicle-kilometre	NA	NA
	Vehicle-kilometres per staff member	5,873	5,689
Financial	Fare revenue per vehicle-kilometre (€)	5.6	6.3
	Operating cost per vehicle-kilometre (€)	11.3	13.9
	Proportion of total operating costs covered by fares	38%	35%
	Proportion of total operating costs covered by subsidy	43%	50%
Service quality	Operating speed (km/h)	17.0 (bus)	16.6 (bus)
		28.4 (metro)	27.8 (metro)
		16.7 (tram)	16.3 (tram)

Source: STIB annual report 2013

Key factors underlying the performance of local public transport in Brussels

B.52 These include:

- Demographic change: the population of Brussels was over a million inhabitants in the 1960s and 1970s but declined to less than 950,000 inhabitants in 1996. Strong growth thereafter, however, allowed the region to recover and Brussels also has a relatively high share of young people.
- Mobility needs have also changed due to urban sprawl and localisation of homes and businesses. The Brussels region has been a growing area for jobs, with employment growing by 8.4% between 2000 and 2010. However, there is increasing inward commuting from Flanders and Wallonia. The number of commuters Flemish and Walloon active in Brussels in late 2010 was approximately 371,700 respectively occupying 34 and 19% of the jobs estimated in the Brussels Capital Region.
- The performance of the public transport network has also been affected by growing road congestion in Brussels, particularly at peak hours. This has meant more passengers using public transport, but has also led to a fall in the commercial speed of buses and trams which compete for road space with other users. Car parking availability has also reached saturation.
- On expert commented that this growth in the number of STIB users is largely due to external factors over which STIB has little or no control (parking policy, introduction of preferential fares, rising fuel prices, increased congestion, population growth, economic growth, increasing awareness of the population to environmental issues, or policies implemented by the government) rather than STIB's actions⁸.

⁸ Christophe GOETHALS, "Les enjeux du financement des transports en commun à Bruxelles", Les analyses du CRISP en ligne, 20 December 2012

Bulgaria

- B.53 In 2014, Bulgaria had a population of 7.2 million inhabitants, with a population density of 66.2 inhabitants per square kilometre. The country's population fell by 3.8% over the period 2008-2014. GDP per capita was €4,800 in 2008 and is estimated at €5,800 in 2014⁹. Successive governments have adopted fiscally prudent measures and made a series of necessary economic reforms, but the economy was hit by the global economic crisis and its recovery has been slow.¹⁰

Table B.7: Bulgaria overview

Bulgaria	2012	2008-2012 change
Population (million)	7.3	-3.8%
GDP per capita (€)	5,600	16.7%
Population density (inhabitants per square kilometre)	65.7	-4.2%

Source: Eurostat/NSI

Overview of competent authorities and procurement in Bulgaria

- B.54 Bulgaria is divided into 28 provinces and 265 municipalities. The local authorities (municipalities) are the competent authorities for public transport within their respective areas. Obligations for local public transport services are defined in the Local Government and Local Administration Act, Road Transport Act, Ordinances No. 2 and 3 of the Ministry of Finance and No. 33 of the Ministry of Transport. Authorities are also responsible for allocating stops and bus stations for local and long distance coach lines.
- B.55 The passenger transport by bus is performed under three types of transport schemes: national, regional and municipal.
- B.56 The national transport scheme includes regular bus lines between cities of two or more regions. This scheme is approved by the Minister of Transport, Information Technology and Communications.
- B.57 The regional transport schemes include regular bus lines of two or more municipalities of the same region and are approved Governor of the respective region.
- B.58 The municipal transport schemes include the regular bus lines of one municipality and they could be either urban (basic or additional) or between towns/villages.
- B.59 Municipalities provide subsidies to public transport from their own budgets, while the national state budget provides compensation for discounted fares and some special public transport cases. The total national envelope for subsidies and compensation of discounts is set each year by the budget law. In 2014, it stood at €52 million.
- B.60 Fares are set by the local authorities. Capital investments in public transport infrastructure and facilities are made under separate budgets or contracts.
- B.61 Public transport operators can be either private, municipal or shareholding companies with municipal participation). They must be registered under the trade law with licences for public transport issued by the state.

⁹ Eurostat and NSI (National Statistical Institute) data

¹⁰ CIA Factbook, <https://www.cia.gov/library/publications/the-world-factbook/geos/bu.html>

B.62 Public transport contracts are generally long term contracts should be designed to be consistent with Regulation 1370/2007. Transport operators are selected based on competitive tender procedures, with requirements and criteria determined in advance by the Contracting authority. The Road Transport Act and Ordinances No. 2 and No. 3 of the Ministry of Finance have been revised to include the provisions of Regulation 1370/2007.

Local public transport trends in Bulgaria

B.63 Total public transport usage in Bulgaria is estimated at 4.8 billion passenger-kilometres annually. We have found no data on vehicle-kilometres.

B.64 Car ownership in 2012 remained below the EU average of 487, with 385 cars per 1,000 inhabitants, but a 19% increase in car numbers was recorded in 2012, the highest growth in the EU.

B.65 The modal split has remained fairly stable over the period 2008-2012, but with rising car ownership this has resulted in an overall decline in public transport share. Between 2000 and 2007, the private car mode share of overall passenger transport rose from 56% of passenger-kilometres to 71%; it is expected to reach 80% by 2020.¹¹ Metro and trolleybus has seen a small increase in use, due to the introduction of new metro lines and rolling stock (such as new trolleybuses).

B.66 No data are available on employees in the sector.

B.67 The 2011 fleet totalled 1,856¹² buses and trolleybuses and around 477 metro and tram sets. No data are available on the average age of buses and rolling stock.

B.68 Since 2013, a project for Integrated Public Transport has been implemented in seven major cities in Bulgaria. The project, financed with €252 million from EFRD structural funds, aims to improve public transport infrastructure, deliver new rolling stock, create rapid bus services, reduce the carbon footprint and introduce and expand intelligent transport service information at public transport stops. Some components of the project are still being developed in some cities, but the overall effect of the improvement of the public transport in the target cities is evident, with growth in public transport use.

B.69 The table below sets out public transport KPIs for Bulgaria. These are derived from two different sets of figures: one provided by the Ministry of Transport in Bulgaria, the other by the country's National Statistics Institute. In the table, data with an asterisk (*) has been gathered from the National Statistics Institute, whereas unmarked data is from the Ministry of Transport.

¹¹ Transport Strategy 2020, Ministry of Transport, Information Technologies and Communication, issued in 2012

¹² Survey report for Ministry of Transport 2012

Table B.1: Public transport KPIs – Bulgaria

Category	Performance indicator	Member State Total	Urban bus	Rural and Long-distance Bus	Tram	Trolley-bus	Metro
Raw data	Total number of passengers transported (mil)	680.2 696.2*	345.2 326.0*	80.4 100.8*	95.4 105.6*	75.3 84.5*	83.9 79.3*
	Total passenger-kilometres (mil)	12,512 11,692*	3,418 2,790*	8,029 7,527*	225 249*	336 365*	503 761*
Productivity	Total vehicle-kilometres (mil)	502.9 290.7*	159.8 159.8*	314.2 100.8*	9.2 9.8*	16.2 16.9*	3.4 3.4*
	Passenger-kilometres per vehicle-kilometre	24.9 40.2*	21.4 17.5*	25.6 74.7*	24.5 25.3*	20.7 21.6*	148.1 224.6*
Financial	Vehicle-kilometres per staff member	NA	NA	NA	NA	NA	NA
	Fare revenue per vehicle-kilometre (€)	NA	NA	NA	NA	NA	NA
	Operating cost per vehicle-kilometre (€)	NA	NA	NA	NA	NA	NA
	Proportion of total operating costs covered by fares	NA	NA	NA	NA	NA	NA
	Proportion of total operating costs covered by subsidy	NA	NA	NA	NA	NA	NA
Service quality	Operating speed (km/h)	NA	NA	NA	NA	NA	NA
	Passenger satisfaction (all modes)	10% High, 30% Good, 28% Median, 32% Low					

Source: Ministry of Transport, IT and Communications, Bulgaria; National Statistics Institute, Bulgaria; European Commission, 'European's Satisfaction with Urban Transport', 2014

Sofia

Introduction

- B.70 Technically, the city of Sofia is both a municipality and a region, but since municipalities are the authorities responsible for public transport, the municipality of Sofia is also responsible for the public transport services in the metropolitan city. For operations, some control functions and ticket sales, the municipality is assisted by its own company, Sofia Urban Mobility Center, which manages all public transport services and parking areas.
- B.71 The municipality has a territory of 492 square kilometres and had 1,316,557 inhabitants at the end of 2014. The capital city is a growth centre with many commuters from nearby cities and villages, since the city offers higher wages, job opportunities and a low unemployment rate. At its east and west ends are the two large residential zones created by big housing complexes constructed in the 1970s, while administration, cultural life and trade are in the centre and many industries are in the north. The city centre is very old, with historical buildings and narrow streets. The availability of parking is a significant problem throughout the city.

- B.72 A new master plan for Sofia adopted in 2009 replaced the previous plan, which was approved in 1961. The intervening period was marked by the rapid growth of passenger cars and a lack of infrastructure to accommodate the traffic. At present more than 800,000 cars cross the city daily, the majority of them undertaking commuter trips. Data for 2012 shows 501¹³ cars per 1,000 inhabitants for Sofia, compared with an average of 385 for the country overall. To improve public transport in the city, the Municipality recently dedicated 35 kilometres of priority bus lanes on major roads in the city.
- B.73 Public transport modes include bus, trolleybus, tram and metro. Fares are the same for all modes of transport with a single journey ticket. Paper passes are valid on bus, trolleybus and tram services and magnetic strip tickets are valid for the metro. Electronic ticketing is currently available on tram and trolleybus and is being expanded to all transport modes.
- B.74 Three municipal companies and five private operators provide public transport in Sofia. In 2013, all eight operators signed new public service contracts, replacing their existing contracts, based on Regulation 1370/2007. The five private operators provide bus services on 29 lines in the city and the municipal bus company operates 67 lines. The Electrotransport municipal company is the operator of the trams and the trolleys lines. The Metro is operated by the Metropolitan JSC, the third municipal company.

Local public transport trends and KPIs

- B.75 The bus network of Sofia consists of 96 lines, 51 lines of urban transport and 45 lines providing suburban services. The urban bus lines account for 84% of bus passengers in Sofia. In 2011, 5 of the 51 urban lines carried more than 30,000 passengers per day.
- B.76 Overall public transport demand in Sofia totalled 438.3 million passenger journeys in 2013, equivalent to 339 trips per capita. Demand was reasonably stable from 2002 to 2010 but then declined, particularly between 2011 and 2012, when there was a reported reduction of 26%. There were signs of a partial recovery between 2012 and 2013, as public transport demand grew 6%. In 2014, there were 443 million passengers, 1.1% more than in 2013 and an average annual growth of 3.3% since 2012.
- B.77 The public perception in Sofia of local public transport is not favourable. Bus, tram and trolleybus services are perceived as providing low comfort and service quality due to an ageing fleet and the poor condition of the vehicles on some (heavily used) lines. Surface public transport is also perceived to offer low peak speeds, caused by traffic congestion and poor reliability due to the inability of the operators to adhere to timetables. Peak services are often overcrowded.
- B.78 Over the years, there has been a significant change in the modal mix, with metro share rising from 2% in 2002 to 13% in 2011 as the network expanded. Bus accounts for 52% of journeys, despite a decline of 21% in demand and 7% reduction in market share. Over half the remaining 48% are made on the 15 tram lines, and then remainder are now shared broadly equally between trolleybuses and metro¹⁴. Bus and tram and trolley operators cover 43.71% of operating costs from ticket sales and the remainder from subsidies and compensations, 8.64% from the state and 47.65% from municipal subsidies.

¹³ Ministry of Interior report to the City council

¹⁴ Steer Davies Gleave survey 2015

B.79 The main performance indicators¹⁵ for local public transport in Sofia are shown in the table below. Little data is available by mode.

Table B.1: Public transport KPIs – Sofia, Bulgaria

Category	Performance indicator	Bus	Metro	Trolleybus	Tram
Productivity	Passenger-kilometres per vehicle-kilometre	NA	NA	NA	NA
	Vehicle-kilometres per staff member (excluding SUMC staff)	20,000 ¹⁶	2,328 ¹⁷	4,130 ¹⁸	?
Financial	Fare revenue per vehicle-kilometre (€)	NA	NA	NA	NA
	Operating cost per vehicle-kilometre (€)	NA	NA	NA	NA
	Proportion of total operating costs covered by fares	44%	NA	44%	44%
	Proportion of total operating costs covered by subsidy	56%	NA	56%	56%
Service quality	Operating speed (km/h) peak hours	18.6	NA	12.7	12.6

Source: Steer Davies Gleave analysis of data provided by SUMC

Key factors underlying the performance of local public transport

B.80 These include:

- Socio-economic and demographic changes:
 - Significant population growth, and growth in the share of elderly residents with different mobility requirements.
 - Increases of car ownership and commuting by car.
 - Increases in workers commuting from neighbouring towns and villages by car.
- Changes in economic activity:
 - Persistent economic contraction and rising unemployment over 2009-2013 has led to a fall in the number of total passenger movements in the metropolitan area.
- Changes in funding:
 - High reliance on public funding which was insufficient until 2012. Fares have not increased to match rises in operating costs due to the price of fuels and electricity.
 - Very positive effect of use of EU and EBRD funding for Integrated Public Transport and construction of Metro Line No.2 (already connected to the airport and central rail station) and the start of construction of Metro Line 3. New tram, trolleybus, bus and metro vehicles reduced the average age of vehicles and rolling stock considerably, attracting more passengers. There is a shift from surface transport to underground transport and from car to Metro.
 - Substantial capital investments in new interchanges and improving road infrastructure, which have also encourage commuting by car.

¹⁵ Steer Davies Gleave survey with SUMC 2015

¹⁶ Private and Municipal companies

¹⁷ Including administration and maintenance

¹⁸ Combined for tram and trolley, including administration

Ruse

Introduction

- B.81 Ruse is in the fifth most populous municipality in Bulgaria, with 164,219 inhabitants at the end of 2014. The population of the municipality had fallen by 6.7% in the last ten years and by a steady 0.5% annual decrease over the last three years¹⁹.
- B.82 The municipality of Ruse covers 570.62 square kilometres, making it larger than Sofia. Ruse performs slightly above the average for the country for the GDP per capita of its inhabitants. Although services account for more than 50% of its GDP, the municipality has well developed industrial and agricultural sectors.
- B.83 The biggest Danube river port of Bulgaria and the bridge connection to Romania on the main route from Turkey and Greece to Moldova, Ukraine and Russia are in Ruse. Transit traffic and Romanian day visitors contribute to the congestion of the roads and to a high level of pollution.
- B.84 Car ownership is estimated at around 450²⁰ cars per 1,000 inhabitants, but statistics may be misleading as many Romanians from nearby towns and Bucharest register their vehicles in Ruse to benefit from lower taxes on ownership and registration than in Romania. However, car traffic is heavy, especially in the narrow streets of the centre.
- B.85 The municipality is responsible for the organisation of public transport in Ruse, which consists of bus and trolleybus transport. Tickets prices are the same for both transport modes. Fares changed in 2009 and 2011 and are now consistent for all operators in the city.
- B.86 There are three public transport operators in Ruse: one operating trolleybus services and the others providing bus services. There are nine trolley bus lines and 20 bus lines. Trolleybus accounts for 40% of vehicle-kilometres but over 55% of passenger journeys.
- B.87 The trolley operator is a joint stock company between a foreign private transport operator (65%) and the Municipality (35%). The other two operators are local private companies. Public service contracts are signed, based on competitive tenders and are updated with the provisions of Regulation 1370/2007.
- B.88 A city master plan for Ruse was adopted in 2006, but subsequent changes in the economy and industry forced the municipality to announce to request the preparation of a new integrated master plan of the city in 2013.

Local public transport trends and KPIs

- B.89 There is no precise data on change of public transport demand, but experts from the municipality estimate that there has been a 20% fall in passenger journeys over the period 2000-2010 due to increased car ownership and shift to car mode and demographic change. More detailed data for 2010 and 2011 shows a fall of nearly 9% in passenger journeys.
- B.90 A 2012 survey suggests that the modal split is 43.5% by foot, 32.4% by car, 20.1% by public transport and 2.4% by bicycle. The reason for the large pedestrian numbers is the compact city centre with no transport access in the narrow streets.

¹⁹ Source: NSI

²⁰ Source: Documents Package for Modernization and Sustainable Development of the Public Transport of Ruse 2012

- B.91 Subsidies cover only a small proportion of operating costs. Revenue from ticket sales does not cover the remainder and so all operators reported more expenses than revenues for 2010 and 2011.
- B.92 Many bus and trolley bus lines overlap in the centre, which leads to competition between the lines. The average speed is 17.54 km/h and there are often long waiting time at peak hours. A lack of access to public transport remains in some parts of the city. In addition, old trolley catenary infrastructure and trolley buses over 20 years in age remain in service.
- B.93 The main performance indicators for local public transport in Ruse are shown below.

Table B.1: Public transport KPIs – Ruse, Bulgaria

Category	Performance indicator	Bus	Trolleybus
Productivity	Passenger-kilometres per vehicle-kilometre	NA	NA
	Vehicle-kilometres per staff member(2011)	13,215	8,080
Financial	Fare revenue per vehicle-kilometre (€)	0.48	0.91
	Operating cost per vehicle-kilometre (€)	0.66	1.06
	Proportion of total operating costs covered by fares	NA	NA
	Proportion of total operating costs covered by subsidy	9%	9.6%
Service quality	Operating speed (km/h)	20.6	13.5

Source: Survey report for Ministry of Transport, Bulgaria, 2012

Key factors underlying the performance of local public transport

- B.94 These include:
- Socio-economic and demographic changes:
 - slow, but steady decline of population with progressive growth in the share of elderly resident with different mobility requirements.
 - increase in heavy weight transit traffic.
 - increase of car ownership and commuting by car.
 - Changes in economic activity:
 - The persistence of economic contraction and rising unemployment over 2009-2013 has led to a decrease in the number of journeys in the municipality.
 - Changes in funding:
 - High reliance on public funding, with insufficient funding till 2013. Fares changed in 2011 but are still far too low to secure investments in new vehicles and full cost recovery.
 - Expected positive effects of the use of EU and EBRD funding for Integrated Public Transport for the construction of road infrastructure, improvement of trolley electrical catenary, intelligent traffic control and other measures. However, it will not be possible to fund the delivery of new trolleybuses, because of the joint status of the trolleybus operator, as the beneficiary of such funding must be the Municipality.

Croatia

- B.95 In 2012, Croatia had a population of 4.3 million inhabitants, a population density of 75.4 inhabitants per square kilometre, and GDP per capita of €8,400, 10.6% less than in 2008. Croatia's economy has yet to recover following the global financial crisis; the Croatian government is implementing austerity measures and accelerating the privatisation of assets in order to meet the criteria for joining the EU's Economic and Monetary Union (EMU) and adopting the euro as its currency²¹.

Table B.1: Croatia overview

Croatia	2012	2008-2012 change
Population (million)	4.3	-0.8%
GDP per capita (€)	€8,400	-10.6%
Population density (inhabitants per square kilometre)	75.4	-1.1%

Source: Eurostat

Overview of competent authorities and procurement in Croatia

The overview of competent authorities and procurement in Croatia that follows is largely derived from UITP Europe's 'Organisation and Major Players of Short-Distance Public Transport: New Developments in the European Union,' published in January 2015.

- B.96 The Ministry of Transport is the responsible authority for public transport at a state level in Croatia, and manages the issuing of regional bus licenses and concessions. Croatia's 22 counties organise local public transport on behalf of the country's 429 municipalities. Croatian cities organise bus and light rail services in their areas.
- B.97 Local public transport services are either tendered out to private companies or directly awarded to companies which owned by their respective cities or municipalities. These contracts typically last between 3 and 6 years; operators are usually responsible for purchasing and maintaining vehicles. While Croatian law permits the subcontracting of local public transport services, in practice this is not common.
- B.98 This contrasts with transport at the regional level, where bus operators are not subject to usual contracting procedures. Instead, the government awards grants exclusive rights to operate bus lines at specified timetables, without defined termination dates, and operators can apply for renewal of their license every five years. Regional bus operators can set their own fares but receive no subsidy from the government to operate these services.

Local public transport trends in Croatia

- B.99 The local public transport (trams and municipal buses) offer in Croatia is approximately 83 million vehicle-kilometres.
- B.100 Total traffic in all public transport was estimated at 4,365 million passenger-kilometres annually. 69% of trips are by bus and tram and 31% by rail services. Demand fell over the period 2007-2011, particularly for rail, with passengers down by 62% and passenger-kilometres down by 47%.

²¹ Source: CIA Factbook

- B.101 Car ownership in 2012 remained significantly below the EU average of 487, with 339 cars per 1,000 inhabitants.
- B.102 UITP estimates that 2,700 people are employed in this sector, although the Croatian Bureau of Statistics estimates that 6,955 are employed in urban transport.
- B.103 The local public transport fleet totalled 1202 buses and 306 trams, 90% of them in Zagreb. No data are available on the average age of buses and rolling stock.
- B.104 Table B.1: contains the KPIs we have been able to estimate for Croatia. No data was provided by the Ministry of Maritime Affairs, Transport and Infrastructure.

Table B.1: Public transport KPIs – Croatia

Category	Performance indicator	All modes
Raw data	Total number of passengers transported	NA
	Total passenger-kilometres	NA
	Total vehicle-kilometres	NA
Productivity	Passenger-kilometres per vehicle-kilometre	68.2
	Vehicle-kilometres per staff member	23,703
Financial	Fare revenue per vehicle-kilometre (€)	NA
	Operating cost per vehicle-kilometre (€)	NA
	Proportion of total operating costs covered by fares	NA
	Proportion of total operating costs covered by subsidy	NA
Service quality	Operating speed (km/h)	NA
	Passenger satisfaction	14% High, 39% Good, 27% Median, 20% Low

Source: Statistical Report on Transport and Communication, 2014; European Commission, 'European's Satisfaction with Urban Transport', 2014

Zagreb metropolitan area

Introduction

- B.105 Zagreb is the capital, the largest city, the most important transport hub and the centre of the road, rail and air networks of Croatia. The population of the city of Zagreb is around 800,000 and the metropolitan population is around 1.2 million people, with a population density of 1,222 residents per square kilometre. Public transport in the city is organised in several layers: the inner parts of the city are mostly covered by trams, the outer city areas and closer suburbs are linked with buses and rapid transit commuter rail.
- B.106 Transport in Zagreb relies on a combination of city-managed mass transit and individual transport.
- B.107 Mass transit includes 19 inner-city tram lines and 120 bus routes, both managed entirely by Zagrebački električni tramvaj (ZET), one of the municipal companies controlled by Zagreb Holding, a holding company managing utilities and other city services. ZET, the major transit operator responsible for public transport in Zagreb and parts of the surrounding Zagreb County, is part of the Zagreb Holding. ZET is exclusively owned by the city of Zagreb and mainly financed through its budget. ZET operates trams, all inner bus lines, and most of the suburban bus lines.

- B.108 The national rail operator Croatian Railways runs a network of urban and suburban train lines in the metropolitan Zagreb area, and is a government-owned corporation. The Zagreb suburban railway mainly covers the eastern and western parts of Zagreb and surrounding municipalities on 5 railway lines, mostly on the standard-gauge lines used for Croatian Railways' long-distance trains.
- B.109 Other main bus operators in the Zagreb hub are Samoborček d.o.o., Meštrović prijevoz d.o.o., Darojković promet d.o.o., Presečki d.o.o. and Čazmatrans Nova d.o.o, whose routes connect suburban areas with Zagreb city terminals.
- B.110 A joint tariff system exists within the City of Zagreb (on behalf of ZET), whereas within the counties a number of individual private operators are contracted to provide services on numerous lines with different tariffs.
- B.111 The transport network operated by ZET is divided into several zones. The first zone corresponds to municipality of Zagreb and tram lines are entirely within first zone.
- B.112 The joint tariff system include all transit options within the city limits. Fares for tram and bus operated by ZET are completely integrated, with more expensive season tickets also valid on trains. Single tickets are valid for 90 minutes inside the first zone for both, buses and trams. 3, 7, 15 or 30 day tickets and monthly and yearly pass are all valid on trams and buses within the city borders.

Local public transport trends and KPIs

- B.113 In 2013 ZET served 2.168 billion passenger-kilometres by bus and 2.279 billion passenger-kilometres by tram. Following a decline in 2010, the number of bus and tram passengers has been slowly growing.
- B.114 The tram network was expanded from 17 kilometres in 1930 to 58 kilometres in 2000, but no new lines have been built since then. The number of tram users has grown from 30 million in 1930 to 231 million in 1990, when it reached its peak.
- B.115 Annual reports are available for Zagreb Holding, with data such as operating costs reported only for the whole holding, rather than for individual companies within the holding group such as ZET. No estimates are made of passenger-kilometres. We found no official data, but estimate that there are 4,278 staff.
- B.116 The annual report includes revenue from transport fares and subsidies but not operating costs, but we estimate that there may have been a revenue shortfall of 30%.
- B.117 The estimated KPIs for local public transport in Zagreb are shown in Table B.1.:

Table B.1: Public transport KPIs – Zagreb metropolitan area, Croatia

Category	Performance indicator	Bus, tram
Productivity	Passenger-kilometres per vehicle-kilometre	NA
	Vehicle-kilometres per staff member	NA
Financial	Fare revenue per vehicle-kilometre (€)	NA
	Operating cost per vehicle-kilometre (€)	NA
	Proportion of total operating costs covered by fares	24%
	Proportion of total operating costs covered by subsidy	46%
Service quality	Operating speed (km/h)	15 (tram)

Source: ZET za PET http://za-grad.com/media/votify/filebrowser/zet_za__5_analiza.pdf

Key factors underlying the performance of local public transport

B.118 These include:

- Socio-economic and demographic changes: moderate population growth, but progressive growth in the proportion of elderly residents with different mobility requirements.
- Changes in economic activity: economic contraction and high unemployment over the last few years has led to a fall in total passenger movements in the metropolitan area.
- Changes in population mobility: the development of the transport system has been falling behind the growing needs of the city's mobility.
- Changes of ticket prices: local public transport fares offered by ZET increased in 2012.
- Modernisation of the traffic monitoring and control in city of Zagreb:
 - Introduction of vehicle location system infrastructure, with 147 real-time arrival information displays in tram and bus stations.
 - Since 2007, ZET service users can buy a ticket by using mobile phones (sending SMS), and there is a project to introduce smart cards.
- New vehicles and service introduction by ZET:
 - 70 new, modern, low-floor trams were purchased in 2008 and 214 low-floor buses were acquired during 2009
 - From 2007, ZET took over transportation of school children, for which it acquired 23 new MAN school buses and 2 minibuses.

Cyprus

- B.119 In 2012, Cyprus had a population of 862,011 inhabitants, with a population density of 93.8 inhabitants per square kilometre and GDP per capita of €17,400, which had declined by 11.2% over the period 2008-2012. Cyprus was hit particularly hard by the global financial crisis, as the country's banks had significant exposure to Greek debt. The economy contracted, unemployment rose above 17%, and in 2012 Cyprus eventually secured an economic rescue package from the 'troika' of the European Commission, European Central Bank and International Monetary Fund. This package was conditional on the government implementing a number of financial and structural reforms.²² The economy is now beginning to recover, and positive growth is expected this year.

Table B.1: Cyprus overview

Cyprus	2012	2008-2012 change
Population	862,011	11%
GDP per capita (€)	17,400	-11.2%
Population density (inhabitants per square kilometre)	93.8	8.9%

Source: Eurostat

Overview of competent authorities and procurement in Cyprus

- B.120 Responsibility for the organisation of public transport in Cyprus is in transition as the contracting authority has recently transferred from the Road Transport Department to the Ministry of Communications and Works (MCW).
- B.121 MCW has been designated as the competent authority replacing the Road Transport Department through an amendment of the relevant law, the Access to the Occupation of Road Transport Operator Law of 2001. A Contract Management Unit, operating under the supervision of the Permanent Secretary of MCW, has been created with the primary responsibility of the supervision and management of public passenger transportation contracts, the coordination/support and collaboration between the departments of the wider public sector and achievement of MCW's short-, medium- and long-term public passenger transport targets.
- B.122 A Steering Committee for Public Transportation, to be established, will have extended powers concerning major decisions governing contract management objectives: approval of alterations in transport contracts, fleet renewal, set of cost per kilometre, setting the budget of the six contracts. The MCW has also drafted regulations to govern the establishment and functioning of an Advisory Transportation Authority. This authority will submit proposals and recommendations to the MCW in relation to policy issues regarding public transportation, promote sustainable mobility, and determine transportation strategy and incentives to increase passenger ridership.
- B.123 Despite an increase in passenger usage after the initial implementation of the current public transportation system in 2010, it was considered to be unsatisfactory and unable to meet the initial targets set by the MCW.
- First, there was no comprehensive approach to form a sound and complete public transportation system (legal and organisational framework, processes, service, support

²² Source: CIA Factbook

infrastructure and operations). The competent authority was essentially responsible only for managing the contracts and overseeing compliance to them.

- Second, it was evident that contractors did not have the necessary experience in the provision of public passenger transportation services.
- Third, the current system did not provide any incentives to the contractors to improve services and/or reduce the costs of service.

B.124 In an effort to upgrade public passenger transportation, in 2006 the MCW originally set:

- Short-term targets, such as to optimise routes, by reducing unprofitable routes and increasing the frequency of routes with denser ridership, estimating the actual cost per kilometre for the years that the operators have audited accounts and setting a number of incentives for contractors, which would reflect their effectiveness.
- Medium-term targets related to fleet renewal, improvement of infrastructure (bus stops, stations, use of telematic technology), improving the image of the service to the general public, increasing passenger ridership and reducing subsidies.
- Long-term targets, such as the complete restructuring of the passenger transportation system and the establishment of a well-performing system responsive to the needs of society.

B.125 To shift passenger traffic from private cars to public transport, the MCW is currently encouraging the use of intercity and rural buses, and taxis by:

- Upgrading and modernising the bus and taxi fleet;
- Encouraging of merging and expansion of the private bus companies; and
- Adopting of integrated ticketing.

Local public transport trends in Cyprus

B.126 The passenger transport sector in Cyprus is characterised by a majority of small and medium-size companies. There are six contracting entities with MCW, five for the district areas and one for the interurban connection between main cities. The main public transport mode is the bus. There is no light or heavy rail infrastructure in Cyprus.

B.127 The local public transport supply in Cyprus is approximately 36.7 million vehicle-kilometres. According to MCW, total traffic is 31.9 million passenger-kilometres annually, but data also suggests that 25.8 million passengers used public transport in 2013: taken together these figures imply a mean trip length of little more than one kilometre. MCW officials who provided the data commented that figures for passenger mobility in Cyprus are calculated based on ticket sales and a best estimation of free ticket passengers (until 2013, a large group of passengers, including pensioners, students and low income individuals were entitled to use public transport for free in the country). Data also indicates that the number of bus passengers per annum has fallen from 14 million in 1980 to 3.5 million in 2002.²³ This steady decline may be due mainly to a rapid increase in car ownership, the poor service offered by the bus companies, and the poor condition of the buses. According to Eurostat, the 2012 share of buses and coaches in passenger transport in Cyprus was about 18.7% of passenger-kilometres, but it appears that this also includes tourist transport. According to UITP, around 1,000 people are employed in this sector.

²³ European Commission, Study on Strategic Evaluation on Transport Investment Priorities under Structural and Cohesion funds for the Programming Period 2007-2013: Cyprus Country Report, 2006

- B.128 Car ownership remained significantly above the EU average of 487 in 2012, with 549 cars per 1,000 inhabitants.
- B.129 The bus fleet totalled 1,870 vehicles nationally in 2003, with the majority of the fleet relatively old. We have not been able to obtain more recent data.
- B.130 The Ministry stated that independent surveys show that customers are not satisfied with the current level of service and organisation. The most common complaints relate to the age of the fleet, the frequency of service and the coverage of the existing routes.
- B.131 The KPIs for Cyprus are presented in the table below.

Table B.1: Public transport KPIs – Cyprus

Category	Performance indicator	All modes
Raw data	Total number of passengers transported (mil)	25.8
	Total passenger-kilometres (mil)	31.9
	Total vehicle-kilometres (mil)	36.7
Productivity	Passenger-kilometres per vehicle-kilometre	0.87
	Vehicle-kilometres per staff member	36,685
Financial	Fare revenue per vehicle-kilometre (€)	0.41
	Operating cost per vehicle-kilometre (€)	1.34
	Proportion of total operating costs covered by fares	NA
	Proportion of total operating costs covered by subsidy	NA
Service quality	Operating speed (km/h)	NA
	Passenger satisfaction	0% High, 32% Good, 26% Median, 42% Low

Source: Ministry of Communication and Works, Cyprus; European Commission, 'European's Satisfaction with Urban Transport', 2014

Nicosia

Introduction

- B.132 Nicosia is the capital and largest city on the island of Cyprus and its main business centre. Greater Nicosia is administered by several municipalities. In the centre is the city municipality of Nicosia itself. The population of the conurbation is 300,000 inhabitants.
- B.133 Public transport within the city has, since 2010, been provided by a new bus service run by OSEL, the Transportation Organisation of Nicosia District.

Local public transport trends and KPIs

- B.134 OSEL's targets include strengthening public passenger transport and increasing the use of buses from 2% in 2010 to more than 10% in 2019. By 2016, OSEL aims to establish a comprehensive fleet management system and ticketing machines, making bus transport an easier and more pleasant way to travel through Nicosia.
- B.135 The main performance indicators for local public transport in Nicosia are shown below.

Table B.1: Public transport KPIs – Nicosia, Cyprus

Category	Performance indicator	Bus
Productivity	Passenger-kilometres per vehicle-kilometre	NA
	Vehicle-kilometres per staff member	36,161
Financial	Fare revenue per vehicle-kilometre (€)	0.40
	Operating cost per vehicle-kilometre (€)	1.49
	Proportion of total operating costs covered by fares	NA
	Proportion of total operating costs covered by subsidy	NA
Service quality	Operating speed (km/h)	NA

Source: Ministry of Communication and Works

Key factors underlying the performance of local public transport

- B.136 With no railway system in Cyprus, the country's public transport is provided entirely by buses, which a European Commission study as far back as 2006 described as offering a 'poor service' and being in 'poor condition'.²⁴ Although the Government intended to implement a strategy increasing usage of public transport by 2015, its ability to invest in infrastructure including public transport would have been affected by the impact of the financial crisis in 2008 and subsequent Eurozone crisis. Intermittent service and an ageing vehicle fleet have contributed to the dramatic decline in usage outlined above, and patronage of public transport would have been affected still further when passengers who previously travelled for free (including students and pensioners) were required to pay for bus services from 2013.²⁵ Other factors that would explain the poor performance of public transport in Cyprus are the country's low population density; with residents dispersed across the island, it can be difficult for public transport such as buses to effectively serve the population. This also explains the country's high numbers of passenger cars per 1,000 residents, which as illustrated above is considerably higher than the EU average.

²⁴ European Commission, Study on Strategic Evaluation on Transport Investment Priorities under Structural and Cohesion funds for the Programming Period 2007-2013: Cyprus Country Report, 2006

²⁵ Parkiaki.com, 2013.

Czech Republic

- B.137 In 2012, the Czech Republic had a population of 10.5 million inhabitants, with a population density of 136.1 inhabitants per square kilometre and GDP per capita of € 11,500, which had fallen by 1.7% over the period 2008-2012. The Czech economy was significantly affected by the global economic crisis in 2008, and fell into recession multiple times, but has grown since 2013²⁶.

Table B.1: Czech Republic overview

Czech Republic	2012	2008-2012 change
Population (million)	10.5	1.6%
GDP per capita (€)	11,500	-1.7%
Population density (inhabitants per square kilometre)	136.1	1.3%

Source: Eurostat

Overview of competent authorities and procurement in Czech Republic

The overview of competent authorities and procurement in the Czech Republic that follows is derived from UITP Europe's 'Organisation and Major Players of Short-Distance Public Transport: New Developments in the European Union,' published in January 2015 as well as the response received from the Ministry.

- B.138 After regionalization of public transportation system in the year 2005 and according to the modified Act on Road Transport (No. 111/1994) and Act on Railways (No. 266/1994) a system consisting of three-level public contracting authorities was developed.
- B.139 The first level is the state represented by Ministry of Transport. The Ministry of Transport has overall legal responsibility for public transport on a national level in the Czech Republic, and for setting the national transport policy. It is also responsible for national public service commitment, i.e. railway long distance passenger transport. The state (national) level cannot include bus lines.
- B.140 The second level is represented by regions (kraje). There are altogether 14 regions in the Czech Republic, which are responsible for providing their districts with regional public transport services. Unlike the state level they have possibility to provide both railway and bus lines. Railway transport covered by regional public service contract include the category of passenger stopping (Os) trains, all regional express (Sp) trains and selected fast (R) trains.
- B.141 The third and last level is municipality, which can be provided by urban or additional regional transport consisting of for example buses, trolley-buses, tramways and also metro (as is the case in Prague).
- B.142 Combination of state, regional and municipal order provides an interconnected system of public transportation in the Czech Republic, and the integration of regional and municipal transport is implemented in several regions or parts of them.
- B.143 Funding for local public transport is drawn from a mixture regional and municipal sources: national resources are available only for railways, excluding urban lines. Regional bus transport subsidy is provided from regional budgets: cities with their own municipal public transport pay from municipal budgets.

²⁶ Source: CIA Factbook

- B.144 Act 194/2010 on Public Service in Passenger Carriage and Act 111/1994 on Road Transport have implemented the requirements of the Regulation 1307/2007 since 3 December 2009. By 2019, all contracts for services provided by all operators, other than internal operators, will have to awarded by competitive tendering.
- B.145 Approximately 960 authorities are responsible for providing PSOs and, with all authorities independent of the government, no summary of the progress of competitive tendering is available. The Ministry of Transport supports the process only by providing training and methodological support.
- B.146 Authorities in two regions have tendered fixed cost contracts to operate regional bus services to private companies for a limited period according to Regulation 1370/2007. The tender competitions in other regions are currently either under way, being prepared or developing the relevant technical and economic studies. Some regions face legal problems connected with legal disputes with the operators and the Office for the Protection of Competition: in these cases directly awarded contracts are to be used for limited 1-2 year periods to bridge the periods between exiting contracts ending and new contracts beginning.
- B.147 The majority of public transport operators in large Czech cities are wholly owned by their respective urban authorities, which conclude direct awards according to Regulation 1370/2007. Cities with private operators have also attempted tender competitions, but some tender competitions attracted insufficient bids to be effective.
- B.148 As of early 2015, however, most public service contracts for local public transport had only been directly awarded by the regional and municipal authorities. Some of the existing contracts are for unlimited periods of time, but allow the authorities the option to amend the contracts each year, but the length of other contracts range from 3 to 15 years.

Local public transport trends in Czech Republic

- B.149 The local public transport supply in the Czech Republic, including long distance buses, is approximately 0.9 billion vehicle-kilometres annually.
- B.150 Total usage is estimated at 25.3 billion passenger-kilometres annually. Around 8 million passengers use public transport each day, 51% of whom travel by bus and trolleybus and 49% by metro, tram and urban rail. Municipal transport accounts for 64% of vehicle-kilometres but 87% of journeys: these numbers have remained fairly stable over the period 2007-2011, with a small decline in the use of regional buses due to competition from rail. Car trips declined nationally over the period 2009-2013 and the mode share of public transport grew.
- B.151 Car ownership in 2012 was below to the EU average of 487, with 448 cars per 1,000 inhabitants. Demand for public transport has declined by about 8% between 2000 and 2012, in contrast to the average demand in the EU, which has risen by around +8% over the same period²⁷.
- B.152 Employment in the transport sector is 247,000 but this includes haulage, rail and air transport. UITP estimates that around 31,000 people are employed in the local transport sector.
- B.153 The national bus fleet totals 20,000 registered vehicles, 3,500 of which serve municipal public transport. The are 1,835 trams and 669 trolleybuses, plus 5,288 train units providing metro, urban, regional and long-distance rail services. The average age is 9.8 years for buses, 12.4 years for trolleybuses and 13.8 years for rail rolling stock used for local public transport.

²⁷ Source: UTIP, *Local Public Transport Trends in the European Union*

- B.154 Given the fragmentation of responsibilities among regions, national data on public transport in the Czech Republic only exists in the form of bottom up estimates and surveys collected by Ministry of Transport.

Table B.1: Public transport KPIs – Czech Republic

Category	Performance indicator	All modes
Raw data	Total number of passengers transported (mil)	2,692 ²⁸
	Total passenger-kilometres (mil)	16.28 ²⁹
	Total vehicle-kilometres (mil)	NA
Productivity	Passenger-kilometres per vehicle-kilometre	29
	Vehicle-kilometres per staff member	28,000
Financial	Fare revenue per vehicle-kilometre (€) – regional bus	€0.40
	Operating cost per vehicle-kilometre (€) – regional bus	€1.20
	Proportion of total operating costs covered by fares	33%
	Proportion of total operating costs covered by subsidy	66%
Service quality	Operating speed (km/h) (regional buses)	33
	Passenger satisfaction	15% High, 47% Good, 25% Median, 13% Low

Sources: Ministry of Transport, Czech Republic; Transport Yearbook 2013, Ministry of Transport, Czech Republic; European Commission, 'European's Satisfaction with Urban Transport', 2014

Prague

Introduction

- B.155 Public transport in Prague and its vicinity is organised by ROPID, the Prague municipality administrative body since 1993. The compensation is paid jointly by Prague municipality, the Central Bohemian region and villages in the area provided with a better than standard service. An Integrated transport system, PID, encompasses Prague and its suburbs. The metropolitan area has a population of 1.9 million (70% in Prague) and covers an area of 3,596 square kilometres, with the majority of public transport users commuting to Prague and to the city centre within Prague. The total number of trips including commuting, shopping and leisure is 3.8 million per day.
- B.156 Prague Transport Company (DPP) operates metro, trams and buses in Prague within the integrated transport system PID. 22% of buses in Prague and its surroundings, however, are operated by private operators. Czech Railways operates one urban railway line. There are 352 services operated by metro, trams, buses, cable car and ferries plus one city railway line.
- B.157 DPP operates all metro and tram lines and 78% of bus lines in Prague. The contract for the period 2010-2019 has been awarded to DPP as an internal operator, but with an annex of detailed requirements specified on an annual basis. Since 1995, private bus operators have been partly chosen by tenders and partly awarded by direct contract by Prague municipality. Contracts are valid until 2019. The first tender for bus services consistent with the Regulation, for lines 220 and 292, was planned for 2014 and was pre-notified in the EU tender journal.

²⁸ Public transport total (including rail, air and inland waterway passenger transport)

²⁹ Urban public transport only

Local public transport trends and KPIs

- B.158 DPP operates 163 million vehicle-kilometres in Prague, while other bus companies operate 16.5 million vehicle-kilometres. The supply of DPP fell in 2012 by 5.5% due to reorganisation of lines to modernise the system and budget constraints, but output has grown slightly since 2010 and is expected to be stable after 2016. Prague’s integrated transport system carries 1.4 billion passengers per year and continues to show growth. Modal split in Prague and its suburbs is stable, and car traffic in the city has remained roughly stable for the last 7 years, with a very slight decline in the centre and 0.3% growth in the suburbs in 2013.
- B.159 The main performance indicators for local public transport in Prague and its integrated suburbs within PID are shown in Table B.1.:

Table B.1: Public transport KPIs – Prague and metropolitan area, Czech Republic

Category	Performance indicator	2010	2013
Productivity	Passengers (billions per year)	1.3	1.4
	Vehicle-kilometres per staff member	15,157	15,240
Financial	Fare revenue per vehicle-kilometre (€)	1.00	1.01
	Operating cost per vehicle-kilometre (€)	2.37	2.61
	Proportion of total operating costs covered by fares	42%	39%
	Proportion of total operating costs covered by subsidy	58%	61%
Service quality	Operating speed (km/h)	27	27

Source: Annual report ROPID 2010, 2013, Annual report DPP 2010, 2013, Transport plan PID 2014

- B.160 We understand that operating costs are reported excluding the costs of maintenance, renewal and expansion of metro and tram infrastructure.

Key factors underlying the performance of local public transport

- B.161 These include:

- The population in Prague area is stable, with slow growth in Prague suburbs.
- There is a long tradition of the use of public transport in Prague.
- The economy faced a minor decrease of GDP. After two decades of growth in car performance, and parallel decrease of public transport patronage, this resulted in traffic volumes and modal split in Prague and vicinity stabilising last 7 years (in contrast with a fall in car volumes in the rest of the Czech Republic).
- Funding of public transport in Prague is increasing, due to high operating costs and the limited efficiency of the city-owned operator. City authorities have developed forecasts which show that it may be unaffordable after 2020. The severe impact on the city budget led to the 2012 reform of the route structure, which led to a cut in performance and costs by 5.5%.
- Ticket prices are affordable;
- DPP’s operating efficiency is a cause for concern and there have been many attempts to increase it significantly. While the design of the public transport operations by ROPID is focused on efficiency, the cost of DPP operation continues to rise due to overhead costs, high procurement costs, with DPP’s cost per vehicle-kilometre is one of the highest in the country. Operations by private companies are contracted via ROPID..
- A new city government, elected in 2014, decided to reduce annual ticket prices by 20% from mid-2015 in an effort to attract more passengers to public transport, and a new section of metro line was opened in April 2015.

South Moravian region

Introduction

- B.162 Since 2004 all public transport in southern Moravia has been integrated within the IDS JMK system, which was fully developed by 2010, and is organised by KORDIS JMK transport organiser, jointly owned by city of Brno and South Moravia region. Railways, if they are available, are the preferred mode of local public transport in the region, with bus transport feeding railways or serving the areas not served by them. The South Moravian region has a population of 1.2 million (35% in Brno) and covers an area of 7,195 square kilometres, with 673 communities gathered to 156 zones. 296 lines of trams, trolleybuses, municipal and regional buses operate within integrated system. There are 301 million trips annually in Brno city and 819 million vehicle-kilometres are operated in regional railway and bus lines. No division of data between rail and bus is available, but:
- Brno Transport Company (DPMB), the internal operator, has a direct contract with the city of Brno to operate trams, trolleybuses, Brno municipal buses and some regional lines.
 - 23 more private bus companies operate regional lines or municipal lines in smaller towns.

- B.163 We understand that DPMB's contract is compatible with Regulation 1370/2007 and all regional buses operators' contracts were competitively tendered by the South Moravian region. Most tendering processes were consistent with Regulation 1370/2007. Contracts tendered before 2009, according to the previous law, will be re-tendered before 2019.

Local public transport trends and KPIs

- B.164 The South Moravian integrated transport system operates 194 regional bus lines, 11 tram lines, 13 trolleybus lines and 79 municipal bus lines in Brno and 8 smaller towns. DPMB operated 38 million vehicle-kilometres in 2013, 5% less than in 2012, catering for 355 million trips (in Brno and on regional lines). Fares cover 32% of DPMB's operating costs.
- B.165 Data for regional bus lines and smaller towns' municipal transport are not published by either competent authorities or operators. The main performance indicators for local public transport in Brno city only are shown in Table B.1.:

Table B.1: Public transport KPIs – Brno, Czech Republic

Category	Performance indicator	2010	2013
Productivity	Passengers (billions per year)	0.4	0.4
	Vehicle-kilometres per staff member	14,040	NA
Financial	Fare revenue per vehicle-kilometre (€)	0.92	0.97
	Operating cost per vehicle-kilometre (€)	2.59	2.84
	Proportion of total operating costs covered by fares	35%	34%
	Proportion of total operating costs covered by subsidy	65%	66%
Service quality	Operating speed (km/h)	NA	NA

Source: Annual report KORIDS JKM 2010, 2013, Annual report DPMB 2010, 2013

Key factors underlying the performance of local public transport

- B.166 These include:
- The population of the Brno area is stable, with growth in the Brno suburbs.
 - The economy in the region, like the rest of the Czech Republic faced a minor decrease of GDP.

- In Brno, where there is no competitive tendering, costs and fares are slowly increasing, but the situation in the region is different, as tendering of public service contracts has led to lower compensation than before, and the funding is stable.
- KORID JMK does not have direct control on the contracts, but its approach ensures that the conditions of public service contracts lead to efficiency. Regional transport operations by private companies were let by competitive tendering, mostly according to Regulation 1370/2007. The performance of all contracted companies in regional bus transport is efficient and the tenders were seen as a success.
- Integration in South Moravian region offers very high quality transport services including well-designed timetables and service conditions. KORIDS JMK organises a dispatcher service which aids the improvement of conditions in the transfer terminals in the surroundings of Brno.

Denmark

- B.167 In 2012, Denmark had a population of 5.6 million inhabitants, with a population density of 130.4 inhabitants per square kilometre, and GDP per capita of €37,200, down by 5.4% over the period 2008-2012. The end of the Danish housing boom in 2007 and the effects of the global economic crisis saw Denmark's economy go into recession from late 2010 to early 2011, but the country's fiscal position is now stronger than the majority of other EU Member States.³⁰

Table B.1: Denmark overview

Denmark	2012	2008-2012 change
Population (million)	5.6	1.9%
GDP per capita (€)	€37,200	-5.4%
Population density (inhabitants per square kilometre)	130.4	2.3%

Source: Eurostat

Overview of competent authorities and procurement in Denmark

The overview of competent authorities and procurement in Denmark that follows is largely derived from UITP Europe's 'Organisation and Major Players of Short-Distance Public Transport: New Developments in the European Union,' published in January 2015.

- B.168 The Danish Ministry for Transport is responsible for transport legislation and procurement in Denmark. The country's five regions and 98 municipalities are responsible for infrastructure planning at a regional and local level.
- B.169 The Greater Copenhagen Metro is run by the Metroselskabet (Metro Company), a business jointly owned by the municipalities of Copenhagen and Frederiksberg and the Ministry for Transport. Six regional public transport authorities – Nordjyllands Trafikselkab, Midttrafik, Sydtrafik, Fynbus, Movia and BAT – are responsible for the organisation of bus transport in their respective regions. These are independent from central government, and their Boards are comprised of representatives from their regions and municipalities.
- B.170 Bus services are tendered by the regional authorities, typically for six years, with the possibility of extension for a 2-year period up to a maximum of three times. Gross cost contracts are most common. The Copenhagen Metro is managed by the publicly-owned Metroselskabet partnership, and operations are tendered out for 5-year periods as detailed below.
- B.171 The authorities are all members of 'Trafikselskaberne', the association for public transport bodies in Denmark. Among the various initiatives to foster the coordination of local public transport strategies in Denmark, a common Cost Index has been developed and is published monthly. This gives nationwide estimates of changes in different operational cost lines used for local public transport contract negotiations.

Local public transport trends in Denmark

- B.172 Total annual traffic on buses and suburban trains is estimated at 2.4 billion passenger-kilometres. Public transport trips (excluding rail) represent around 10% of the total distance travelled. For commuting trips public transport, excluding rail, has a mode share of 13% and cycling has a share of 20%.

³⁰ CIA Factbook

- B.173 In 2012, there were 399 passenger cars for every 1,000 inhabitants in Denmark, well below the EU average of 487 for that year. With an increase of around +5% for the period 2000-2012, demand for public transport in Denmark has risen less than the EU average of around +8% during that time³¹.
- B.174 UITP estimates that 10,000 people are employed in the public transport sector in Denmark. The bus fleet totals 3,335 vehicles nationally.
- B.175 The main performance indicators for bus services at the aggregate national level is shown below.

Table B.1: Public transport KPIs – Denmark (local bus only)

Category	Performance indicator	All local bus services
Raw data	Total number of passengers transported (mil)	351
	Total passenger-kilometres (mil)	2,335
	Total vehicle-kilometres (mil)	268.35
Productivity	Passenger-kilometres per vehicle-kilometre	8.7
	Vehicle-kilometres per staff member	26,499
Financial	Fare revenue per vehicle-kilometre (DKK)	12.0
	Operating cost per vehicle-kilometre (DKK)	26.5
	Proportion of total operating costs covered by fares	39%
	Proportion of total operating costs covered by subsidy	61%
Service quality	Operating speed (km/h)	NA
	Passenger satisfaction (all modes)	8% High, 39% Good, 28% Median, 25% Low

Sources: Ministry of Transport, Denmark; Steer Davies Gleave analysis of data from operators websites (Arriva, Keolis), UITP OMP 2015, Danish Statistical Yearbook 2012; European Commission, 'European's Satisfaction with Urban Transport', 2014

Copenhagen

Introduction

- B.176 The Capital Region (Hovedstaden Region), one of the regional authorities in Denmark, covers the urban areas of Copenhagen and Frederiksberg and the municipality of Bornholm. The total population of the region is 1.7 million, one third of whom live in the Copenhagen municipality. Since 2007, when different county transit agencies were merged and fares were integrated, Movia Trafik has been the competent authority for bus transport for both urban areas but not for Bornholm.
- B.177 In addition to local bus services, Copenhagen is served by a driverless metro system opened between 2002 and 2007, built by Ansaldo STS under a contract that included construction, delivery of multiple units, and operations and maintenance for a period of 8 years from opening. Integrated ticketing is in place and a travel card (Rejsekort) can be used to travel by bus, metro and rail. Fares are set nationally. Following a competitive tender, Metro Service (a joint venture of ATM and Ansaldo) was awarded the operation of the metro for the period 2010-2015. A 3-year extension to 2018 has been agreed.

³¹ Source: UITP, *Local Public Transport Trends in the European Union*

B.178 Local bus services in Copenhagen are awarded through competitive tenders. The main bus operators are Arriva and City-Trafik, a wholly-owned subsidiary of Keolis.

Local public transport trends and KPIs

B.179 The number of passengers using the Copenhagen Metro has grown from over 50 million in 2008 (the year after opening) to around 55 million over the period 2011-2013. The annual accounts for the Metro record an overall profit after accounting for total expenditure and depreciation, but this includes the income from the concession contract, without which passenger fare revenues cover around 90% of operating costs. Other income comes from activities such as advertising.

B.180 The number of passengers transported by local buses in Copenhagen was 211 million in 2013. This figure has dipped in 2009 and 2011 (years of negative economic growth) but has remained over the 200 million mark in the past few years. In addition, in 2013 2.4 million passengers used the Flextrafik service, designed for people with special needs. The main performance indicators for bus and metro services are shown below.

Table B.1: Public transport KPIs – Copenhagen, Denmark

Category	Performance indicator	Bus	Metro
Productivity	Passenger-kilometres per vehicle-kilometre	NA	57
	Vehicle-kilometres per staff member	NA	23,585
Financial	Fare revenue per vehicle/train-kilometre (thousand DKK)	NA	13.8
	Operating cost per vehicle/train-kilometre (thousand DKK)	NA	15.1
	Proportion of total operating costs covered by fares	34%	91%
	Proportion of total operating costs covered by subsidy	66%	0%
Service quality	Operating speed	NA	NA
	Passenger satisfaction (share of satisfied/very satisfied)	91%	96%

Source: Metroselskabet I/S Annual Report 2013, Danish Statistical Yearbook 2012

Key factors underlying the performance of local public transport

B.181 These include:

- Urban development:
 - Copenhagen’s growth followed the so-called "finger plan", whereby development has been focused on the fingers of regional rail lines radiating from the city centre. Housing development has been promoted around public transport lines and around the main hubs. The gaps between the fingers are mostly used for recreation and farming. Local bus services and cycle lanes tend to act as feeders to the rail and metro services, enhancing the attractiveness of local public transport.
 - Cycling is especially popular in Copenhagen, with a modal share of around 30%, and closer to 40% for trips to work and school. This is the results of decades of investment in both hard infrastructure and soft measures to promote cycling.
- Changes in organisation and local public transport offer:
 - Since reorganisation of the local transport agency under Movia in 2013, local public transport services in the Copenhagen Capital Region have been evolving rapidly.
 - The opening of Metro sections in 2002, 2003 and 2007 has expanded the public transport supply and increased overall patronage. The Metro offers a 24-hour service

to the city of Copenhagen. Two new circle metro lines known as 'Cityringen', running underground over 15 kilometres around the city centre, are scheduled to open in 2018.

- This has also had an impact on bus operations. Movia has been involved in the restructuring of bus routes and the replacement of some night bus services with metro services.
- Competitive tendering:
 - Copenhagen has been a leader in competitive tendering in bus transport since the 1990s. HT used to be the sole operator of buses but, due to falling ridership and increasing subsidies during the 1980s, tendering was introduced in the 1990s. A key outcome was a reduction in operating costs per bus hour by 24% over ten years, and the emphasis on quality in contract specifications has helped to increase ridership.
 - Recent data on average cost per hour of public transport service (as defined in service contracts) shows a range of DKK 630-740 over the period 2008-2012. Average costs have been falling in recent years as a result of higher competition for a larger bundle of services.
 - In 2013, Metroselskabet's Board of Directors decided to use the 3-year option to extend the current metro contract to December 2018, in order to allow for the 'Cityringen' and the existing metro run in the same contract periods.

Estonia

- B.182 In 2012, Estonia had a population of 1.3 million inhabitants, with a population density of 30.5 inhabitants per square kilometre, and GDP per capita was €9,500. Estonia's economy has a history of strong performance and, though it went into recession in 2008 as a result of the financial crisis, it has recovered well over the last five years³².

Table B.1: Estonia overview

Estonia	2012	2008-2012 change
Population (million)	1.3	-1%
GDP per capita (€)	9,500	0%
Population density (inhabitants per square kilometre)	30.5	-1%

Source: Eurostat

Overview of competent authorities and procurement in Estonia

The overview of competent authorities and procurement in Estonia that follows is derived from UITP Europe's 'Organisation and Major Players of Short-Distance Public Transport: New Developments in the European Union,' published in January 2015 and based on the response received by the Ministry.

- B.183 The Ministry of Economic Affairs and Communications has ultimate authority for public transport at a state level in Estonia. However, Estonia is divided into 15 counties and 213 local authorities (30 cities and 183 parishes). Local authorities at county, municipality and city level are responsible for organising local public transport in their respective areas. Since 2009, the Estonian Road Administration has been responsible for advising authorities on public transport procurement, and for supervising the performance of public service contracts. The vast majority of local public transport in Estonia is run on public service contracts and subsidised by government, though a few bus lines are operated on a commercial basis.
- B.184 Estonia's Public Transport Act made competitive public tendering for the provision of subsidised bus transport services compulsory from 2000 onwards. However, in certain areas, including the capital Tallinn, bus contracts have continued to be awarded directly to publicly-owned companies; in addition, contracts for less than 200,000 vehicle-kilometres can be directly awarded. While Estonian law permits multiple transport providers to submit joint tenders for public service contracts, in practice this is not common. Contracts tend to last for 8 years and the maximum permitted length of a public service contract is 10 years.

Local public transport trends in Estonia

- B.185 Total traffic is estimated at 1.4 billion passenger-kilometres annually but data on vehicle-kilometres is unavailable. Every day, around 553,000 passengers use public transport, 80% of whom travel by bus and 20% by trolleybus, tram or rail. This number has remained fairly stable over the period 2007-2011 and, as car trips have increased nationally over the period 2009-2013, the mode share of public transport has declined.
- B.186 There is 413 licenced operators in Estonia operating regular and occasional transport services. For national carriage of passengers there are 200 lines between different counties. Of those 11

³² Source: CIA Factbook

are serviced with public service obligations (PSO). There is a further 846 lines in the different counties and parishes, which are mostly serviced with public service obligations.

- B.187 In the 8 cities of Tallinn, Tartu, Pärnu, Narva, Viljandi, Rakvere, Kohtla-Järve, Kuressaare, all the lines are operated under a PSO.
- B.188 In 2012, car ownership in Estonia was below the EU average of 487, with 456 cars per 1,000 inhabitants. Demand for public transport has declined by over 20% between 2001 and 2012, in contrast to average demand in the EU, which has risen by around +8% for the period between 2000 and 2012³³.
- B.189 UITP estimates employment as 1600 in rail transport and 5800 in road transport³⁴, but there are no data on employment light rail and tram companies. More than 70 companies offer public transport services.
- B.190 The national bus fleet totals 4600 vehicles with an average age of more than 11 years³⁵.
- B.191 Estonia has total population of 1.3 million people of whom nearly 0.5 million live in Tallinn or the Tallinn metropolitan area. Public transport in Tallinn is free to residents and comprises a large part of the total public transport service in Estonia, so financial KPIs are not comparable to KPI's of other countries. €22.7 million are paid to operators annually, according to the Estonian Ministry.
- B.192 According to a survey from 2012 on 6% on the quality of rural public transport, 6% of users were very satisfied, 41% were rather satisfied, 23% were rather not satisfied, 12% were not satisfied and 18 % did not know.

³³ Source: UTIP, *Local Public Transport Trends in the European Union*

³⁴ EU transport in figures, statistical pocketbook 2012

³⁵

http://www.civitas.eu/sites/default/files/timo_moorast_public_transport_communication_system.pdf

Table B.1: Public transport KPIs – Estonia

Category	Performance indicator	All modes	Urban bus	Rural and long-distance bus
Raw data	Total number of passengers transported (mil)	202.3	175.8	26.5
	Total passenger-kilometres (mil)	1,486.3	591	895.2
	Total vehicle-kilometres (mil)	NA	NA	NA
Productivity	Passenger-kilometres per vehicle-kilometre	NA	NA	NA
	Vehicle-kilometres per staff member	NA	NA	NA
Financial	Fare revenue per vehicle-kilometre (€)	NA	NA	NA
	Operating cost per vehicle-kilometre (€)	NA	NA	NA
	Proportion of total operating costs covered by fares	NA	NA	NA
	Proportion of total operating costs covered by subsidy	NA	NA	NA
Service quality	Operating speed (km/h)	NA	NA	NA
	Passenger satisfaction (all modes)	7% High, 29% Good, 33% Median, 31% Low		

Source: Ministry of Economic Affairs and Communications, Estonia; EU transport in figures, statistical pocketbook 2012; European Commission, 'European's Satisfaction with Urban Transport', 2014

Tallinn

Introduction

- B.193 Tallinn is the largest city in Estonia; it also has the country's main port, which is often visited by cruise ships. The city covers 159 square kilometres with a population of 435,000; the wider metropolitan area encompasses 543,000 residents. Trolleybus, bus and tram services in the city are all free of charge for Tallinn residents. The Tallinn City government is responsible for planning and organising transport services in the city. The same tickets are used for all transport modes by residents: visitors must buy either a pre-paid card or single ride tickets. Fees are collected from tourists, city guests and passengers that are not officially registered residents of Tallinn, such as visitors from other Estonian cities.
- B.194 Public transport services are provided mostly (90%) by the municipal enterprise, Tallinn City transport company, which is directly awarded a contract to provide bus, tram and trolleybus services. Other PSC services are provided by private bus operator MRP linna liinid. All transport is funded from Tallinn City budget.

Local public transport trends and KPIs

- B.195 Overall demand for public transport has declined during the last two decades, but introduction of free public transport increased both the use of public transport and the number registering as city residents and hence eligible for free transport. The number of passengers journeys rose by 9 %³⁶ in the two years after free public transport was introduced, but there was no decline in the number of private cars and private car use.
- B.196 The main performance indicators for local public transport in Tallinn are shown below.

³⁶ Two years of free public transport in Tallinn, Allan Alaküla, Head of Tallinn EU Office

Table B.1: Public transport KPIs – Tallinn, Estonia

Category	Performance indicator	Bus, trolleybus and tram
Productivity	Passenger-kilometres per vehicle-kilometre	3.11
	Vehicle-kilometres per staff member	16,901
Financial	Fare revenue per vehicle-kilometre (€)	0.16
	Operating cost per vehicle-kilometre (€)	1.85
	Proportion of total operating costs covered by fares	9%
	Proportion of total operating costs covered by subsidy	91%
Service quality	Operating speed (km/h)	20

Source: Two years of free public transport in Tallinn, Allan Alaküla, Head of Tallinn EU Office; Andres Harjo Transport Department, City of Tallinn, Best practices and lessons learned in Tallinn, <http://www.tallinn.ee/eng/freepublictransport/g13168s70247>, Public transport priority system in Tallinn, automatic stop calls and information signs in vehicle <http://www.civitas.eu/sites/default/files/12-5-620tallinn.pdf>

Key factors underlying the performance of local public transport

B.197 These include:

- Estonia’s economy is considered a sustainable economy. Strategic goals of greening the transport sector have been set and efforts have been made to achieve them, including solutions such as free public transport and the development of an electric vehicle charging network. As with other Baltic states, Estonia suffers from large numbers of private vehicles and the culture of using private vehicles for all travel is still strong.
- Funding for public transport is a struggle for municipal budgets, as the population is small and some areas have very low population density, making public transport economically impracticable. Some funding from European Union structural funds has been used, mostly to repair and improve infrastructure and to purchase new vehicles, which are very costly for public transport operators dealing with tight budgets. National funding levels have changed little in recent years.

Finland

- B.198 In 2012, Finland had a population of 5.4 million inhabitants, with a population density of 17.5 inhabitants per square kilometre and GDP per capita of €30,900, 5.5% less than in 2008. Finland's economy experienced one of the deepest contractions in the euro zone following the global financial crisis, but rising exports and consumption helped bring the economy back to growth in 2011.

Table B.1: Finland overview

Finland	2012	2008-2012 change
Population (million)	5.4	1.9%
GDP per capita (€)	30,900	-5.5%
Population density (inhabitants per square kilometre)	17.5	1.7%

Source: Eurostat

Overview of competent authorities and procurement in Finland

- B.199 The Ministry of Transport and the Finnish Transport Agency (FTA) have overall responsibility for transport legislation and governance respectively in Finland. There are a total of 35 competent PSO authorities (of which 25 municipal authorities and 9 local state authorities). Transport modes include buses (with several operators), tramways (with only one operator), metro (with only one operator), taxis, ferries (with many operators) and rail (one operator for passenger transport).
- B.200 While traditionally public transport contracts in Finland have been directly awarded with exclusive rights to preferred operators, procurement through competitive tendering exercises is now becoming the preferred method of award. National legislation approved in 2009 introduced a transition period from 2014 to 2019. The first of the licences that had been directly awarded expired in the first half of 2014, and the majority of all new contracts will be competitively tendered. The majority of public service contracts are "gross contracts", although there is increasing use of incentive-based or net contracts by transport authorities. Contracts typically last between 4-7 years.

Local public transport trends in Finland

- B.201 The local public transport supply in Finland is approximately 460 million vehicle-kilometres:
- 440 million vehicle-kilometres by bus;
 - 15 million vehicle-kilometres on Helsinki Metro; and
 - 6 million vehicle-kilometres on Helsinki trams.
- B.202 Total passenger volume is estimated at over 10 billion passenger-kilometres annually. In 2012, 471 million journeys were made in Finnish local public transport, of which 61% were made by bus and 39% by tram, metro and suburban rail.
- B.203 The charts below summarise the trend in vehicle-kilometres and passenger-kilometres over the period 1999-2013. These show a stable supply of bus services, mirrored by a fluctuating demand around the economic cycle. Passenger numbers on Metro services increased until 2005 when demand plateaued. Over the last few years, the modal share of public transport has remained around 15% of total trips, while demand for public transport has risen by around 4% between 2000 and 2012, less than the EU average of around +8% for the same period (UITP 2014). Car ownership in 2012 was significantly higher than the EU average of 487, with 563 cars per 1,000 inhabitants.

Figure B.1:: Vehicle-kilometres by mode in Finland, 1997-2013 (Index: 1997=100)

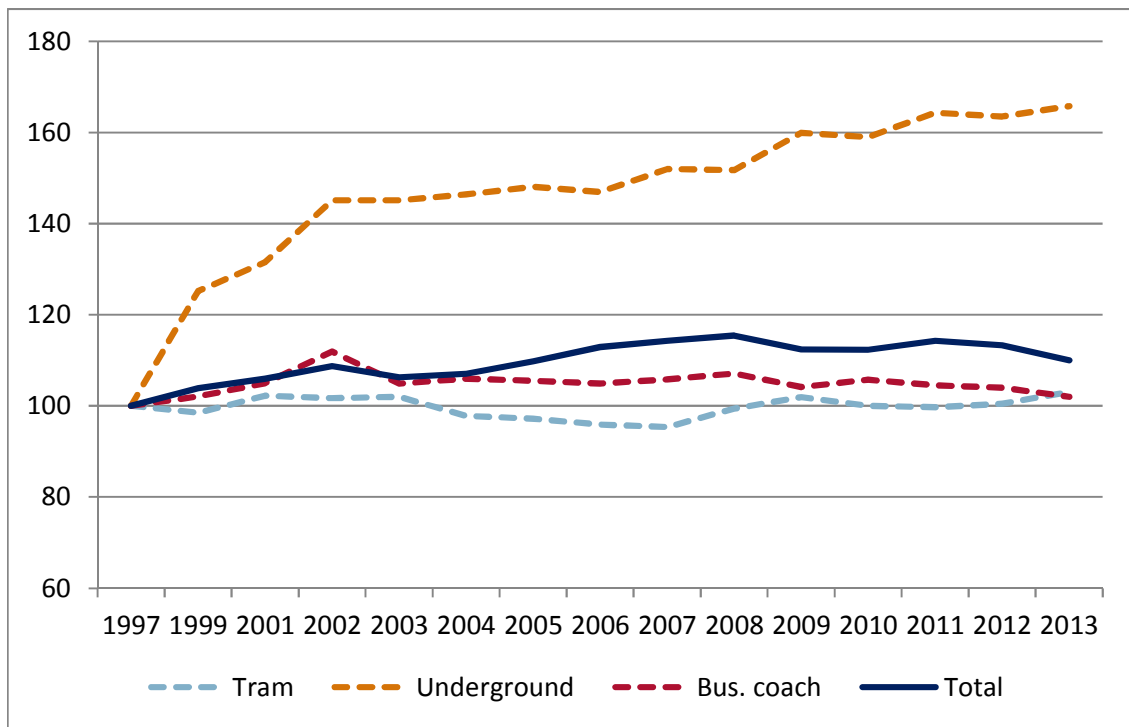
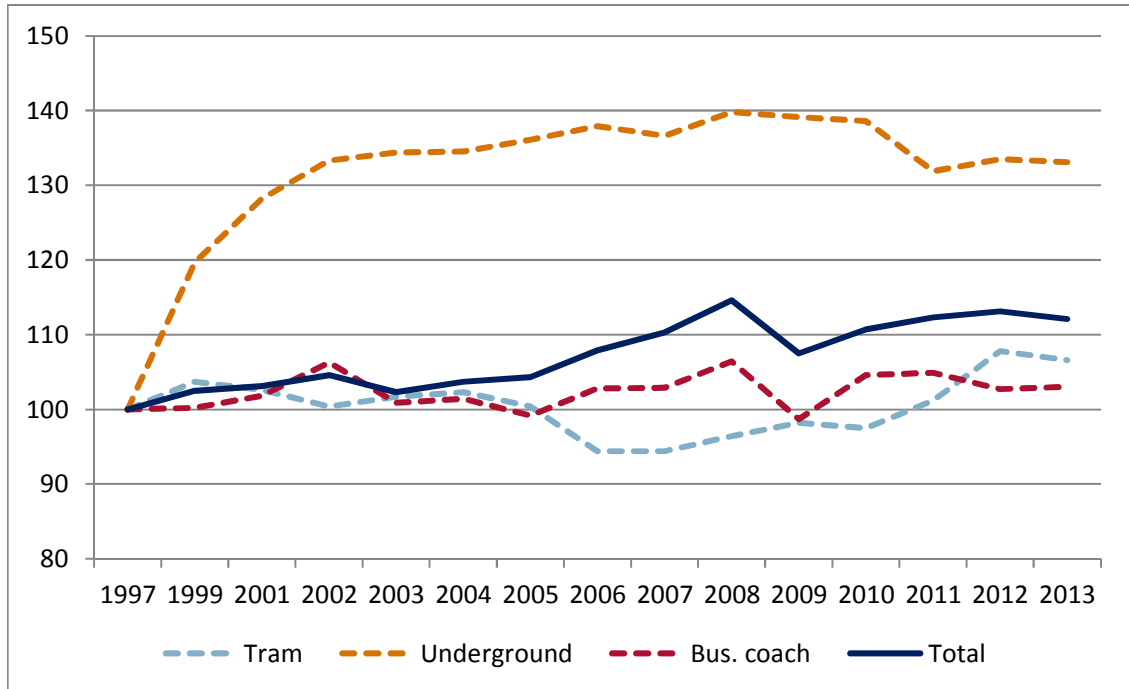


Figure B.2: Passenger-kilometres by mode in Finland, 1997-2013 (Index: 1997=100)



Source: 2015 Statistics of the Finnish Transport Agency

B.204 The total number of employees in the bus industry nationally is just below 12,000 and the number of buses used for public transport is 15,300. The bus industry consists of a number of larger players operating in more than one city (Savonlinja-yhtiöt operating in 10 cities), and many small-sized operators: 40% of bus companies own fewer than 5 buses.

B.205 Data on public transport performance is provided by the Finnish Transport Agency (*Liikennevirasto*) on an annual basis, but includes railways, taxis, air transport and long-distance coaches. The following table is based on information provided by the Ministry of Transport and the association of bus and coaches *Linja-Autolitto*.

Table B.1: Public transport KPIs – Finland

Category	Performance indicator	Bus
Raw data	Total number of passengers transported (mil)	353
	Total passenger-kilometres (mil)	4,737
	Total vehicle-kilometres	442
Productivity	Passenger-kilometres per vehicle-kilometre	11
	Vehicle-kilometres per staff member	37,684
Financial	Fare revenue per vehicle-kilometre (€)	1.9
	Operating cost per vehicle-kilometre (€)	2.1
	Proportion of total operating costs covered by fares	73%
	Proportion of total operating costs covered by subsidy	27%
Service quality	Operating speed (km/h)	NA
	Passenger satisfaction (all modes)	19% High, 44% Good, 24% Median, 13% Low

Sources: Ministry of Transport and Telecommunication, Finland; Linja-Autolitto, Liikennevirasto; European Commission, 'European's Satisfaction with Urban Transport', 2014

Helsinki

Introduction

B.206 In the Helsinki region, comprising 7 municipalities including Helsinki, the public transport network consists of bus, tram, metro, commuter rail and ferry services. Helsinki City Transport (HKL), which is controlled by the city government, owns the public transport infrastructure and is responsible for its maintenance.

B.207 The regional authority (HSL) procures services:

- Tram and metro services are operated internally by HKL through a direct award regulated by a service agreement with HSL.
- Bus services are awarded through public tenders by HSL.

B.208 The tram infrastructure comprises 95 kilometres of tracks, with more than 10 kilometres added over 2010-2011 to serve new areas of urban development. The metro infrastructure is 21 kilometres long. There are almost 3,000 bus stops in the HSL, and integrated ticketing is in place across all transport modes.

B.209 Approximately 245 million trips are taken on public transport in Helsinki each year:

- 120 million are served by HKL on trams (57 million) and metro trains (63 million).
- 125 million on bus and ferry.

B.210 Public transport operations are subsidised by municipal funding, either through compensation of the PSC with HKL, or through direct funding /capital grants from HSL. The only exception is the Helsinki metro which makes an operating profit net of capital costs.

Local public transport trends and KPIs

B.211 The modal share of public transport in the Helsinki region is around 43%, much higher than national average (15%). This share has remained fairly stable since the late 1980s, following an increase in motorisation in the 1960s and 1970s.

B.212 We have estimated KPIs for local public transport in the Helsinki region as shown in Table B.1.: We have used publicly available sources, which tend to quote total figures for the main cities in Finland in aggregate. Overall, subsidies cover almost 50% of the operating costs of local public transport in the Helsinki region. Metro operating costs are not subsidised, and bus operations are the most heavily subsidised.

Table B.1: Public transport KPIs – Helsinki, Finland

Category	Performance indicator	Bus	Metro	Tram
Productivity	Passenger-kilometres per vehicle-kilometre	NA	27	22
	Vehicle-kilometres per staff member	NA	5,714	895
Financial	Fare revenue per vehicle-kilometre (€)	NA	2	7.5
	Operating cost per vehicle-kilometre (€)	NA	1.68	8.86
	Proportion of total operating costs covered by fares	NA	100%	85%
	Proportion of total operating costs covered by subsidy	NA	0%	15%
Service quality	Passenger satisfaction (1 to 5)	NA	3.92	4.14

Source: Ministry of Transport, HKL Annual Reports 2012-2013, Liikennevirasto

Key factors underlying the performance of local public transport

B.213 These include:

- Transport volumes have remained fairly stable in Helsinki over the past few years with a high modal share, although the growth of metro, bus and tram ridership (reaching record numbers in 2013) has been matched by an increase in car, walking and cycling trips. Emerging trends include increased use of public transport by younger residents and heavier reliance on car journeys by older residents.
- The public transport supply benefits from close cooperation between HKL and the regional government contracting authority HSL. A common ticketing and information services are available (80% of Helsinki’s residents own a travel card), and common planning processes are in place for investment in the urban transport network (depots, line extensions, station refurbishments). HSL also implements parking policies to discourage car use. The authority and the operator met 22 times over the course of 2013.
- HSL aims to increase residents’ involvement in public transport route network planning. In 2013, residents were consulted on the West Metro feeder bus services and tram route network reform. A map-based online survey was used for the first time in spring 2013 to study people’s travel habits in Luttasaari and southern Espoo, and an open blog was put online for people to follow and comment on the proposals. Residents meetings were also held in November and December 2014.
- A new on-demand bus service, Kutsuplus, based on an automated booking and control system, was introduced in autumn 2012. Travellers can book their rides via the website, SMS or a smartphone app. Requests are aggregated, and the system calculates an optimal

route that most closely satisfies pick-up and drop-off points by users. The cost of a ride is higher than by bus, but cheaper than by taxi. Kutsuplus thus aims to incentivise modal shift. The number of Kutsuplus vehicles is set to increase to 100 by the end of 2015.

- Other active policies for modal shift include HSL's 'Take a spring break from driving' campaign. Residents were offered a Travel Card with two weeks of travel time for free, targeting adults in the region. Over a period of ten months in 2012-13, 28,000 ordered a travel card and became new public transport customers. The campaign was especially effective with men: two-thirds of local public transport users in the region are women.

France

- B.214 In 2012, France had a population of 65.3 million inhabitants, with a population density of 103.4 inhabitants per square kilometre, and GDP per capita of €27,600, 2% more than in 2008. The economy has stalled since the global economic crisis, with 44% more unemployed workers in 2013 than in 2008.

Table B.1: France overview

France	2012	2008-2012 change
Population (million)	65.3	2.0%
GDP per capita (€)	27,600	-1.8%
Population density (inhabitants per square kilometre)	103.4	2.0%

Source: Eurostat

Overview of competent authorities and procurement in France

- B.215 In France, the powers relating to the organization of transport are distributed among the different territorial levels. The *LOTI* law from December 1982 on public transport created the framework for the organization of local public transport in France. For the distribution of powers between the various local authorities, the legislation distinguishes between urban public transport and intercity public transport.
- Municipalities or groups of municipalities are competent in their area of urban transport for the organization of urban transport;
 - Departments organize intercity transport;
 - The regions are responsible for organising non-urban road transport and rail lines across several departments that make up a region.
- B.216 The French central government coordinates transport at a state-wide level. In the Île-de-France region, the region which comprises the city of Paris and seven separate *Départements*, a single authority, STIF (*Syndicat des Transports d'Île-de-France*) is responsible for all local public transport in the region, including procuring transport services and setting the price of fares.
- B.217 In most cases, the SAPIN Act of January 1993 mandated local transport authorities to tender local public transport contracts competitively, although the Act also allows competent authorities to operate local public transport services themselves or to award contracts directly to a publicly-owned body or “*régie*”. As of 2012, around 90% of public service contracts were awarded following competitive tendering exercises.

Local public transport trends in France

- B.218 In the Île de France region, traffic data include heavy rail and are not consistent with the definitions used in this study.
- B.219 Outside the Île de France, the local public transport supply is approximately 711 million vehicle-kilometres.

- B.220 In 2012, car ownership remained above the EU average of 487, with 512 cars per 1,000 inhabitants. Demand for public transport has risen by nearly 30% between 2000 and 2012, while average demand in the EU has risen by around 8% same period³⁷.
- B.221 UITP estimates that 50,000 people were employed in this sector in 2012, outside Île-de-France.
- B.222 Outside Île-de-France, the average age of the rolling stock, owned in the majority of the cases by the Authorities rather than by the operators, is 7.5 years. In Île de France, there are just under 10,000 vehicles.

Île de France

- B.223 The Île-de France region has a single competent authority, STIF. Its missions are to define, organise, coordinate and fund public passenger transport services on behalf of all the local authorities of the region. Decisions of STIF are made in consultation with the operators: RATP, SNCF and OPTILE (a grouping of private bus businesses). In return, STIF compensates businesses for the daily operation of transport through contracts with objectives with RATP and SNCF and by a *convention* with OPTILE.
- B.224 The funding of operating expenses is based on:
- 30% from fares paid by the users
 - 38% from the transport tax
 - 20% public subsidies for 20% (51% from the Region, 30% from the city of Paris and the remaining 19% from the other *départements*)
 - 3% from other revenues (such as from advertising)
- B.225 Over the last 10 years, the total transport tax has increased in Île-de-France by 23% in constant currency, representing an average annual growth of 2.1%.
- B.226 In 2012, the mix of trips was:
- 37% by metro
 - 29% in RER trains
 - 23% in suburban buses
 - 8% Paris bus
 - 3% Paris trams

Rest of France

- B.227 With 287 provincial networks, urban public passenger transport in France has been estimated by a report from the *Court des Comptes*³⁸ to generate nearly € 9 billion of expenditure in 2012, including € 2.5 billion for investment. It recorded 27 million users, with 800 million vehicle-kilometres operated annually, and a usage growing rapidly (+ 25% over 2000-2010).
- B.228 Urban transport therefore plays a significant role in the daily lives of French citizens, especially as there has been a continued movement of urbanisation of the French population. The share of the population living in an urban area increased from 69% to 82.6% between 1982 and 2008. Between 1999 and 2008, urban areas grew by 39.2%, from 33% to 46% of the country.
- B.229 In France outside the Île-de-France there has been a recent expansion of the areas in which competent authorities must provide transport services. Between 2008 and 2012, there has

³⁷ Source: UITP, *Local Public Transport Trends in the European Union*

³⁸ “Les transports urbains publics de voyageurs”, Court des Comptes, Rapport public annuel 2015

been an increase of 40% overall in the size of the area, mostly in less densely populated areas, resulting in a 7% increase in the total population served.

- B.230 The largest two operators of France, Keolis and Transdev, each held between 30% and 40% market share (outside Île-de-France) in 2012. Only 10% of the provincial networks are operated under direct management. Some large networks (such as Nice, Clermont-Ferrand or Cannes) have recently reverted from competitive tender to an internal operator, but this is not yet a clear trend. With limited market players, the French Competition Authority has noted that organising authorities have little room for negotiation and that relations between authorities and delegates are often unbalanced. Some delegation contracts bind the organising authority to the same operator for a long period, but the average length of contracts is 7.7 years. Between 2005 and 2012, only 27% of the tenders competitively procured changed operators.
- B.231 The Competition Authority also stated that the sharing of production risks (on costs) and of commercial risks (revenue) appeared rather unfavourable to the organising authorities. This is despite 75% of contracts being based on the principle of a fixed contribution, with the intention to transfer these risks to the operator.
- B.232 It also noted that the information provided by the delegates did not always allow delegating authority to exercise effective control, with information sometimes incomplete, incorrect or unexplained. These deficiencies hamper analysis by competent authorities of the effectiveness and the efficiency of the services provided by the operators.
- B.233 Specific to France is the contribution made to the funding of transport services through the “*Versement Transport (VT)*”, a local tax of businesses located within the urban transport area. This tax is an essential element of the funding of public transport and amounted on average to 46% of costs in 2012. Of the remaining 54%, 35% of the funding came from local authorities, 2% from the State and 17% was paid by users through fares. In 2012 the competent authorities invested € 2.5 billion (excluding repayment of debt capital), including 51.3% for the work and 18.4% for rolling stock.
- B.234 There are some concerns about the sustainability of the French funding model. In 10 years, the VT raised has significantly increased (54% overall): with local authority funding this now averages €113 per person in 2012. However, cuts in central government grants to local authorities (€ 1.5 billion in 2014 and € 3.7 billion annually in 2015, 2016 and 2017) threaten the sustainability of the model.
- B.235 French transport users have benefited from many years of transport fares significantly below the actual cost. The average proportion of operating costs covered by fares is only 28.6%, or only 20% including depreciation, although this still largely varies with the size of the network and transport modes in operation.
- B.236 The development of operating expenses is highly correlated with that of the wage bill, which averaged 54% of the operating costs (excluding staff outsourcing) in 2012.
- B.237 Transport services are almost invariably procured as part of a multimodal network, and there only very few cases where services are individually procured, and little data is available by mode. In addition, given the fragmentation of responsibilities among authorities, national data on public transport in France only exists as bottom-up estimates and surveys collected by different government and research institutions.

Table B.1: Public transport KPIs – France

Category	Performance indicator	Île de France	Rest of France
Raw data	Total number of passengers transported	NA	NA
	Total passenger-kilometres	NA	NA
	Total vehicle-kilometres	NA	711
Productivity	Passenger-kilometres per vehicle-kilometre	NA	NA
	Vehicle-kilometres per staff member (000)	NA	14
Financial	Fare revenue per vehicle-kilometre (€)	NA	1.7
	Operating cost per vehicle-kilometre (€)	NA	5.4
	Proportion of total operating costs covered by fares	39.8%	28.6%
	Proportion of total operating costs covered by subsidy	19.8%	37.5%
Service quality	Operating speed (km/h)	NA	NA
	Passenger satisfaction (whole country)	19% High, 43% Good, 25% Median, 13% Low	

Sources: GART, UTP, CEDEMA, (note that some staff are outsourced); European Commission, ‘European’s Satisfaction with Urban Transport’, 2014

Grenoble

Introduction

- B.238 The competent authority in Grenoble is the *Syndicat Mixte des Transports en Commun de l’agglomération Grenobloise*. The population within the 311 square kilometres covered is just over 400,000 inhabitants and covers 28 municipalities, focused on the urban area with little sprawl towards less densely populated parts of the city. Grenoble therefore has a relatively high density of population within the area served.
- B.239 SEMITAG (or TAG), the partner company of Transdev (40% shareholder) and SMTC (52% of shares) operates almost the entire Grenoble network under a public service delegation on behalf of SMTC since 1975. Local entities own the remaining shares. Contracts are allocated after competitive tendering, with the current contract running for 7.5 years until 2020.
- B.240 The “*contribution financière forfaitaire*” contract in use means that the operator carries both cost and revenue risks, but investments remain the responsibility of the authority. Funding of the operator comes from fare revenue (27%) and grant revenues (68%). Half the grant is from the municipalities and half is from the *département*.
- B.241 Grenoble operates an integrated network of 44 bus lines and 4 (soon 5) relatively high frequency tram lines, introduced in the 1980s. Around 25% of the vehicle-kilometres are by tram and the remainder by bus. However there were more journeys by tram (58%) than by bus (42%).

Local public transport trends and KPIs

- B.242 Between 2008 and 2012, the number of trips per inhabitants in Grenoble has remained fairly stable. In 2010 French research centre CERTU estimated that Grenoble had one of the highest numbers of daily trip per inhabitant using public transport in France, at an average of 0.6.
- B.243 The share of fare revenue over operating costs in Grenoble remained stable between 2008 and 2012 at 26%-27%. Over the period the number of trips has remained static but, while Grenoble

increased fare revenues by 11%, operating costs rose 6%, which has required a 14% increase in the grant paid to the operator.

B.244 The main performance indicators for local public transport in Grenoble are shown below.

Table B.1: Public transport KPIs – Grenoble, France

Category	Performance indicator	2008	2012
Productivity	Passenger-kilometres per vehicle-kilometre	NA	NA
	Vehicle-kilometres per staff member (000)	10.5	10.3
Financial	Fare revenue per vehicle-kilometre (€)	1.7	1.9
	Operating cost per vehicle-kilometre (€)	6.4	7.0
	Proportion of total operating costs covered by fares	26%	27%
	Proportion of total operating costs covered by subsidy	63%	68%
Service quality	Operating speed (km/h)	NA	17.2 (tram) 17.8 (bus)

Source: CERTU, UTP, SMTC

Key factors underlying the performance of local public transport

B.245 These include that the following factors:

- Grenoble is a dense urban area, surrounding by mountains, with a single city centre.
- For more than 20 years there has been political action to promote alternatives to car transport, which now accounts for just under 50% of trips. This explains a higher than French average offer and public transport usage.
- The network has recently expanded with the opening of a new tramway line and extension of older lines.
- Grenoble has many universities and hence a high number of young people for its size.

Millau

Introduction

B.246 Millau is a small city located in the south of France with 24,300 inhabitants and surrounded by rural territories. The competent authority is *Communauté de Communes Millau Grands Causses*. The transport operator is Keolis who operates four bus lines with 7 vehicles, and transport on demand. It has 12 staff. Like Grenoble it operates under a “*contribution financière forfaitaire*” contract.

B.247 In 2010 the network was significantly redesigned, which led to cheaper fares, better matching of the frequency to demand (particularly for trips to/from work), an increase in the area served by public transport and more environmentally friendly and more accessible vehicles. The fleet was halved and the length of the network reduced from 200 kilometres to 68 kilometres.

B.248 Fares are now among the lowest in France, at €0.50 for a single ticket. However, with 268,998 trips, usage fell by 6% between 2012 and 2013, partly due to a fall in used by school children, following the removal of their free transport.

B.249 Nevertheless, since the launch of the new network in 2010, traffic is up by 30%. In 2013, sales of monthly passes and senior passes also rose (+ 5% and + 7%). Compared to 2008 supply, as measured in seat-kilometres, has increased by 28%, and journeys by 29%.

- B.250 Fare revenue has fallen by 31% over the period but has been compensated by a 21% increase in grant. Total costs have fallen by 35% overall, but operating costs have increased by 17%.
- B.251 A transport on demand service is available two to three days a week, although use fell in 2013, since when it has been operated by locally-based taxi drivers.
- B.252 The main performance indicators for local public transport in Millau are shown below.

Table B.1: Public transport KPIs – Millau, France

Category	Performance indicator	2008	2012
Productivity	Passenger-kilometres per vehicle-kilometre	NA	NA
	Vehicle-kilometres per staff member (000)	14.7	23.4
Financial	Fare revenue per vehicle-kilometre (€)	0.5	0.3
	Operating cost per vehicle-kilometre (€)	3.5	3.6
	Proportion of total operating costs covered by fares	14%	8%
	Proportion of total operating costs covered by subsidy	85%	88%
Service quality	Operating speed (km/h)	NA	NA

Source: CERTU

Key factors underlying the performance of local public transport

- B.253 One factor affecting performance is that cheap fares have stimulated demand but also depressed the proportion of operating costs covered by fares and hence increased the subsidy needed to balance the accounts of the operator.

Germany

- B.254 In 2012, Germany had a population of 81.8 million inhabitants, with a population density of 229.4 inhabitants per square kilometre. GDP per capita in 2012 was €30,200. This had increased by 3.1% over the period 2008-2012. Despite the global economic crisis in 2008, Germany's economy has continued to grow, partly due to structural reforms led by the Schroeder administration between 1998-2005.³⁹

Table B.1: Germany overview

Country	2012	2008-2012 change
Population (million)	81.8	-0.5%
GDP per capita (€)	30,200	3.1%
Population density (inhabitants per square kilometre)	229.4	-0.2%

Source: Eurostat

Overview of competent authorities and procurement in Germany

The overview of competent authorities and procurement in Germany that follows is derived from UITP Europe's 'Organisation and Major Players of Short-Distance Public Transport: New Developments in the European Union,' published in January 2015 and from the response received by the German Ministry

- B.255 In Germany, the federal states and the local authorities are responsible for planning, designing, organizing and funding local public transport. These modes of transport are regulated by the Passenger Transport Act (PBefG), which was first published in 1964 but last modified in 2013. The Act determines which bodies can act as public transport authorities. In addition, the latest amendment establishes the conditions for direct award of local public transport services, including cost-effective services, to municipal operators, in accordance with the provisions in Regulation 1370/2007. The local public transport authorities define the public transport interest and stipulate an appropriate range of services. They do so on the basis of the objectives and principles resulting from the federal states' local transport acts.
- B.256 In Germany, there are around 430 such public transport authorities. Most of these public transport authorities and/or most of the over 4,500 transport operators have been amalgamated to form integrated transport authorities with joint ticketing arrangements.
- B.257 Uniform fares, ranges of tickets, timetables and timetable information for the entire area covered by the integrated transport authority make it easier and more convenient for people to use local public transport.
- B.258 The Federal Government supports the federal states in funding local public transport by making annual payments on various legal bases, currently totalling way over € 8 billion. Under the Local Public Transport (Regionalization) Act, the federal states are first entitled to federal funding of around € 7.3 billion per year (as at 2014), which they can use primarily to finance local and regional passenger rail services, but which they can also invest into capital projects to improve local public transport.
- B.259 In addition, the federal states receive compensation payments to improve transport at the local authority level (local public transport and local road construction) totalling around €

³⁹ Source: CIA Factbook

1.336 billion per year under the Unbundling Act, plus further payments of € 332.6 million per year from the federal programme under the Local Authority Transport Infrastructure Financing Act, which can be used to provide pro rata funding for local rail infrastructure in conurbations.

- B.260 The federal states are responsible for dividing up the funding from the Unbundling Act between local public transport and local road construction. Since 2014, only capital expenditure has been ring-fenced.
- B.261 Most cities and counties rely on publicly-owned transport operators to provide local public transport services, and the vast majority of contracts to provide bus, tram and metro services are directly awarded by local authorities. In 2012, only 1% of local public transport services in urban areas was awarded following a competitive tendering exercise. Contracts for bus services tend to last for 10 years, while metro and tram services can last for up to 15 years. Subcontracting of bus services is common in Germany, with around 30% of bus services being allocated to subcontractors.
- B.262 Regarding the rail sector, the Ministry explained that it is not possible to provide a segmentation of information between urban rail and long distance rail. The following information thus relates to all local and regional passenger rail services. Since the reform of the railways in 1994, the regulatory framework for non-discriminatory network access for private railway undertakings and for fair competition on the railways has been created.
- B.263 Responsibility for local and regional passenger rail services was devolved to the federal states on 1 January 1996 (regionalization). Since then, competition has evolved in a positive manner, and the proportion of Deutsche Bahn AG's competitors providing local and regional passenger rail services is rising. In Germany, there are currently 27 public transport authorities which, as competent authorities appointed by the federal states, conclude contracts with the railway undertakings on the provision of transport services.
- B.264 The total number of local and regional passenger services increased by around 29 percent between 1993/94 (around 500 million train kilometres) and 2013 (around 644 million train kilometres). Private railways' market share of the train kilometres provided rose from 2.4 % in 1994 to 26.4 % in 2013. In 2012, passenger kilometres (pkm) travelled on local and regional passenger rail services totalled around 51.1 billion.
- B.265 According to DB AG estimates, private railways' share of passenger kilometres was 14.6 % in 2012 (source: DB AG 2013 and 2014 Competition Reports). Local public transport trends in Germany.
- B.266 The local public transport supply in Germany is approximately 2.0 billion vehicle-kilometres.
- B.267 In 2012, total local public transport demand was estimated at 50.9 billion passenger-kilometres, 67% of which was travelled on local buses and 33% on metro and tram services⁴⁰. The Ministry estimates 59.6 billion passenger kilometres in the public road sector in 2013, with an additional 16.7 billion on light rail and 89.6 billion on heavy rail. The total number of passengers carried by land-based public transport in 2013 is 11.9 billion, 9.4 billion of which travelling by bus and light rail (source Ministry). Light rail public transport records a traffic of 16,667 million passenger km in 2013 (on metro, tram and all other light rail systems).

⁴⁰ Source: ifeu – Institut für Energie- und Umweltforschung Heidelberg GmbH, Datenbank Umwelt & Verkehr 2013

- B.268 In national statistics, the public transport sector in Germany is typically sub-divided into the following segments: Road-based public transport statistics which cover local and regional regular bus services (38,334 million passenger km in 2013), long-distance regular coach services (2,729 million passenger km in 2013), and long-distance occasional/charter coach services (18,625 million passenger km in 2013). However, no distinction is made between urban and rural bus.
- B.269 Car ownership in 2012 was above the EU average of 487, with 539 cars per 1,000 inhabitants. Demand for public transport rose by around 12% between 2000 and 2012, above the EU average increase of around 8% for the same period.⁴¹
- B.270 UITP estimates that around 130,000 people were employed in this sector in 2013. We were unable to find any data on the number of transport companies operating in Germany.
- B.271 The Association of German Transport Companies (VDV) publishes annual statistics on the performance of their member companies, which collectively account for 91% of passengers transported and 90% of passenger-kilometres travelled in local public transport.
- B.272 The statistics in the following paragraphs refer only to member companies of the VDV, unless otherwise stated.
- B.273 The national bus fleet totals 40,000 vehicles, and around 6,800 train units provide metro and tram services. The average age is 7.5 years for buses used in urban public transport and 9.5 years for longer bus services. No information is available on the age of rolling stock used for metro and tram services.
- B.274 The Ministry also clarified that a Report by the Federal Government on cost recovery trends in local public transport was currently being prepared as part of a research project and should be available soon.
- B.275 The following table contains the KPIs we were able to calculate for Germany.

Table B.1: Public transport KPIs - Germany

Category	Performance indicator	VDV only
Raw data	Total number of passengers transported (mil)	9,355
	Total passenger-kilometres (mil)	76,355
	Total vehicle-kilometres (mil)	3,512
Productivity	Passenger-kilometres per vehicle-kilometre	22.7
	Vehicle-kilometres per staff member	15,310
Financial	Fare revenue per vehicle-kilometre (€)	7.0
	Operating cost per vehicle-kilometre (€)	6.3
	Proportion of total operating costs covered by fares	77%
	Proportion of total operating costs covered by subsidy	23%
Service quality	Operating speed (km/h)	NA
	Passenger satisfaction	11% High, 38% Good, 31% Median, 20% Low

Sources: Bundesministerium für Verkehr, Bau und Wohnungswesen; VDV (2014) VDV-Statistik 2013; European Commission, 'European's Satisfaction with Urban Transport', 2014

⁴¹ Source: UITP, *Local Public Transport Trends in the European Union*

Berlin

Introduction

- B.276 Berlin has a population of 3.5 million inhabitants and covers an area of 890 square kilometres. The local authority for public transport is Senatsverwaltung für Stadtentwicklung, which is responsible for defining service specifications and partly funding operating costs.

Local public transport services in Berlin consist of a large and dense network of regional rail, commuter rail (S-Bahn), metro, tram, bus and ferry services. Tram lines are found exclusively in the former eastern parts of the city, representing the heritage of the former socialist government. The different modes are well-connected at common interchange stations. All public transport services in Berlin and its surrounding metropolitan area are integrated within the common tariff area Verkehrsverbund Berlin-Brandenburg (VBB), meaning that with a single ticket travellers can interchange between the different modes as often as required within a permitted total journey duration and the tariff area.

- B.277 The two main operators of the public transport system in Berlin are BVG, running all metro, tram and bus lines, and S-Bahn Berlin, a subsidiary of the German incumbent rail operator DB, operating the commuter rail network. In addition, DB Regio and ODEG operate several regional rail services with important connections within the city and its metropolitan area.
- B.278 BVG operates under a public service contract between the Region of Berlin (represented by the Senatsverwaltung für Stadtentwicklung) and BVG itself. This public service contract is the first of its type in Berlin in the field of public transport, and came into force on 1 January 2008. It establishes the framework for the provision of local public transport services as well as the maintenance of the necessary infrastructure up to 2020.
- B.279 The contract was negotiated and concluded directly with BVG without competitive tendering. The ECJ requirements for internal awards were met, as BVG is wholly-owned by the region of Berlin, and the contract also anticipated the requirements of Regulation 1370/2007 valid from 3 December 2009 for “internal operators”⁴².

Local public transport trends and KPIs

- B.280 The main performance indicators for local public transport in Berlin are shown below.

⁴² Runge et Werner (2009) Der “Berliner Verkehrsvertrag”: Verkehrsvertrag zwischen dem Land Berlin und den Berliner Verkehrsbetrieben (BVG) AöR

Table B.1: Public transport KPIs – Berlin, Germany

Category	Performance indicator 2013	Bus	Metro	Tram	All modes
Productivity	Passenger-kilometres per vehicle-kilometre	15.3	108.7	28.2	32.6
	Vehicle-kilometres per staff member	NA	NA	NA	9,866
Financial	Fare revenue (in Mio. €)	NA	NA	NA	603.0
	Fare revenue per vehicle-kilometre (€)	NA	NA	NA	4.7
	Operating cost per vehicle-kilometre (€)	NA	NA	NA	NA
	Proportion of total operating costs covered by fares	NA	NA	NA	NA
	Proportion of total operating costs covered by subsidy	NA	NA	NA	NA
Service quality	Operating speed (km/h)	NA	NA	NA	NA
	Passenger satisfaction (1: high, 5: low)	NA	NA	NA	2.3

Source: VBB

Key factors underlying the performance of local public transport

B.281 These include:

- The 2013 German unemployment rate was 6.9%, up 0.1% on 2012, although employment increased by 0.6% over the same period.
- The 2013 Berlin unemployment rate, in contrast, was 11.7%, but had fallen by 0.6%, and employment has increased by 1.9%, faster than the national average.
- Extensive marketing initiatives had increased the sales of annual passes for the local public transport network in Berlin at annual rates of about 8% between 2011 and 2013.
- In addition, annual pass holders can now also use their electronic pass for the bicycle rental scheme of Deutsche Bahn and for several car-sharing schemes in Berlin. The objective is to further integrate new modes of transport into one common tariff and to increase customer comfort and satisfaction.
- A 2.2 kilometre long extension of the existing metro Line 5 is currently under construction. The extension will connect the 1.8 kilometre long metro line between the Hauptbahnhof (main train station) and the Brandenburg Gate, which is currently not connected to any other metro line in the network, and the existing metro Line 5. Together the three sections will be numbered as Line 5.

Greece

- B.282 In 2012, Greece had a population of 11.1 million inhabitants, with a population density of 84.8 inhabitants per square kilometre, and GDP per capita of €15,100, 19.7% less than in 2008. The Greek economy went into recession following the global economic crisis, and contracted sharply over the following years. In November 2014 the economy came out of recession, which had lasted for six years.

Table B.1: Greece overview

Greece	2012	2008-2012 change
Population (million)	11.1	-0.5%
GDP per capita (€)	15,100	-19.7%
Population density (inhabitants per square kilometre)	84.8	-0.8%

Source: Eurostat

Overview of competent authorities and procurement in Greece

The overview of competent authorities and procurement in Greece that follows is derived from UITP Europe's 'Organisation and Major Players of Short-Distance Public Transport: New Developments in the European Union,' published in January 2015, and from the response received by the Greek Ministry.

- B.283 Greece's Ministry of Infrastructure, Transport and Networks is responsible for local public transport at urban and rural levels. However, arrangements in the organisation of local public transport vary between the 13 separate regional authorities and 325 municipalities, each governed by elected local authorities. Regional and local authorities are responsible for the approval or modification of interurban and urban transport planning in their respective areas. The Greek Ministries of Transport and Finance set fare structures and tariffs centrally for all areas and modes of local public transport, and are also responsible for all public transport compensation and subsidies in the country.
- B.284 The regions of Attica (which includes Athens) and Thessaloniki have their own specific arrangements for the organisation and procurement of local public transport. Laws no.2669/98 and no.3920/2011 set the legal framework for urban public transport operation in the Attica prefecture. In Attica, bus, tram and metro services are operated by two 100% state-owned companies, which are subsidiaries of OASA SA, the competent authority for the region. The companies are directly awarded public service obligation contracts by OASA SA. In Thessaloniki, all bus transport services are provided by OASTH, a private sector company, which was directly awarded a public service contract by the Ministry of Transport for the exclusive provision of bus services in 2001 (renewed in 2008). In all other urban areas, local private cooperatives (KTELS) operate local public transport services as monopolies; KTELS also operate intercity passenger services at regional level.
- B.285 There is currently no competition in local public transport procurement in Greece: the only directly awarded public service contracts have been to the private sector monopoly in Thessaloniki and the state-owned companies in Attica mentioned above. However, recent legislation, passed to introduce competition to the market, has established an independent regulatory authority (RAEM) which will be responsible for all procurements of local public transport services in all Greek regions with the exception of Athens and Thessaloniki.
- B.286 National intercity/interurban regular lines are operated exclusively by the so-called KTEL S.A. and KTEL (acronym for Joint Receipts Fund of Buses) companies pursuant to Greek Law

2963/2001, a status reminiscent of a quasi-direct award of contract. There are 62 interurban KTEL companies operating approximately 4.500 intercity/interurban buses in Greece, in principle in each Regional Unit (ex-Prefecture), plus in each of the bigger islands in Greece (isolated geographical units).

- B.287 The Ministry of Economy, Infrastructure, Shipping & Tourism (General Administration for Transport/ Passenger Transport Directorate) is responsible for the elaboration of legislation and for setting the institutional framework, while the Regional Directorates for Transport & Communications (supervised by the Ministry of the Interior in their capacity as organic units of each Greek Region/Regional Unit) are competent for the implementation of the institutional framework and consequently for the supervision of the respective KTEL.
- B.288 With regard to the current institutional framework regulating the operation of KTEL companies, pursuant to the exception provided for in Article 8, par. 2.1 of Regulation 1370/2007 as far as awarding of contracts and provision of public interurban/intercity regular transport of passengers are concerned, the deadline for the provision of the services in question by the KTEL companies under the current status (namely, without call for tenders) has been set for December 2019.

Local public transport trends in Greece

- B.289 The local public transport supply in the two main networks of Athens and Thessaloniki is approximately 185 million vehicle-kilometres, but this excludes the KTEL network elsewhere.
- B.290 Eurostat estimates that total traffic is 22.8 billion passenger-kilometres annually, predominantly by bus.
- B.291 Car ownership in 2012 was below the EU average of 487, with 467 cars per 1,000 inhabitants.
- B.292 UITP estimates that 11,000 people are employed in this sector, with at least seven companies offering public transport services. The national bus fleet totals over 3,100 vehicles, but no data on the age of the fleet is available.
- B.293 The KPIs for Greece, based on the two main networks of Athens and Thessaloniki, are presented in the table below. No data was provided by the Greek Transport Ministry.

Table B.1: Public transport KPIs – Greece (Athens and Thessaloniki only)

Category	Performance indicator	All modes
Raw data	Total number of passengers transported (mil)	900
	Total passenger-kilometres (mil)	NA
	Total vehicle-kilometres (mil)	185
Productivity	Passenger-kilometres per vehicle-kilometre	NA
	Vehicle-kilometres per staff member	NA
Financial	Fare revenue per vehicle-kilometre (€)	1.74
	Operating cost per vehicle-kilometre (€)	3.5
	Proportion of total operating costs covered by fares	49%
	Proportion of total operating costs covered by subsidy	NA
Service quality	Operating speed (km/h)	NA
	Passenger satisfaction	13% High, 34% Good, 29% Median, 24% Low

Source: 'Financial Performance Report of Athens Public Transport', July 2012; European Commission, 'European's Satisfaction with Urban Transport', 2014

Athens

Introduction

- B.294 Athens is the capital and largest city of Greece. The Athens Metropolitan Area consists of densely populated municipalities surrounding the municipality of Athens (the city centre) in all directions. Greater Athens has a combined population of 2,640,701. In combination with Greater Piraeus, the city had a total population of 3,090,508 inhabitants in 2011, which makes it a dense urban area.
- B.295 The Athens urban area has rapidly spread in recent decades and continues to expand, mainly to the East and the North. Population trends and land availability data indicate that this expansion is gradually levelling off. Car ownership is yet to reach saturation point, but any further increases will be gradual and limited. Travel demand in Athens is primarily focused on two areas, with a very large percentage of journeys attracted to the Athens city centre and to the centre of Piraeus, the country's main port.
- B.296 Athens is served by a variety of transport modes, forming the largest mass transit system of Greece: a large bus fleet, a trolleybus fleet that mainly serves Athens's city centre, the city's metro, a commuter rail service and a tram network, connecting the southern suburbs to the city centre.

Local public transport trends and KPIs

- B.297 OASA S.A. is the responsible competent authority for the planning, co-ordination and control of all public transport modes in the Attica prefecture (buses, trolley buses, metro, urban rail and tramway). Two OASA affiliates, Road Transport (OSY) S.A (buses and trolley buses) and Urban Rail Transport (STASY) S.A. (metro system operation, urban rail and tramway) are responsible for the execution of transport services. These arrangements have been in place since 2011, when OSY S.A and STASY S.A absorbed a range of companies who had previously operated public transport in the city.
- B.298 The Athens metro has an operating staff of 387 and runs two of the three metro lines, the Red and Blue lines which were constructed largely during the 1990s, with the initial sections opened in January 2000. All routes run within the city entirely underground and a fleet of 42 trains consisting of 252 cars operate within the network, with 550,000 passengers daily.
- B.299 The Athens metro company does not service the ISAP (Electric Railway Company line), which for many years served as Athens's primary urban rail transport and is now the Green Line (line 1) of the Athens Metro network. Unlike the red and blue lines, ISAP has many surface sections on its route. This original metro line, from Piraeus to Kifissia, serves 22 stations, with a length of 25.6 kilometres, operating staff of 730 and a fleet of 44 trains and 243 cars. ISAP carries 600,000 passengers daily.
- B.300 Athens Tram SA operates a fleet of 35 vehicles, which serve 48 stations, employ 345 people with an average daily ridership of 65,000 passengers. The tram network spans a total length of 27 kilometres and covers ten Athenian suburbs. The network runs from Syntagma Square to the southwestern suburb of Paleo Faliro, where the line splits in two branches: one along the Athens coastline toward the southern suburb of Voula, and one toward the Piraeus district of Neo Faliro. Further planned extensions towards the major commercial port of Piraeus will include 12 new stations, increasing the overall length of tram route by 5.4 kilometres and expanding the overall transport network.

B.301 In recent years, ridership has declined, partly due to reliability concerns resulting from urban transport workers' strikes, along with the new fares policy. The economic crisis, which resulted in high unemployment, has also affected underlying demand.

B.302 The financial performance of public transport operators during the last decade resulted a cumulative debt of approximately €2.8 billion, and the government adopted a restructuring plan to make the public transport system more profitable. The 2011 restructuring plan dealt with the reduction of the operating deficit of all operators. The key points towards public transport consolidation are:

- Changes in pricing policy
- Merging of the transportation operators
- Implementation of an employee transfer program
- Connectivity and route development during summer
- Connectivity and route development during autumn and winter
- Changes in the administrative structure of the OASA group, as well as in key transport operators internal processes

B.303 The main performance indicators for local public transport in Athens are shown in the table below.

Table B.1: Public transport KPIs – Athens, Greece

Category	Performance indicator	Bus	Metro/Tram
Productivity	Passenger-kilometres per vehicle-kilometre	NA	NA
	Vehicle-kilometres per staff member	15,816	19,030
Financial	Fare revenue per vehicle-kilometre (€)	1.4	2.9
	Operating cost per vehicle-kilometre (€)	3.7	3.8
	Proportion of total operating costs covered by fares	37%	76%
	Proportion of total operating costs covered by subsidy	NA	NA
Service quality	Operating speed (km/h)	NA	NA

Source: 'Financial Performance Report of Athens Public Transport', July 2012

Key factors underlying the performance of local public transport

B.304 These include:

- In Athens, the unemployment rate increased on average by 5% annually between 2008 and 2012, reaching 25% in 2015. This has contributed to a reduction in patronage. A new fare policy was presented as a result of the 2011 restructuring plan which an impact of the level of demand.
- The implementation of a significant cost-cutting plan, which resulted in a reduction in operating expenditure in the last years.

Thessaloniki

Introduction

B.305 The metropolitan area of Thessaloniki has a population of 1 million inhabitants and covers an area of 1,455 square kilometres. Public transport in the area, comprising 14 municipal authorities, is served by a network of bus routes designed by Thessaloniki Public Transport Authority (the PTA) and operated by the Organisation of Urban Transportation of Thessaloniki

(OASTH), a company which was created to be the executing and operating agency of public transport in the greater urban area of Thessaloniki.

- B.306 The city is a major economic, industrial, commercial and political centre and also the capital of the Central Macedonian Periphery, as well as of the Macedonia and Thrace Region. The city continues to expand beyond the industrial areas to the west, and the international airport, commercial and business hubs, as well as agricultural land to the east. The centre of the city is home to the municipality, the historical centre, the Aristotle and the Macedonia University campuses, as well as numerous other educational, administrative and service institutions, and is, as such, the focal point of the city.
- B.307 It is estimated that at least 2,000,000 trips (public transport and private vehicles) are made in Thessaloniki per day, 25% of them in the city centre. The most recent traffic study in Thessaloniki shows that modal share is dominated by private transport, with public transport share falling from 34% to 25% between 1988 and 2008.

Local public transport trends and KPIs

- B.308 The Greek government assigns public transport services only to OASTH. with specific terms and conditions specified in the contract award. In 2009 the public transport network of Thessaloniki included 78 bus routes and extended approximately 50 kilometres out from the city centre. The network consists of urban routes, which serve the urban area of Thessaloniki, and suburban routes, which serve the municipalities and communities bordering the city. The form of the network is primarily radial with transit stations on the outskirts of the city and the wider commercial centre.
- B.309 Average service interval is 15 minutes on urban and 29 minutes on suburban routes, with annual output of approximately 42,000,000 vehicle-kilometres, 92% are spent on scheduled bus routes.
- B.310 In 2008, the planned annual capacity of the system was approximately 422 million passengers and actual usage was close to 177 million, with an average load factor of 42%.
- B.311 Following the financial crisis in 2008 and the subsequent effects on Greece's economy and levels of government spending, measures to address the new operational conditions in public transport were taken:
- Reduction of service hours (cutting early and late schedules)
 - Reduction of personnel (drivers) overtime
 - Reduction and/or cancelling of night bus schedules
 - Bus frequency reductions to reduce the number of vehicles required
 - Reduction of shareholders' return on equity
 - Low cost efforts to improve the quality of bus services; and
 - Increases of fare levels in conjunction with changes in transfer rules
- B.312 Improvements to the local public transport network in Thessaloniki are being implemented; in particular the introduction of a new metro system. The aim is for the city's transport system to adopt a "fishbone" structure, with the new metro system providing the "backbone" feeding the other lines of the system. The bus lines will function as branches and feeders, increasing the area coverage and operating as a complement to rapid transit.
- B.313 The contract of OASTH with the Greek government is coming to an end, but it is unclear whether the next contract will be competitively tendered.

B.314 The main performance indicators for local public transport in Thessaloniki are shown in the table below.

Table B.1: Public transport KPIs – Thessaloniki, Greece

Category	Performance indicator	Bus
Productivity	Passenger-kilometres per vehicle-kilometre	NA
	Vehicle-kilometres per staff member	68,910
Financial	Fare revenue per vehicle-kilometre (€)	1.3
	Operating cost per vehicle-kilometre (€)	2.9
	Proportion of total operating costs covered by fares	45%
	Proportion of total operating costs covered by subsidy	NA
Service quality	Operating speed (km/h)	NA

Source: 'Organisation and Major Players of Short Distance Public Transport', UITP Europe, January 2015

Key factors underlying the performance of local public transport

B.315 These include:

- The recent financial crisis in Greece has resulted in fuel price increases (+50%), reduction in gross incomes, increases in direct taxes, additional income and property taxes, increases in VAT and consequently a severe reduction in disposable income. For the public transport service the consequences have been an increase of operational costs and the reduction of state subsidy.

Hungary

- B.316 In 2012, Hungary had a population of 9.9 million inhabitants, a population density of 106.6 inhabitants per square kilometre and GDP per capita of €8,800, 1.2% less than in 2008. Hungary's economy was significantly affected by the global financial crisis in 2008, leading the government to secure a financial rescue package from the International Monetary Fund, European Commission and World Bank. However, in recent years the government has made good progress in reducing the deficit and the economy is showing signs of growth 1.1% GDP growth for 2013 and 3.6% for 2014⁴³.

Table B.1: Hungary overview

Hungary	2012	2008-2012 change
Population (million)	9.9	-1.1%
GDP per capita (€)	8,800	-5.4%
Population density (inhabitants per square kilometre)	106.6	-1.2%

Source: Eurostat

Overview of competent authorities and procurement in Hungary

The overview of competent authorities and procurement in Hungary that follows is largely derived from UITP Europe's 'Organisation and Major Players of Short-Distance Public Transport: New Developments in the European Union,' published in January 2015.

- B.317 The Hungarian Ministry of Transport (Ministry for National Development) is the responsible authority for national, regional and suburban public transport services in the country.
- B.318 Only the competent authority for the Municipality of Budapest is mandated to organise and procure local public transport and set passenger fares, but around 115 other municipalities also choose to exercise this option.
- B.319 Local public transport at municipality level is either directly awarded to transport operators or competitively tendered, in accordance with Regulation 1370/2007. The national law which regulates the passenger transport is law no. XLI of 2012 on passenger transport services. In October 2012, the Municipality for Budapest took the decision to liberalise the market for bus services in the city, which means that competitively tendering public service contracts will soon be in place in Budapest.
- B.320 Service providers are usually responsible for purchasing, operating and maintaining vehicles. Subcontracting of public service contracts is allowed if the conditions fall within those set out in the Public Procurement Act of Hungary (2007).

Local public transport trends in Hungary

- B.321 The local public transport supply in Hungary is approximately 421.7 million vehicle-kilometres, including all regional and local buses but excluding trains and Budapest local public transport. Around 69.7 million vehicle-kilometres of this total is local rather than regional.
- B.322 Demand for public transport has declined by nearly 20% between 2001 and 2012, and decreased sharply in 2009 but has since been recovering. Total traffic is 31.25 billion

⁴³ Source: CIA Factbook

passenger-kilometres annually including local and domestic services. 77.3% of journeys are by bus and 22.1% by metro, tram and rail services.

- B.323 Car ownership in 2012 was significantly below the EU average of 487, with 301 cars per 1,000 inhabitants.
- B.324 UITP estimates that 12,500 people are employed in urban transport and 17,000 in domestic bus transport, with more than 15 companies offering public transport services.
- B.325 In January 2015, the 24 state-owned regional bus companies were merged to form 7 bigger regional bus service providers. The national bus fleet totals around 17,300 vehicles, of which:
- 3,034 serve local public transport in Budapest; and
 - 6,503 are operated by regional Volan bus companies.
- B.326 Around 1,700 rail vehicles units provide metro, urban, regional and long-distance rail services. The average age of vehicles is 14.5 years for buses and 34.9 years for railway rolling stock.
- B.327 Estimated KPIs for Hungary are displayed in the table below. No data was received from the Ministry of National Development.

Table B.1: Public transport KPIs – Hungary (excluding Budapest)

Category	Performance indicator	Local buses excluding Budapest	Regional and suburban buses
Raw data	Total number of passengers transported (mil)	532.5	441.1
	Total passenger-kilometres (mil)	2,052	8,496
	Total vehicle-kilometres (mil)	82.54	410.6
Productivity	Passenger-kilometres per vehicle-kilometre	24.86	20.69
	Vehicle-kilometres per staff member	17,319	23,825
Financial	Fare revenue per vehicle-kilometre (€)	1.29	0.82
	Operating cost per vehicle-kilometre (€)	2.02	1.21
	Proportion of total operating costs covered by fares	63.6%	68.0%
	Proportion of total operating costs covered by subsidy	36.4%	32.0%
Service quality	Operating speed (km/h)	NA	25-37
	Passenger satisfaction (all modes)	12% High, 41% Good, 28% Median, 19% Low	

Sources: KTI SZI; VOLÁN yearly data; KSH; European Commission, 'European's Satisfaction with Urban Transport', 2014

Budapest

Introduction

- B.328 Budapest is the economic and social centre of Hungary, accounting for 40% of employment and GDP.
- B.329 The Centre for Budapest Transport (BKK) has been the competent authority, organising all transport related activities in Budapest including roads, taxis, freight regulations and in particular public transport since October 2010. It is responsible for the 525.13 square kilometre area of the Municipality of Budapest, which has a slowly growing population of 1.75 million inhabitants. After 20 years of decline beginning in 1990, since 2009 there has been a process of counter-suburbanisation, which has led to a rise in the population of Budapest.

- B.330 With the surrounding suburban areas of 81 settlements, the population includes 3 million of the national total of 9.9 million. The demand for commuting is high and about 40% of the share of public transport trips cross the Municipality's borders.
- B.331 There are different modes of public transport with the following mode share:
- 41% bus;
 - 27% tram;
 - 22% metro;
 - 5% trolleybus; and
 - 4.4% "HÉV" suburban train, cog-wheel railway, funicular and Danube river boat services
- B.332 Passenger information, ticketing, service management and dispatcher systems are integrated, as are regular passes and single tickets for these modes. However most suburban buses and state railway trains run by Volánbusz (a public company, but not organised by BKK) are integrated only with the monthly pass system and not with the full ticketing system.
- B.333 Under a directly awarded 10 year PSO contract begun in 2012, incumbent operator BKV (a public company) operates most of the urban public transport and some "HÉV" suburban train services under the authority of BKK.
- B.334 Following an open tender launched by BKK on the basis of a cost per kilometre operated, VT-Arriva is the second biggest service provider of urban buses, under a gross cost contract for 8+2 years with a bonus-malus system. As of May 2015 it operates 350 of the 1350 urban buses in Budapest.
- B.335 In January 2015, under a competitive PSO exercise similar to those undergone by VT-Arriva and Volánbusz, BKK ordered 28 hybrid articulated buses for 3 key cross-city downtown bus lines to be operated by T & J, an existing subcontractor of Volánbusz.
- B.336 Volánbusz operates most of the suburban buses and also some long distance buses with several smaller private subcontractors. It has a directly-awarded 8+2 year PSO contract until January 2017, when new competitors may enter into the market. In July 2014, Volánbusz put 150 new buses into operation for services to some suburban settlements which were previously served by BKV. They are financed under an individual contract partly by the Municipality of Budapest and partly by the independent settlements served. All other lines are financed either:
- By the Municipality of Budapest via BKK; or
 - By private actors, for some routes to shopping centres and important workplaces
- B.337 The incumbent rail operator MÁV-START Ltd. (public company) operates most of the suburban trains on 11 railway lines. All services are financed under PSO, until 2023, by the Ministry for National Development (NFM), which is responsible for regional passenger service financing. On 3 suburban railway (HÉV) lines, BKV operates services, financed by Budapest Municipality via BKK and also partly by NFM.

Local public transport trends and KPIs

- B.338 Services operated amount to 180 million vehicle-kilometres.
- B.339 Between 2010 and 2013, estimated total passenger-kilometres rose by 3.6% to 5.22 billion passenger-kilometres, and passengers boardings also rose to 1.41 billion in 2013.
- B.340 The modal share of public transport in Budapest is around 45%, with approximately 34% taken by private car, 2% by cycling and the remainder by walking. The rising share of cycling has been

supported by a growing number of cycling paths as well as the start of the public bike sharing system (Bubi) in the central area.

B.341 Several major infrastructure renewal projects took place between 2014 and 2015, many with EU co-financing. These included tram line reconstructions and the opening of the 6.7 kilometre long new metro line M4 in March 2014.

B.342 The KPIs estimated for local public transport in Budapest are shown in the table below.

Table B.1: Public transport KPIs – Budapest, Hungary

Category	Performance indicator	2014
Productivity	Passenger-kilometres per vehicle-kilometre	29.01
	Vehicle-kilometres per staff member	13,471
Financial	Fare revenue per vehicle-kilometre (€)	1.06
	Operating cost per vehicle-kilometre (€)	2.50
	Proportion of total operating costs covered by fares	44%
	Proportion of total operating costs covered by subsidy	59%
Service quality	Operating speed (km/h)	Bus 15.2, Metro 24.4, Tram 14.7

Source: BKV, BKK, KSH

Key factors underlying the performance of local public transport

B.343 These include:

- Budapest is the economic centre of Hungary and the population has been growing since 2009 by an average of 10,000 inhabitants per year, although at 1.75 million it is still far from the 2.1 million of 1989.
- The location of workplaces have changed mostly to the Western area (Budaörs edge city) from the former industrial areas of central-east Pest (Kőbánya, Csepel). The downtown area remains the most important destination for travel to employment and education. The city's unemployment rate (5.2%) is lower than the national average (7.1%) and the EU average, with a high concentration of qualified jobs thus higher income in Budapest.
- Due to the financial crisis, public funding remained low between 2010 and 2012 but has increased since 2013. This has been used to pay back €100 million of €300 million debt, and to co-finance infrastructure investments and replacement of rolling stock. In contrast to the previous two decades of increases in ticket prices, since January 2010 there has only been one general increase. In January 2013 the price of the most popular single tickets and passes rose 7-8%, but in January 2014 the Budapest Municipality General Assembly imposed a 10% reduction in the most popular monthly pass prices, which increased ticket revenue to nearly €200 million per year.
- Since October 2010 BKK has created a new image for public transport in Budapest with improved customer service, static and dynamic passenger information systems, improved ticketing systems and access to ticketing, and cleaner vehicles, all due to the bonus-malus system employed by service providers. The introduction of new rolling stock between 2011 and 2015 increased the share of low-floor buses from 24% to 65%, with a target of 100% by 2018. The average age of buses has fallen from 18 to 13 years.

Ireland

- B.344 In 2012, Ireland had a population of 4.6 million inhabitants, a population density of 67.1 inhabitants per square kilometre, and GDP per capita of €36,400, 7.4% less than in 2008. Ireland's steady economic growth during the 1990s and early 2000s had been reversed sharply by the global financial crisis, but since 2011 the economy has begun to grow again following a period of austerity and deficit reduction, with growth of 4.8% recorded in 2014⁴⁴.

Table B.1: Country overview

Country	2012	2008-2012 change
Population (million)	4.6	2.8%
GDP per capita (€)	36,400	-7.4%
Population density (inhabitants per square kilometre)	67.1	2.3%

Source: Eurostat

Overview of competent authorities and procurement in Ireland

The overview of competent authorities and procurement in Ireland that follows is derived from UITP Europe's 'Organisation and Major Players of Short-Distance Public Transport: New Developments in the European Union,' published in January 2015 and the response received from the Ministry.

- B.345 The National Transport Authority (NTA) is a statutory non-commercial body, which operates under the aegis of the Department of Transport, Tourism and Sport. It was established on foot of the Dublin Transport Authority Act 2008 and the Public Transport Regulation Act 2009. Under Part 3, Chapter 2 of the Dublin Transport Authority Act 2008, the NTA has statutory responsibility for securing the provision of public transport services by way of Public Service Obligation Contracts throughout the entire country:
- In the Greater Dublin area, the NTA is responsible for strategic transport planning, investment in public transport infrastructure, implementing integrated ticketing, fares and information schemes, and regulating fares.
 - Elsewhere, it has responsibility for the licensing of bus routes, procuring public transport services through public transport services contracts, and funding particular bus and rail services that are considered necessary for social or economic reasons.
- B.346 The Authority has four main Public Transport Service Contracts in place with operators in Ireland:
- Bus services are provided by Dublin Bus and Bus Éireann under a Direct Award contract with the NTA;
 - Rail services are provided under a Direct Award Contract with the NTA by Iarnród Éireann (Irish Rail);
 - Light rail services (Luas) are provided by Transdev under contract with the NTA and the Railway Procurement Agency following a competitive tender.
- B.347 Dublin Bus, Bus Éireann and Iarnród Éireann are part of the CIÉ group (entirely stated-owned statutory corporation). There are two minor Public Transport Service Contracts following competitive tender in place with M & A Coaches and Wharton Travel Limited to operate bus

⁴⁴ Source: CIA Factbook

services and further services are in the process of being tendered. Rural bus services which comprise approximately 1.7 million passenger journeys with 80% demand responsive are also provided under contract to the NTA.

- B.348 LUAS, the Dublin light rail system, is currently operated by Transdev Ireland, under tender from the Railway Procurement Agency, a state agency of the Department for Transport.
- B.349 The Public Transport Regulation Act (2009) made major changes to the bus licensing regime in Ireland, with the aim of increasing competition and giving all private and public bus operators the opportunity to bid for bus contracts. All bus operators in Ireland are now licensed to operate bus services.
- B.350 In 2009, the NTA directly awarded net cost service concessions for public service obligation (PSO) services, supported by NTA investment in fleet and facilities, to:
- Irish Rail for all rail services, for ten years
 - Bus Éireann and Dublin Bus for bus contracts in their respective areas, for five years, renewed for another five years in 2014.
- B.351 However, 10% of PSO bus contracts are to be tendered from 2016.
- B.352 The NTA is also responsible for administering a Rural Transport Programme which provides services to citizens whose travel needs are not met by existing bus or train services. The NTA procures the services of private operators for the scheme but Local Authorities advise the NTA on the contracts.
- B.353 The level of government funding for local public transport services dropped significantly during a period of public spending austerity following the financial crisis. The combination of economic conditions and net cost contracts has meant that operators have not performed well financially in recent years, but 2014 may have been a turning point, with increased passenger numbers across all modes.
- Local public transport trends in Ireland**
- B.354 The local public transport supply in Ireland is approximately 240 million vehicle-kilometres.
- B.355 There were 207.9 million passenger trips on local public transport in 2013:
- 68% by bus
 - 18% by rail
 - 14% by light rail
- B.356 Following a decline in local public transport usage during the economic recession, passenger numbers have begun to increase, with growth in all markets in 2014. Car ownership in Ireland in 2012 was below the EU average of 487, with 415 cars per 1,000 inhabitants.
- B.357 UITP estimates that 10,000 people are employed in the local public transport sector. The bus fleet totals over 2,300 vehicles nationally. In 2012, the average ages of the bus fleets were:
- 6 years for Dublin Bus
 - 5.6 years for the fleet for the city buses of Cork, Limerick, Galway and Waterford
 - 5.4 years for Bus Éireann's national routes
- B.358 The table below contains data for services which are part subsidised by the Irish government.

Table B.1: Public transport KPIs – Ireland

Category	Performance indicator	All modes	Dublin Bus	Urban bus outside Dublin	Rural and long distance bus (PSO)	Luas	Urban rail (DART)
Raw data	Total number of passengers transported (mil)	187.3	112.5	17.7	11.0	30.5	15.6
	Total passenger-kilometres (mil)	NA	NA	NA	NA	NA	NA
Productivity	Total vehicle-kilometres (mil)	92.2	50.1	7.4	8.5	3.5	2.6
	Passenger-kilometres per vehicle-kilometre	NA	NA	NA	NA	NA	NA
	Vehicle-kilometres per staff member	15,321	16,256	3,040	NA	7,234	NA
Financial	Fare revenue per vehicle-kilometre (€)	3.24	3.28	2.86	1.27	12.24	12.78
	Operating cost per vehicle-kilometre (€)	4.56	5.25	4.76	2.56	14.78	NA
	Proportion of total operating costs covered by fares	71%	64%	60%	50%	83%	NA
	Proportion of total operating costs covered by subsidy	24%	25%	97%	NA	9%	NA
Service quality	Operating speed (km/h)	NA	NA	NA	NA	NA	NA
	Passenger satisfaction (all modes)	19% High, 41% Good, 22% Median, 18% Low					

Source: Department of Transport, Tourism and Sport, Ireland; European Commission, 'European's Satisfaction with Urban Transport', 2014

Dublin

Introduction

- B.359 In 2009 the NTA took over responsibility for transport in Dublin from the Dublin Transportation Office. In 2011, Dublin county had a population of 1.3 million and the Greater Dublin area, which comprises the surrounding counties, had a population of 1.8 million people (9% more than in 2006). There is a high level of commuting from the surrounding counties.
- B.360 The public transport network consists of:
- Dublin Bus, serving almost 200 routes in the Greater Dublin area.
 - LUAS, a two line light rail network, 37 kilometres long and serving 54 stops (a connecting line between the two existing lines is currently under construction).
 - Bus Éireann, provides some commuter bus services to the neighbouring counties.
 - Irish Rail, commuter rail services operated on five heavy rail lines.
 - DART, an electrified suburban railway line also operated by Irish Rail.
- B.361 Apart from LUAS, operated by Transdev Ireland, all these companies are publicly-owned.

- B.362 The fare structures for each mode are broadly independent, although some ticket types are available for use on different modes. A national smart card introduced in 2011, the LEAP card, can be used on all modes and provides cheaper fares to passengers. For example, Dublin Bus passengers using a Leap card receive an average discount of 12%.

Local public transport trends and KPIs

- B.363 The estimated KPIs for local public transport in Dublin are shown in the table below.

Table B.1: Public transport KPIs – Dublin, Ireland

Category	Performance indicator	Bus	Tram
Productivity	Passenger-kilometres per vehicle-kilometre	NA	NA
	Vehicle-kilometres per staff member	16,256	7,234
Financial	Fare revenue per vehicle-kilometre (€)	3.28	12.24
	Operating cost per vehicle-kilometre (€)	5.25	14.78
	Proportion of total operating costs covered by fares	0.63	0.83
	Proportion of total operating costs covered by subsidy	0.32	0.09
Service quality	Operating speed (km/h)	NA	NA

Source: Department of Transport, Tourism and Sport

Key factors underlying the performance of local public transport

- B.364 Unemployment in Dublin has fallen from a peak of 13% in 2011 to just under 9% by early 2015. Following several years of extremely poor economic and financial circumstances, since 2012 the economy of Ireland and particularly Dublin has been steadily improving. However, since 2008 bus passenger journeys fell at a faster rate than employment levels and recovery in passenger numbers is slower than the rise in employment and gross national product. This may be due to higher fares required to cover the shortfall in passenger revenues and reductions in central government funding.
- B.365 Economic activity is recovering more quickly in the major urban areas (like Dublin) and this is reflected in faster growth in passenger numbers in these areas while in rural areas passenger numbers are not yet recovering. Population densities in Ireland are relatively low outside major cities and while rural populations have grown in recent years, this has often been in a dispersed manner, making it increasingly difficult to provide a public transport service that is a viable competitor to the car.
- B.366 From late 2011, Dublin Bus phased in a project called Network Direct introducing more direct, high frequency services with significantly improved connections across the city centre. Over 80% of Dublin bus routes have been affected. Dublin Bus has also invested heavily in technology including free Wi-Fi for passengers and an app which received over 400,000 downloads in 2013 alone.
- B.367 Total revenue for Dublin Bus grew by 6.8% in 2013, from €191.1 million to €204.1 million, aided by a fares increase of an average of 8% in December 2012/January 2013. Dublin Bus' cost base has been cut by €63 million since 2008 through significant changes in work practices, staff reductions and reductions in payroll premium rates. Both factors aided a net surplus of €0.5 million in 2013 compared with deficit of €3.8 million in 2012.
- B.368 Luas passenger trips grew by 4.5% in 2013 to some 30.5 million. This growth included particularly strong growth (15-20%) on the Luas Citywest and Luas Cherrywood extensions which in previous years had seen passenger numbers lower than originally forecast due to

postponement or abandonment, during the economic crises, of planned developments in the catchment areas of these lines.

- B.369 In the mid-2000s, as a part of an overall transport infrastructure investment programme for Ireland, the Government announced plans to develop several other LUAS lines in addition to a metro system in Dublin. While preliminary studies were undertaken for these developments, the plans were cancelled due to the onset of the economic crisis.

Italy

- B.370 In 2012, Italy had a population of 59.4 million inhabitants, a population density of 202 inhabitants per square kilometre, and GDP per capita of €22,800, 0.8% higher than in 2008. Although Italy has the third largest economy in the Eurozone, the country was significantly impacted by the recent recession, which produced a major rise in public debt. The country continues to face pressure from investors and other Eurozone nations to conduct structural reforms to encourage growth.⁴⁵

Table B.1: Italy overview

Italy	2012	2008-2012 change
Population (million)	59.4	0.8%
GDP per capita (€)	€22,800	-7.7%
Population density (inhabitants per square kilometre)	202	1.2%

Source: Eurostat

Overview of competent authorities and procurement in Italy

The overview of competent authorities and procurement in Italy that follows is largely derived from UITP Europe's 'Organisation and Major Players of Short-Distance Public Transport: New Developments in the European Union,' published in January 2015.

- B.371 With the exception of large cities, regional governments are the competent authorities for local public transport in Italy, following Legislative Decree n. 422/97 (*Decreto Burlando*). In cooperation with local governments, the regions are tasked with defining the optimal geographical areas in which public transport services are organised. Full separation between the competent authorities and the transport operators is mandatory.
- B.372 While the *Decreto Burlando* had made competitive tendering compulsory by 2009, later interventions have watered down this requirement (Law n. 99/2009) and allowed direct awards. The legislature attempted to introduce competitive tenders again in 2011, but this provision was overturned by a national referendum on local public services. The award procedure is usually prescribed in the regional transport laws that, on the basis of the overarching legislative framework, rule the governance of the sector.
- B.373 By 2012, 47% of road-based vehicle-kilometres tendered had been directly awarded in nine regions. Where competitively tendered, previous incumbents had won 78% of them.
- B.374 Public funding covers over 60% of operating costs. While funding has varied in recent years, the national government allocates circa €5-6 billion a year to a dedicated fund, split between competent authorities based on historic costs. Since 2015, a 10% share, which is expected to increase over time, is allocated according to relative improvements in efficiency targets.
- B.375 The local public transport legislative context has proven to be very unstable in Italy in the past 15 years. A new government decree, aimed at promoting the efficiency of the sector and boosting the use of local public transport, is expected in early 2015 and will be based on the "standard cost approach". It will determine the amount of public contribution to be provided for PSO in each area as the difference between the efficient cost of providing the service in that area and the revenues collected.

⁴⁵ CIA Factbook, <https://www.cia.gov/library/publications/the-world-factbook/geos/it.html>

Local public transport trends in Italy

- B.376 The local public transport supply in Italy is approximately 2 billion vehicle-kilometres.
- B.377 Total traffic is estimated at 36.5 billion passenger-kilometres annually. This number has remained fairly stable over the period 2007-2011 but car trips have declined nationally between 2009 and 2013, so the mode share of public transport has grown. However, car ownership in 2012 was significantly above the EU average of 487, with 621 cars per 1,000 inhabitants.
- B.378 72% of passengers travel by bus and 28% by metro, tram and rail services.
- B.379 UITP estimates that around 115,000 people are employed in this sector, with more than 1,200 companies offering public transport services. The sector is highly fragmented, with half of the companies employing between one and five employees, and no large national players.
- B.380 The bus fleet totals 48,000 vehicles nationally, and around 11,700 rail vehicles provide metro, urban, regional and long-distance rail services. The average age is 9.7 for buses and 21.9 years for railway rolling stock.
- B.381 Given the fragmentation of responsibilities among regions, national data on public transport in Italy is only available in the form of bottom up estimates and surveys collected by different government and research institutions. No aggregate financial data by specific transport mode is available at the national level.

Table B.1: Public transport KPIs – Italy

Category	Performance indicator	All modes	Urban bus	Rural bus	Long-distance bus*	Tram	Underground / Metro
Raw data	Total number of passengers transported (mil)	4,710	2,735	877	7.6	363	726
	Total passenger-kilometres (mil)	39,285	10,859	16,830	4,982	1.32	5.3
	Total vehicle-kilometres (mil)	2,068	726	1,021	166	38	117
Productivity	Passenger-kilometres per vehicle-kilometre	19	15	16	30	35	45
	Vehicle-kilometres per staff member	21,666	16,666	24,871	60,615	10,255	26,831
Financial	Fare revenue per vehicle-kilometre (€)	1.26	NA	NA	NA	NA	NA
	Operating cost per vehicle-kilometre (€)	4.4	NA	NA	NA	NA	NA
	Proportion of total operating costs covered by fares	29%	NA	NA	NA	NA	NA
	Proportion of total operating costs covered by subsidy	55%	NA	NA	NA	NA	NA
Service quality	Operating speed (km/h)	NA	NA	15	42	NA	NA
	Passenger satisfaction (all modes)	9% High, 31% Good, 29% Median, 31% Low					

Sources: SDG analysis of ISFORT (2014), Cassa depositi e prestiti (2012), Fondazione Caracciolo (2014), Conto Nazionale dei Trasporti. *Long-distance buses include interregional lines of national competence and lines to Switzerland of EU competence; European Commission, ‘European’s Satisfaction with Urban Transport’, 2014

Rome

Introduction

- B.382 Public transport in Rome is the responsibility of *Roma Capitale*, the local authority established in 2010, granting the municipal government (*Comune di Roma*) special administrative and financial powers. The metropolitan area has a population of over 2.8 million and covers an area of 1,285 square kilometres. A quarter of the resident population lives outside the main ring-road (GRA), in the suburbs and satellite towns and, with significant levels of in-commuting for both work and leisure, the number of daily passenger journeys is around 6.2 million.
- B.383 65% of vehicle-kilometres consist of bus, tram and trolleybus operations. Of bus services 80% are operated by ATAC, wholly owned by the municipality, and, following a competitive tender in 2010, 20% by Roma TPL Roma TPL, a public-private consortium.
- B.384 Local public transport also includes:

- Three Metro lines operated by ATAC
- Urban and suburban rail services operated mainly by Trenitalia, the national rail operator

B.385 ATAC operates under a service contract that has been directly awarded by the *Comune di Roma* and renewed in 2012 for the period 2013-2019. ATAC receives public funding from the regional budget (Regione Lazio), in the form of an annual subsidy intended to cover over 50% of costs. Revenue include fares, fines and commercial revenues such as parking fees and advertising.

Local public transport trends and KPIs

B.386 ATAC operated 160 million vehicle-kilometres and 2.5 billion passenger-kilometres (7% of Italy's local public transport volume), a decline of around 10% since 2010 and 13% since 2004. However, the modal share of public transport has grown from 16% in 2004 to 21% in 2014. In contrast with the overall trend, commuter journeys from outside the GRA have grown by 50%. A new Metro line C, and an extension to Metro line B, opened in 2014.

B.387 Estimated KPIs for local public transport in Rome are shown in the table below.

Table B.1: Public transport KPIs – Rome, Italy

Category	Performance indicator	2010 value	2014 value
Productivity	Passenger-kilometres per vehicle-kilometre	16	15
	Vehicle-kilometres per staff member	14,076	13,074
Financial	Fare revenue per vehicle-kilometre (€)	1.8	1.9
	Operating cost per vehicle-kilometre (€)	6.0	5.8
	Proportion of total operating costs covered by fares	29%	32%
	Proportion of total operating costs covered by subsidy	54%	56%
Service quality	Operating speed (km/h)	13	14

Source: SDG analysis of ATAC Annual Reports and Comune di Roma PGU 2014

Key factors underlying the performance of local public transport

B.388 These include:

- Socio-economic and demographic changes:
 - Moderate population growth, but progressive growth in the share of elderly resident with different mobility requirements.
 - Growth in the number of residents in the suburbs outside the GRA, from 18% in 1998 to 26% in 2012.
- Changes in economic activity, with economic contraction and high unemployment over 2009-2013 reducing the number of total passenger movements in the metropolitan area, both for private and public vehicles.
- Changes in funding:
 - High reliance on public funding, and particularly subsidies from the regional authority. Funding was cut by a third between 2010 and 2013, resulting in a multimillion deficit in ATAC's annual accounts for 2012-2013, and increased to around €500 million by the new regional government in 2014.
 - A substantial share of revenues comes from sources including parking fees and advertising. Elsewhere in Italy, regional law requires accounting or even

organisational separation between local public transport and other activities (see for example the Emilia Romagna network below).

- Ongoing legal disputes:
 - The decision by the *Comune di Roma* to extend ATAC's award until 2019 has been challenged by the Italian Competition Authority (AGCM), which contends that several provisions for competitive tendering, transparency and funding arrangements have not been met, including Article 6 of Regulation 1370/2007. A judgement by the regional court is expected in 2015.
 - The courts are also investigating claims of abuse of power by the former management team. Prosecutors claim that dozens of people without appropriate qualifications, including friends and relatives, were hired over the period 2008-2010.
- Overall impacts on efficiency: the efficiency of ATAC's operations in 2014 have been influenced by an ongoing period of economic stagnation, an unstable funding environment, controversies related to the extension of the award and political scandals. The 2015-2019 Business Plan presented to the local government plans to increase the share of fare revenue, including from a crackdown on fare evasion, reduce the average age of the bus fleet and reduce operating costs through a number of efficiency savings.

Emilia-Romagna

Introduction

- B.389 With about 4.3 million inhabitants (7.4% of the national total), Emilia-Romagna is the sixth Italian region in terms of population in Italy and third in terms of GDP per capita (about €32,500), making it one of the wealthiest regions in Europe.
- B.390 In 2012, about 42% of the regional population lived in the 13 metropolitan areas of the Region, defined as towns with a population over 50,000. Over the period 2000-2012 overall population in Emilia-Romagna grew 12% compared with a national average of 4.6%.
- B.391 In 2012, regional car ownership was 626 cars per 1,000 inhabitants, slightly higher than the national average of 621 cars per 1,000 inhabitants.
- B.392 Local public transport services in Emilia-Romagna are currently organised by nine reference areas, which correspond to the administrative provinces of the region, and include both urban bus services in major towns and the suburban services.
- B.393 In each of the nine provinces a local public transport agency is responsible for the procurement and management of local public transport public service contracts and for implementing the decisions taken by local authorities (provinces and municipalities) regarding the planning of local public transport.
- B.394 Services are operated by a consortium of transport operators which is awarded the contract after a competitive tender, but in all areas the company that leads the consortium and operates the majority of the service is publicly owned. These companies are:
- SETA SpA in Modena, Reggio Emilia and Piacenza
 - TPER SpA in Bologna and Ferrara
 - START Romagna SpA in Ravenna, Forlì-Cesena and Rimini
 - TEP SpA in the Parma area

B.395 The governance of the sector is currently experiencing a significant reorganisation. The region will reduce the number of reference areas from nine to five, requiring the Agencies to prepare plans for merging operations.

Local public transport trends and KPIs

B.396 In 2012 total output in Emilia-Romagna was 112 million vehicle-kilometres (5.9% of the national total) and 252 million passenger transported (5.2% of the national total). Passengers transported in 2012 were 2.5% less than in 2010 and 4.0% less than in 2008.

B.397 Bus fares rose between 2011 and 2013 through the “*Patto per la mobilità*” agreement, promoted by the region to improve the financial sustainability of the sector. In 2012, €260 million of public contributions were channelled to the bus local public transport in Emilia Romagna, covering about 67% of costs of operating the services. The share of operating costs covered by revenues, while still below the 35% target set for the sector, has increased steadily over the last three years.

B.398 The estimated KPIs for local public transport in Emilia-Romagna are shown below.

Table B.1: Public transport KPIs – Emilia-Romagna, Italy

Category	Performance indicator	2010	2012
Productivity	Vehicle-kilometres per driver	26,330	27,180
Financial	Fare revenue per vehicle-kilometre (€)	0.95	1.14
	Operating cost per vehicle-kilometre (€)	3.30	3.46
	Proportion of total operating costs covered by fares	29%	33%
	Proportion of total operating costs covered by subsidy	71%	67%
Service quality	Punctuality (Buses arriving between -2 and +5 minutes)	92%	94%

Source: SDG analysis of Emilia Romagna local public transport Monitoring Report 2014

Key factors underlying the performance of local public transport

B.399 These include:

- Socio-economic and demographic changes
 - Moderate population growth, but progressive growth in the share of elderly resident with different mobility requirements.
 - Increases in the number of residents in the suburbs outside main city centres, especially around the Bologna area.
- Transport demand habits:
 - On average people living in Emilia Romagna make about 9 million trips per day, about two thirds of which are within urban centres. Private vehicles account for more than 70% of modal share, with local public transport services and cycling accounting for about 7% and 10% each.
 - The region and local municipalities are investing in action to promote cycling and its integration with local public transport.
- Changes in integrated ticketing: the region has been implementing a region-based integrated ticketing scheme (“Mi nuovo”, that enables users to pay for the different local public transport services (and bike sharing schemes) across the region with the same card. The scheme will be progressively refined over the coming years.

- Changes in funding:
 - Despite the decline in the national resources made available for the financing of local public transport services, Emilia Romagna managed to maintain the resources targeted at the sector through a shift of funding from other sectors and the adoption of a series of specific measures.
 - An agreement (“Patto per la mobilità”), signed by all the stakeholders, which increased the fare revenue per vehicle-kilometre, securing the financial sustainability of the sector in the last few years, and reducing the proportion of operating costs covered by public funding.
- Ongoing reorganisation in place:
 - The region has promoted the merger of key public owned local public transport operators.
 - Drivers productivity has improved recently, but still is still scope for improving operational efficiency.
 - To promote scale economies, the region has reviewed the extension of the reference areas for the provision of local public transport.
- Ongoing amendments in the financing system. Consistent with national goals and Regulation 1370/2007, the region is reviewing the mechanisms in place to finance public service obligations in local public transport. The new scheme, expected in coming months, will be based on the “standard cost approach” and determine the amount of public contribution to be provided for PSO in each reference area as the difference between the efficient cost of providing the service in that area and the revenues collected.

Latvia

- B.400 In 2012, Latvia had a population of 2 million inhabitants, a population density of 32.7 inhabitants per square kilometre, and GDP per capita of €6,800, 2.9% less than in 2008. Latvia's economy went into severe recession following the global financial crisis, but has shown strong growth over the last few years, following financial support from the European Commission and International Monetary Fund. The Latvian government remains committed to reducing the country's fiscal deficit and has embarked on a mass privatisation of state-owned institutions⁴⁶. Latvia adopted the euro as its currency in 2014.

Table B.1: Latvia overview

Country	2012	2008-2012 change
Population (million)	2	-6.7%
GDP per capita (€)	6,800	-2.9%
Population density (inhabitants per square kilometre)	32.7	-6.6%

Source: Eurostat

Overview of competent authorities and procurement in Latvia

The overview of competent authorities and procurement in Latvia that follows is derived from UITP Europe's 'Organisation and Major Players of Short-Distance Public Transport: New Developments in the European Union,' published in January 2015 and from the response received from the Ministry.

- B.401 The Ministry of Transport has responsibility for overall governance of public transport and transport legislation in Latvia. The Public Transport Board, formed in 2014, is responsible for transport planning, financing and organisation at a regional level, and sets tariff rates in Latvia's regions. The Road Transport Administration, a 100% state-owned company, organises public transport service procurement in the country. Latvia's nine major cities each have individual responsibility for organising local public transport in their respective areas.
- B.402 The institutions involved in the provision of public transport services are:
- The Ministry of Transport of the Republic of Latvia;
 - The Public Transportation Board;
 - The Road Transport Administration; and
 - The local governments of Republic cities (9 cities with republic status).
- B.403 Public transport in Latvia is divided into two levels of governance:
- Regional, including regional routes of interurban significance, regional route of local significance and all railway routes.
 - Municipal, including routes of city significance, which provides movement within the administrative boundaries of a republic city, as well as from such city to the nearby territories.
- B.404 Riga is the capital and largest city: half the two million people living in Latvia live in Riga or Riga metropolitan area. All nine cities have bus services, Daugavpils and Liepaja also have trams, and Riga also has trams and trolleybuses.

⁴⁶ Source: CIA Factbook

- B.405 The competence of authorities in the field of public transport services, the conditions for operation and organisation of public transport services and the main financing principles are governed by Law on Public Transport Services. According to the Ministry, all national legislation in field of public transport services is aligned with the principles of Regulation 1370/2007 and the Law of Public Transport services (the PSO Regulation) in force as of 15 July 2007.
- B.406 Local public transport services in Latvia are either tendered to private companies or directly awarded to companies owned by their respective cities or municipalities. Contracts are directly awarded in the capital city of Riga.

Local public transport trends in Latvia

- B.407 There are 57 bus companies operating intercity and local bus routes, 2 rail companies and 15 companies for city transport bus, tram and trolleybus provided regular public transport services in Latvia. All these companies are nationally owned.
- B.408 Total estimated bus use was 2.3 billion passenger-kilometres in 2013: 38% by rural and long-distance buses, 36% by city buses and 26% by trams and trolleybuses.
- B.409 2013 passenger numbers⁴⁷ were 239.3 million passengers in total, 146.1 million of them on bus. According to the Central Statistical Bureau (CSB), in 2014 trams carried 45 million passengers and trolleybuses carried 47 million.
- B.410 Car ownership in 2012 was significantly below the EU average of 487, with 305 cars per 1,000 inhabitants. Over the period 2000–2012, demand for public transport declined by 30%, compared to an EU average of 8% growth.
- B.411 UITP estimates that 6,600 people are employed in this sector. There are more than 22⁴⁸ companies offering public transport services.
- B.412 The national bus fleet totals 4,845 vehicles with an average age of 11 years. No data on the age of trams and trolleybuses are available.
- B.413 The estimated KPIs for Latvia are listed in the table below.

⁴⁷ Statistics Latvia

http://data.csb.gov.lv/pxweb/en/transp/transp_ikgad_transp/TR0270.px/table/tableViewLayout1/?rxid=a79839fe-11ba-4ecd-8cc3-4035692c5fc8

⁴⁸ http://www.balticbiogasbus.eu/web/Upload/Regional_seminars/MoreBBB/Riga_2013/1_MBBB_Riga_Public_transport_Latvia.pdf

Table B.1: Public transport KPIs – Latvia

Category	Performance indicator	All modes
Raw data	Total number of passengers transported (mil)	229
	Total passenger-kilometres (mil)	2,923
	Total vehicle-kilometres (mil)	NA
Productivity	Passenger-kilometres per vehicle-kilometre	NA
	Vehicle-kilometres per staff member	NA
Financial	Fare revenue per vehicle-kilometre (€)	2
	Operating cost per vehicle-kilometre (€)	5
	Proportion of total operating costs covered by fares	40%
	Proportion of total operating costs covered by subsidy	60%
Service quality	Operating speed (km/h)	NA
	Passenger satisfaction	18% High, 47% Good, 25% Median, 10% Low

Sources: CSB, Transport in Latvia 2014, Public Transport System of Latvia Andulis Židkova, Board member, Road Transport Administration, Public Transport System of Latvia Andulis Židkova Board member Road Transport Administration; European Commission, 'European's Satisfaction with Urban Transport', 2014

Riga

Introduction

- B.414 Riga's territory covers 307.17 square kilometres and it is the largest city of the Baltic States. More than a third of Latvia's population lives in Riga and more than half lives in the wider metropolitan area. The population of Riga city municipality is 706,000 with a density of 2,301 person per square kilometre. Several large universities and other higher education schools are located in the city, attracting large number of students from other parts of Latvia.
- B.415 Public transport in Riga is primarily provided by "Rīgas Satiksme" which offers a transport service to nearly every area throughout Riga. The tram is the most frequently used mode of public transport. Riga's administrative divisions consist of six administrative entities: Central, Kurzeme and Northern Districts and the Latgale, Vidzeme and Zemgale Suburbs.
- B.416 The publicly-owned company provides passenger transport by buses, trolleybuses and trams, various forms of transport for rent, and street and underground parking services in Riga city. It operates:
- 432 buses on 53 routes
 - 264 trolleybuses on 19 routes
 - 218 trams on 9 routes
- B.417 The municipal enterprise is subsidised by the municipality for carrying passengers with reduced fare tickets, and other income is generated by fares. All public transport uses the same integrated electronic ticketing system (E-wallet, Pupil's e-card, Riga resident's card, Tourist's card) valid on all modes.
- B.418 Rīgas Satiksme, founded on 20 February 20 2003, is a company with share capital 100% owned by Riga city municipality and the legal status of Riga municipal limited liability company. Its activities include responsibility for the operation of the city's car parks. It currently employs nearly 4,300 staff members Data on the PSC contract between the company and Riga municipality is unavailable.

B.419 Modal share of public transport in Riga and its surroundings has decreased considerably in the past decade from over 80% in the Soviet period to an estimated 35-40%, still relatively high compared to West European countries. Modal split remained broadly static over the period 2001-2010, and in 2010 was estimated as 35% cars, 35% public transport, 29% walking and 1% other modes.

Local public transport trends and KPIs

B.420 The city of Riga is implementing sustainable urban transport measures in cooperation with the municipal public transport enterprise. Public transport is well-used and renovation programmes were launched to upgrade existing vehicles and buy new vehicles for the city.

B.421 Estimated KPIs for local public transport in Riga in 2013 are shown in the table below.

Table B.1: Public transport KPIs – Riga, Latvia

Category	Performance indicator	Bus
Productivity	Passenger-kilometres per vehicle-kilometre	28.47
	Vehicle-kilometres per staff member	10,619
Financial	Fare revenue per vehicle-kilometre (€)	0.27
	Operating cost per vehicle-kilometre (€)	0.83
	Proportion of total operating costs covered by fares	32%
	Proportion of total operating costs covered by subsidy	67%
Service quality	Operating speed (km/h)	16-21

Source: <https://www.rigassatiksmelv/en/news/-rigas-satiksmel-stable-results-in-financial-year-2013/>; Ministry of Transport Republic of Latvia Development of Riga and Pieriga Mobility Plan; <https://www.rigassatiksmelv/en/news/150-526-484-passengers-carried-by-public-transport-in-2014/>; RĪGAS PAŠVALDĪBAS SABIEDRĪBAS AR IEROBEŽOTU ATBILDĪBU "RĪGAS SATIKSME" OPERATĪVĀ INFORMĀCIJA-2014. GADA PĀRSKATAM

Key factors underlying the performance of local public transport

B.422 These include:

- Riga is a local economic centre and a port city that creates large number of workplaces. People commute daily from the surrounding region to the Riga. Public transport is funded from both the local budget of Riga municipality and the national budget, but reduced subsidies from the national budget in more recent years led to increased ticket prices.
- While state subsidies were cut due to economic crisis, subsidies from the municipality have increased as it decided to expand the variety of reduced fare tickets available. Increases in VAT for public transport have also had to be covered by subsidies.
- The public transport network is well-developed within the city limits and no major changes were made to the network itself, but significant investments in new vehicles have been made over the last decade.
- A mobility plan and action programme for Riga and its surroundings is being developed. The city's strategic approach to transport management is currently defined by the Riga Public Transport Development Concept 2005, which was approved in 2005 by the Riga City Council. The main goal of the concept is to guarantee that all social groups have access to a quality means of public transport as an alternative to private cars. Among the main tasks are to ensure the priority of public transport in road traffic; to integrate the public transport network; to develop an electronic ticketing system; and to develop a low-floor tram system. Since May 2009, an electronic ticketing system has been in operation in the city's public transport system. The first low-floor tram in Riga was put into service in 2010

and 9 kilometres of public transport lanes have been introduced in the city centre in the last three years.

Lithuania

- B.423 In 2012, Lithuania had a population of 3 million inhabitants, a population density of 47.7 inhabitants per square kilometre, and GDP per capita of €8,100, 1.26% more than in 2008. Although Lithuania's economy went into recession following the global financial crisis, the government engineered a return to growth through a programme of economic reforms, increasing exports and encouraging foreign investment⁴⁹.

Table B.1: Lithuania overview

Lithuania	2012	2008-2012 change
Population (million)	3	-6.5%
GDP per capita (€)	8,100	1.26%
Population density (inhabitants per square kilometre)	47.7	-6.5%

Source: Eurostat

Overview of competent authorities and procurement in Lithuania

- Public transport services in Lithuania are provided by both private operators and municipality entities. Requirements for public transport procurement are provided in the Codex of Road Transport service of the Republic of Lithuania, which implements requirements for competitive tendering as required by Regulation 1370/2007. Lithuania has a three-tier administrative division: the country is divided into 10 counties, and these counties are further subdivided into 60 municipalities;

- B.424 Municipalities are responsible for organising public transport service in their territory. With few exceptions, municipality enterprises run all public transport services on routes within a city, suburbs and countryside.
- B.425 However, municipal enterprises usually only serve routes within their own territory and territories of neighbouring municipalities, and interurban transport services are mostly provided by private entities.
- B.426 Municipality enterprises are heavily subsidised by municipalities, as they provide services that are not financially viable, either due to the small numbers of passengers from small settlements in the countryside or due to reduced fares for students, elderly and disabled. New buses are also funded from the municipal budgets.
- B.427 Private operators receive compensation for subsidised tickets or on specific routes that are not financially viable.
- B.428 There are no official data on subsidised interurban routes operated by private operators. However, only two of the sixty municipalities are fully or partially served by private operators: the remainder use municipal operators, with private operators only providing complimentary service. Both private and municipality operators get their main income from fares, but municipality enterprises are also funded by municipal budget.

Local public transport trends in Lithuania

- B.429 According to the Ministry of Transport and Communications in Lithuania, over 200 million passengers were transported in 2013. Public transport is only provided by buses and

⁴⁹ Source: CIA Factbook

trolleybuses in Lithuania, and there are no metro, riverbus or light rail services in the country. Railway transport is not integrated with the urban system.

- B.430 Total annual passenger volume in 2013 was 736 million passenger-kilometres, all by bus or trolleybus. However, the number of private cars in Lithuania increased and the number of public transport trips declined nationally between 2009 and 2013, leading to a fall in public transport mode share.
- B.431 In 2014 there were 1.2 million private cars in Lithuania. In 2012, car ownership was significantly above the EU average of 487, with 590 cars per 1,000 inhabitants.
- B.432 Around 8,000⁵⁰ people are employed in the public transport sector, with more than 70 companies offering public transport services.
- B.433 The bus and trolleybus fleet totals 12,500 vehicles nationally, with an average age of 14 years.
- B.434 Some of the KPI information set out below is taken from the Ministry of Transport and Communications in Lithuania, while some has been estimated from researching case studies of public transport companies operating in the country that publish their data.

Table B.1: Public transport KPIs – Lithuania (limited operators only)

Category	Performance indicator	All modes
Raw data	Total number of passengers transported (mil)	200.69
	Total passenger-kilometres (mil)	736
	Total vehicle-kilometres (mil)	34.9
Productivity	Passenger-kilometres per vehicle-kilometre	21
	Vehicle-kilometres per staff member	4,362.5
Financial	Fare revenue per vehicle-kilometre (€)	0.6
	Operating cost per vehicle-kilometre (€)	0.9
	Proportion of total operating costs covered by fares	up to 50%
	Proportion of total operating costs covered by subsidy	up to 50%
Service quality	Operating speed (km/h)	Approximately 20 in bigger cities
	Passenger satisfaction (all modes)	13% High, 35% Good, 29% Median, 23% Low

Source: Ministry of Transport and Communications, Lithuania; European Commission, ‘European’s Satisfaction with Urban Transport’, 2014

Vilnius

Introduction

- B.435 Vilnius is a rather sparsely populated city spread out over a large area, with population density of only 1,381 per square kilometre. The current population of Vilnius city municipality is 538,000. However, several large universities and other higher education schools are located in the city, attracting large number of students who do not usually register as official inhabitants of Vilnius city municipality, and are therefore excluded from official demographic statistic data.

⁵⁰ Data by The Lithuanian National Road Carriers’ Association LINAVA

- B.436 Public transport in Vilnius city municipality is organised by the Vilnius city municipality and the municipality enterprise “Susisiekimo paslaugos”, which is responsible for managing and running public transport services within municipality limits.
- B.437 The majority of jobs are within the city centre. Large numbers of employees commute from suburbs and more residential neighbourhoods to the city centre and several other locations with a high concentration of work places, such as university campuses.
- B.438 Vilnius is one of the most motorised cities in European Union, with 634 personal vehicles per 1000 inhabitants.
- B.439 Two modes of public transport are available in Vilnius city municipality, buses (including minibuses) and trolleybuses. Minibuses, operated by private operators, are used in suburbs to carry passengers to the main public transport lines routes.
- B.440 The municipal operator is directly awarded its contract, while private operators for access routes are awarded through competitive tenders.
- B.441 The municipality operates both buses and trolleybuses, which use the same integrated electronic ticketing system. The mostly small private operators use mainly minibuses.
- B.442 The municipal enterprise is subsidised by the municipality for carrying passengers with reduced fare tickets, with their other income coming from fares. Private operators are subsidised for reduced fare tickets and also receive fares income, but only the municipal enterprise gets funding from the municipality for new buses/trolleybuses.
- B.443 Large investments in vehicles for the municipal enterprise, but not for private operators, may be co-funded from national programmes.

Local public transport trends and KPIs

- B.444 Modal split in Vilnius changed significantly over the period 1997-2015:
- In 1997, 45% of trips were made using public transport and only 23% were made using private vehicles.
 - In 2011, 31% of trips were made using public transport and 33.2% were made using private vehicles.
 - In 2015, a shift to back to higher use of public transport is expected, raising the share to 35.5% due to the introduction of BRT.
- B.445 In 2013, BRT routes and public transport lanes were introduced to the city, but there have been no other major changes to the network in the past decade. Estimated passenger-kilometres have been broadly static at around 96,800 kilometres per day in 2001 and 2013, but the number of passenger journeys rose from 237 million in 2001 to 275 million in 2010.
- B.446 Estimated KPIs for local public transport in Vilnius are shown in the table below.

Table B.1: Public transport KPIs – Vilnius, Lithuania

Category	Performance indicator	Bus/Trolleybus
Productivity	Passenger-kilometres per vehicle-kilometre	16.42
	Vehicle-kilometres per staff member	32,200
Financial	Fare revenue per vehicle-kilometre (€)	1.95
	Operating cost per vehicle-kilometre (€)	1.72
	Proportion of total operating costs covered by fares	60%
	Proportion of total operating costs covered by subsidy	40%
Service quality	Operating speed (km/h)	Trolleybus: 17.3 km/h; Bus: 21 km/h; Express bus: 22 km/h

Source: Plan for expansion of bike road network in Vilnius, Municipal enterprise “Vilnius planas” 2014; Statistical pocketbook 2012 transport in figures EU 2012; Vilnius city public transport, presentation by Municipal enterprise Susisiekimo paslaugos 2013

Key factors underlying the performance of local public transport

B.447 These include:

- Vilnius is the economic centre of Lithuania. The financial crisis had an impact on the economy, which has now recovered and the economy is steadily growing. The city attracts a large number of employees from the suburbs and surrounding smaller cities. There has also been a trend during the last decade of moving into private housing in the suburbs, encouraging urban sprawl and reducing the density of population. People living in the suburbs usually use private cars. Vilnius municipality is not responsible for providing transport services in some residential areas outside the city limits where the number of transport users is too small for regular services.
- While some offices are located in more remote areas with cheaper rent and land, most workplaces are still located in the city centre causing intense traffic during the peak hours.
- The funding available for public transport is limited. There have also been cases where the payment of compensation or subsidies by the municipality is late. Recent subsidy levels have been static, as numbers of passengers transported and annual vehicle-kilometres have changed very little. Subsidies and compensations are allocated to municipal enterprises from the municipal budget and in some cases funds are allocated to “more important” matters, resulting in a loss for the municipal operator.
- There have been no major changes in fares or the public transport system nationally in the last decade, although Vilnius introduced public transport lanes and BRT like bus routes, based on popular routes.

Luxembourg

- B.448 In 2012, Luxembourg had a population of 0.5 million inhabitants and a population density of 205 inhabitants per square kilometre. The Grand-Duchy of Luxembourg is a small country, in close proximity to France, Belgium, and Germany. It has a high-income economy. Following the financial crisis its GDP fell nearly 9% over the period 2008-2012, but GDP per capita in 2012 remained the highest in the euro zone at €62,600.

Table B.1: Luxembourg overview

Luxembourg	2012	2008-2012 change
Population (million)	0.52	+8.5%
GDP per capita (€)	62,600	-8.88%
Population density (inhabitants per square kilometre)	205.3	+8.6%

Source: Eurostat

Overview of competent authorities and procurement in Luxembourg

- B.449 According to the amended law of 29 June 2004 on public transport, the Ministry of Transport is the competent authority in charge of planning transport supply and services, pricing policy, negotiation of public service contracts, financial management and remuneration of operators.
- B.450 The operators are responsible for the operation of public transport, whilst the *Communauté des Transports* or *Verkéiersverbond* is a cooperation body comprising representatives of the state, municipalities, users and operators. The law of 25 January 2006 (which amends the law of 29 June 2004) gives the *Verkéiersverbond* the task of developing public transport and other efficient transport, improving service coordination offered by the various operators, and general advisory missions regarding mobility, communication with the public and marketing of public transport.

Local public transport trends in Luxembourg

Introduction

- B.451 The Luxembourg economy depends largely on foreign and cross-border workers. 85% of the population live in urban areas, but more than 60% of the inhabitants of Luxembourg City are not country nationals, and in 2013 more than 150,000 workers commuted daily from France, Belgium, and Germany⁵¹.
- B.452 Excluding rail services, and pending opening of a tramway line in Luxembourg City in 2017, public transport is operated solely by bus. Ticketing for all public transport modes is integrated nationally, apart from cross-border tickets, for which different rules apply. The local public transport supply by bus in 2012 was approximately 0.06 billion vehicle-kilometres in 2012.
- B.453 The three main operators in Luxembourg are:
- AVL (Autobus de la Ville de Luxembourg), which provides services for the city of Luxembourg and surrounding localities. One third of the services are operated under contract by private companies.
 - TICE, which provides services to the urban area of Esch-sur-Alzette in the southwest of the country and operates 15 lines.

⁵¹ Source: CIA Factbook

RGTR (Régime Général des Transports routiers), which provides 134 interurban and school services between the different localities of the Grand Duchy. RGTR consists of 34 private bus companies operating concession contracts let by the Ministry of Transport.

- B.454 Total 2010 traffic by bus was estimated at 0.083 billion passenger-kilometres since 2005, with growth at 4% per annum compared with 7% per annum of growth of the supply of vehicle-kilometres. No passenger traffic figure is available beyond 2010, but we note that the supply of vehicle-kilometres continued to grow at 4.6% per annum from 2010 to 2012.
- B.455 The government has set a target for 2020 of a modal share of at least 25% of public transport use. However, the road network is seen as an important part in this integrated approach, because of external links beyond the Luxembourg Economic Area. Car ownership in 2012 was significantly above the EU average of 487, with 663 cars per 1,000 inhabitants. With 56.8 kilometres of motorway per thousand square kilometres, Luxembourg also has one of the highest density of motorways across Europe.
- B.456 No national employment figures for public transport are available. No data are available on employment at RGTR, and while AVL and TICE report a total of 800 staff, this may exclude sub-contractors to AVL. The total national bus fleet is estimated to be around 1,200 vehicles, plus 62 buses operated by CFL.
- B.457 Very limited financial information is available. In 2012 gross revenues amounted to €21 million for AVL and €1.9 million for TICE, but these data may or may not include subsidies. No revenue figure was available for RGTR, although operating costs were in the order of €123 million.

Local public transport trends and KPIs

- B.458 The estimated KPIs for local public transport in Luxembourg are shown in the table below.

Table B.1: Public transport KPIs – Luxembourg

Category	Performance indicator	Bus
Raw data	Total number of passengers transported (mil)	93.8 (AVL, TICE and RGTR)
	Total passenger-kilometres (mil)	NA
	Total vehicle-kilometres (mil)	60.5 (AVL, TICE and RGTR)
Productivity	Passenger-kilometres per vehicle-kilometre	NA
	Vehicle-kilometres per staff member	16,000 (AVL and TICE)
Financial	Fare revenue per vehicle-kilometre (€)	NA
	Operating cost per vehicle-kilometre (€)	2.8 (RGTR)
	Proportion of total operating costs covered by fares	NA
	Proportion of total operating costs covered by subsidy	NA
Service quality	Operating speed (km/h)	NA
	Passenger satisfaction	29% High, 47% Good, 18% Median, 6% Low

Sources: AVL, TICE, RGTR; European Commission, 'European's Satisfaction with Urban Transport', 2014

Key factors underlying the performance of local public transport

B.459 These include:

- Luxembourg closed its tram network in 1964 but the city is planning a new €565 million, 16 kilometre, line from the central train station through Kirchberg, where many European institutions are located, to the airport. The first phase is scheduled to open in 2017.
- While Luxembourg has one of the highest car ownership per capita rates in the world, a third of Luxembourg city households do not own a car⁵². 40% of trips taken by car in the city are less than 2 kilometres in length.
- In recent years, five park and ride car parks have been built at rail and bus stations on the outskirts of the city.

⁵² <http://roadpricing.blogspot.co.uk/2011/07/luxembourg-city-mayor-rules-out.html>

Malta

- B.460 In 2012, Malta had a population of 417,546 inhabitants, a population density of 1,327 inhabitants per square kilometre, and GDP per capita of €13,500, 0.8% more than in 2008. Malta's economy, which relies largely on foreign trade, manufacturing and tourism, was not affected by the economic crisis as badly as most EU Member States; this was helped by the fact that the country's growing financial sector had little exposure to the sovereign debt of other Member States⁵³.

Table B.1: Malta overview

Country	2012	2008-2012 change
Population	417,546	2.4%
GDP per capita (€)	13,500	0.8%
Population density (inhabitants per square kilometre)	1,327	2.5%

Source: Eurostat

Overview of competent authorities and procurement in Malta

- B.461 Transport Malta is the Competent Authority for public transport in Malta. The Authority's mission is to promote and develop the transport sector in Malta by means of proper regulation and by promotion and development of related services, businesses and other interests both locally and internationally.
- B.462 Up to July 2011, the bus service for Malta and Gozo was being operated by a large number of independent bus owners operating under a collective of bus owners, the Public Transport Association (PTA), which signed collective agreements with the regulator, the Malta Transport Authority. The owners of buses had been granted indefinite exclusive rights to operate bus services in Malta and Gozo with access to the market only being permitted through the sale and transfer of an existing bus licence. In this respect, the number of buses in each Association had remained fixed since the 1970s, the network of bus routes had changed very little and fare levels, compensation payments and service improvement were established through a series of negotiated agreements with successive Governments. In July 2010, following a competitive tendering process, the PSC contract for the supply of scheduled public transport in the Maltese Islands (both Malta and Gozo) was issued to Arriva (66% owned by Arriva Group, in turn owned by German company Deutsche Bahn, and 33% owned by Malta's Tumas Group) for a period of 10 years. The contract was regulated by Transport Malta (national competent authority responsible for transport regulation). The new service came into effect in July 2011.
- B.463 Bus services covered by the national PSC include:
- 80 routes on the island of Malta with Valetta, the Mater Dei Hospital and Malta airport as hubs.
 - 15 routes on the island of Gozo, operating mostly from a central bus station.
- B.464 The new service brought with it a number of improvements to the service. These included:
- 10 year Public Service Concession with clear public service obligations, methodology for financial compensation calculations, key performance indicators and penalty regime;

⁵³ Source: CIA Factbook

- Extended route coverage and longer operational hours (contracted annual provision of 25.2 million km public transport services);
- Replacement of old fleet (average age 30 years), polluting buses which were inaccessible to the mobility impaired with a modern, accessible and clean bus fleet (Euro V engines);
- A total bus fleet of 276 at the end of 2014;
- Buses equipped with air conditioning, audio announcements and real-time 'next bus stop' displays;
- Upgraded bus network infrastructure (bus stops, bus termini, park and ride facilities and bus interchanges, road side ticket machines);
- New ticketing system with pre-paid electronic travel cards and concession fares;
- Better trained drivers;
- Introduction of the online journey planner and SMS notifications to passengers;
- Real time information at key bus stops;
- Route information (including time tables) on bus stops and web site.

- B.465 As a result of the change above, bus patronage had experienced an increase of 24.5% between 2010 and 2013.
- B.466 The public service compensation amount that was required for the bus operator to fulfil the requirements in the 10-year concession contract was a key evaluation component in the competitive tendering process. The Government, through the public service concession contract, had imposed a number of public service obligations to ensure that public transport could contribute to social and economic integration, namely: operation of a number of non-profitable bus routes (i.e. extensive operating times, high frequency and service to remote or small communities etc.) and concession fares for elderly, children and students.
- B.467 The aim was to encourage the use of public transport, as it is seen by the Government as a very important contributor to continued national economic growth providing a sustainable economic policy solution to the growing problem of traffic congestion and its related external costs and its negative impacts on growth, jobs, environment, tourism, safety and health.
- B.468 In addition, in terms of national economic objectives, the bus operator was required to provide a high quality bus service (i.e. modern fleet of fully accessible, low emission buses, real-time travel information and new ticketing system).
- B.469 However only two years into the contract (by 2013), the bus operator was experiencing difficulties in service operations, and in December 2013 an agreement was reached with the Government to transfer the entire shareholding of Arriva Malta to the Maltese Government at the beginning of 2014. From this point the operations were taken over by the Government and run by a purposely set up company.
- B.470 This was an interim solution as it was the Government's intention to transfer the operations of the scheduled public transport service back to the private sector.
- B.471 In December 2014, Transport Malta awarded Autobuses de León (ALSEA), operating as Malta Public Transport, a new contract to run scheduled bus services in Malta. The contract began in early January 2015 and includes the purchase of 142 buses by the summer of 2015, the implementation of new routes and more services, but the full contract requirements have not yet been made public.

Local public transport trends in Malta

- B.472 Total estimated transport activity is 2.7 billion passenger-kilometres annually: 82.5% by car and 17.5% by bus. The number of bus passengers in 2013 was reported as 39.4 million, the highest number since 1990. No data on vehicle-kilometres are available.
- B.473 Car ownership in 2012 was significantly above the EU average of 487, with 592 cars per 1,000 inhabitants.
- B.474 Eurostat estimates that 1,300 people are employed in this sector. In 2013 the bus fleet totalled 264 vehicles, over 70% of them new in 2011.

Local public transport trends and KPIs

- B.475 No data was received from the Maltese Ministry for Transport and Infrastructure, so we were unable for estimate public transport KPIs for this country.

Table B.1: Public transport KPIs –Malta

Category	Performance indicator	Bus
Raw data	Total number of passengers transported	NA
	Total passenger-kilometres	NA
	Total vehicle-kilometres	NA
Productivity	Passenger-kilometres per vehicle-kilometre	NA
	Vehicle-kilometres per staff member	NA
Financial	Fare revenue per vehicle-kilometre (€)	NA
	Operating cost per vehicle-kilometre (€)	NA
	Proportion of total operating costs covered by fares	NA
	Proportion of total operating costs covered by subsidy	NA
Service quality	Operating speed (km/h)	NA
	Passenger satisfaction	0% High, 17% Good, 30% Median, 53% Low

Source: European Commission, 'European's Satisfaction with Urban Transport', 2014

Key factors underlying the performance of local public transport

- B.476 While Arriva operated the contract it faced many challenges including disputes with drivers and fleet shortages. With the agreement of the Maltese government, a system was introduced in which passengers with a Maltese ID card paid a reduced fare, but this was found to be incompatible with EU law. It is understood that Arriva Malta made losses of approximately €50 million.
- B.477 The new operator ALSEA has stated that it will increase staff numbers by 300 by the end of the year in addition to expanding the route network and adding another 142 new buses to its fleet. The main bus terminus in Valletta is also being doubled in size to cater for the additional new bus routes. A smart card is also being introduced which, to encourage the adoption rate, will be free during the first year of its introduction.
- B.478 Full details of the contract have not been released, but the subsidy will be €23 million in 2015 rising to €29 million from 2016 onwards.

Netherlands

- B.479 In 2012, the Netherlands had a population of 16.7 million inhabitants, with a population density of 487.2 inhabitants per square kilometre. However, depending on the definition of its boundaries, around 7 million of population live within the Randstad conurbation which includes the distinct cities of Amsterdam, Rotterdam and the Hague (Den Haag) and is arguably one of the largest conurbations within Europe. As we discuss further below, the Randstad is connected by a single rail network serving all the urban areas.
- B.480 GDP per capita in 2012 was €32,700. This had decreased by 4.4% over the period 2008-2012. The Dutch economy, the sixth largest in the Eurozone, was significantly affected by the global economic crisis and fell into recession in 2009, but is now showing signs of recovery.⁵⁴

Table B.1: Netherlands overview

Netherlands	2012	2008-2012 change
Population (million)	16.7	2.0%
GDP per capita (€)	32,700	-4.4%
Population density (inhabitants square kilometre)	487.2	2.0%

Source: Eurostat

- B.481 Car ownership in the Netherlands in 2012 was below the EU average of 487, with 472 cars per 1,000 inhabitants.

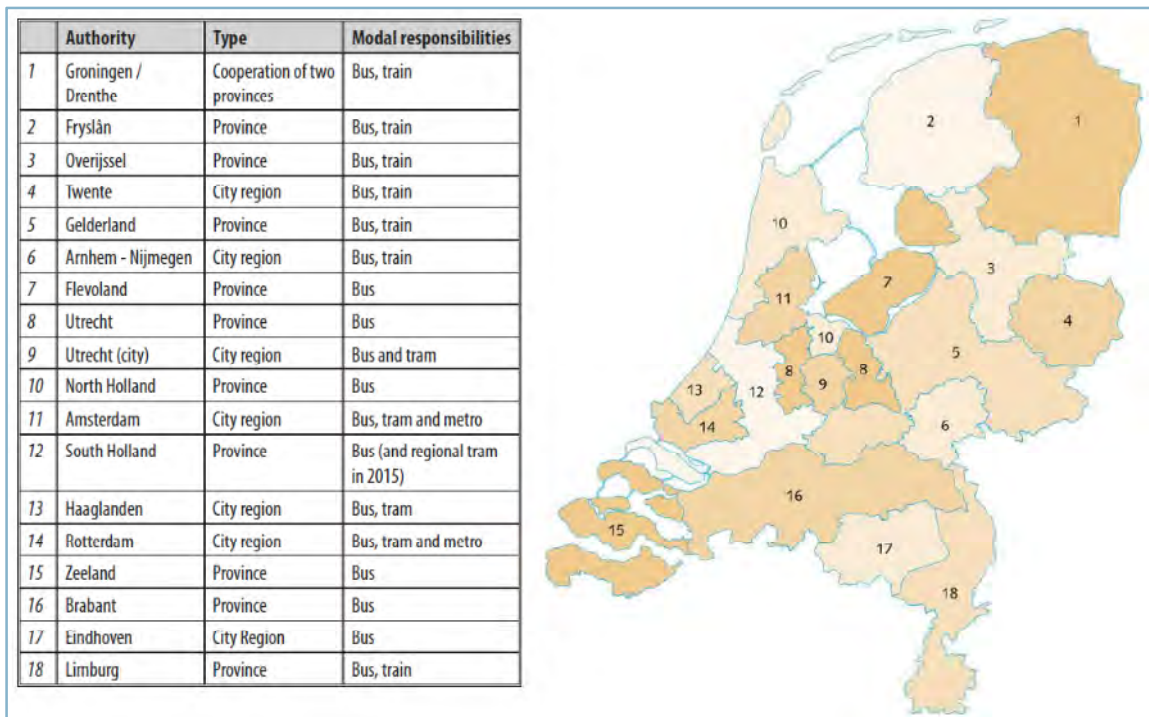
Overview of competent authorities and procurement in Netherlands

The overview of competent authorities and procurement in the Netherlands that follows is largely derived from UITP Europe's 'Organisation and Major Players of Short-Distance Public Transport: New Developments in the European Union,' published in January 2015.

- B.482 The Passenger Transport Act 2000 mandated the transport authorities in the Netherlands' provinces to competitively tender public transport services as concession contracts through an open procedure. However, the Act allowed transport authorities for the northern and southern Randstad areas to choose between directly awarding contracts or holding competitive tender exercises. The result is that:
- In the northern Randstad, all forms of transport in the city of Amsterdam are directly awarded to the municipal operator GVB.
 - In the southern Randstad, around Rotterdam and the Hague, there are direct awards for rail contracts but tendering for bus services.
- B.483 The maximum length of concessions is 10 years for bus and 15 for rail and, in most cases, responsibility for financing the purchase and maintenance of vehicles or rolling stock rests with the concessionaire. While subcontracting of services is allowed under Dutch legislation, this rarely occurs in practice.
- B.484 By 2010, the pattern of modal responsibilities was allocated to 19 authorities as shown below, twelve provinces (including cooperation between Groningen and Drenthe) and seven city regions including Amsterdam and Rotterdam.

⁵⁴ Source: CIA Factbook

Figure B.1: Netherlands authorities and modal responsibilities in 2010



Source: Pteg “Public Transport Tendering in the Netherlands”

- B.485 As of 1 January 2015, however, the powers and responsibilities for local public transport of the seven regional authorities were transferred to the twelve provinces, with two exceptions:
- The northern Randstad, around Amsterdam (11)
 - The southern Randstad, around Rotterdam (14) and the Hague (13)
- B.486 These arrangements are new in 2015 and as yet no data has been published by the twelve provinces and two urban regions operating on the new basis. We would expect the first data on this basis to become available at some stage during 2016.
- B.487 Tendering for services is often multi-modal and may include not only bus, light rail and metro, as shown in but also regional taxi services.
- B.488 A review of public transport tendering in the Netherlands for public transport has identified three distinct patterns of contracting:
- Gross cost contracting
 - Net cost contracting
 - Super-incentive contracting
- B.489 In gross cost contracting the operator provides services exactly as specified by the competent authority, although it may be free to put forward proposals to increase service frequency where this is necessary. It does not carry any revenue risk but may still be incentivised through a performance regime related to aspects of service quality such as punctuality.
- B.490 In net cost contracting the operator has some flexibility to propose service variations at the bidding stage and during the life of the contract, provided that the services exceed minimum levels specified by the competent authority. The operator is paid a fixed annual subsidy, typically also bears full revenue risk, and may also be incentivised further through a performance regime related to aspects of service quality such as punctuality. One practical

issue in the Netherlands is that the former “Strippenkaart” national system of zonal fares meant that allocation of revenue to operators was slow and error-prone, and this may have made net cost contracting less attractive to operators.

- B.491 Super-incentive contracting is unique to the Netherlands but has been used for all suburban and regional services in Amsterdam. In this system, bidders are informed how much subsidy will be available and are then encouraged to design services subject only to achieving accessibility measures: the competent authority does not specify either routes or frequencies. The bidder carries revenue risk and is therefore incentivised to design the network of services generating most net revenue, subject to meeting these accessibility measures. Bidders are rewarded with subsidy calculated as a proportion of the revenue they generated: there is no fixed subsidy payment. While innovative, this arrangement has attracted a number of criticisms, in particular:
- The complexity of the bidding and evaluation process, in which the competent authority does not specify services but instead allows the bidder to identify what revenues it thinks it can earn with a given level of subsidy.
 - The dissatisfaction when operators have rebalanced services in a way which (as is almost inevitable) results in reductions in service levels for some particular locations or journeys.

B.492 As a result, we understand that the contracting model has been modified to reduce the flexibility allowed to bidders and hence to become closer to conventional net cost tendering.

- B.493 One consequence of the combination of the Strippenkaart system and these contracting models is that it is rarely possible to identify clear financial statements for any given mode of transport:
- If contracts are multimodal, there is rarely any need to identify revenue to mode.
 - In super-incentive contracts, the subsidy to be paid cannot be identified in advance as it is calculated as a mark-up on the revenue achieved by the operator.

Local public transport trends in Netherlands

- B.494 We have not identified any consistent description of the total supply of local public transport in the Netherlands, but we estimate from publications of the Netherlands Institute for Transport Policy (KiM) that the total volume of bus, tram and metro travel is 7 billion passenger-kilometres excluding urban rail. A particular difficulty is that many data include the national rail network operator NS, but it is unclear what proportion of its services (if any) should be considered to be “urban rail”.
- B.495 According to UITP, around 67,000 people are employed in local public transport in 2011, although nearly 30,000 of these work for the national rail operator NS. Again, it is not possible to identify which NS staff can meaningfully be associated with “urban” rail services.
- B.496 We estimate from UITP data that the public transport fleets total around 6,500 buses, 600 trams and 270 metro trains. Again, the NS fleet of trains cannot meaningfully be associated with “urban” rail services.
- B.497 Key limitations of the data are that:
- Urban rail cannot be defined as a mode, as the majority of the population, including the three largest cities, live in the Randstad which is small enough to act as a single commuter (but not strictly urban) rail network.

- With extensive contracting out on a multimodal basis, there is no reason for either competent authority or operator to attempt to allocate revenue to a specific mode, so it is not possible to identify either revenue or subsidy by mode.
- Any data that is available is normally provided by operator, but this may be identifiable either to a region or to a mode. Operators' annual reports do not always include any operational data, which can sometimes be requested separately but may not be made available.
- Many operators employ part-time staff, and refer to full-time equivalents (FTEs), rather than the total number of staff with an employment contract.

B.498 The Ministry of Infrastructure and the Environment in the Netherlands informed us that tendering for public transport is carried out at the regional level; as such there is no centralised transport data collection in the country. A 2010 evaluation report on the impact of public tenders has been sent to the European Commission, but this was too early for the report to reflect the impact of Regulation 1370/2007; no newer reports are available.

Table B.1: Public transport KPIs – Netherlands

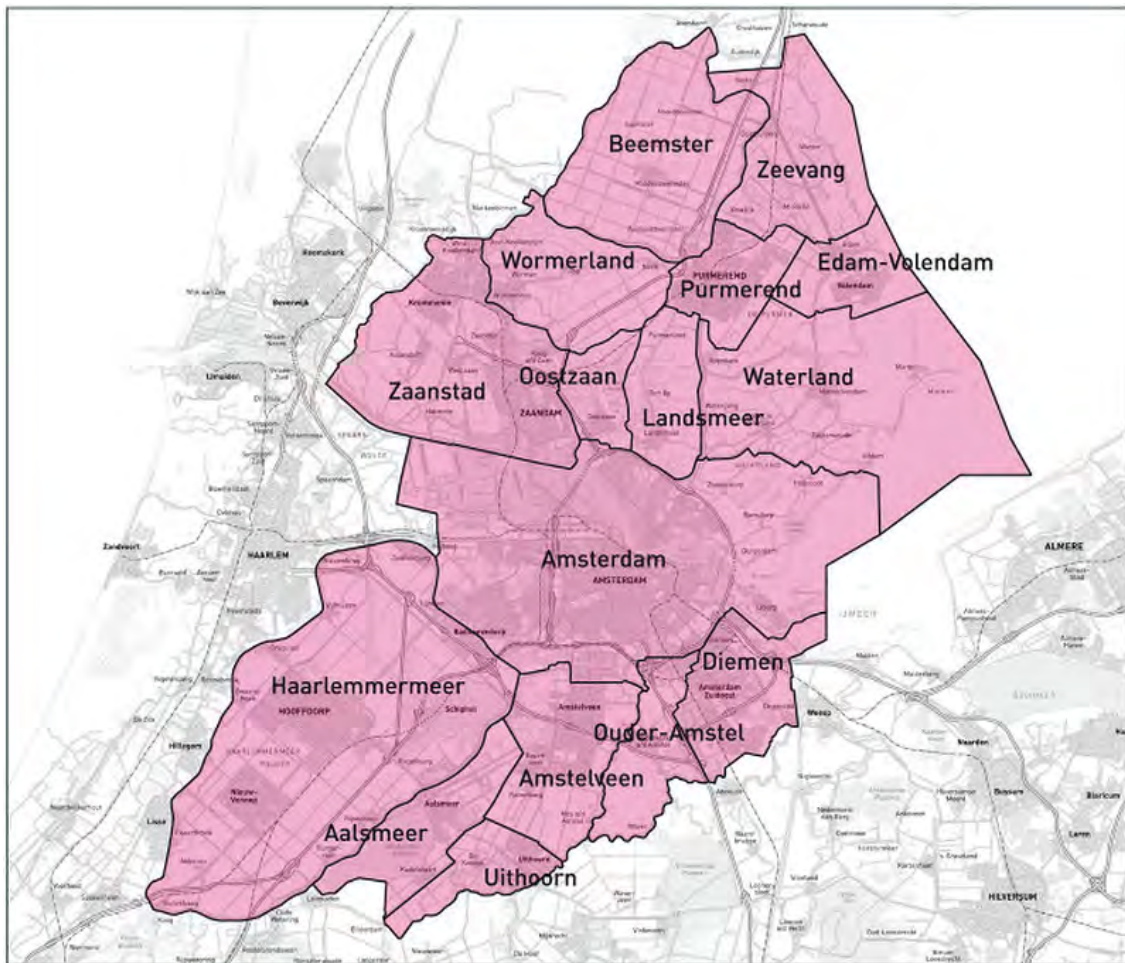
Category	Performance indicator	All modes
Raw data	Total number of passengers transported	NA
	Total passenger-kilometres	NA
	Total vehicle-kilometres	NA
Productivity	Passenger-kilometres per vehicle-kilometre	NA
	Vehicle-kilometres per staff member	NA
Financial	Fare revenue per vehicle-kilometre (€)	NA
	Operating cost per vehicle-kilometre (€)	NA
	Proportion of total operating costs covered by fares	NA
	Proportion of total operating costs covered by subsidy	NA
Service quality	Operating speed (km/h)	NA
	Passenger satisfaction	12% High, 41% Good, 24% Median, 23% Low

Source: European Commission, 'European's Satisfaction with Urban Transport', 2014Amsterdam

Introduction

B.499 The map below shows in greater detail the Stadsregio Amsterdam comprising Amsterdam city and 15 other municipalities.

Figure B.1: The Stadsregio Amsterdam



- B.500 EMTA estimate that, in 2011, the Stadsregio served a population of approximately 750,000 in the city of Amsterdam and a total of 1.4 million taking into account the 15 other municipalities in the region. The total area of the region is approximately 1000 square kilometres, giving an average population density of 1400 persons per square kilometre.
- B.501 Total employment is approximately 500,000 within the city and 900,000 within the region. Given the nature of the Randstad, however, there is significant commuting not only within the region but also between the region and other parts of the Randstad.
- B.502 There are five modes of transport within the Amsterdam region:
- Urban and regional bus
 - Light rail
 - Metro within Amsterdam
 - Urban rail (although, as noted above, it is not possible to identify the urban rail operations provided by NS which operate through the city, region, wider Randstad and nationally)
 - Ferry
- B.503 Public transport other than rail was historically integrated through the national Strippenkaart zonal multi-ride ticket system first introduced in 1980. Strips of ticket coupons bought anywhere in the Netherlands were valid for journeys throughout the country on the basis of the numbers of zones, typically 5 kilometres across, entered on the journey. Strips could be bought in batches of up to 45 in advance or up to 8, and at a higher price, on board. A parallel

sterabonnement weekly, monthly or annual ticket allowed unlimited travel in a nominated list of zones

- B.504 The Strippenkaart system was flexible and provided a consistent pricing system across the Netherlands, but required passengers to calculate the number of zones required for each journey. In addition, allocation of revenue through the WROOV (Werkgroep Reizigers Omvang en Omvang Verkopen) system was slow and based on annual surveys which might not accurately reflect actual travel, particularly for smaller operators. With franchising of services, many operators had responded by introducing local and dedicated fares, some of which were distance-based rather than zonal. This had the effect that ticket sales were identifiable directly to the operator (but not necessarily to a mode) rather than needing to be allocated through the WROOV system.
- B.505 In 2011 the Strippenkaart system was completely replaced by the OV-chipkaart smartcard system, which uses a kilometre-based fare system and can also be used on rail services. OV-chipkaart can be used throughout the Netherlands, and NS sets national rail fares, but the price per kilometre for other modes is set by each province. The 2015 price is a fixed charge of €0.88, applied throughout the Netherlands, with a charge of €0.151 per kilometre, measured in units of 50 metres, charged by GVB in Amsterdam.
- B.506 In addition to rail services provided by NS, the principal transport contracts let by the Stadsregio are as shown in Table B.1: The largest contract, for bus, tram, metro and ferry services, is a direct award to the municipal operator GVB, which operates around 200 buses, 200 light rail vehicles and 100 metro train sets.

Table B.1: Current contracts let by Stadsregio Amsterdam

Contract	Start	End	Modes	Contract basis	Operator	Subsidy in 2013
Amstelland-Meerlanden	2007	2017	Bus	Tender	Connexxion	€40 million
Zaanstreek	2010	2018	Bus	Tender	Connexxion	€11 million
Waterland	2011	2019	Bus	Tender	EBS	€15 million
Urban network	2012	2017	Bus, tram, metro, ferry	Direct award	GVB	€197 million
Other support costs						€38 million

Source: UITP, Stadsregio Amsterdam Report 2013, EMTA Directory of public transport

- B.507 All these contracts are let on a net cost or super-incentive basis, as described above. Rail operator NS is funded nationally but funding for the individual bus, tram, metro and ferry contracts is the responsibility of Stadsregio Amsterdam.

Local public transport trends and KPIs

- B.508 Stadsregio Amsterdam's annual report for 2013 reports the total subsidies of €301 million but does not disaggregate the costs of the urban network by mode or include any operational data.
- B.509 The main performance indicators for local public transport in Amsterdam are shown in Table B.1: table below. We have not received a submission from the Dutch Ministry.

Table B.1: Public transport KPIs – Amsterdam, Netherlands

Category	Performance indicator	Bus	Metro	Tram
Productivity	Passenger-kilometres per vehicle-kilometre	NA	NA	NA
	Vehicle-kilometres per staff member	NA	NA	NA
Financial	Fare revenue per vehicle-kilometre (€)	NA	NA	NA
	Operating cost per vehicle-kilometre (€)	NA	NA	NA
	Proportion of total operating costs covered by fares	NA	NA	NA
	Proportion of total operating costs covered by subsidy	NA	NA	NA
Service quality	Operating speed (km/h)	NA	NA	NA

Key factors underlying the performance of local public transport

- B.510 A number of factors may be relevant to the performance of public transport in the Netherlands in general and in Amsterdam in particular.
- B.511 First, the Netherlands is a relatively small country and has been able to introduce initiatives such as Strippenkaart, in 1980, and subsequently the OV-chipkaart, which provide a consistent national system and reduce the costs of introducing bespoke approaches for each competent authority.
- B.512 Second, the Netherlands is conscious that much of the country has been reclaimed from the sea on a planned basis, and there is a strong culture of planning land use and transport on an integrated and long term basis.
- B.513 Third, there is a pragmatic approach to the level at which transport can best be planned and managed:
- Nationally, as with the rail network, with local (provincial) control only in more rural provinces in relation to relatively self-contained lines.
 - At city level, as with the GVB contract for all of Amsterdam.
 - At municipal level, as with the smaller bus contracts.
 - By the operator, where such contracts have been let on a “super-incentive” basis.
- B.514 Fourth, the Netherlands was an early advocate of liberalisation and contracting out of public transport provision. On the rail network, open access was tested by Lovers Rail as early as 1996-1999. From 2000, the Passenger Transport Act generally mandated competitive tendering of transport through open tenders, which means that most of the competent authorities have around 15 years’ experience of developing effective contractual mechanisms, and there is also a mature supplier base of ten large transport firms (State-owned NS, two municipal operators, one mixed operator, and six major private groupings providing a range of bus, light rail and rail services).

Poland

- B.515 In 2012, Poland had a population of 38.5 million inhabitants, a population density of 121.7 inhabitants per square kilometre, and GDP per capita of €8,500, 11.8% more than in 2008. Gaining membership to the European Union and access to EU structural funds provided the Polish economy with a major boost; its economy has since continued to grow despite the global economic crisis⁵⁵.

Table B.1: Poland overview

Poland	2012	2008-2012 change
Population (million)	38.5	1.1%
GDP per capita (€)	8,500	11.8%
Population density (inhabitants per square kilometre)	121.7	-0.2%

Source: Eurostat

Overview of competent authorities and procurement in Poland

The overview of competent authorities and procurement in Poland that follows is largely derived from UITP Europe's 'Organisation and Major Players of Short-Distance Public Transport: New Developments in the European Union,' published in January 2015.

- B.516 Poland is comprised of 16 regions, 380 districts and 2,479 municipalities. The Public Transport Act of 2010 designates local authorities as the competent authorities for local public transport, which is entirely devolved from central government. Municipalities are responsible, in their areas, for the organisation and funding of public transport, setting fares, and contracting out the provision of public transport.
- B.517 Organisational structures and arrangements vary:
- Some municipalities organise the public transport in their own territory
 - Some form unions to provide a service collectively stretching across municipalities
 - Some agree to organise public transport for others.
- B.518 Some municipalities or unions of municipalities have established an urban transport authority, while others designate local public transport operation to transport companies which are entirely owned by the municipalities.
- B.519 The procurement of contracts to operate local public transport also varies by municipality, and can be either by direct award or competitive tender. Contracts are awarded in compliance with Regulation 1370/2007.

Local public transport trends in Poland

- B.520 Total annual demand is estimated at 50.1 billion passenger-kilometres.
- B.521 Demand was stable from 2007 to 2011 but by 2013 more than 3.6 billion passengers used public transport, 6% less than in 2003. As car travel declined between 2009 and 2013, the mode share of public transport has grown.
- B.522 Car ownership in 2012 was fractionally below the EU average of 487, with 486 cars per 1,000 inhabitants.

⁵⁵ Source: CIA Factbook

- B.523 UITP estimates that 43,900 people are employed in the sector and there are more than 200 companies offering public transport services.
- B.524 At the end of 2013 the national fleets totalled over 11,518 buses, 3,400 trams, 240 underground train vehicles and 180 trolleybuses. The average age of the bus fleet varied between operators and regions:
- 6 years in Warsaw;
 - 8 years in Lublin; and
 - 12 years in Gdynia
- B.525 The average age of rolling stock in Poland is 28 years, but SKM Ltd in Warsaw has one of the youngest fleets in the country with an average age of below 5 years⁵⁶. Some other cities have seen significant investments:
- New infrastructure in Poznan and Olsztyn;
 - Buses and trams in Gdansk and Szczecin; and
 - Investment in urban rail in Gdansk Metropolitan Area
- B.526 The estimated KPIs for Poland are shown in the table below.

Table B.1: Public transport KPIs – Poland

Category	Performance indicator	Bus	Tram	Metro
Raw data	Total number of passengers transported	NA	NA	NA
	Total passenger-kilometres	NA	NA	NA
	Total vehicle-kilometres (mil)	NA	184.78	23.78
Productivity	Passenger-kilometres per vehicle-kilometre	NA	NA	NA
	Vehicle-kilometres per staff member	NA	NA	13,123
Financial	Fare revenue per vehicle-kilometre (PLN)	NA	NA	4.47
	Operating cost per vehicle-kilometre (PLN)	NA	NA	13.4
	Proportion of total operating costs covered by fares	Aggregate Bus-Tram-Urban Rail: 35%		33%
	Proportion of total operating costs covered by subsidy	Aggregate Bus-Tram-Urban Rail: 65%		67%
Service quality	Operating speed (km/h)	19.0	14.1	36.16
	Passenger satisfaction (all modes)	13% High, 38% Good, 26% Median, 23% Low		

Sources: Warsaw Metro (2014) *Annual report 2013*; A. Karolak, President of the Chamber of Urban Transport (2013) *Presentation for the Transport Committee of the Association of Polish cities*; European Commission, 'European's Satisfaction with Urban Transport', 2014

⁵⁶ Steer Davies Gleave calculations based on Central Statistical Office, Office of Rail Regulation, individual operators' data

Warsaw

Introduction

- B.527 Zarząd Transportu Miejskiego (ZTM) is an organiser of urban public transport within the territory of Warsaw. It provides transport to two million citizens of the Warsaw Metropolitan Area. Selected lines extend beyond the borders of Warsaw city (1.7 million people) to create a network of connections to the city centre. ZTM is responsible, inter alia, for defining routes, specifying timetables and setting fares, sales of tickets and ticket inspections.
- B.528 ZTM is responsible for tram, bus, metro and urban rapid rail lines. There is a high level of integration of ticketing and mapping across all modes, and ZTM tickets are also valid on regional trains serving the Warsaw Metropolitan Area, through cooperation with rail operators Koleje Mazowieckie (Mazovian Railways) and Warszawska Kolej Dojazdowa (Warsaw Commuter Railway).
- B.529 There are following public transport operators serving this network:
- Tramwaje Warszawskie is a directly awarded public operator of an extensive tram network in Warsaw (the contract expires in 2027).
 - Metro Warszawskie Ltd. is a public company that operates the metro network (direct award).
 - Miejskie Zakłady Autobusowe (MZA) Warszawa Ltd. is a public company responsible for some of the city bus routes.
 - Szybka Kolej Miejska (SKM) Ltd. is a public company who runs suburban trains on 4 lines (directly awarded contract expires in 2024).
 - There are a number of private bus companies operating in the city and neighbouring municipalities (ZTM subcontracted operation on selected lines to private enterprises (ITS Michalczewski, Mobilis, PKS Grodzisk Mazowiecki) through competitive tender.
- B.530 In 2013, Warsaw spent 4.58 billion PLN (33.4% of the city budget) on transport, of which 2.25 billion PLN was spent on buying public transport services from operators. Revenue from tickets covered 36.4% of the total transport costs, equivalent to a subsidy of 7.69 PLN for every full price 4.40 PLN ticket.
- B.531 The capital of Poland has invested significantly in new network infrastructure in recent years, inter alia through access to EU funding. Examples of major infrastructure projects include:
- The central section of the II Metro Line (opened in March 2015)
 - Introduction of tram priority at selected junctions
 - New tram routes to Tarchomin
 - Bus lanes
 - Improved park & ride facilities
- B.532 Additionally, the city awarded a number of long-term contracts, which unlocked investments in new rolling stock such as:
- Siemens Inspiro trains for Warsaw Metro
 - New PESA and NEWAG train sets for SKM
 - 186 new low-floor Swing trams

Local public transport trends and KPIs

B.533 In 2013, ZTM Warsaw transported 1.06 billion passengers, 19% more than in 2006. Use of public transport in Warsaw has risen due to improved infrastructure and rolling stock, more customer focus and integration between different transport modes. This is in contrast to the rest of Poland where public transport passengers numbers have decreased. In Poznan for example, between 2012 and 2013 tram use rose but bus use fell.

B.534 The estimated KPIs for local public transport in Warsaw are shown in the table below.

Table B.1: Public transport KPIs – Warsaw, Poland

Category	Performance indicator	Bus (MZA Warszawa)	Tram (Tramwaje Warszawskie)	Metro (Metro Warszawskie)	Suburban rail (SKM)
Productivity	Passenger-kilometres per vehicle-kilometre	NA	NA	NA	NA
	Vehicle-kilometres per staff member	18,439	14,918	13,123	42,325
Financial	Fare revenue per vehicle-kilometre (PLN)	Aggregate ZTM ticket revenue per vehicle-kilometre: 4.47			
	Operating cost per vehicle-kilometre (PLN)	9.2	14.0	13.4	9.6
	Proportion of total operating costs covered by fares	49%	32%	33%	47%
	Proportion of total operating costs covered by subsidy	51%	68%	67%	53%
Service quality	Operating speed (km/h)	Slow 21 Fast 24.5 Express 26 Suburban 27	18.3	36.16	S1: 34.3 S2: 39.5 S3: 38.6 S4: 42.4

Sources: Warsaw City Council (2014) *2013 Budget Implementation*; SISKOM (2013) *Trams in Warsaw*; Warsaw Metro (2014) *Annual report 2013*; Central Statistical Office (2014) *Transport – activity results in 2013*; Warsaw Department for Transport (2009) *Transport Strategy, 2014/2015 Rail Timetable*.

Key factors underlying the performance of local public transport

B.535 These include:

- Socio-economic and demographic changes, with moderate population growth and an increase in the number of residents of the outlying boroughs (especially in the north-east e.g. Białołęka) and neighbouring towns such as Piaseczno, Pruszków and Sulejówek.
- Changes in economic activity, with the emergence of new business centres such as Służewiec and low and decreasing unemployment leading to an increase in the number of passenger movements in the metropolitan area.
- Changes in the transport network:
 - Investments in infrastructure (new metro line and tram routes) and rolling stock (new trams, train sets, buses) improving reliability, journey ambience and journey times.
 - More customer focus including integration between modes, smart ticketing.
 - Increased congestion on urban roads, and limited and expensive parking facilities in the city, decreasing the relative attractiveness of the private car.

- Steady funding, with sustained access to EU funding, which supports large-scale investments, and long-term contracts with operators unlocking more efficient planning of services and incentivising fleet modernisation.
- Overall impacts on efficiency:
 - The efficiency of ZTM Warsaw operations in 2014 should be viewed as influenced by a period of economic development and stable funding environment.
 - Introduction of new rolling stock, reducing the average age of fleet, and investments in infrastructure will reduce the operating costs of public transport operation in the Warsaw Metropolitan Area, improve the attractiveness of urban transit, and increase ridership.

Ćmielów

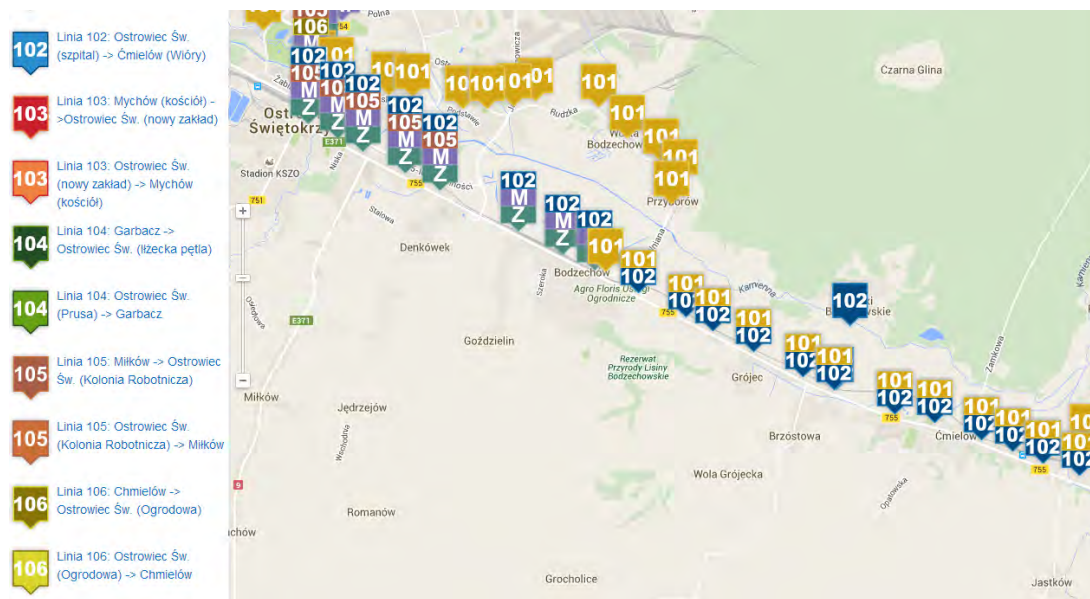
Introduction

B.536 Ćmielów is a small town (c. 3,000 inhabitants) in Ostrowiec County, Świętokrzyskie Voivodeship, seat of Gmina Ćmielów. It is famous for porcelain factories dating back to 1790. Ćmielów lies on the Kamienna River in Sandomierz Upland, 11 kilometres east of city of Ostrowiec Świętokrzyski (c. 80,000 inhabitants), along electrified, double track railway line no. 25 and local road no. 755.

Local Public Transport Trends

- B.537 Only a few years ago (2000-2005) the town was very well connected to the regional and national transport network offering a choice of modes and services to various destinations. Ćmielów used to be served by:
- Suburban bus lines linking Ćmielów with the neighbouring city of Ostrowiec (suburban line no. 2 – buses approx. every hour 5 am – 10 pm, line no. 22 – three buses/day – serving employees of ironworks in Ostrowiec and porcelain factories in Ćmielów at the beginning/end of their shifts),
 - Regional buses to the city of Ostrowiec (c. 30 per day on schooldays, c. 15 – 20 per day during weekends and holidays) and other destinations (5 am – 8 pm) in the area incl. Opatów, Sandomierz, Stalowa Wola (mainly operated by PKS Ostrowiec Świętokrzyski),
 - Regional railway operator (at that time – PKP) with several direct trains per day (7 – 12 per direction) to:
 - Skarżysko Kamienna (change for trains to Warsaw, Kraków, Kielce) via Ostrowiec Świętokrzyski,
 - Stalowa Wola via Sandomierz.
- B.538 Financial condition of the urban bus operator (MPK Ostrowiec Świętokrzyski) resulted in increasing fares and reducing service frequencies to suburban destinations over the years and finally their cessation. No competition from the railway (no passenger trains has served the station since 2005) and a decreasing number of regional buses led to private mini-bus operator (TransKatrina) entering the market in 2008. The operator has become successful and runs regular services not only to Ćmielów but also to other towns in the Ostrowiec area. TransKatrina offers standard and concessionary fares for both single tickets and monthly travel cards. Currently (July 2015) Ćmielów is served by:
- Private mini-bus operator (TransKatrina) linking the town with the city of Ostrowiec (two lines using different routes: no. 101 and no. 102),
 - Regional buses (PKS Ostrowiec Świętokrzyski) – c. 9 per day per direction.

Figure B.1: Local mini-bus operator routes and stops serving Ćmielów (101, 102).



Source: TransKatrina 2015 [Online:] <http://trans-katrina.pl/trasy-naszyc-busow/wszystkie-linie> [Accessed: 9th July 2015].

B.539 An overview of public transport services in Ćmielów is shown in the table below.

Table B.1: Public transport services – Ćmielów, Poland

Category	Description	Mini bus Line 101	Mini bus Line 102	Regional bus PKS
Frequency (per day per direction)	Weekdays*	17 (6:01, 17:46)	19 (4:46, 22:01)	9** (5:59, 18:14)
	Saturdays*	7 (6:51, 15:46)	10 (4:51, 20:06)	2** (15:11, 18:14)
	Sundays*	6 (8:11, 15:46)	7 (7:31, 18:36)	2** (15:11, 18:14)
Fare	Standard single fare (zł) – within town / to Ostrowiec	2,00 / 3,50	2,00 / 3,50	1,50 / 3,00
Journey time	Ćmielów bus stop 08 – Ostrowiec city center (min.)***	0:30 – 0:35	0:28 – 0:35	0:18 – 0:25
Service quality	Operating speed (km/h)	26.7 – 31.2	28.7 – 35.8	29.3 – 40.7

Sources: SDG calculations based on: TransKatrina Timetable as of 09/07/2015, PKS Ostrowiec Świętokrzyski Timetable as of 09/07/2015; * - first and last departure times are given in brackets; ** - more buses available from the center of town (c. twice as many); *** - it was assumed city center is the last stop in each case i.e. Galeria Ostrowiec Shopping Center for mini-buses, Bus Terminus Żabia Street for PKS.

B.540 It is worth mentioning that there is no financial and performance data available for the above mentioned operators.

Key factors underlying the performance of Local Public Transport

B.541 These include:

- Socio-economic and demographic changes, with slow depopulation of town and an increase in the proportion of elderly residents (Ćmielów is 3.5 km long, a lot of within town demand for movement for the elderly – trips to and from the centre, where key facilities like shops, bank, surgery, commune office etc. are located),
- Changes in economic activity leading to changes in patterns of and demand for travel (e.g. decrease in employment in main factories in the region, more people, especially young, travelling further to cities like Warsaw, Kraków, Kielce to work or study. Main flow of passengers is still to the city of Ostrowiec Świętokrzyski, which is the center of economic activity in the area),
- Changes in transport network:
 - Little investment in public transport infrastructure (although there is some ongoing work on the local road no. 755 and railway line no. 25 but with little prospects of reintroduction of suburban buses or regional trains in the nearest future),
 - Limited choice of public transport services and poor network connectivity (e.g. poor integration between different modes making it difficult to get to the town in late evening) leading to a decrease in the relative attractiveness of public transport and greater ownership and use of private cars (it is relatively easy to get to Ostrowiec, however, the service offer to other towns in the area is limited making it almost impossible to get there without using private modes of transport),
- Overall impacts on efficiency:
 - The efficiency of the private, more flexible operator has led to introduction of mini-buses adapted to the needs of people with disabilities etc., which should improve the attractiveness of public transport, and increase ridership especially in the light of changes in the profile of the local population.

Portugal

- B.542 In 2012, Portugal had a population of 10.5 million inhabitants, a population density of 114 inhabitants per square kilometre, and GDP per capita of €14,300, 5.3% less than in 2008. Portugal was significantly affected by the global financial crisis; its economy contracted in 2009, and again between 2011-13 as the country went through a period of austerity to meet the conditions of a financial rescue package from the IMF and the European Union. The impact of austerity has resulted in record unemployment and high levels of emigration, which are reflected in falling population and hence density⁵⁷.

Table B.1: Portugal overview

Portugal	2012	2008-2012 change
Population (million)	10.5	-0.1%
GDP per capita (€)	14,300	-5.3%
Population density (inhabitants per square kilometre)	114	-0.6%

Source: Eurostat

Overview of competent authorities and procurement in Portugal

The overview of competent authorities and procurement in Portugal that follows is derived from UITP Europe's 'Organisation and Major Players of Short-Distance Public Transport: New Developments in the European Union,' published in January 2015 and response provided by the Ministry.

- B.543 The Portuguese Ministry of Economy is the competent authority for local public transport at international, regional and intercity level. The metropolitan transport authorities of Lisbon and Porto, which incorporate 18 and 17 municipalities respectively, are responsible for the regulation and coordination of local public transport in their areas. At a local level, municipalities in Portugal are responsible for awarding local transport services in urban areas within their territories: they can either put these services out to tender or award them directly.
- B.544 The national reference text for public passenger transport is the Inland Transport Framework Law (Law no. 10/90, Lei de Bases do Sistema de Transportes Terrestres/"LBSTT"). This legal act establishes the distribution of competencies as regards the organization of transport services. Urban and regional road transport services are governed by the Automobile Transport Regulation (Regulamento dos Transportes em Automóveis, "RTA", dating as from 1948 and amended several times). The above-mentioned legal framework is being object of a deep reform – the Government presented to the National Parliament (Assembleia da República/AR) a Proposal of Law establishing the new Legal Regime for the Public Service of the Passengers' Transportation (REGIME JURÍDICO DO SERVIÇO PÚBLICO DO TRANSPORTE DE PASSAGEIROS/"RJSPTP").
- B.545 The (new) legal Act (in discussion within the specialized Transport Committee within the National Parliament)
- Adapts the legal framework to the regime of "controlled competition", as established in Regulation (EC) 1370/2007, of the EP and the Council;
 - Defines competent transport authorities (in the sense of Regulation 1370/2007) and decentralizes competencies in the field of organization/contractualization of public

⁵⁷ CIA Factbook

transport services to local authorities (Municipalities, Associations of Municipalities and Metropolitan Areas).

- B.546 According to the new legal regime (under discussion) Municipalities and Associations of Municipalities (“CIMs”) will take over the role of competent local authorities in relation to the organization of public transport services. School transport (pupils/students) will be considered in an integrated/“systemic” manner within regular services. Such new local competent transport authorities will launch, progressively, public tenders for the award of public transport services, contained in public service contracts. There will be a period of “phasing out” of the “RTA administrative licences” that can no longer subsist after the 3rd of December 2019.
- B.547** The Portuguese government has recently established two new organisations responsible for aspects of local public transport in the country:
- The Institute for Mobility and Transport (IMT), created in 2012, is responsible for transport planning and coordination and for supervising and regulating transport operators in the country, and so acts as the technical regulator. The IMT is responsible for all public transport in Portugal with the exception of Madeira and the Azores, two archipelagos with autonomy for their own public transport arrangements.
 - The Mobility and Transport Authority (AMT), created in 2014 as an independent economic regulator, took over responsibility for regulation, promotion and defence of competition in public transport in Portugal.
- B.548 There are varying arrangements for public transport contract procurement for different areas and modes of transport in Portugal:
- In Lisbon and Porto, 100% state-owned companies are awarded concessions directly by the government to operate road transport.
 - In other municipalities:
 - Some bus contracts are put out to tender
 - Some are directly operated by local authorities
 - Some are local contracts for private/public cooperation
- B.549 The metro systems in Lisbon and Porto are both operated by state-owned companies, Metropolitano de Lisboa and Metro do Porto, directly awarded public service contracts by the government.
- B.550 The light rail system in the River Tagus area of Lisbon is operated by a consortium of private companies, awarded a 30-year concession contract after an international tender exercise. Urban rail transport, services are carried out under concession awarded by the State. CP – COMBOIOS DE PORTUGAL E.P.E. is the main concession holder for this type of transport, under an administrative contract.

Local public transport trends in Portugal

- B.551 The local public transport supply is approximately 220 million vehicle-kilometres.
- B.552 Total demand is estimated as 8 million passenger-kilometres annually. 65% of passengers use bus and 35% use metro, tram and rail services.
- B.553 Car ownership in 2012 was below the EU average of 487, with 429 cars per 1,000 inhabitants.
- B.554 UITP estimates that around 10,000 people are employed in this sector, with more than 550 companies offering public transport services.

- B.555 The national bus and tram fleet totals over 4,000 vehicles and around 250 train units providing metro, urban, regional and long-distance rail services. The average age of buses is 12.3 years.
- B.556 Transport is organised in 2 levels: nationally, and locally, by municipality.
- B.557 Instituto Nacional de Estatística (INE) publishes regularly transport statistics that can be disaggregated up to NUTS III in some cases. Estimated KPIS are shown in Table B.1.:

Table B.1: Public transport KPIS – Portugal

Category	Performance indicator	All modes
Raw data	Total number of passengers transported (mil)	616
	Total passenger-kilometres (mil)	4,847
	Total vehicle-kilometres (mil)	220
Productivity	Passenger-kilometres per vehicle-kilometre	22
	Vehicle-kilometres per staff member	22,000
Financial	Fare revenue per vehicle-kilometre (€)	1.12
	Operating cost per vehicle-kilometre (€)	NA
	Proportion of total operating costs covered by fares	NA
	Proportion of total operating costs covered by subsidy	NA
Service quality	Operating speed (km/h)	NA
	Passenger satisfaction	17% High, 38% Good, 20% Median, 25% Low

Sources: Instituto Nacional de Estatística; ECSI; UITP; Publico; European Commission, 'European's Satisfaction with Urban Transport', 2014

Lisbon

Introduction

- B.558 The Lisbon Metropolitan Area has a population around 2 million people with a commuting network formed by bus, tram, metro, train and boats extending both sides of the river Tagus.
- B.559 The Lisbon Metropolitan Transport Authority is responsible for planning, coordination, supervision, finance and fares for public transport in Lisbon. However there are proposals to decommission it and transfer its responsibilities to the local administrative body, Lisbon Metropolitan Area (AML), which covers 14 towns including Lisbon and 18 municipalities.
- B.560 Bus and tram contracts in Lisbon are awarded directly by the State to 'Companhia Carris de Ferro de Lisboa, S.A.' (Carris), the company responsible for providing surface transport in Lisbon. Carris also has some services connecting the city of Lisbon with the municipalities around the city.
- B.561 Instituto da Mobilidade e dos Transportes (IMT), part of the central administration, is responsible for authorising regular routes outside the urban areas. These authorisations are currently held by more than 120 companies operating 4,500 regular routes.
- B.562 CP (Comboios de Portugal) E.P.E is the main rail concession holder. Other rail concessions are awarded by the state either directly or by tendering contracts. There are currently three Rail concessions in the Metropolitan Area of Lisbon:
- Fertagus, a privately run rail service crossing the river Tagus
 - Metropolitano de Lisboa, a state-owned company that operates the metro

- Metro Transportes do Sul, a light rail network in the south side of the river Tagus, operated by a private company

B.563 The major players in Lisbon currently transport around 460 million passengers, with 89% travelling by bus and 11% by metro or tram. Carris carries 49% of the passenger-kilometres by bus in the Metropolitan area of Lisbon.

B.564 The 7 Colinas/Viva Viagem contactless card can hold the following tickets:

- Carris/Metro, for 60 minutes, valid on both Carris and Metro networks
- Daily Carris/Metro, for 24 hours, valid on both Carris and Metro networks
- Zapping, valid on Carris, Metro, CP and Transtejo/Softlusa networks

B.565 The Lisboa Viva card can also be used in several ways, including:

- Zapping, as above
- Operators' passes valid only for a specific operator's network
- Intermodal passes, valid for more than 1 operator

B.566 The Lisbon fleets include more than 1300 buses and 950 tram and trains.

Local public transport trends and KPIs

B.567 Public transport usage in Lisbon has recently dipped due to increases in fares and an effort to control costs. It is currently being operated around 115 million vehicle-kilometres across all modes and is estimated to carry 3,390 million passenger-kilometres in the metropolitan area of Lisbon. Bus is still the mode with the highest share across all public transport modes.

B.568 Estimated KPIs for the metropolitan area of Lisbon are shown below. Together, income from subsidies, compensation and fare revenue was higher than total operational expenditure.

Table B.1: Public transport KPIs – Lisbon, Portugal

Category	Performance indicator	Bus	Metro	Tram
Productivity	Passenger-kilometres per vehicle-kilometre	39	24	NA
	Vehicle-kilometres per staff member	15,702	18,737	NA
Financial	Fare revenue per vehicle-kilometre (€)	2.4	2.9	NA
	Operating cost per vehicle-kilometre (€) (Carris)	3.0	NA	NA
	Proportion of total operating costs covered by fares (Carris)	88.5%	NA	NA
	Proportion of total operating costs covered by subsidy (Carris)	21%	NA	NA
Service quality	Operating speed (km/h) (Carris)	14.6	NA	10.3

Sources: Carris, IMT survey

Key factors underlying the performance of local public transport

B.569 These include:

- Socio-economic and demographic changes:
 - Portugal faced several problem in financing in the international markets in recent years which had an effect on public transport.
 - There is a great dependence on private transport, mainly due to the major investment on highways prior to the economic crisis.

- Changes in economic activity. The recent economic crisis had an impact on available income, with an increase in unemployment and a fall in economic activity. This led to a decrease in demand for public transport that has not yet recovered.
- Changes in funding and fares: recent satisfaction studies by Lisbon Metropolitan Transport Authority shown that fare plays a bigger role in mode choice than quality factors. This study also shows that Lisbon's bus users are the most unsatisfied with the punctuality of the transport and train users are the most unsatisfied with the quality of the service in comparison to its price. Weekend service frequencies are also an issue on most of the modes.
- Infrastructure: the modes are poorly integrated, forcing users to a high number of interchanges.
- Services Planning:
 - There is no legal obligation for planning, even though it can have a crucial impact on the quality of the services provided.
 - The Strategic Plan for Transport (PET) being implemented includes several measures such as updating of fares, rationalisation of costs and opening of competition to private companies.

Aveiro

Introduction

- B.570 Aveiro is a city located south of Oporto with a population around 78,000 people. The city is located on a bay and as such the daily commute by public transport is done mainly by buses and boats. Aveiro was a pioneer in Portugal by being one of the first authorities to offer of public bicycles at no cost to the user. After an initial offer of 300 bicycles in 2000, there are only 30 bicycles currently available. The municipality is now looking for new investment to re-launch this alternative transport mode, used for short commuting trips.
- B.571 There are currently two bus companies operating in Aveiro: Movebus, part of the MoveAveiro group, and UrbAveiro, part of the Transdev group that operates other lines in Aveiro. The companies offer the following ticketing options:
- MoveAveiro
 - Advanced ticket – a multi-trip magnetic ticket
 - Single – a ticket that is bought on the bus, valid for a single trip
 - Monthly tickets – tickets are valid for 1 month, where there is the variant for students and elderly people
 - UrbAveiro:
 - Regular fares, which vary depending on zones
 - 'Cartão Valor' – A card that gives higher flexibility and discounts
 - Monthly tickets
- B.572 While MoveAveiro is a public municipal company, UrbAveiro is a multinational private concessionaire. UrbAveiro is currently exploring four bus lines that that were privatised back from MoveAveiro in 2012.

Local Public Transport trends and KPIs

- B.573 As a result of the privatisation of the four bus lines the network length operated by MoveAveiro decreased from 203 km to 172 km. This resulted in a decrease of the network operated by MoveAveiro from 203km to 172km. MoveAveiro are currently experiencing

financial difficulties; the net income for the company in 2014 was -€2.2 billion, and the losses branded unsustainable by the city’s mayor. However, as this loss was for the entire MoveAveiro company, which also includes car parking and other sources of income and expenditure, it is unclear how much of this is attributable to the company’s public transport activity. The city authorities are currently planning for the concession of MoveAveiro’s bus services.

B.574 The table below shows the main performance indicators for the public transport in Aveiro. Only data from MoveAveiro was readily available, so this does not reflect the total local public transport situation in the city.

Table B.1: Public transport KPIs – Aveiro

Category	Performance indicator	Bus
Offer	Vehicle km (Mln)	0.47
	Seats km (Mln)	37.09
Demand	Passenger km (Mln)	8.6
	Passengers transported (Mln)	0.7

Source: MoveAveiro 2014 report

Romania

- B.575 In 2012, Romania had a population of 20.1 million inhabitants, a population density of 87.1 inhabitants per square kilometre, and a GDP per capita of €4,700, 6.9% less than in 2008. Following the global financial crisis, Romania received a series of emergency rescue packages from the European Commission, International Monetary Fund and other organisations. Since 2013, the economy has shown positive signs of growth⁵⁸.

Table B.2: Romania overview

Romania	2012	2008-2012 change
Population (million)	20.1	-2.6%
GDP per capita (€)	4,700	-2.1%
Population density (inhabitants per square kilometre)	87.1	-6.9%

Source: Eurostat

Overview of competent authorities and procurement in Romania

The overview of competent authorities and procurement in Romania that follows is largely derived from UITP Europe's 'Organisation and Major Players of Short-Distance Public Transport: New Developments in the European Union,' published in January 2015.

- B.576 Since 2013, the Ministry of Regional Development and Public Administration (MDRAP) has been responsible for legislation covering local and urban public transport in Romania. The Romanian Ministry of Transport (MT) covers air, waterborne, rail, regional road and freight transport at a regional, national and international level.
- B.577 Local authorities in Romania are responsible for managing public transport in their respective areas, including maintaining transport infrastructure, supplying passenger information and securing accessibility. Local public transport services are operated by both private companies and operators who are themselves owned by the local authorities. Public service contracts are either competitively tendered in accordance with Regulation 1370/2007 or directly awarded to publicly owned operators. The standard duration of contracts is 6 years for bus lines and 10 years for tram services: while contract arrangements vary, local authorities are largely responsible for acquiring vehicles and maintaining infrastructure, while operators have responsibility for vehicle maintenance.

Local public transport trends in Romania

- B.578 Eurostat reports total annual demand on public transport of 19.4 billion passenger-kilometres.⁵⁹ 55% of passengers use bus, 27% use tram and rail, 9% use metro and 8% use trolleybus: the mix was stable over the period 2007-2011. The Romanian Ministry of Transport have provided data for the Bucharest metro only, rather than all transport modes. We have found no data on vehicle-kilometres.
- B.579 Car ownership in Romania remains significantly below the EU average of 487, with 224 cars per 1,000 inhabitants in 2012. Demand for public transport decreased by around 8% between 2000 and 2012, compared to the EU average increase of 8%.

⁵⁸ Source: CIA Factbook

⁵⁹ EU Transport in Figures – Statistical Pocketbook 2014

- B.580 UITP estimates that 20,500 people are employed in the local public transport sector, and there are more than 20 companies offering public transport services.
- B.581 The national fleet totals around 4,800 buses and minibuses, 1350 trams, 545 metro cars and around 600 trolleybuses, although these data include vehicles which may not be operational. We have found no data on fleet age.
- B.582 The Romanian Ministry has provided data for the Bucharest metro but we have found no data to estimate national KPIs.

Table B.1: Public transport KPIs – Romania

Category	Performance indicator	Metro
Raw data	Total number of passengers transported (mil)	173.19
	Total passenger-kilometres (mil)	2.5
	Total vehicle-kilometres (mil)	8.26
Productivity	Passenger-kilometres per vehicle-kilometre	0.30
	Vehicle-kilometres per staff member	NA
Financial	Fare revenue per vehicle-kilometre (€)	NA
	Operating cost per vehicle-kilometre (€)	NA
	Proportion of total operating costs covered by fares	NA
	Proportion of total operating costs covered by subsidy	NA
Service quality	Operating speed (km/h)	NA
	Passenger satisfaction	21% High, 37% Good, 20% Median, 22% Low

Sources: Ministry of Transport, Romania; European Commission, 'European's Satisfaction with Urban Transport', 2014

Bucharest (RATB + Metrorex)

Introduction

- B.583 The metropolitan area of Bucharest has a population of over 2.2 million and covers an area of 285 square kilometres. 2.5 million daily passenger journeys are served by two publicly-owned companies:
- 90% of vehicle-kilometres, including bus, tram and trolleybus operations, are operated by RATB (*Regia Autonoma de Transport Bucuresti*), the local authority established in 1990.
 - 10% of vehicle-kilometres are operated by Metrorex's four Metro lines, which serve 51 stations. Metrorex is owned by the State.

- B.584 As far as we are aware, no public service contracts have been signed in Bucharest to date.

Local public transport trends and KPIs

- B.585 We have found no operational data for RATB. Metrorex operated 8.2 million vehicle-kilometres in 2013 and the Ministry estimated that it carried 600,000 passengers per day in 2013, that is about 15 million passengers per month. The estimated KPIs for Bucharest in 2014 are shown in the table below.
- B.586 RATB uses the same fare for bus, tram and trolleybus, which rose from 1.1 RON to 1.3 RON in 2008 but has not been changed since. Metrorex has increased the two-journey ticket prices

several times, up 7% 2.5 RON in 2009, to 3 RON in 2010, to 4 RON in 2011 and to 5 RON in March 2015.

B.587 In 2006 a card valid on Metrorex and RATB services, Portofel Electronic (Electronic Wallet), was launched.

B.588 The first Metro line was inaugurated in 1979 and the latest additions to the network were in 2008, when 4 new stops were added to the Magistrala III line, and 2011 when 2 more stops were added to the Magistrala IV line. Table

Table B.1: Public transport KPIs – Bucharest, Romania (Metro only)

Category	Performance indicator	Bus	Tram	Metro
Productivity	Passenger-kilometres per vehicle-kilometre	NA	NA	NA
	Vehicle-kilometres per staff member	NA	NA	1,957
Financial	Fare revenue per vehicle-kilometre (€)	NA	NA	20.68
	Operating cost per vehicle-kilometre (€)	NA	NA	78.38
	Proportion of total operating costs covered by fares	NA	NA	44.9% ⁶⁰
	Proportion of total operating costs covered by subsidy	NA	NA	49.1%
Service quality	Operating speed (km/h)	NA	NA	NA

Source: Bucharest Metro, Official Budget 2014

Key factors underlying the performance of local public transport

B.589 The population of Bucharest declined by 13% between 2002 and 2012, which would be expected to have an impact on demand for public transport in the city over the same time period. However, with no time-series data available for Bucharest (and what data there was only available for the city's metro, it was not possible to highlight factors underlying the performance of local public transport in Bucharest.

⁶⁰ This figure includes revenue from advertising. The Bucharest Metro made a loss of 6% of its total operating costs, according to its official budget for 2014.

Slovakia

- B.590 In 2012, Slovakia had a population of 5.4 million inhabitants, a population density of 110.3 inhabitants per square kilometre, and GDP per capita of €9,400, 4.4% more than in 2008. Since the country's separation from the Czech Republic in 1993, Slovakia has made major economic reforms. The impact of these reforms, joining the European Union and adopting the euro, led to a surge in foreign investment; the country's economy has managed to show positive growth despite the impact of the global economic crisis⁶¹.

Table B.1: Slovakia overview

Slovakia	2012	2008-2012 change
Population (million)	5.4	0.5%
GDP per capita (€)	9,400	4.4%
Population density (inhabitants per square kilometre)	110.3	0.6%

Source: Eurostat

Overview of competent authorities and procurement in Slovakia

The overview of competent authorities and procurement in Slovakia that follows is largely derived from UITP Europe's 'Organisation and Major Players of Short-Distance Public Transport: New Developments in the European Union,' published in January 2015.

- B.591 The ultimate authority for public transport strategic planning, transport policy and legislation in Slovakia is the Ministry of Transport, Construction and Regional Development, which is also fully responsible for the organisation of railway transport. It has no direct influence on the operation of local public transport, for which Slovakia's regional and city authorities are fully autonomous. The administrations of 8 self-governing regions organise and fund public bus transportation on regional lines (of 100 kilometres or less), while Slovak cities organise the award of their own local public transport services.
- B.592 Act 56/2012 on Road Transport and Regulation 1370/2007 set the framework for the organisation of local public transport. Regional bus transport contracts are currently directly awarded by all 8 regional governments, but there are plans for the competitive tendering exercises required by Regulation 1370/2007 before 2019.
- B.593 No integrated transport system combining bus and railway transport exists in Slovakia, except for two experimental small size cases in the Bratislavský and Žilinský regions. The division of responsibilities between state (railways) and regions (buses), and the limited ability of regional authorities to organise the performance of bus operators according to overall regional needs, means that the two modes tend to compete rather than cooperate, and regional bus transport generally parallels the railways.
- B.594 Bus operators are mostly partially-privatised (half state-owned) companies with big market share in the regions and relatively strong decisive power.
- B.595 The first competitive tendering of regional bus transport contract is currently being prepared in the Nitrianský region. Urban public transport contracts are typically directly awarded by the city authorities. The operators are owned by bigger cities. Existing contracts typically last between 8-10 years, and some can be extended for another 5 years. An option to tender them

⁶¹ Source: CIA Factbook

competitively has not yet been used, but competitive tendering is necessary for smaller towns without an internal operator.

- B.596 Public funding covers typically 66% of operating costs. Losses by regional bus operations are compensated by regional budgets and losses by urban transport systems are compensated by municipal budgets. Funding has increased in the last decade due to falls in both demand and fares. Municipal transport in bigger cities is the only market segment which has not declined, and has stabilised since 2010.
- B.597 Regional bus transport generally offers a high standard of quality and reasonable density of services. Municipal budgets are however rather limited, and urban transport systems have faced difficulties in allocating sufficient funding for services. This has resulted in a lack of maintenance of both infrastructure and rolling stock. Financing from European Cohesion Fund has been used to stabilise urban transport systems in Bratislava and Košice which suffered from poor infrastructure and old vehicles.

Local public transport trends in Slovakia

- B.598 The supply of local transport is approximately 76 million vehicle-kilometres.
- B.599 There are 699 million passengers journeys per annum, 87% by bus and trolleybus and 13% by tram. Volumes fell steadily during the 1990s and also over the period 2007-2011, when rising car travel meant that the mode share of public transport declined.
- The regional bus transport systems of the 8 regions operate 4.4 billion vehicle-kilometres annually and are used by 819,000 passengers every day.
 - The municipal public transport systems traffic operate 76 million vehicle-kilometres in the 6 biggest cities of the country and are estimated to carry 1.15 billion passenger-kilometres per annum.
- B.600 Car ownership in 2012 was significantly below the EU average of 487, with 337 cars per 1,000 inhabitants.
- B.601 More than 20 companies offer regional public transport services, with municipal transport operated in 55 towns, while the six biggest cities have their own public transport companies.
- B.602 The national fleet totals around 5,240 buses, 250 trolleybuses and 345 trams. The average age of the 4,5000 regional buses is 8.4 years and of the trams is 24.6 years.
- B.603 Estimated KPIs are shown in the table below.

Table B.1: Public transport KPIs – Slovakia – local public transport

Category	Performance indicator	All modes	Urban bus	Rural and long-distance bus	Tram	Trolleybus
Raw data	Total number of passengers transported (mil)	698.78	288.15	261.08	88.84	60.72
	Total passenger-kilometres (mil)	1,145	NA	NA	NA	NA
	Total vehicle-kilometres (mil)	76.05	49.42	N/A	14.72	11.91
Productivity	Passenger-kilometres per vehicle-kilometre	15	NA	NA	NA	NA
	Vehicle-kilometres per staff member	NA	NA	NA	NA	NA
Financial	Fare revenue per vehicle-kilometre (€)	0.6	NA	NA	NA	NA
	Operating cost per vehicle-kilometre (€)	1.9	NA	NA	NA	NA
	Proportion of total operating costs covered by fares	33%	NA	NA	NA	NA
	Proportion of total operating costs covered by subsidy	66%	NA	NA	NA	NA
Service quality	Operating speed (km/h)	NA	NA	NA	NA	NA
	Passenger satisfaction (all modes)	13% High, 33% Good, 25% Median, 29% Low				

Sources: Ministry of Transport, Communications and Public Works, Slovakia; The yearbook of transport, post and telecommunication 2014; European Commission, 'European's Satisfaction with Urban Transport', 2014

Bratislava

Introduction

- B.604 Public transport in Bratislava is operated by Bratislava Transport Company (DPB). The compensation is paid by Bratislava city. Bratislava has a population of 0.4 million in an area of 367.9 square kilometres with prevailing commuting to the centre and business districts in Ružinov and Petržalka and industrial district in the North and South-East.
- B.605 The total number of trips is 0.7 million per day. DPB operates 91 tram, trolleybus and bus routes. Annual operations are:
- 28.6 million vehicle-kilometres (64%) by bus
 - 10.9 million vehicle-kilometres (24%) by tram
 - 5.5 million vehicle-kilometres (12%) by trolleybus
- B.606 The three modes operate as one transport system, but its integration with other modes is limited to rail travel within the city and one regional bus line. There are also municipal lines to Hungary and Austria, with the of Vienna-Bratislava railway line integrated into the ticketing system.

B.607 The Bratislava Transport company operates the lines based on a directly awarded contract with Bratislava municipality for the period 2009-2018. Performance is specified in the annex of the contract, which is issued annually. The contract complies with Regulation 1370/2007 and the annual compensation is around €53.5 million.

Local public transport trends and KPIs

B.608 DPB today operates 45 million vehicle-kilometres annually, slightly more than seven years ago. The performance is expected to be stable after 2016, with a slight growth of tram output expected due to the opening of a new line across the Danube. Bratislava public transport carries 0.23 billion passengers per year: this has been declining in recent years as car traffic is still growing.

B.609 The estimated KPIs for Bratislava are shown in the table below.

Table B.1: Public transport KPIs - Bratislava, Slovakia

Category	Performance indicator	2010	2013
Productivity	Passengers (billions per year)	0.2	0.2
	Vehicle-kilometres per staff member	13,920	15,111
Financial	Fare revenue per vehicle-kilometre (€)	0.8	0.9
	Operating cost per vehicle-kilometre (€)	2.2	2.3
	Proportion of total operating costs covered by fares	33%	41%
	Proportion of total operating costs covered by subsidy	67%	59%
Service quality	Operating speed (km/h)	NA	NA

Source: Annual report DPB 2010, 2013

Key factors underlying the performance of local public transport

B.610 These include:

- Stable population in Bratislava, with growth in the Bratislava suburbs.
- A growing economy, with a steady growth in car use and decline in public transport patronage, although this decline has been slower than in the last decade.
- The funding of public transport in Bratislava is stable, but there is a slow growth in fare collection and efficiency, so financial results are stable despite the slow rise in operating costs. However, maintenance of buses, trams and trolleybuses is limited and the quality of infrastructure and company service is declining.
- The Ministry of Transport, Regional Development and Construction and the city government have prepared applications for European Cohesion funding to assist in the procurement of new trams and trolleybuses. A modernisation program for the existing tram track and construction of a new track to Petržalka will be finished at the end of 2015.
- Fares are stable and no changes are planned. There is a very slow process of integration, but with low political support and limited cooperation between city and region, the programme is still only in the experimental phase after 10 years of development, and plans for the future are unclear.
- The efficiency of DPB's operations is of increasing concern to the city government, and DPB cut staff in recent years. Future financing of public transport will be influenced by the costs of operation and maintenance, as well as of a new bus fleet and tram rolling stock.

Košice and Košický region

Introduction

- B.611 Public transport on Košice is operated by Košice City Transport Company (DPMK). The compensation is paid by Košice city. Public transport in Košický region is organised and funded by regional government and operated by semi-private bus companies. Although the organiser of integrated transports system, ODIS, has been established, it is not active and no integration of public transport exists.
- B.612 Košice city has a population of 240,000 in an area of 242.8 square kilometres with prevailing commuting to the centre and to factories on South-western city limits, connected by a special tram line. There are also strong transport links with the nearby city of Prešov.
- B.613 Košice city's contract to DPMK was awarded directly for the period 2009-2018. DPMK operates buses, trams and trolleybuses (currently out of service due to reconstruction works) in Košice city. There are 43 lines operated by trams, trolleybuses and buses and 16 special tram and bus lines connecting Košice to the factory area.
- B.614 There is no integration with other transport modes.
- B.615 Košický region has the population 0.8 million including the city and an of area 6,755 square kilometres, with 70,000 trips per day on regional buses.
- B.616 Košický region's contract with the regional bus operators were also awarded directly for the period 2009-2017, with annual annexes to define performance.
- B.617 The contracts are consistent with Regulation 1370/2007, but no competitive tendering has yet occurred.

Local public transport trends and KPIs

- B.618 DPMK operates a total of 16 million vehicle-kilometres annually:
- 10.5 (68%) million vehicle-kilometres by buses
 - 3.8 (24%) million vehicle-kilometres by trams
 - 1.2 (8%) million vehicle-kilometres by trolleybus
- B.619 In Košice, public transport patronage of 90 million passengers per year is slightly declining, and modal split in Košice is declining as car traffic is still growing.
- B.620 in Košický region, the semi-private bus operators operate 26 million vehicle-kilometres annually. While output has remained stable, annual passenger numbers have declined from 40 million to 20 million in the last decade, requiring an increase in subsidy from €0.3 per kilometre to €0.65 per kilometre over the last eight years.
- B.621 Estimated KPIs for Košice and Košický region are shown in the table below.

Table B.1: Public transport KPIs - Košice and Košický region, Slovakia

Category	Performance indicator	City 2010	City 2013	Region 2010	Region 2013
Productivity	Passengers (billions per year)	0.09	0.09	0.03	0.02
	Vehicle-kilometres per staff member	14,274	14,906	NA	NA
Financial	Fare revenue per vehicle-kilometre (€)	0.8	0.9	0.6	0.6
	Operating cost per vehicle-kilometre (€)	2.1	2.1	1.0	1.2
	Proportion of total operating costs covered by fares	37%	40%	56%	49%
	Proportion of total operating costs covered by subsidy	63%	60%	44%	51%
Service quality	Operating speed (km/h)	NA	NA	NA	NA

Source: Annual report DPMK 2010, 2013, www.vucke.sk

Key factors underlying the performance of local public transport

B.622 These include:

- The Population in Košice grew until 1993, but is now stable with a high share of people living in blocks of flats, and the population of Košický region close to the city is growing.
- The economy in Košice is affected by the closure of heavy industry in the last decade and the resulting unemployment which now stands at around 16%, although the economy in the city is slightly growing.
- Car ownership and usage is growing, so stable use of municipal public transport usage and declining use of regional public transport means that the modal share of public transport is declining. The Košický region consists mostly of villages with extensive car commuting to Košice and three other district centres.
- The funding of public transport in Košice is stable, but the constrained city budget means that the quality of infrastructure and rolling stock is declining. An extensive programme of modernisation of tram tracks and renewal of tram rolling stock in Košice is now under way. The need for funding of the regional public transport from regional budget is growing due to the declining numbers of passengers.
- Urban transport fares are stabilised, but there were plans to increase the price of single tickets to improve cost recovery. Half year passes are available but expensive and few are sold. Regional transport prices are also stable.
- The efficiency of operations of DPMK is of concern to the city government, but policy towards DPMK tends to change after each election.

Slovenia

- B.623 In 2012, Slovenia had a population of 2.1 million inhabitants, a population density of 102.2 inhabitants per square kilometre, GDP per capita of €15,000, 9.7% less than in 2008. Although Slovenia has high GDP per capita for central Europe, the economy was significantly affected by the global financial crisis and its economy was in recession for several years, but it has recently begun to show positive growth again⁶².

Table B.1: Slovenia overview

Slovenia	2012	2008-2012 change
Population (million)	2.1	2.3%
GDP per capita (€)	€15,000	-9.7%
Population density (inhabitants per square kilometre)	102.2	1.8%

Source: Eurostat

Overview of competent authorities and procurement in Slovenia

The overview of competent authorities and procurement in Slovenia that follows is derived from UITP Europe's 'Organisation and Major Players of Short-Distance Public Transport: New Developments in the European Union,' published in January 2015 and from the response received from the Ministry of Transport.

- B.624 The Slovenian Ministry of Infrastructure is responsible for suburban, regional and interregional public transport. Two institutions, the Slovenian Economic and Trade chambers, are the competent authorities for issuing companies with bus licenses. Cities in Slovenia are responsible for organising local public transport within their own urban areas; Slovenian legislation mandates cities with over 100,000 inhabitants to organise local public transport. While only two cities, Ljubljana and Maribor, meet this criteria, authorities in five other cities have opted to organise their own public transport services:
- In Ljubljana and Maribor, public service contracts are directly awarded to operators owned by the city authorities.
 - In the other five cities, local public service contracts are tendered to private operators.
- B.625 These contracts typically last 8-10 years and operators are usually responsible for purchasing and maintaining vehicles. While Slovenian law permits the subcontracting of local public transport services, in practice this is not common.
- B.626 The Ministry of Transport informed us that it had not yet implemented the Regulation to granting services on the basis of published public tenders. The current system is still based on the direct award of concessions without a public tender, but the Ministry is preparing a new tender documentation for the award of concessions.
- B.627 Public tender to grant concessions for long-distance public passenger bus transport was first implemented in 2010, but it was repealed as a result of excessive prices.

Local public transport trends in Slovenia

- B.628 The local public transport supply in Slovenia is approximately 67.6 million vehicle-kilometres.

⁶² Source: CIA Factbook

- B.629 Total annual demand is estimated at 107.6 million passenger-kilometres annually, excluding municipal bus services. 82% of passengers travel by local or regional bus and 18% by train. Over the period 2007-2011, the number of bus users has declined but the number of rail users has remained stable.
- B.630 Car ownership in 2012 was above the EU average of 487, with 518 cars per 1,000 inhabitants.
- B.631 UITP estimates that there are 2,600 people are employed in this sector and 36 companies offering bus services and 1 company offering rail services.
- B.632 The national bus fleet totals 1,229 vehicles. No comprehensive and summary data are available on the average age of buses and rolling stock.
- B.633 National statistics include no information on municipal bus services and differ significantly from UITP data. The Ministry informed us that currently there is little information available about public transport.
- B.634 KPIs estimated from the national statistics are shown below.

Table B.1: Public transport KPIs – Slovenia

Category	Performance indicator	All modes	Rural and long-distance bus
Raw data	Total number of passengers transported (mil)	NA	26.82
	Total passenger-kilometres (mil)	465.7	440.87
	Total vehicle-kilometres (mil)	67.6	45.37
Productivity	Passenger-kilometres per vehicle-kilometre	6.89	9.72
	Vehicle-kilometres per staff member	26,000	NA
Financial	Fare revenue per vehicle-kilometre (€)	NA	0.56
	Operating cost per vehicle-kilometre (€)	NA	1.81
	Proportion of total operating costs covered by fares	NA	30.97%
	Proportion of total operating costs covered by subsidy	NA	23.61%
Service quality	Operating speed (km/h)	NA	NA
	Passenger satisfaction (all modes)	15% High, 30% Good, 25% Median, 30% Low	

Sources: Statistical Office of the Republic of Slovenia; Ministry of Infrastructure, Slovenia; European Commission, 'European's Satisfaction with Urban Transport', 2014

Ljubljana urban region

Introduction

- B.635 The Ljubljana Urban Region covers the area of the central Slovenia statistical region. It connects 26 municipalities with more than 510,000 inhabitants, has 252,000 people in employment and 87,000 high school and university students. It is the most densely populated part of the Slovenia and has the biggest concentration of human resources, knowledge, and entrepreneurship. The municipality of Ljubljana within the Ljubljana Urban Region forms the gravitational centre of the region, which gathers main regional and interregional flows. Recent development of the transport system in the region has focused on improvement of the road infrastructure and consequently improvement of private vehicle users' mobility, while all forms of sustainable transport, particularly public transport, have been neglected.

B.636 Regional public transport services consist only of buses. Public transport by rail, organised nationally, serves mainly regional transport on some of the lines. Bus transport services in the region are provided by Ljubljanski potniški promet d.o.o. (LPP), a public company, and a few private companies (Alpetour d.d., Kambus d.d., Veolia Transport Slovenia, Integral Zagorje). Public company Ljubljanski potniški promet d.o.o. provides public transport in the area of the entire municipality of Ljubljana city and 16 suburban municipalities. Private companies cover mainly suburban and urban parts of region. The ticketing systems of the different operators are not yet integrated, although a project for integrated public passenger transport has been running at the national level since 2007.

B.637 In Ljubljana, a public service contract is directly awarded to operator LPP, which is owned by the city authorities. LPP's core activity is transport, but it also provides:

- Maintenance and repair of commercial vehicles
- Technical examinations
- Type approvals

B.638 LPP covers 42 lines within the city of Ljubljana and 30 lines in the suburban area around the capital. Private operators Alpetour d.d., Kambus d.d., Arriva Dolenjska in Primorska d.o.o. and Integral Zagorje d.o.o. hold a Ministry of Infrastructure concession for the provision of regular public transport services under the tendering procedure. They provide public transport in different suburban and urban municipalities in the region under conditions set by the Ministry. The fares are set by Ministry and the concession was awarded on the basis of the least subsidy.

Local public transport trends and KPIs

B.639 LPP does not estimate passenger-kilometres as there is a flat fare for trips of up to 90 minutes.

B.640 Since 2010 LPP has been extending routes from the city of Ljubljana towards suburban municipalities in the region, and by 2014 it had 31 routes with a total length of 702 kilometres.

B.641 In 2013 the buses operated 11 million vehicle-kilometres and there were 40 million journeys, but in 2014 the number of trips in suburban passenger transport rose 34%.

B.642 The estimated KPIs for the LPP network of municipal buses are shown in the table below.

Table B.1: Public transport KPIs – Ljubljana, Slovenia (LPP buses only)

Category	Performance indicator	Bus
Productivity	Passenger-kilometres per vehicle-kilometre	NA
	Vehicle-kilometres per staff member	18,108*
Financial	Fare revenue per vehicle-kilometre (€)	1.7**
	Operating cost per vehicle-kilometre (€)	NA
	Proportion of total operating costs covered by fares	62.8%***
	Proportion of total operating costs covered by subsidy	35.9%***
Service quality	Operating speed (km/h)	18.2**

Source: LPP d.o.o., Annual report 2013

(http://www.lpp.si/sites/default/files/lpp_si/stran/datoteke/5.lpp_letno_porocilo_2013.pdf)

* 72% of vehicle-kilometres in municipal transport, 22% in regional and 5% in occasional transport

** municipal buses

*** proportion of all costs of the public company LPP

Key factors underlying the performance of local public transport

B.643 These include:

- Socio-economic and demographic changes:
 - Moderate population growth, but progressive growth in the share of elderly resident with different mobility requirements.
 - An increase in the number of residents in the suburban municipalities caused an increase of traffic flows.
- Changes in economic activity: economic contraction and high unemployment over the last few years has led to a decrease in the number of total passenger movements in the region, both for private and public vehicles. The unemployed population of Ljubljana increased in the last few years, and sales of tickets for the unemployed people increased 10% between 2013 and 2014.
- Transport demand habits: promotion of walking and cycling in the City of Ljubljana and introduction of Bicikelj (public bicycle rental system) has led to a shift of some users from local public transport to cycling.
- Changes in funding: The national resources available for the financing of local public transport services for public service contractors has decreased in the last years. Bus companies are no longer eligible to tax relief for purchase of new buses, except for hybrid and electric vehicles. However, in the last few years the Municipality of Ljubljana has increased subsidy for operation costs of LPP.
- Reorganisation of the ticketing system: integration of modes and ticketing is still in preparation, but implementation on the territory of whole country is planned in 2016.
- Changes of ticket prices in 2012:
 - LPP's single fares rose 50% and monthly fares were also increased.
 - Student and pupil fares fell due to changes in the subsidisation to school transport.
- The introduction of integrated lines in suburban public transport offered by LPP has increased demand through a lower effective fare.
- Modernisation of traffic monitoring and control in city of Ljubljana, through:
 - Introduction of a vehicle location system, with displays at bus stations showing real-time arrival information.
 - Introduction of the Urbana single city card in 2009. Urbana is a no-contact smart card, allowing quick and convenient cash-free payment for LPP buses, cable-car rides to the Ljubljana Castle, parking and for services of the Ljubljana City Library.

Spain

- B.644 In 2012, Spain had a population of 46.8 million inhabitants, with a population density of 93.2 inhabitants per square kilometre and GDP per capita of €20,200, 6.9% less than in 2008. Following the global economic crisis, Spain's economy went into sharp recession in 2009, with further GDP reductions in 2011, 2012 and 2013. However, the government's post-crisis programme of fiscal austerity and reforms to tax, pensions and the health system have helped to attract foreign investment and reduce the cost of borrowing⁶³.
- B.645 The Spanish economy has started recovering, registering a +1.4% increase in GDP in 2014 and with a forecast +2.5% for the present year. This, however, has not yet translated in significant reductions in unemployment levels above 20%.

Table B.1: Spain overview

Spain	2012	2008-2012 change
Population (million)	46.8	2.5%
GDP per capita (€)	20,200	-6.9%
Population density (inhabitants per square kilometre)	93.2	1.8%

Source: Eurostat

Overview of competent authorities and procurement in Spain

The overview of competent authorities and procurement in Spain that follows is largely derived from UITP Europe's 'Organisation and Major Players of Short-Distance Public Transport: New Developments in the European Union,' published in January 2015.

- B.646 The Constitution of 1978 divides Spain into 17 autonomous communities and two autonomous cities. These communities are solely responsible for regulation and legislation of local public transport in their respective areas; the central government of Spain can only regulate road and rail transport on routes covering more than one autonomous community. This affects interurban bus services and middle- and long-distance rail services. While the autonomous communities are responsible for the regulation of local public transport, Spanish municipalities are responsible for the management of the service; the 120 municipalities with a population of over 50,000 are mandated by government to organise the transport service in their territories.
- B.647 Local public transport services are either tendered to private companies or directly awarded to companies owned by their respective autonomous communities. In 2013, around 80% of all public service contracts in Spain's five main metropolitan areas (Madrid, Barcelona, Bilbao, Valencia, Seville) were directly awarded to publicly-owned companies rather than following a tendering exercise. Following a recent amendment to Spain's Land Transport Organisation Law, the duration of some contracts has been limited to 10 years as required by Regulation 1370/2007.
- B.648 In 2013, there were 90 of PSO contracts directly managed by the State (i.e. between two autonomous communities).

⁶³ Source: CIA Factbook

Local public transport trends in Spain

- B.649 The local public transport supply in Spain is approximately 1.3 billion vehicle-kilometres⁶⁴.
- B.650 In 2012, total local public transport traffic was estimated at 25.4 billion passenger-kilometres annually. Of 3.9 billion journeys, 42% were by bus, 28% by metro, 17% by rural and long distance bus, 12% by urban rail and 1.4% by tram.
- B.651 Car ownership in 2012 was below the EU average of 487, with 476 cars per 1,000 inhabitants. Demand for public transport has declined by around 5% between 2002 and 2012, in contrast to average demand in the EU, which has risen by around 8% for the period between 2000 and 2012⁶⁵. Volumes have remained fairly stable over the period 2007-2011, and car trips have declined nationally between 2009 and 2013, so the mode share of public transport has grown.
- B.652 There are over 100,000 people employed in the public transport sector, approximately 90% of them in the urban, rural and long-distance bus sectors, and the remaining 10% working on metros.
- B.653 The larger urban transport operations, comprising around 40% of the market, are publicly owned, with the remaining 60% operated by private companies. The main private companies are Avanza, with around 20% of the market, and ALSA with another 10%: another 5-6 groups operate in 5 medium-sized cities. There are also a number of smaller local operators, generally with a single operation.
- B.654 The local transport bus fleet totals 11,100 vehicles nationally, and around 6,390 rail vehicles providing metro, tram, commuter rail and light rail services. The average age of buses is 6.7 years.
- B.655 The table below contains the KPIs we have been able to estimate for Spain.

Table B.1: Public transport KPIs – Spain

Category	Performance indicator	All modes
Raw data	Total number of passengers transported (mil)	3,886
	Total passenger-kilometres (mil)	23,400
	Total vehicle-kilometres (mil)	1,301
Productivity	Passenger-kilometres per vehicle-kilometre	18
	Vehicle-kilometres per staff member	12,664
Financial	Fare revenue per vehicle-kilometre (€)	1.94
	Operating cost per vehicle-kilometre (€)	3.31
	Proportion of total operating costs covered by fares	58.5%
	Proportion of total operating costs covered by subsidy	48.3%
Service quality	Operating speed (km/h)	13.1
	Passenger satisfaction	18% High, 42% Good, 24% Median, 16% Low

Sources: Ministerio de Fomento; Observatorio de la Movilidad Metropolitana; European Commission, 'European's Satisfaction with Urban Transport', 2014

⁶⁴ Source: Ministerio de Fomento, Observatorio de la Movilidad Metropolitana

⁶⁵ Source: UTIP, *Local Public Transport Trends in the European Union*

- B.656 The design of services is undertaken using network criteria, where the services are defined by including profitable and non-profitable routes to create a balance. This allows the provision of high quality conditions and homogeneous fares, regardless of the characteristics of the municipalities. However, there is considerable variation in tender conditions on the technical and professional competence criteria of transport operators and on accessibility and service quality requirements. In most cases, the compensation for PSOs includes exclusivity of service.
- B.657 In general, the conditions for the provision of services and its compensation are fixed through the life of the contract. However, when there is no alternative, the current legislation allows the “re-establishment of the financial equilibrium of the contract”, that is the relationship between the costs involved in the provision of the service subject to public service obligations, the service fares, and, where applicable, the compensations related to the provision of the services. These relationships should not change during the life of the contract.
- B.658 Regulation 1370/2007 does not appear to have had a significant economic impact in Spain, as most services subject to PSOs were already tendered competitively before it came into force.

Barcelona

Introduction

- B.659 The Barcelona Metropolitan Region (BMR) includes 164 municipalities and a total of 5.0 million inhabitants, 1.6 million of whom live in the city of Barcelona.
- B.660 The *Autoritat del Transport Metropolità* (ATM) is the Consortium in charge of the coordination of public transport in the Metropolitan Region of Barcelona. The ATM includes the Regional Government of Catalonia, the Barcelona Council, and the 18 municipalities with public transport services within the *Entitat Metropolitana del Transport* (EMT).
- B.661 The functions of the ATM include planning of transport infrastructure, management of metropolitan mobility (publishing the General Mobility Plan), coordination of services operated by public and private operators, financing of the system by the Administration, management of operators’ contracts and tariff policy (including tariff integration) and the definition and promotion of the corporate image of the system.
- B.662 Approximately 37% of daily trips are made on private transport with the remainder on public transport modes. The car ownership rate is 408 per 1,000 inhabitants in the BMR and 361 cars per 1,000 inhabitants in Barcelona city.
- B.663 Local transportation in the Metropolitan Area of Barcelona is a mixed system with three publicly owned operators and about 30 private operators.
- B.664 Transports Metropolitans de Barcelona (TMB), fully owned by the Barcelona Local Government, operates the Metro system and day-time urban bus routes in central Barcelona and the immediate surroundings. We have not been able to clarify the details of the contract in place.
- B.665 There are two other railway publicly owned companies:
- RENFE is the State-owned railway company, which operates the Barcelona commuter (Cercanías) services.
 - *Ferrocarrils de la Generalitat de Catalunya* (FGC) is a railway company owned by the Regional Government which operates commuter and suburban railway services.

- B.666 A number of private concessionaires operate all the night bus routes, and bus services connecting the suburban areas with the city centre. The bus fleet serving the Barcelona Metropolitan Region includes 2,338 buses with an average age of 7.3 years.
- B.667 The Barcelona Trams are operated by a private company (TRAM) under two design-build-finance-operate concession contracts from the ATM that run until 2032.
- B.668 The ATM holds the powers to set tariffs and implements a tariff-integrated system in the Metropolitan Region of Barcelona extended with 6 zones (rings) and 8 radial sectors to cover 253 municipalities and a total population of 5.3 million inhabitants. All tickets are part of the system and are valid for all modes and all operators. The price depends on the number of zones and there is no penalty for change of mode within a time limit of 75 minutes for 1 zone and 15 minutes increments for each additional zone.
- B.669 In 2013, the Regional Government approved the implementation of the so-called T-Mobility card, a single (smart) card for all public transport, which will replace all existing transport documents with a new chip-based, contactless system. The project will increase the linkage between individual usage and price, with discounts for higher levels of use.
- B.670 All urban buses in Barcelona, and 97% of Metropolitan buses, are fully accessible to persons with reduced mobility (PRM). All tram services and 91% of Metro stations are accessible.

Local public transport trends and KPIs

- B.671 The main performance indicators for local public transport in Barcelona for 2012 are shown in Table B.1.: No data on staff employment are available.
- B.672 TMB, the company which operates the urban bus network and underground in Barcelona, publishes financial information which groups data mixing public and private companies, bus and metro. It has therefore been difficult to draw conclusions about the proportion of operating costs covered by fares and subsidy for these modes. In the case of the tram network, the subsidy includes an “investment charge” to repay initial investment in the system, which explains why the figure for this is so high.

Table B.1: Public transport KPIs – Barcelona, Spain

Category	Performance indicator	Bus	Metro	Tram
Productivity	Passenger-kilometres per vehicle-kilometre	17.5	23.2	43.6
	Vehicle-kilometres per staff member	NA	NA	NA
Financial	Fare revenue per vehicle-kilometre (€)	1.9	2.8	5.0
	Operating cost per vehicle-kilometre (€)	3.5	5.1	12.3
	Proportion of total operating costs covered by fares	55.2%	54.5%	40.5%
	Proportion of total operating costs covered by subsidy	58.8%	40.7%	159.7%
Service quality	Operating speed (km/h)	12.1	27.6	18.5

Source: ATM Annual “xifres” publication, Ministerio de Fomento, Observatorio de la Movilidad Metropolitana

Key factors underlying the performance of local public transport

- B.673 These include:
- Socio-economic and demographic changes

- Moderate population decrease of 2.6% between 2008 and 2012, although by 2014 the population had fallen by 0.5%.
- The unemployment rate in the area has increased 159% over the period, growing from 8.7% to 22.6% over the period 2008-2012.
- Evolution of economic activity
 - The persistence of economic contraction and high unemployment over 2008-2012 has led to a decline in the number of total passenger movements in the metropolitan area, both for private and public vehicles.
 - Over the period 2008-2012 the overall annual number of public transport trips has declined by 3.7% and the number bus trips declined by 5.3%.
- Changes in operations and funding
 - The length of bus routes in the region has increased 29.8% over 2008-2012, and the volume of bus-kilometres operated also increased by 8.7%.
 - Fares revenue fell over the period by 10.2% and operating costs increased by 2.2%.
 - Over 2008-2012 the price of a single ticket rose from €1.30 to €2.00 and the price of the most popular ticket, the 10-trip voucher (T-10), increased from €7.20 to €9.45.
 - In 2012, the urban bus network of Barcelona was re-designed, changing from a basically radial design, to an organisation based on three groups of lines; 8 horizontal lines (parallel to the sea, named H), 17 vertical lines (direction mountain to sea, named V) and 3 diagonal lines (named D).

Seville

Introduction

- B.674 The Seville region has a population of 1.48 million inhabitants, over an area of 4,221 square kilometres, 696,676 of whom live in the capital city.
- B.675 The Consorcio de Transporte Metropolitano del Area de Sevilla (CTAS) is a public corporation in charge of the management of the infrastructures and transport services of its area of influence. The CTAS currently includes the Andalucía Regional Government, the City of Seville, the Provincial Assembly and 44 municipalities of the region.
- B.676 The functions of the Consortium include planning for metropolitan transport (including publication of a Metropolitan Transport Plan), regulation, coordination, control and inspection of transport services, traffics, infrastructures and facilities related to the provision of metropolitan transport, establishing the tariff policy framework and promotion of public transport. The CTAS is also responsible for determining the (compensation) amounts to be received by the transport operators in relation to the provision services subject to PSOs.
- B.677 The public transport system of the Seville region includes the urban and metropolitan bus transport networks, commuter (suburban) rail services (RENFE) and the Metro de Sevilla.
- B.678 The system includes a mix of public and private operators:
- The four commuter rail lines are operated by State-owned RENFE.
 - Metro de Sevilla is operated under a concession contract that runs until 2041 by a company which is participated by Andalucía's Regional Government. The concession included project development, construction and commercial operation.
 - Transportes Urbanos de Sevilla Sociedad Anónima Municipal (TUSSAM) is a municipal company that operates 41 urban bus lines in the city of Seville and the Seville Tram.

- The remaining 10 urban lines are operated by Transportes Ruiz and Los Amarillos respectively.
- Urban bus services are operated by TUSSAM and by 2 private operators.

B.679 Metropolitan bus services are made up of 64 lines, operated by 7 private operators. The bus fleet totals 573 buses, 72% of them used on urban services, with an average age of 7.2 years.

B.680 The car ownership rate in the city of Seville is similar to the national average of 477 vehicles per 1,000 inhabitants. In the Metropolitan area, the rate is slightly lower at 466 vehicles per 1,000 inhabitants.

B.681 Since 2002 the CTAS has operated an integrated tariff system based on division of the territory in five tariff zones and a standard, designed not to penalise modal transfers, favouring regular users. The existing system allows holders of the “CTAS Transport card” to use it on the metropolitan bus network, Metro de Sevilla line 1, and urban buses.

B.682 All urban buses in Seville and 69% of metropolitan buses are fully accessible to persons with reduced mobility (PRM). All Metro stations and tram services are fully adapted.

Local public transport trends and KPIs

B.683 The main performance indicators for local public transport in Seville for 2012 are shown in Table B.1.: No data on staff employment are available.

B.684 Data suggests that the public bus operator in Seville is insufficiently funded, and that the subsidy is insufficient to make up the difference between fare revenue and operating costs. However, the operator may have other revenue sources such as advertising that would make up for this shortfall. As with Barcelona’s tram system, the metro in Seville is supported by a large subsidy that includes an investment charge.

Table B.1: Public transport KPIs – Sevilla, Spain

Category	Performance indicator	Bus	Tram	Metro
Productivity	Passenger-kilometres per vehicle-kilometre	13.4	22.5	37.7
	Vehicle-kilometres per staff member	NA	NA	NA
Financial	Fare revenue per vehicle-kilometre (€)	2.5	NA	7.2
	Operating cost per vehicle-kilometre (€)	5.7	NA	10.7
	Proportion of total operating costs covered by fares	43.6%	NA	67.5%
	Proportion of total operating costs covered by subsidy	47.8%	NA	205.0%
Service quality	Operating speed (km/h)	17.7	10.3	29.7

Source: Ministerio de Fomento, Observatorio de la Movilidad Metropolitana

Key factors underlying the performance of local public transport

B.685 These include:

- Socio-economic and demographic changes
 - Moderate population growth of 3.4% between 2008 and 2012 and a further 0.2% in 2013.
 - The unemployment rate in the area has increased 103% over the period, growing from 16.0% to 32.6% over 2008-2012.
- Development of economic activity

- The persistence of economic contraction and high unemployment over 2008-2012 has limited the growth in public transport demand. Demand grew until 2011, in part due to the significant growth observed in Metro Services (Line 1 opened in 2009), but has declined since.
- Between 2008 and 2012 the overall public transport annual number of trips rose 1.5% and the number of bus trips fell by 13.2%.
- Changes in operations and funding over the period 2008-2012
 - The length of bus routes operated in the region has increased by 63.9%, but the bus-kilometres operated has been almost constant.
 - Fares revenue rose by 9.6% and operating costs rose by 8.4%.

Sweden

- B.686 In 2012, Sweden had a population of 9.5 million inhabitants, with a population density of 23.4 inhabitants per square kilometre. Trafikanalys show that, in 2012, car ownership was 468 cars per 1,000 inhabitants; the EU average for the same year was 487.
- B.687 GDP per capita in 2012 was €35,300. This had increased by 1.7% over the period 2008-2012. The Swedish economy, which relies on exports to the rest of the European Union, went into recession in 2009, but strong industrial and financial sectors helped support the country's return to economic growth.⁶⁶

Table B.1: Sweden overview

Sweden	2012	2008-2012 change
Population (million)	9.5	3.3%
GDP per capita (€)	35,300	1.7%
Population density (inhabitants per square kilometre)	23.4	4%

Source: Eurostat

Overview of competent authorities and procurement in Sweden

The overview of competent authorities and procurement in Sweden that follows is largely derived from UITP Europe's 'Organisation and Major Players of Short-Distance Public Transport: New Developments in the European Union,' published in January 2015.

- B.688 Sweden is divided into 21 regions (Counties), each with its own central government authority, and 290 municipalities (Communes). There are 21 public transport authorities, which in most cases are either part of the regional authority for their respective area or closely linked to it. These are the competent authorities for the organisation and provision of local public transport in Sweden.
- B.689 All local public transport services in Sweden are public service obligations, contracted out by authorities to private transport operators; almost all of these services (around 98%) are procured through competitive tendering exercises, in accordance with Regulation 1370/2007. The majority are 'gross contracts,' although there is increasing usage of incentive-based or net contracts by transport authorities. The length of contracts are usually between 5-8 years for buses and 5-10 years for rail. Responsibility for tariffs and ticketing systems continues to sit with the public transport authorities.

Local public transport trends in Sweden

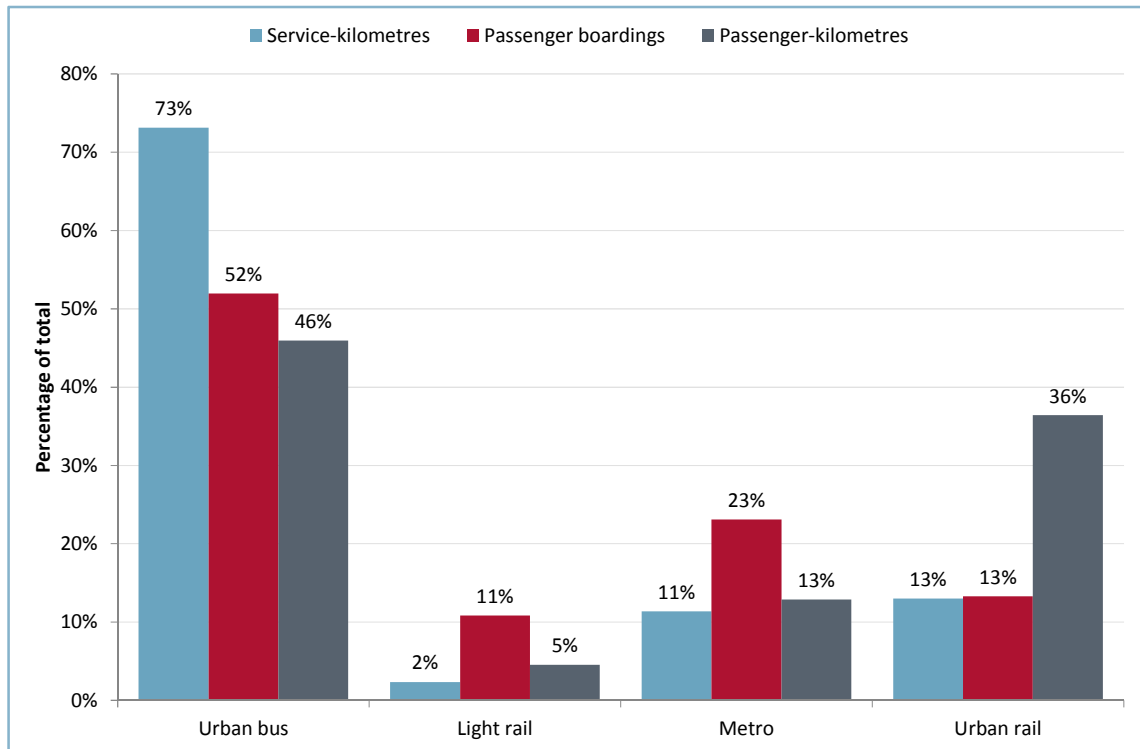
- B.690 Total public transport supply in Sweden in 2013, excluding long distance and commercial services, amounts to around 800 million service-kilometres or 50 billion seat-kilometres. There were 1.4 billion passenger boardings, and 14 billion passenger-kilometres, implying an overall average load factor of just under 30%.
- B.691 Trafikanalys, a Swedish government agency focused on transport policy, notes that, since 2000, the number of boarding per capita has increased by 21% and the total number of boardings has increased by almost 32%. However, the pattern of demand varies, with growth in some Counties and decline in others. The three counties with the principal urban areas of Stockholm, Göteborg (Västra Götaland) and Malmö (Skåne) account for 60% of public

⁶⁶ Source: CIA Factbook

transport supply, 71% of passenger-kilometres and 84% of total boardings, with the highest users of public transport being in Stockholm with 355 boarding per inhabitant and the lowest in Kalmar with 33 boardings per inhabitant.

B.692 Average fare revenue per passenger-kilometre across all modes was approximately €0.14. The mix of modes used is summarised below.

Figure B.1: Mix of public transport by mode



B.693 The dominant mode is bus, the only mode available in the island county of Gotland, and average bus journeys are relatively long at 8.9 kilometres. Light rail and metro serve mainly shorter journeys with average trip lengths of 4.2 kilometres and 5.6 kilometres respectively. On the urban rail networks, in contrast, average journey lengths are around 27.6 kilometres. The result is that bus accounts for 73% of service kilometres but only 46% of passenger-kilometres, but urban rail accounts for only 13% of service kilometres but 36% of passenger-kilometres.

B.694 UITP estimates that around 330 companies provide transport services and the Swedish Ministry of Transport estimates that they collectively employ 31,400 people. UITP estimates that 23,000 of these employees work for the public transport authorities in Stockholm, Göteborg (Västtrafik) or Malmö (Skånetrafik) or five major private sector operators NOBINA, KEOLIS, VEOLIA, ARRIVA and MTR: if correct, this implies that the mean size of remaining operators is around 25 staff. Some of these operators may operate wholly or partially in the long distance or commercial sector.

B.695 UITP also estimates that the three major public transport authorities and five major operators have a fleet of around 13,400 buses, suggesting a total national fleet of around 18,000 buses, at least some of which provide only long distance or commercial services. Trafikanalys state that the median age of buses was four years at the end of 2013, and we estimate that the mean age of the bus fleet fell from 6.6 years in 2003 to 5.7 years in 2013. Trafikanalys also identified that newer buses achieve, on average, a higher annual mileage. It is not clear whether this is due to higher speeds, longer hours, greater reliability or prioritised

deployment, but this does mean that the mean age of a typical bus in service will be lower than that of the fleet.

B.696 Key limitations on the availability of data are that:

- Urban bus services are mainly provided under contract and their costs are confidential to the operators concerned. We understand that typical operator profit margins are around 1.2%
- Urban passenger revenues are rarely specific to a mode, and hence neither revenues nor subsidy are identified by mode

B.697 Table B.1: summarises the information available on KPIS for Sweden. Key limitations on the availability of data are that:

- Urban bus services are mainly provided under contract and their costs are confidential to the operators concerned. We understand that typical operator profit margins are around 1.2%
- Urban passenger revenues are rarely specific to a mode, and hence neither revenues nor subsidy are identified by mode

Table B.1: Public transport KPIS – Sweden

Category	Performance indicator	All modes	Urban bus	Light rail	Metro	Urban rail
Raw data	Total number of passengers transported (mil)	1,420	738	154	328	189
	Total passenger-kilometres (mil)	14,300	6,573	648	1,841	5,208
	Total vehicle-kilometres (mil)	808	591	19	92	105
Productivity	Passenger-kilometres per vehicle-kilometre	18	11	34	20	50
	Vehicle-kilometres per staff member	25,731	NA	12,616	27,067	29,338
Financial	Fare revenue per vehicle-kilometre (€)	2.54	NA	NA	NA	NA
	Operating cost per vehicle-kilometre (€)	4.84	3.62	11.6	4.3	7.3
	Proportion of total operating costs covered by fares	52%	NA	NA	NA	NA
	Proportion of total operating costs covered by subsidy	55%	NA	NA	NA	41%
Service quality	Operating speed (km/h)	NA	NA	NA	NA	NA
	Passenger satisfaction (all modes)	15% High, 43% Good, 24% Median, 18% Low				

Source: Local and regional public transport 2013, Swedish Ministry of Transport; European Commission, 'European's Satisfaction with Urban Transport', 2014

Transport in Stockholm County

Introduction

B.698 Stockholm County has a population of 2.1 million including 900,000 in the Stockholm commune and 25 other communes shown in **Error! Reference source not found..** Transport is managed by Storstockholms Lokaltrafik (SL).

B.699 The Stockholm public transport system is a complex and varied environment. There are four main modes of public transport under SL's control:

- Bus

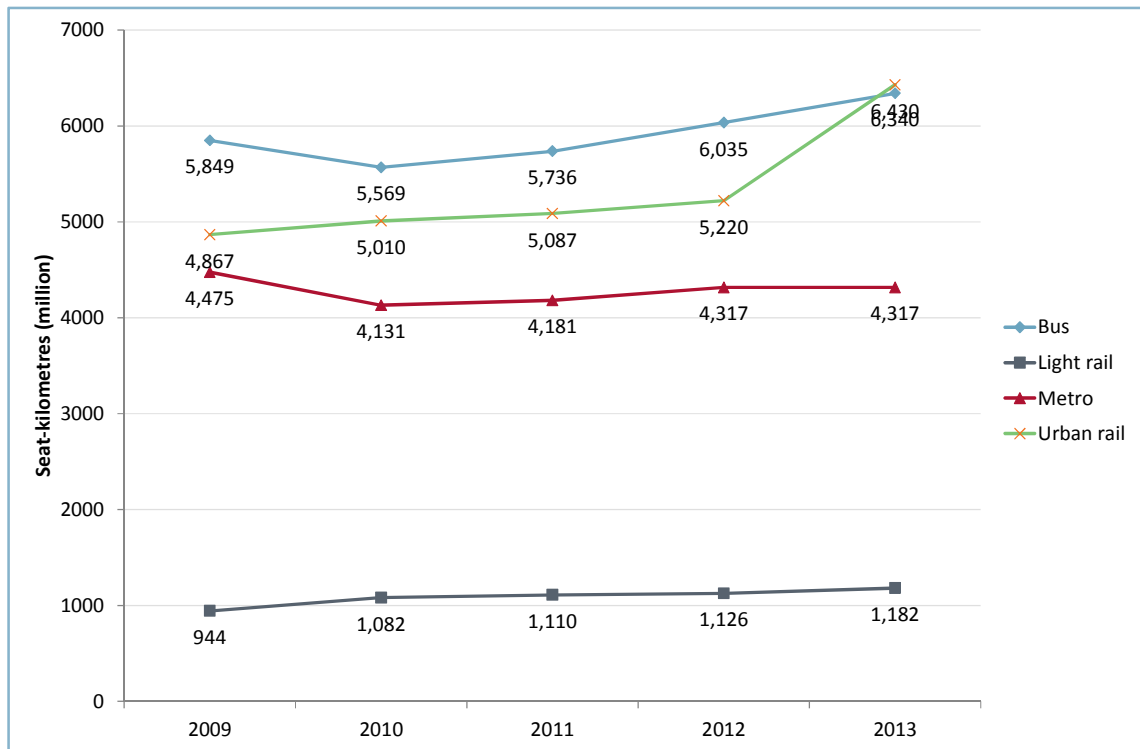
- Light rail, including two local lines, the Roslagsbanan and Saltsjöbanan, and four light rail lines including the 18-kilometre Tvärbanan
- Metro, dating from 1950 with 100 stations on three lines
- Urban rail or Pendeltåg services which focus on central Stockholm but include some services beyond the County boundary operated in conjunction with neighbouring counties (such as to Uppsala in Uppsala County)

- B.700 Other services operated include the Arlanda Express rail concession and the commercially operated airport buses including Flygbussarna.
- B.701 Extensions to both the metro and urban rail network are being built.
- B.702 Fares and ticketing are highly integrated with a range of annual, period and zonal tickets and the city also has a congestion charging scheme (which may be extended) and a deregulated taxi market.
- B.703 In common with other Swedish county authorities, SL contracts for many of its transport services, including bus, commuter rail and metro. At present:
- Bus provided under contract by a number of operators
 - Light rail lines are operated by private companies including Arriva which operates the Roslagsbanan, Saltsjöbanan and Tvärbanan
 - Metro is owned by the Stockholm County Council but operated under contract by MTR
 - Urban rail or Pendeltåg services are operated under contract by Stockholmståg
- B.704 Arriva was awarded a 12 year contract (called E20) for the provision of other transport services (tram and bus). This is currently Sweden's largest multi-modal transport operating contract covering a total of 183 light rail vehicles and 484 buses operating in Stockholm.
- B.705 Strukton Rail was awarded the contract for maintenance of signalling systems, power supply and track on the Roslagsbanan for a 5 year term (extendable to 9 years).
- B.706 MTR (the Hong Kong based transport group) took over operation of the metro in 2009 after a competitive tender with at least five participants. It has an eight year contract with an option for a further extension of six years. MTR Stockholm (MTRS) has responsibility for operating and planning the system but SL will continue to maintain the infrastructure. Maintenance of the 500 vehicles was transferred from the joint venture of SL and Veolia (the previous contractor) to MTR, which established a new joint venture, TBT, with Norwegian train maintenance company, Mantena. The contract provides for a fixed payment of SKr2.4bn a year plus incentives of up to SKr145m a year based on key indicators such as trains run, cleanliness, punctuality and customer satisfaction. Further extensions to the Metro network have been planned and construction is reported to start in 2016, but that activity is not part of this operating contract.

Local public transport trends and KPIs

- B.707 SL provides detailed data on seat-kilometres, passenger boardings, passenger-kilometres and other data.
- B.708 The chart below shows the changing mix of seat-kilometres operated for the modes operated by or for SL.

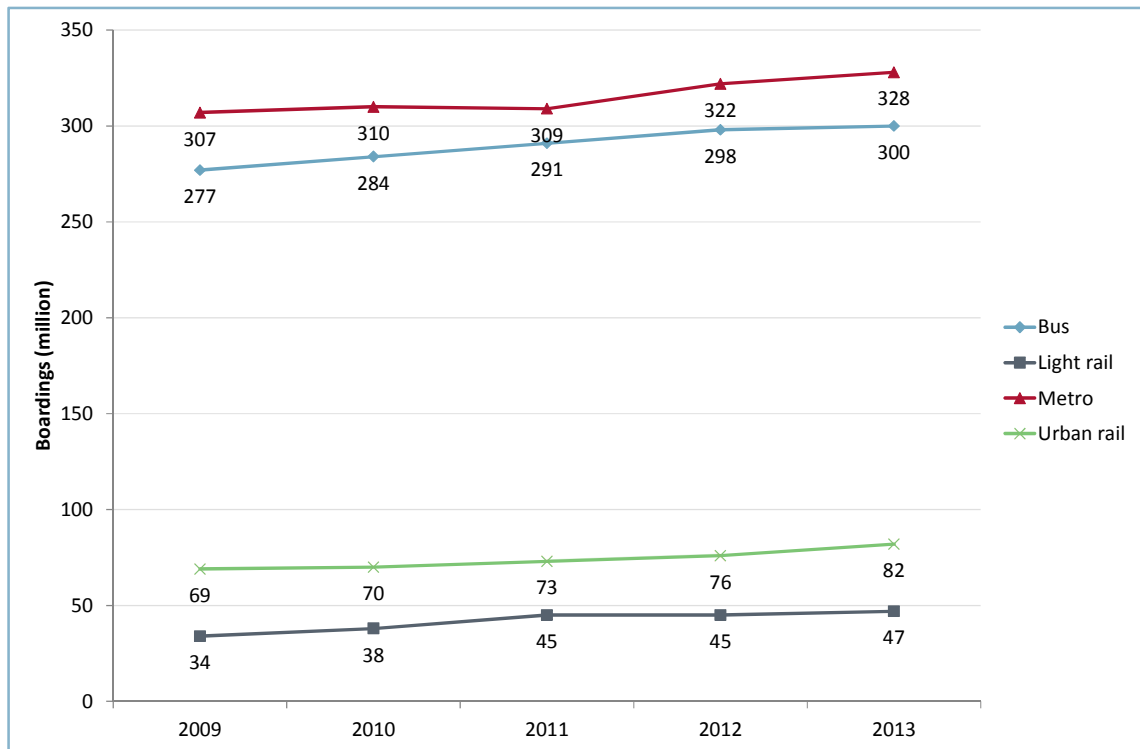
Figure B.1: SL supply of seat-kilometres by mode



Source: Storstockholms Lokaltrafik (SL) Annual Report 2013, Steer Davies Gleave analysis

- B.709 Bus, urban rail and metro are the principal modes but Stockholm also has significant and growing light rail services. There has been growth in light rail services, including the extension to the Tvärbanan light rail line, but in particular to the Pendeltåg urban rail network.
- B.710 The chart below shows the trends in public transport usage as measured by boardings.

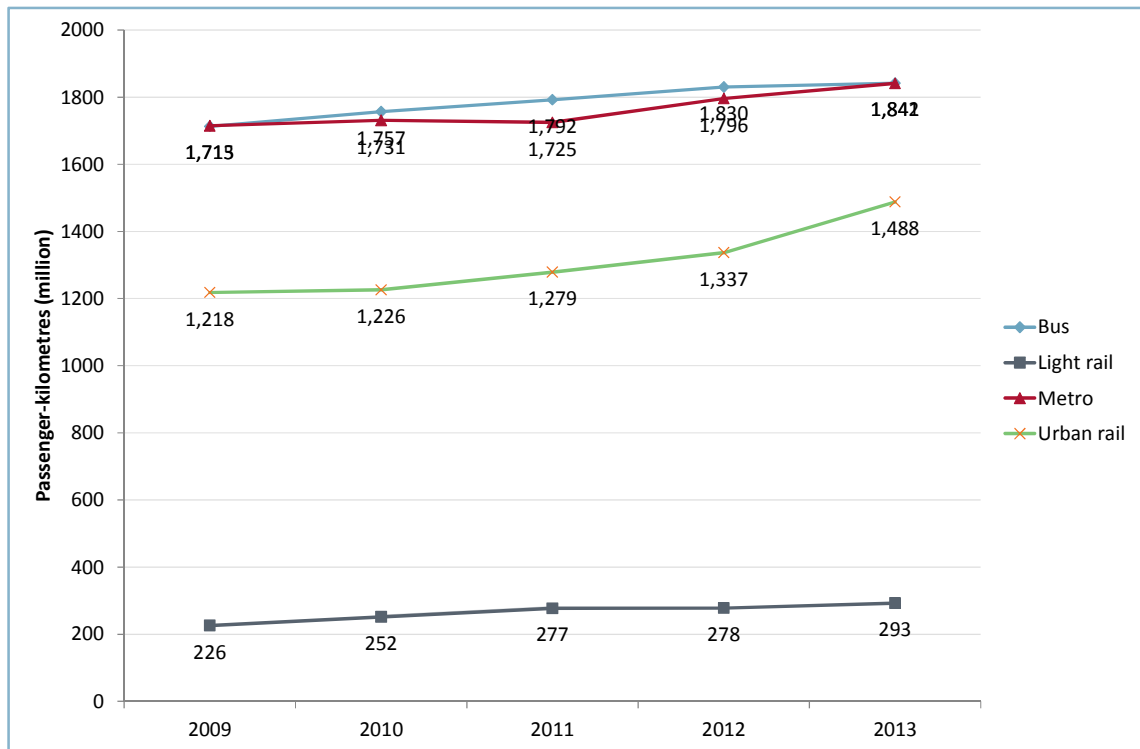
Figure B.2: SL demand: boardings by mode



Source: Storstockholms Lokaltrafik (SL) Annual Report 2013, Steer Davies Gleave analysis

- B.711 Bus and metro account for the largest share of boardings, but there has been steady growth in demand by all modes.
- B.712 Figure B.3: shows the trends in public transport usage as measured by passenger-kilometres.

Figure B.3: SL demand: passenger-kilometres by mode



Source: Storstockholms Lokaltrafik (SL) Annual Report 2013, Steer Davies Gleave analysis

- B.713 This shows the relative importance of the Pendeltåg urban rail network which carries longer distance journeys across the entire Stockholm County.
- B.714 The main performance indicators for local public transport in Stockholm County are shown in Figure B.4: .
- B.715 Key limitations on the availability of data available in recent years are that:
- Passenger revenues are not specific to a mode, and hence neither revenues nor subsidy can be calculated by mode;
 - Approximately two-thirds of services are bought in, and so SL's costs are the contracted price rather than the operators' own costs (similarly, SL cannot identify the operators' employees); and
 - Fares cover 39% of SL's costs and subsidy covers 39% of SL's costs, but SL has other sources of income.

Figure B.4: Public transport KPIs – Stockholm, Sweden

Category	Performance indicator	Total	Bus	Light rail	Metro	Rail
Productivity	Passenger-kilometres per vehicle-kilometre	NA	NA	NA	20	NA
	Vehicle-kilometres per staff member	NA	NA	NA	27,067	NA
Financial	Fare revenue per vehicle-kilometre (€)	NA	NA	NA	NA	NA
	Operating cost per vehicle-kilometre (€)	NA	NA	NA	4.3	NA
	Proportion of total operating costs covered by fares	39%	NA	NA	NA	NA
	Proportion of total operating costs covered by subsidy	42%	NA	NA	NA	NA
Service quality	Operating speed (km/h)	NA	NA	NA	NA	NA

Source: Local and regional public transport 2013, Storstockholms Lokaltrafik (SL) Annual Report 2013

Key factors underlying the performance of local public transport

- B.716 We have not identified any brief analysis which links overall demand for public transport in the Stockholm area to either exogenous factors such as population, GDP, employment or endogenous factors such as network, frequency, capacity or fares. The changes in seat-kilometres, passenger boardings and passenger-kilometres summarised in the Figures above cannot be readily explained by single factors.
- B.717 However, a number of broad factors may contribute to the performance of local public transport in Stockholm. We stress that the order in which we list them below does not imply any relative importance.
- B.718 First, the geography of Stockholm favours public transport. The City is located on a number of islands where Lake Mälaren drains towards the Baltic. This means much movement is limited by the availability of bridges and tunnels, and these can be planned, built and priced (including public transport fares and road tolls) to facilitate rail or public transport use rather than permit uncontrolled use of car.
- B.719 Second, Stockholm has carried out extensive and detailed data collection and planning, and proposals for developments are subject to research and consultation. Detailed analysis of past, current and planned and forecast population and employment at the levels of the individual communities is a valuable tool for planning transport. Within this framework the network has been gradually expanded including:
- In the past, the construction and extension of the Tvärbanan and the Arlanda Express infrastructure, also available to Pendeltåg and long-distance trains, to Arlanda Airport.
 - In the future, extensions to the metro and the construction of the Citybanan, a new pair of tracks through central Stockholm relieving a longstanding bottleneck constraining north-south Pendeltåg and long distance services.
- B.720 Third, Stockholm benefits from a broad policy consensus on the need for public transport and in particular for subsidy for around 50% of total costs. Within the overall subsidy envelope, however, fares have gradually been rebalanced, in particular with the aim of encouraging the use of zonal or period tickets which allow free movement over a period.

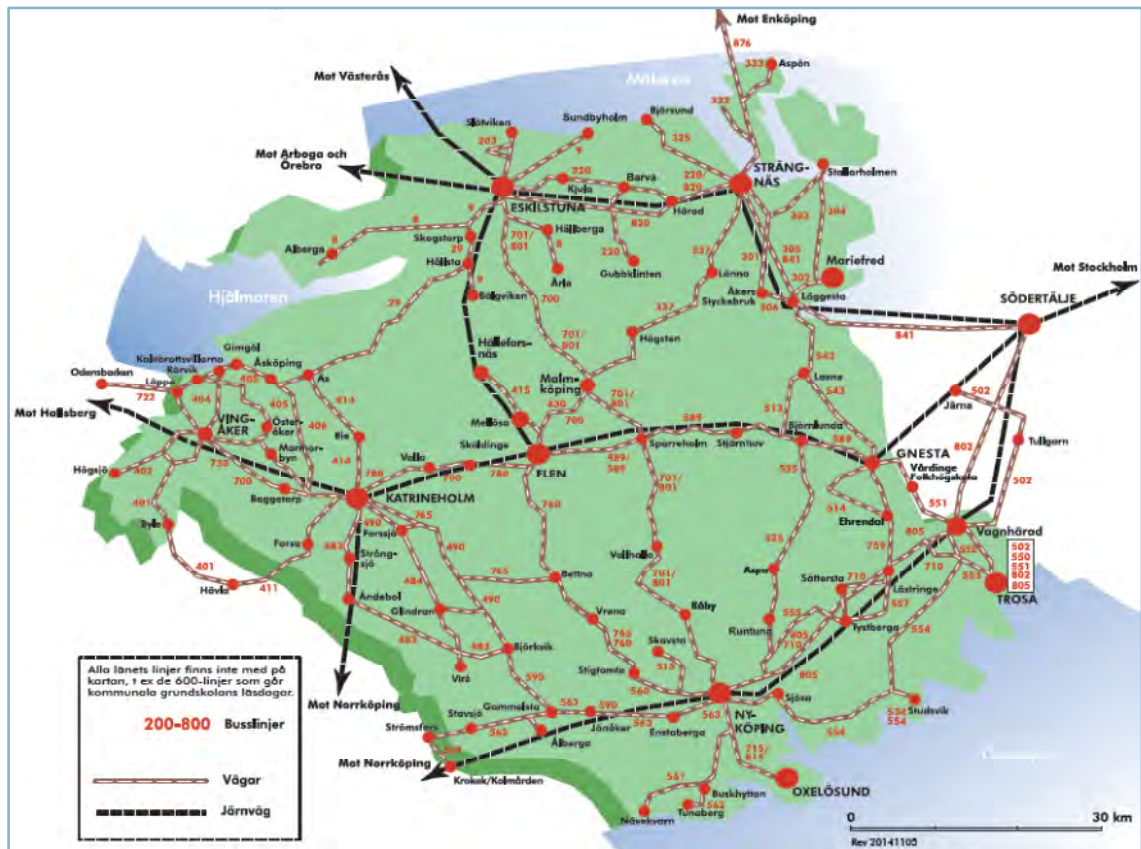
- B.721 Fourth, Sweden sets targets, including both direct targets for public transport mode share and also targets which indirectly encourage public transport, such as the environmental policy at Arlanda Airport (Stockholm was the first European Green Capital in 2010) which encourages the use of public transport as a surface access mode.
- B.722 Fifth, Stockholm has been innovative in a number of areas. Sweden was the first European Member State to separate railway infrastructure and operations, in 1988, three years before Directive 91/440/EEC required even limited accounting separation from 1993. SL has deregulated the taxi market, allowing operators to set their own fares in a competitive environment. In support of its environmental policy, and in preference to further increases in road capacity, it has experimented with, and then introduced on a permanent basis, a congestion charge applying to traffic entering the central area, and this may now be extended to cover the Essingeleden motorway around the city centre. Some Pendeltåg services are now operated jointly with neighbouring Uppsala County to link Stockholm and Uppsala via Arlanda Airport.
- B.723 Sixth, and as set out above, Sweden in general and Stockholm in particular is open to the contracting out of public transport provision, but on a pragmatic basis according to specific needs and results. This policy has been developed over a number of years and benefits from the experience gained during the process. This has resulted in a number of different models, such as:
- The Arlanda Express airport concession, which built and operators both infrastructure and services, which it sells to other users at unregulated prices
 - The metro, where operations have been contracted out but SL continues to maintain the infrastructure

Transport in Södermanland County

Introduction

- B.724 Södermanland County (Sörmland) has 270,000 inhabitants including 65,000 in its largest town, Eskilstuna. It is contiguous with Stockholm County and includes the airport of Skavsta, near Nyköping, which is used by a number of airlines as an alternative to Arlanda airport on the northern edge of Stockholm County. Södermanland County and its constituent Communes procure a total of 124 different bus and rail routes under a variety of contract forms:
- Rail net cost contracts, all with MÄLAB, which in turn has procured rail services under framework agreements with train operators SJ, Veolia and Tågkompaniet;
 - Rail cooperation agreement with Stockholm County Council (SLL);
 - Bus gross cost contracts with NOBINA, which provides bus services throughout Scandinavia;
 - Bus incentive contracts with various operators; and
 - Bus service concession on one small route.
- B.725 The current network of bus and rail routes is shown in below.

Figure B.1: Eskilstuna and Södermanland County



Source: Sörmland Länstrafiken

Local public transport trends and KPIs

- B.726 Sörmland produces an extremely detailed analysis of all 124 bus and rail route operated under PSCs. Each route is reported on a consistent basis, providing the detail shown in Table B.1: .
- B.727 We understand that the competent authorities in Sörmland consider this information to meet the requirements of Article (7)(1) of regulation 1370/2007.

Table B.1: Public transport reporting – Sörmland, Sweden

Swedish	Q	English	Comments
Linjenummer		Route number	
Typ		Route type	Regional, local or for a specific Commune
Linjesträckning		Routing	Start, end and main calling points
Linjebeskrivning		Route description	Provides further details of the type of route
Styrande parametrar		Governing parameters	Identifies issues such as connections required
Finansiär		Financier	The County or Commune funding the route
Entreprenör		Operator	
Antal turer/vintervecka	✓	Trips per winter week	Number of trips on weekdays, Saturday, Sunday
Linjens längd i km (typvärde)	✓	Length in kilometres (typical)	
Produktion km/år	✓	Vehicle kilometres per year	
Produktion tim/år	✓	Vehicle hours per year	
Fordon	✓	Vehicles	Vehicles are not dedicated to routes, so this is an estimate and may be less than 1
Antal resor (totalt)	✓	Number of passenger journeys	This may be estimated for travellers with passes
Därav allmänheten	✓	Of which, public	Excludes non fare-paying passengers
Kostnad per år (exkl moms)	✓	Cost per year (excluding VAT)	Contract price, rather than the operator's costs
Intäkt per år (allmänhet, exkl moms)	✓	Revenue per year (general use, excluding VAT)	
Kostnadstäckning	✓	Cost recovery	
Intäkter per år (skolkort, ex moms)	✓	Revenue per year (school passes, excluding VAT)	
Kostnadstäckning inkl skolkort	✓	Cost recovery including school passes	
Planerad utveckling		Planned development	Information on future changes to the route

Source: Sörmland Länstrafiken, Steer Davies Gleave analysis, Q is quantitative data

B.728 However, as Table B.2: shows, even this detailed level of reporting has not enabled us to calculate many of the KPIs for Sörmland.

Table B.2: Public transport KPIs – Sörmland, Sweden

Category	Performance indicator	Total	Bus	Rail
Productivity	Passenger-kilometres per vehicle-kilometre	13.2	NA	NA
	Vehicle-kilometres per staff member	NA	NA	NA
Financial	Fare revenue per vehicle-kilometre (€)	1.16	Average can be calculated	Average can be calculated
	Operating cost per vehicle-kilometre (€)	NA	NA	NA
	Proportion of total operating costs covered by fares	NA	NA	NA
	Proportion of total operating costs covered by subsidy	38%	NA	NA
Service quality	Operating speed (km/h)	NA	NA	NA

Source: Sörmland County Annual Traffic Report 2013⁶⁷, Trafikanalys

B.729 The principal reasons are that:

- The authority makes no estimate of passenger-kilometres although Trafikanalys estimates this as 210 million passenger-kilometres from which we have estimated the number shown in the table.
- Article (7)(1) does not require the provision of any information on staff numbers and, when services are contracted out, particularly under a number of small PSCs, a competent authority has no means of identifying the number of operator staff involved. In practice, with operators such as NOBINA having multiple contracts, both staff and vehicles are shared between contracts, and a number of minor routes are listed as having no vehicles. One example is the 570 bus service funded by Nyköping Commune, which runs once each Saturday night and carries an average of 12 passengers. NOBINA, the operator, requires no dedicated vehicle or dedicated staff. A further complication is that some routes are served by two or more operators, as can be the case where the competent authority has procured additional services under a separate competition.
- The authorities can identify the subsidy paid to operators and, for gross cost contracts at least, the revenue associated with each service. However, the cost of the service can only be identified by the operators, if they calculate it at all. NOBINA, for example, may not carry out any analysis of the costs of operating the 570 bus service.

B.730 We estimate that the fare revenue per vehicle-kilometre for the 570 bus service is SKR 3.5 (€0.39) per vehicle-kilometre. In contrast, the average revenue per vehicle kilometre on Veolia’s bus route 1, which operates 173 times per weekday between Torshälla and Borsökna, is SKR 14.0 (€1.54) per vehicle-kilometre or SKR 20.8 (€2.29) per vehicle-kilometre, or nearly six times higher. It is not surprising that revenue per vehicle-kilometre on frequent service is higher, as there is much more scope to vary the service frequency (such as intervals of 60, 30, 20, 15, 12, 10 or fewer minutes) to match supply closely to demand.

B.731 Trafikanalys reports an average value of €1.16 across all routes, which lies between our estimates for routes 1 and 570, but it is clear that this is an average across a wide mix of services.

⁶⁷ “Trafikbokslut, Sörmlands län 2013 med årlig rapport”

Key factors underlying the performance of local public transport

B.732 Sörmland's detailed reporting provides some insight into factors underlying the performance of local public transport, in particular that:

- Average load factors may vary widely, and be low on services where there is little opportunity to reduce frequency to match capacity to demand.
- Average speeds are likely to vary widely between urban and regional routes.
- Average cost recovery depends not only on average load factors and average speed but also on fares policy.

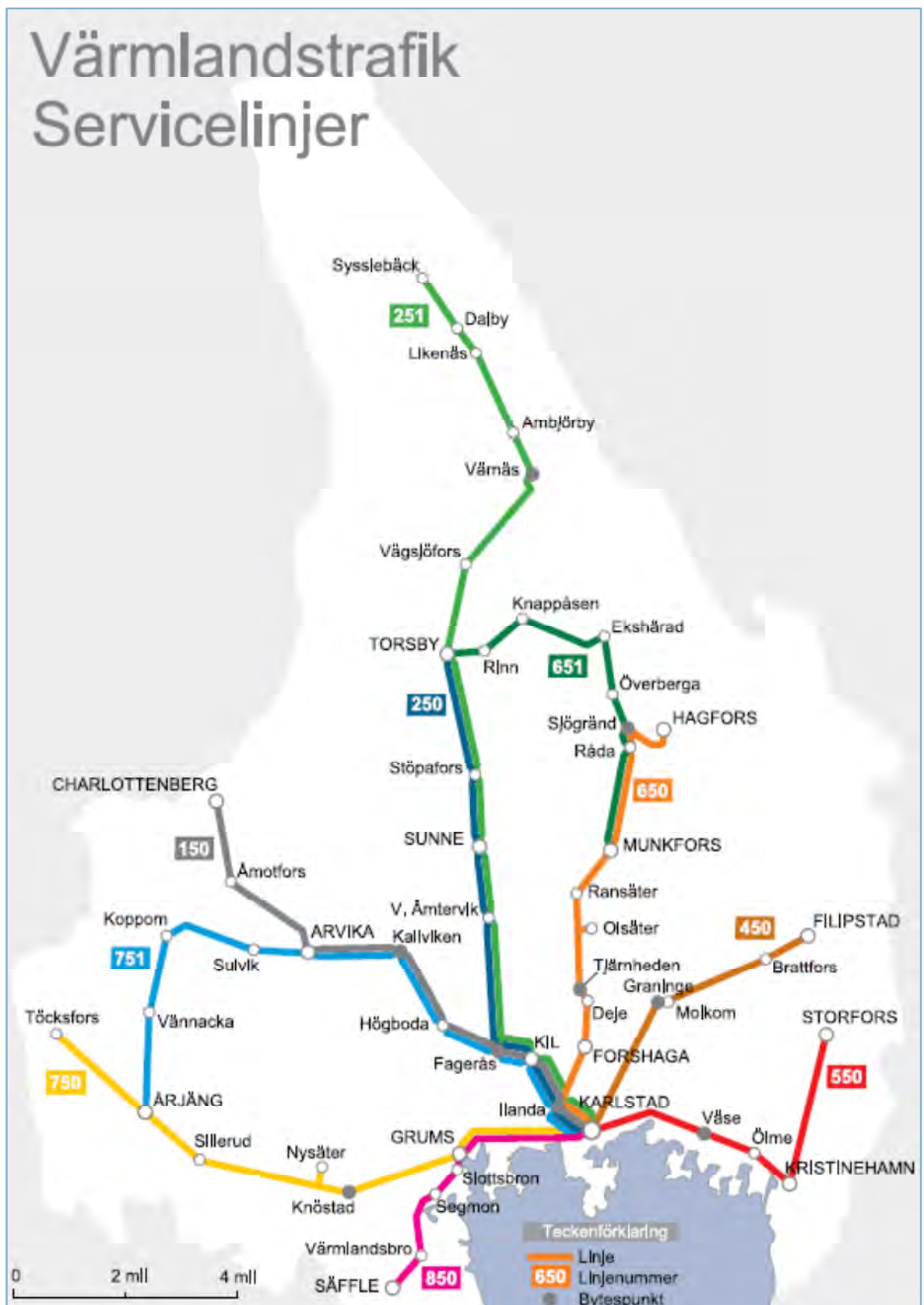
B.733 This suggests that any averaging of data over the services of Member State, a competent authority, or even a mode within a competent authority, is likely to conceal wide variations resulting from the characteristics of individual routes.

Transport in Värmland County

Introduction

B.734 Värmland County has 270,000 inhabitants including 90,000 in its largest town, Karlstad, from which the principal bus routes radiate, as shown in Figure B.1.: A number of bus and rail services are supported by the County and the Communes.

Figure B.1: Karlstad and Värmland



Source: Värmlandstrafik

Local public transport trends and KPIs

Table B.1: Public transport KPIs – Värmland, Sweden

Category	Performance indicator	Total	Bus	Rail
Productivity	Passenger-kilometres per vehicle-kilometre	12.6	10.5	34.1
	Vehicle-kilometres per staff member	NA	NA	NA
Financial	Fare revenue per vehicle-kilometre (€)	1.38	NA	NA
	Operating cost per vehicle-kilometre (€)	NA	NA	NA
	Proportion of total operating costs covered by fares	NA	NA	NA
	Proportion of total operating costs covered by subsidy	NA	NA	NA
Service quality	Operating speed (km/h)	NA	NA	NA

Source: Årlig rapport om kollektivtrafiken i Värmland 2013, Trafikanalys

- B.735 Värmland produces a brief annual report on public transport but the only KPI we have been able to identify from the data available is the passenger-kilometres per vehicle-kilometre. As with Sörmland, an average fare revenue per vehicle-kilometre across all modes has been estimated by Trafikanalys.

Key factors underlying the performance of local public transport

- B.736 Given the limited data available relevant to our chosen KPIs, it has not been possible to carry out any more detailed analysis on the performance of local public transport. As with Sörmland, however, factors underlying the performance of local public transport may include that:
- Average load factors may vary widely, and be low on services where there is little opportunity to reduce frequency to match capacity to demand.
 - Average speeds are likely to vary widely between urban and regional routes.
 - Average cost recovery depends not only on average load factors and average speed but also on fares policy.

United Kingdom

- B.737 In 2012, the United Kingdom had a population of 63.5 million inhabitants, a population density of 263 inhabitants per square kilometre, and GDP per capita of €30,200, 5.9% less than in 2008. Although the UK is a unitary state, the devolved governments of Scotland, Wales and Northern Ireland have significant responsibility for transport powers. National transport powers for England are exerted by the UK government.

Table B.1: United Kingdom overview

United Kingdom	2012	2008-2012 change
Population (million)	63.5	3.12%
GDP per capita (€)	€30,200	-5.9%
Population density (inhabitants per square kilometre)	263	3%

Source: Eurostat

Overview of competent authorities and procurement in the United Kingdom

- B.738 The overview of competent authorities and procurement in the United Kingdom that follows is derived from UITP Europe's 'Organisation and Major Players of Short-Distance Public Transport: New Developments in the European Union,' published in January 2015 and the response received from the Department for Transport.
- B.739 In English urban areas outside London, Integrated Transport Authorities (ITAs) are responsible for local transport networks. Passenger Transport Executives (PTEs) are the executive arm of ITAs and are directly responsible for local public transport. In England, some investment decisions are taken by Local Enterprise Partnerships (LEPs), partnerships between the local government and private businesses. London is detailed below as one of the network case studies.
- B.740 In Scotland and Wales, respectively, Regional Transport Partnerships and Regional Transport Consortia play the role of ITAs and PTEs. In Northern Ireland, the Department for Regional Development has direct responsibility for public transport.
- B.741 In Wales, Scotland, and England outside London, bus services have been deregulated since 1986 and most bus services are operated by commercial companies on a commercial basis⁶⁸. Bus operators are subject to a relatively limited 'access to the market' criteria (e.g. meeting safety and operator suitability criteria, and registering services and timetables with the Office of the Traffic Commissioner, the body which regulates industry safety and punctuality). Within the market, there is no financial compensation and no exclusive right, although operators are reimbursed by local authorities on a 'no better, no worse' basis, in line with the compensation requirements set out in Regulation 1370/2007 for the free carriage of eligible elderly and disabled passengers on off-peak bus services.
- B.742 Local transport authorities do not have the power to integrate public service obligations into these services, although where certain bus services (for example Sunday or late evening services) are not commercially viable, local authorities may choose to tender for their provision where they consider it to be socially necessary. Such services are openly tendered in line with domestic and EU legislation. An estimated 19% of mileage outside London in 2014 was on services financially supported (i.e. on a tendered basis) by local authorities.

⁶⁸ This means that bus operators decide which services to run and what fares to charge.

- B.743 Public transport in Northern Ireland is directly awarded to Translink, a publicly owned corporation.
- B.744 All operators must provide free travel to disabled individuals and passengers over the State Pension Age and are compensated for doing so by the relevant Competent Authorities.
- B.745 Most light rail systems are awarded by competitive tender and include infrastructure management.
- B.746 Public funding for local transport comes from the devolved governments in England, Scotland, Wales and Northern Ireland.

Local public transport trends

- B.747 Over 2.7 billion vehicle-kilometres were provided by bus, tram and underground vehicles in financial year 2013/2014⁶⁹ across the UK. Passenger-kilometres on Britain’s bus services totalled just under 30 billion while tram and underground passenger-kilometres amounted to just under 12 billion. Passenger-kilometre figures for Northern Ireland were unavailable.
- B.748 Just under 5.3 billion passenger journeys were taken on buses in the UK during 2013/2014, the highest figure since the mid-1980s. While bus use in London has doubled during that period, the rest of the country witnessed a slight increase in 2013/2014 following several years of decline during the economic recession. The number of tram passenger journeys in the UK reached over 227 million in 2013/2014 having steadily risen over the last 20 years with the construction of new networks and lines.
- B.749 Car ownership in 2012 was below the EU average of 487, with 464 cars per 1,000 inhabitants. Demand for public transport has risen by nearly 20% overall between 2000 and 2012, significantly above the EU average of 8%.⁷⁰
- B.750 There are approximately 127,000 people employed by bus operators across the UK. Nowadays, most services are run by one of the five private companies which developed following the deregulation of bus services in the early 1990s (Arriva, First, Go-Ahead, National Express and Stagecoach). There are several municipal companies remaining, the largest of which is Lothian Buses who run services in Edinburgh and the surrounding region. There are an estimated 43,000 vehicles in the UK’s bus fleet, 432 vehicles in England’s tram fleet and 4324 vehicles in the UK’s underground fleet (London and Glasgow).
- B.751 Some in the UK transport industry contend that the freedom afforded to bus operators (with the exception of London and Northern Ireland) has created an imbalance of terms between bus operators and local authorities. In response to this study, the Passenger Transport Executive Group (PTEG) described a series of ‘failings’ of commercial bus services: “they only run on profitable routes at profitable times; fares are unregulated and often expensive; and there is little imperative to coordinate services and fares between operators, leading to passenger confusion and sub-optimal performance. The overall result is a vicious decline of service, leading to decline in patronage, leading to further decline in service.”
- B.752 The UK government has proposed measures to counter the perceived disadvantages associated with the deregulated bus industry, set out above. Quality Bus Contract Schemes (QCs), which allowed local authorities to set the destinations, frequency, quality standards and

⁶⁹ Transport statistics in the UK are recorded for each financial year between April 1st and March 31st and not by calendar year.

⁷⁰ Source: UTIP, *Local Public Transport Trends in the European Union, Passenger Focus*

fare costs for bus services, received little take-up from local authorities due to the complexity of implementation and the possibility of legal challenge from bus operators. However, Quality Partnerships (QPs), where local authorities and bus operators enter into mutual agreements to provide services and infrastructure, while retaining the free-access model, have been more successful. Under the government's proposed Buses Bill, directly-elected mayors for combined authority areas would be responsible for running and franchising their own bus services, giving them greater powers over bus operators than local authorities currently have.

B.753 In July 2015, Cornwall Council, Cornwall and the Isles of Scilly Local Enterprise Partnership and the UK government agreed the Cornwall Devolution deal, which promises that (subject to necessary legislation and local consultation) Cornwall Council will receive powers to franchise all bus services in Cornwall by December 2018. It is the first rural county in the UK to receive such powers.

B.754 The table below summarises the KPIs available for the United Kingdom.

Table B.1: Public transport KPIs – United Kingdom

Category	Performance indicator	Bus (GB)	Bus (NI)	Tram (England)
Raw data	Total number of passengers transported (mil)	5,233	66.9	227.1
	Total passenger-kilometres (mil)	29,700	NA	1,484.5
	Total vehicle-kilometres (mil)	2,529	69.5	28.65
Productivity	Passenger-kilometres per vehicle-kilometre	11.7	NA	52
	Vehicle-kilometres per staff member	20,395	20,461	NA
Financial	Fare revenue per vehicle-kilometre (€)	1.87	2.18	12.48
	Operating cost per vehicle-kilometre (€)	2.3	NA	NA
	Proportion of total operating costs covered by fares	NA	NA	NA
	Proportion of total operating costs covered by subsidy	NA	NA	NA
Service quality	Operating Speed (km/h)	NA	NA	NA
	Passenger satisfaction (all modes)	21% High, 42% Good, 21% Median, 16% Low		

Sources: Steer Davies Gleave analysis of DfT and Transport Scotland statistics; European Commission, 'European's Satisfaction with Urban Transport', 2014

London

Introduction

B.755 The Competent Authority for the London region is Transport for London (TfL), an executive agency which is part of the Greater London Authority (GLA). The GLA is top level administrative body for Greater London and is led by the Mayor of London, a role which is directly elected by London residents. TfL is responsible for developing and implementing London's transport strategy as well as managing the majority of public transport services in London (most commuter rail is managed by the Department of Transport).

B.756 The London network contains the following public transport systems:

- London Underground: a metro system with 11 different lines and serving 270 stations.
- Docklands Light Railway (DLR): an automated light rail system operating in the east of the city with six branches and 45 stations.

- Tramlink: a light rail system operating in South London with four branches and 39 stations.
- Overground: an urban rail network linking peripheral inner and outer London suburbs with six lines and 83 stations.
- London buses: the city's bus network with over 600 routes.
- London River Services: river boat services mostly travelling east west along the Thames with 25 terminals. TfL regulate and license both leisure and commuter services.

B.757 The London region has an extensive heavy rail commuter network. As these routes are part of larger franchises tendered by the Department of Transport, we do not consider them to be urban rail as defined for this study.

B.758 The procurement strategy of Transport for London varies by mode:

- Internal operator: London Underground Limited operates the metro system. It is a wholly owned subsidiary of Transport for London.
- Competitive tenders are used for other transport modes including:
 - DLR: seven year concession is currently operated by a joint venture of Keolis and Amey;
 - Overground: seven year concession with executed option of a two year extension is currently operated by a joint venture of Arriva and MTR Corporation;
 - Tramway: operated by Tram operations Limited, part of FirstGroup; and
 - Buses: All routes are put out to competitive tender by TfL on a rolling basis. Contracts are typically awarded on a gross cost basis with performance incentives and usually last five years in duration with a two year extension if TfL performance targets are met.

Local public transport trends and KPIs

B.759 The public transport system in London serves a population of 8.3 million. Travel demand has risen consistently since the 1990s with the increase in trips made (1.1% annually between 2003 and 2013) largely matching the growth in population (1.3% between 2012 and 2013, and 13.8% higher than 2003). In 2013, journeys made by public transport accounted for 45% of all journeys in London, marking a 15% increase in public transport mode share over the previous twenty years.

Key performance indicators

Table B.1: Public transport KPIs – London, United Kingdom

Category	Performance indicator	Bus	Tramlink (Tram)	DLR (Light rail)	Metro	Urban rail
Productivity	Passenger-kilometres per vehicle-kilometre	NA	NA	NA	NA	NA
	Vehicle-kilometres per staff member	NA	NA	NA	NA	NA
Financial	Fare revenue per vehicle-kilometre (€)	£3.06	NA	£21.03	£30.00	£18.86
	Operating cost per vehicle-kilometre (€)	NA	NA	NA	NA	NA
	Proportion of total operating costs covered by fares	NA	NA	NA	NA	NA
	Proportion of total operating costs covered by subsidy	NA	NA	NA	NA	NA
Service quality	Operating Speed (km/h)	NA	NA	NA	NA	NA
	Passenger satisfaction	83%	89%	87%	83%	82%

Source: Travel in London Report 7 (TfL)

Key factors underlying local public transport performance

- B.760 London witnessed considerable population growth of 14% between 2001 and 2011. London's population is younger than the rest of the UK (63% aged under 44 in London compared to 53% for the rest of the UK in 2011). Only 65% of London residents possessed a driving licence in 2012/2013, the lowest rate in the UK. London also has the highest proportion of households in the UK without a car (44% in 2013).
- B.761 The average household income per head in London is 30 per cent higher than the UK level. London generates approximately 22 per cent of the UK's GDP. The unemployment rate stood at 6.4% for London at the end of 2014, 0.7% higher than the UK rate of 5.7%. Both rates have been declining steadily since a post economic crisis peak in 2011.
- B.762 The contract award mechanism for London bus services, tram services and the DLR has not changed over the last 10 years.
- B.763 Until 2007, the majority of the Overground network was part of the national network managed by Network Rail. Since TfL assumed responsibility in 2007, the network was grown in size with services previously part of national rail franchises brought under the remit of the Overground contract.
- B.764 There has been no structural changes in the financing of London public transport network in the last ten years.
- B.765 Since the introduction of TfL's smartcard, Oyster, in 2003, the number of passengers paying with cash has reduced dramatically. Over 80% of journeys are now paid for using Oyster and buses have stopped accepting cash payments since 2014.
- B.766 The supply of public transport has been also been increased by TfL in recent years. For example, the number of vehicle-kilometres operated by buses increased by 43% between 1999 and 2013 and the number of underground kilometres by 11% between 2001 and 2013.

Merseyside

Introduction

- B.767 The metropolitan area of Liverpool, known as the Merseyside region has a population of 1.38 million (2012). It is served by an urban rail and bus network.
- B.768 A passenger transport executive (a local government body responsible for public transport within large UK urban areas) named Merseytravel is responsible for the organisation of public transport in the Merseyside region.
- B.769 The majority of bus services in the region (84%) are run on a commercial basis. There are many different operators operating services in the region. Arriva operates 69% of bus services, Stagecoach operates 21% with approximately ten small operators providing the remainder of services.
- B.770 The remaining (16%) of bus services are supported by Merseytravel. The vast majority of these services are run as minimum cost contracts with just 1.7% run as net subsidy contracts. Merseytravel paid £15.6 million in subsidy to these supported services in 2012/2013.
- B.771 Merseytravel is also responsible for issuing the tender for the Merseyrail network, a commuter rail network formed of three lines serving 67 stations in the region. This urban network is currently operated by a Serco-Abellio on a 25 year contract.

Local public transport trends and KPIs

- B.772 The region has seen a significant decline in bus journeys since the 1990s from 230 million in 1990 to just under 140 million in 2013.
- B.773 As regards rail journeys, a significant increase was witnessed between 1997 and 2012 from 32 million to 39 million. The most recent financial year for which data is available saw a slight decrease in passenger journeys however.

Table B.1: Public transport KPIs – Merseyside, United Kingdom

Category	Performance indicator	Bus	Merseyrail
Productivity	Passenger-kilometres per vehicle-kilometre	10	67
	Vehicle-kilometres per staff member	NA	5,333
Financial	Fare revenue per vehicle-kilometre (€)	NA	NA
	Operating cost per vehicle-kilometre (€)	NA	NA
	Proportion of total operating costs covered by fares	NA	NA
	Proportion of total operating costs covered by subsidy	NA	NA
Service quality	Operating Speed (km/h)	NA	NA
	Passenger satisfaction	NA	NA

Source: Merseytravel annual statistical monitor (2012-2013)

Key factors underlying local public transport performance

- B.774 The population of the Merseyside region grew by 1.4% between 2002 and 2012 to 1.32 million inhabitants. During this period, the population of Liverpool city itself grew by 6%. 30.6% of Merseyside's population are 24 and under while just over a fifth (20.8%) are of pensionable age. The GDP per capita for the Merseyside region was €29,252 in 2013, just below the UK average.

- B.775 Within the Merseyside region, Liverpool has a lower than average car ownership rate in comparison to many other similar urban areas. In recent years, there have been rises in both car driver and car passenger trips in addition to an increase in rail use whilst bus use and walking declined.
- B.776 In 2013, the unemployment rate stood at 9.8% in the Merseyside region. The growth rate for GVA in the Merseyside region was 38% between 2002 and 2012, in comparison with the national UK average of 43.6%.
- B.777 The contract award mechanism for bus and rail services has not changed over the last 10 years.
- B.778 Sales of bus-only and combined bus and rail tickets have decreased since 2004 but sales of rail-only season tickets have increased. Average peak fares for bus and rail have risen steadily over the last decade at a greater rate than the retail price index and motoring costs.
- B.779 Vehicle-kilometres on supported bus services has fallen from a peak of 12.68 million in 2006/07 to 10.72 million in 2012/13. The subsidy reduced by almost 19% over the same period.
- B.780 Following a trial of removing all bus lanes in Liverpool in 2013, the City Council decided to reinstate just four of the original 26 bus lanes in 2014.
- B.781 A smart card, Walrus, was introduced in late 2014 for various ticket types.

Buckinghamshire

Introduction

- B.782 Buckinghamshire is a county in the South East of England, just north of London. Although the county contains some large towns including Milton Keynes, High Wycombe and Aylesbury, much of the area is rural.
- B.783 Local public transport in Buckinghamshire is comprised entirely of local bus services. As in the rest of England (with the exception of London), these services are deregulated and operated by commercial companies. Arriva and Go Ahead, two of the “big five”, the UK’s largest bus groups, operate nearly 70% of bus services in Buckinghamshire; Arriva alone has over 50% market share.⁷¹
- B.784 Under the Transport Act 1985, Buckinghamshire County Council has a duty to identify public transport requirements in the county and provide reasonable access for passengers when purely commercial companies are not meeting these requirements.⁷² In effect, this means subsidising commercial companies to operate unprofitable but “socially necessary” bus routes, particularly in rural areas, where passengers would not otherwise be served. In 2013/14, 23% of the bus services provided in Buckinghamshire were subsidised by the Council.⁷³

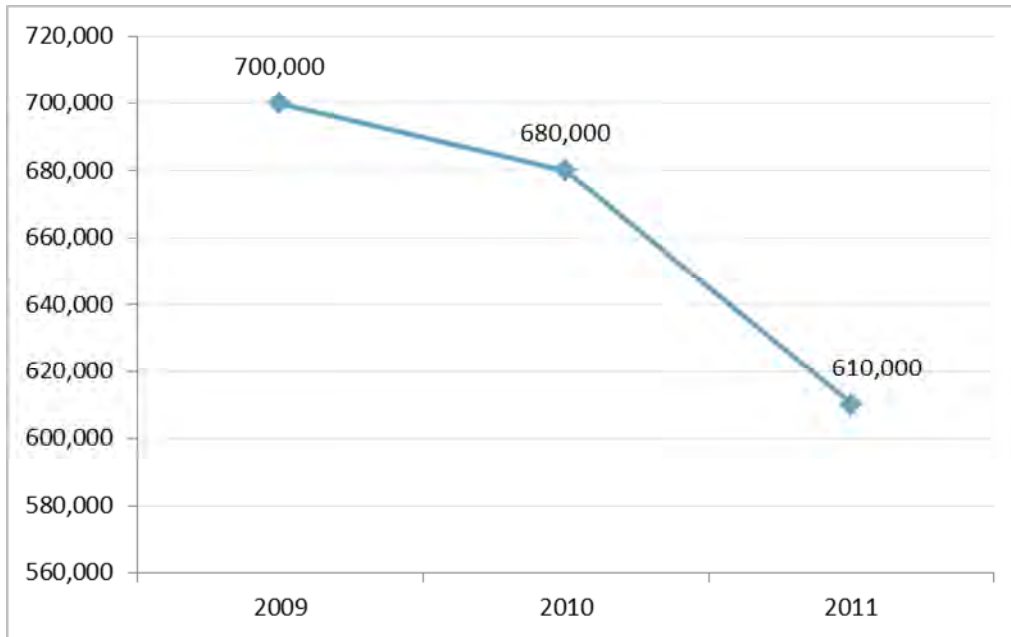
⁷¹ Department for Transport Statistics (March 2014)

⁷² Buckinghamshire County Council - Environment, Transport and Localities Select Committee, Public Transport Enquiry (October 2014)

⁷³ Department for Transport Statistics (March 2014)

B.785 Overall, bus usage in Buckinghamshire is in decline; the number of bus journeys each year has fallen by around 11% between 2010 and 2014.⁷⁴ This decline is even more pronounced when looking at bus usage on rural routes:

Figure B.1: Total passenger journeys on rural routes in Buckinghamshire, 2009-2011



Source: Transport for Buckinghamshire, Travel Bucks Strategy (2012)

Key performance indicators

B.786 Although limited KPI information for local public transport in Buckinghamshire is estimable from annual bus statistics published by the UK Department for Transport, the majority of the information below is not required to be published by the private bus companies operating in Buckinghamshire, and is thus not attainable.

Table B.1: Buckinghamshire KPIs

Category	Performance indicator	Bus
Productivity	Passenger-kilometres per vehicle-kilometre	4.12
	Vehicle-kilometres per staff member	NA
Financial	Fare revenue per vehicle-kilometre (€)	NA
	Operating cost per vehicle-kilometre (€)	NA
	Proportion of total operating costs covered by fares	NA
	Proportion of total operating costs covered by subsidy	NA
Service quality	Operating Speed (km/h)	NA
	Passenger satisfaction	NA

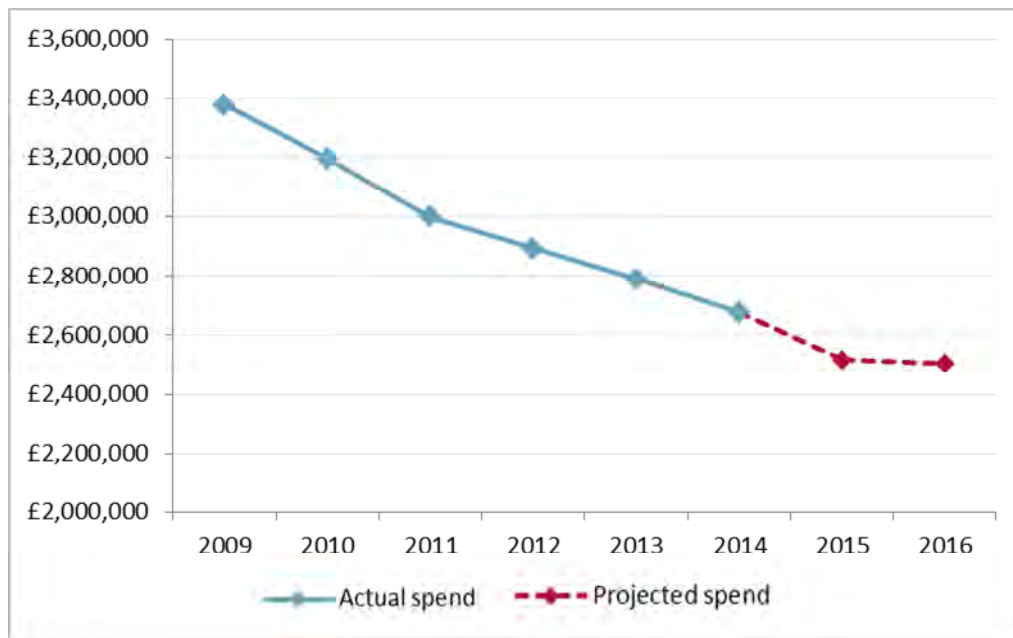
Source: UK Department for Transport Statistics (March 2014)

⁷⁴ Department for Transport Statistics (March 2014)

Key factors underlying local public transport performance

- B.787 Several factors can be seen to underline the decline in local public transport performance in Buckinghamshire. Changing ages and economic profiles of communities across the county, particularly in rural areas, have led to a drop in those who use local bus services.⁷⁵
- B.788 Following the global financial crisis of 2008 and subsequent reductions in UK government spending, local authorities in the UK such as county councils in the UK have seen significant reductions in the funding they received from government. These financial restrictions have led to cuts in local authority spending on “socially necessary” subsidised bus routes, as councils have had to find savings across their budgets. The chart below shows a marked decrease in Buckinghamshire County Council spending on subsidised bus services. As local authorities focus on delivering value for money in a financially challenging environment, spending on rural bus services (which Buckinghamshire County Council say deliver only 0.61 passenger journeys for every £1 invested on rural bus routes, in comparison to 5.1 journeys on the county’s core bus network) has been and will continue to be reduced.⁷⁶

Figure B.1: Buckinghamshire County Council net spend on bus subsidy services



Source: Buckinghamshire County Council - Environment, Transport and Localities Select Committee, Public Transport Enquiry (October 2014)

- B.789 Last year, Buckinghamshire County Council’s Environment, Transport and Localities Select Committee carried out an inquiry into local public transport in the county. The Committee found that transport suppliers in Buckinghamshire are generally independent of one another and do not have a coordinated approach to operations, and said more needed to be done to join-up service delivery of local public transport in the county. They also recommended

⁷⁵ Transport for Buckinghamshire, Travel Bucks Strategy (2012)

⁷⁶ Transport for Buckinghamshire, Travel Bucks Strategy (2012)

exploring other, potentially less expensive transport alternatives to subsidised bus services such as taxis and community buses.⁷⁷

⁷⁷ Buckinghamshire County Council - Environment, Transport and Localities Select Committee, Public Transport Enquiry (October 2014)

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