# Workshop 2: Practical Considerations in Implementing Different Institutional Regimes

### Tools for controlling the market and impacts of tendered bus services Tero Anttila

Public transport authorities have tendered bus services in the Helsinki region since 1994. In this decade, Helsinki Region Transport (HSL) has adopted two new procedures to mitigate the negative impacts of tendering - environmental bonuses and a market share constraint.

Almost without exception, transport operators only introduce new buses at the start of a new contract period. Because the contracts, including extensions, run for 7-10 years, traffic emissions are not reduced during the contract period despite improvements in low-emission technology. This is why HSL in 2012 introduced an environmental bonus scheme, where emission reduction measures are tendered annually for existing contracts. The award criterion is the cost-effectiveness of the proposed measures in terms of emission reductions. Typically, operators have proposed the use of biofuels, retrofitting vehicles with exhaust filters and replacing old buses with lower-emission vehicles.

During the past 20 years, tendering has led to significant changes in market shares among operators and the market share of one transport operator was approaching 40%. In order to prevent market concentration and to maintain competition, HSL adopted a market share cutting tool in 2015 to make it less likely for one operator to win too large share of the services tendered in each bidding round. Under this procedure, the number of services won by an operator exceeding the predetermined share of services is cut such a way that the socioeconomic loss suffered by HSL due to choosing the operator who submitted the second-best bid is reduced to a minimum. In 2015-2018, HSL has applied this market share cutting tool in three major bidding rounds, with the result of decreasing the market share of two operators so that the highest individual market share in autumn 2019 is 35% of transport services purchased by HSL.

This presentation describes how the environmental bonus scheme and the market share cutting tool have been implemented as well as their environmental benefits and impacts on operators' market shares.

### Recent Developments in Transit Operations Contracting in the U.S.

David Bragdon and Stephanie Lotshaw

Public transit provision in the U.S. shifted overwhelmingly from private to public sector management in the 1960s and 1970s. Over the past four to five decades, experience with contracted operations in the U.S. has lagged practice in other parts of the world. Now, a combination of factors is starting to create some momentum in the other direction, and some agencies are evolving in their practice of contracting. The promise of new approaches seems greatest in cities that have not historically been strong transit markets but have ambitions of significant improvement. Many of those locations, while politically progressive at the municipal level, happen to be located in states where politicians at the state level are traditionally hostile to transit and unsympathetic to the interests of labour. Raleigh, New Orleans, and Austin are examples of this cohort. This intersection of local officials who seek better transit and state officials who are typically suspicious of public sector activity actually represents opportunity for contracting to be perceived as a solution that can address both perspectives.

The two most interesting case studies in the U.S. which continue to evolve in 2018-19 are New Orleans, Louisiana and Austin, Texas. TransitCenter, an independent research organization that researches transit trends in order to promote improved agency performance, has followed up its 2017 publication "Bid for Better Transit" with deeper involvement in recent developments, particularly in those two cities. The New Orleans Regional Transit Authority has had a single contract operator since an "emergency" procurement in the wake of Hurricane Katrina in 2005, but in early 2019 will launch its first truly open and international RFP soliciting bids for operations of bus, tram and ferry. Simultaneously, it will transition managerial employees of its current private operator to direct RTA public sector employment instead. These significant changes, against a backdrop of a city with significant mobility and economic challenges and a relatively new Mayor who sees better transit as essential, are expected to culminate in September 2019, less than a week after the conclusion of the Thredbo Conference in Singapore. We propose to provide Thredbo attendees with a very timely, provocative report on this current procurement, and what it may portend for other U.S. cities. We will also touch on the status of contracting in other U.S. systems, including the Massachusetts Bay Transportation Authority

regional rail contract which has been the subject of controversy, the aforementioned Austin situation, and Las Vegas.

### Flexibility in contract design – is that possible?

Carolina Camén, Panagiota Tsaxiri, Mailn Aldenius and Helene Lidestam

Contracting out and public procurement are important issues and can be seen as a management tool. Even though, previous research has identified benefits using public procurement, public procurement is not without concessions. For example, not knowing your partner, project into the future, scope of the business, the change of extent of the business and the change in service or the development of the same are some challenges identified. Another issue is flexibility in contracts and how flexibility can be managed or allowed in contract design in order to still have a service of high standard and with good quality. Therefore, contracts design becomes vital in order to allow flexibility as well as monitoring the same when services are public procured. Nevertheless, the question is how to design these types of contracts allowing adjusting to market changes.

In the public transport business, the service is public procured and the specifications submitted by the public transport authorities (PTAs) are currently very comprehensive and detailed. Previous research has acknowledged that detailed specifications can restrict flexibility, not just in the design of the contracts but also when preforming the services. In bus contracts, the degree of specification varies when it comes to, for example, interior and exterior requirements of the buses as well as environmental requirements. Flexibility in bus contracts concerns given the operators greater freedom, for example, in terms of timetables, choice of bus size on different lines, and interior of the buses. Flexibility for operators should not be increased in general but linked to relevant areas where policy goals can be met. Flexibility in contracts design can be used as a strategy or management tool to reduce cost, as cost of public transport in Sweden has recently increased over the range.

Therefore, the aim of this study is twofold. First, the aim is to understand how flexibility can be managed in order to meet the demand of the markets when market change. Second, the aim is to investigate how the degree of flexibility in the contract design affects public transport costs.

Data was collected through content analysis of tender documents in the bus transport in Sweden from 2008 to 2018 and by doing interviews with professionals in the industry. Interviews have been conducted to investigate the industry's view on the importance of flexibility and how flexibility is managed during the contractual period and how contracts can be adjusted in accordance to market change. The analysis was carried out using traditional steps in the analysis of qualitative data and inspired by the process of grounded theory approach to start with.

The study contributes practical by showing examples of flexibility in contracts designs and understand how the flexibility can affects the costs and thereby the performance of the service. Results, in the form of statistical data, from the content analysis of ten years of procurements are presented regarding different flexibility aspects. Further, the results of the study have potential to create knowledge and contribute to better decision making for future procurement of bus traffic.

### *Urban Bus networks: How can Unbundling bus provision from operation support bus reforms?*Leonardo Canon Rubiano

Cities with high-quality public bus networks share similar institutional arrangements: the public sector is responsible for infrastructure development, network and service planning, regulating and monitoring (managing) of operations, while efficiency-oriented bus companies operate services according to specifications and standards well defined in contracts.

Tendering for bus operations varies according to selection and remuneration mechanisms, and a lot has been written to describe the variants of tenders. Going forward, when looking at the who and how of bus provision and operation, there are two broad categories: bundled provision and operations, and un-bundled separate contracts for operators and fleet providers.

Unbundled bus provision and operation schemes are picking up pace and might be suitable for cities considering reforming their bus systems, despite the need for a more sophisticated contractual framework. The paper will describe the two schemes and their main variants, including:

Bundled procurement, operations, and maintenance of buses:

- 1. State-owned bus company: procures, operates and maintains buses. Examples: Barcelona, Sri Lanka's SLTB, Jakarta, Medellin.
- 2. Private operating company: procures, operates and maintains fleet as per contract requirements (as in Chile, Colombia, Mexico, Nigeria, Tanzania.)

Unbundled fleet Provision, bus O&M:

- 3. Fleet management contracts: Public sector procures and provides private operators the fleet under lease and operating contract. Private operates and maintains fleet according to standards set.
- 4. Unbundled concessions for fleet provision and fleet operation: Public sector awards various private independent concessions for fleet provision and fleet operation. Examples:
- Santiago, Chile: The Santiago Bus fleet comprises nearly 6,500 buses. As of 2018, the city is structuring fleet provision contracts for as much as 2,700 buses for up to 4 fleet providers.
- Bogota, Colombia: In February 2018, Bogota's BRT system opened the bidding process to select up to 6 different fleet providers with a total investment capacity of USD 161 m. The estimated length of the contracts is 15 years, and Transmilenio is finalizing tenders for around 1,400 buses.

For cases 3 and 4, private bus operating firms are responsible for maintenance and operation costs and are remunerated with performance-linked payments (i.e., per operated kilometres, ridership).

The paper will discuss the key opportunities and challenges of unbundled schemes and discuss how unbundling fleet provision can act as a catalyzer to support informal operators in their modernization and corporatization process.

### Bus service transformation in Wellington, New Zealand

**Andrew Cooper** 

Greater Wellington Regional Council is responsible for the provision of public transport services in the Greater Wellington region of New Zealand.

In 2018, the Council delivered the most significant changes to the region's public transport in decades. The changes were the result of major design and consultation work since 2011 to reduce bus congestion in the central city, provide more capacity where needed and ensure more equitable access to bus services across the region.

The introduction of a new nation-wide Public Transport Operating Model (PTOM) legislated by central government provided the opportunity to make a suite of changes to public transport at the same time as implementing a new contracting regime.

The transformational changes to bus services included:

- Implementation of the Public Transport Operating Model (PTOM) through the procurement of 16 bus operating contracts across the region. The objective of PTOM is to deliver a competitive public transport operator market, with enhanced service levels and value for money for the public purse by tendering new performance-based contracts.
- Fleet transition incorporating the transition from fixed-wire trolley buses and old diesel fleets to a low emission bus fleet, initiating the transition to a modern electric bus fleet.
- New bus network in Wellington city.

Under PTOM, services are grouped into 'units' of routes, each an exclusive contract with an operator. The Wellington region comprises 16 bus units. Seven of these units were directly appointed by negotiation to incumbent operators, with nine units tendered. The tender process included many features to reduce barriers to entry and is regarded as a benchmark for industry engagement. The result was a highly competitive tender process with nine local and international bus operators submitting tenders.

To meet Council aspirations for a low emission bus fleet, the tender process featured an industry-first quantitative assessment of bus fleet emissions using an economic cost to society approach to monetise bus emissions. This feature contributed to a tender outcome that has delivered 100% new buses to the tendered contracts, 95% of which are Euro VI, plus an initial ten battery electric buses which will be followed by the phased introduction of a further 22 electric buses over the first three years of the contracts. The resulting environmental outcomes are delivering improved air quality across the region with emissions of harmful pollutants reduced by 38 per cent in Wellington city and 84 per cent in the Hutt Valley conurbation.

While the tender process met objectives for enhancing competition, delivering value for money and substantially improving bus fleet quality, the transition was particularly challenging. The new contracts, featuring two new entrants, new fleet and new depots were implemented at the same time as a radically new bus network, expanded and upgraded ticketing system, upgraded real time information system and a substantial change programme for the Regional Council, involving new roles, systems and processes. As a consequence, the transition has taken longer than expected to reach acceptable customer service levels, with many lessons learned for managing transitions of this nature.

### Regional passenger rail transport Efficiency: a test of measurement and explanation in the case of France.

Christian Desmaris and Guillaume Monchambert

Regional passenger rail transport is a key issue for both public authorities and rail operators. It is particularly true in France, where transport is the regions' second largest budget (30% of operating expenses on average) and where regional rail transport (TER) represents for the incumbent, the SNCF, half of the traffic, 2/3 of the passengers transported and 18% of passenger-kilometres (excluding Ile de France). And nevertheless, the development of the TER is hindered by its high cost for public finances (Arafer, 2018; Spinetta, 2018). The question of productive efficiency is therefore a legitimate question.

The issue of measuring and explaining productive efficiency in public passenger transport has already given rise to a number of studies (Farci et al., 2005; Gagnepain, Ivaldi, 2002; Piacenza, 2006; Holmgren, 2013), but very little concerns regional rail passenger transport in France, in particular for the recent period (Lévêque, 2004, 2007).

This study aims (i) to produce a model for measuring productive efficiency adapted to regional rail passenger transport and (ii) to identify where the inefficiency comes from. For that, we use a stochastic production frontier model, calibrated with new and recent data from French regions coming from several public databases (ARF, ARAFER).

Our model will take as output the volume of production, the train-kilometre and, as inputs, the cost of labour, energy, fixed capital (length of the network), circulating capital (rolling stock) ... We simultaneously will test the effect on productive inefficiency of four sets of factors: the socio-economic environment (population, surface and GDP), the characteristics of the regional rail system (number of stations, number of lines, train-kilometre supply), the quality of the service (reliability rate) and the characteristics of the contract between the operator and the transport authority (duration of the agreement, type of governance, penalties and financial incentive).

This study seems to present a double scientific interest: on the one hand to propose a multi-criterion explanatory model of the inefficiency of regional rail passenger transport; on the other hand, to shed light on the case of France, at a particular moment, when public decision-makers will have the possibility to solicit by tender of railway undertakings other than the incumbent operator (from December 2019). We hope to bring new elements to two major issues: what is the degree of inefficiency of the railway production of each regional operator? What are the explanatory factors for this inefficiency? These elements will be able to inform the choices regarding negotiation with the incumbent operator and with possible new operators.

## How to Make Public Transport More Attractive? A comparative analysis of Amsterdam and Oslo Fabio Hirschhorn, Didier van de Velde and Wijnand Veeneman

Making public transport more attractive, especially in relation to cars, is key to ensure that problems like traffic congestion and pollution do not hamper cities' opportunities to strive economically, and also to enhance people's accessibility to jobs, education and leisure opportunities. This is particularly important in the context of growth in population of main urban areas, which is the case of Amsterdam and Oslo in recent decades. Accordingly, strategy documents from public transport authorities in these two areas acknowledge urbanisation-related challenges and state the aim to increase the share of trips made using public transport.

Despite having similar challenges and goals, Amsterdam and Oslo have chosen to organise and govern their public transport systems in different ways, e.g. in relation to the structure of the public transport authority, the way tasks are allocated between authority and operators, the funding framework and use of policy packages, and the policies for coordination across transport and land use. In both urban areas the modal share of public transport within overall motorised trips has grown since the early 2000s (although at a faster pace in

Oslo, approximately 50% more than in Amsterdam between 2005 and 2015 according to EMTA (2007, 2017)), suggesting that authorities' measures, whilst different, are in the right direction to increase the use of public transport.

The paper develops an in-depth analysis of the evolution of the organisation of public transport in the metropolitan areas of Amsterdam and Oslo since the 1990s to unveil main factors driving changes in public transport modal share in these cases. Due to its longitudinal character, the paper addresses not only the impact brought by the aforementioned elements of public transport institutional regimes, but also considers the influence and interplay of other relevant factors, such as historical processes and path dependencies, informal institutions, and the role played by relevant actors that lead institutions' choices in certain directions.

Methodologically, the paper employs process-tracing to build within-case analyses of each area, building upon documentary sources and interviews with key stakeholders. Findings from these two analyses are then confronted to elaborate general conclusions that might apply to both cases and to other comparable areas. Eventually the paper aims to identify practical aspects of how institutional reforms and transport policies are implemented and also clarify their potential impact on performance.

#### References

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### Hybrid markets - contract design, performance and conflicts

Staffan Hulten and Gunnar Alexandersson

Regional public bus services in Sweden have, with few exceptions, been competitively tendered for 30 years. The practice of tendering has undergone significant changes since the first tenders were carried out in the late 1980s. The most noteworthy changes are: 1) the replacement of pure gross cost contracts with contracts that include bonus and malus clauses to safeguard the quality of the service or contracts with incentives; 2) the bundling of bus lines into larger networks; 3) demands on operators to provide buses that use specific types of fuel, for example electricity or gas; and 4) the bundling of bus and railway services in one contract.

The tendered bus market in Sweden has generated a substantial body of research (e.g. Alexandersson et al, 1996, Alexandersson and Pyddoke, 2010, Hultén, 2015, Vigren, 2015, and Vigren and Pyddoke, 2018). Building on previous research, the goal of this paper is to explore and compare how the contract design in tendered regional bus services in Sweden influences performance in terms of costs, passenger growth and quality of the services, and on the frequency of major conflicts between the contracting parties.

The research on the impact of contract design on performance in the provision of public transport has not arrived at a consensus on best practice, see for example Bray and Mulley (2013). Hensher and Stanley (2008) even questioned if competitive tendering was any better than negotiations with pre-selected operators.

According to one line of research in transportation economics (Briones och Gomez-Lobo, 2013) incentives should not be used for bus lines or networks in densely populated areas and should preferably be used in areas with low population density. However, the collaborating actors in the Swedish public transportation industry – bus operators and regional public transport authorities (PTAs) – have agreed that incentive contracts should be used in regions or cities with a high population density. According to a model contract at least 25 per cent of the bus operators' revenues should depend on the number of passengers using the services.

The case in Sweden for using incentives based on the number of passengers is to a high extent motivated by a national goal to double the market for regional public transportation and is partly motivated as a way to solve practical problems encountered by the PTAs. A previous research report (Hultén, 2015) found that contracts in which more than 25 per cent of the bus operators' revenues depend on such incentives, on average had lower costs per passenger and higher costs per bus kilometre than other types of contracts.

In this paper, the economic performance of the different contract types are measured using a database on all Sweden's regional bus services collected by the agency Trafikanalys. The database covers the years 2013 and 2014. The quality aspects in the contracts are measured using data from the annual reports of the Swedish Bus Federation. The conflict aspect is studied using the annual reports of the PTAs procuring the bus services.

#### The benefits of modernization to informal operators

Robin Kaenzig and Christian Mettke

A major barrier to bus sector reform in developing countries is the aversion of existing informal operators to change. Whilst recognising that change brings some threat to these operators and their way of life, sector reform, fleet modernisation and industry consolidation also offer opportunity to benefit the operator through improved operating efficiencies and economies of scale.

This paper considers the case of sectoral reform in the Philippines. The iconic (but environmentally and socially problematic) Jeepneys are being phased out and replaced with Euro IV minibuses or buses as part of a wide-ranging modernization programme also featuring route rationalisation and sector consolidation. The first of these modernized routes have recently commenced operation, and early indications from the operator perspective are positive.

The commercial operating data collected from these modernized routes provides the evidence to demonstrate the benefits of modernization and sector reform. The enabling factors, including scrappage programme, financing mechanism and support for sector professionalisation are considered. This evidence is of value not only to Fillipino operators considering participation in the reform programme but to all informal operators in developing countries.

### Can Finland benefit from single European railway markets and successfully introduce com-petition for the rails?

Joel Karjalainen and Niko-Matti Ronikonmäki

In recent decades, European Union has focused to promoting competition on the markets for train services. Competition among train operating companies has seen as a tool to improve train services and to provide incentives for a cost-efficient production. EU's policy has been to separate the sup-ply of train services from the provision and ownership of rail infrastructure. EU has also tried to create a single market in the European railways. This have been seen a way to ensure that innovations and innovative business models can flourish across the Europe, and to create wider and more efficient rolling stock markets. By common regulation, barriers to entry can be lowered both in train services and in rolling stock manufacturing.

As a part of EU, Finland is studying the possibilities to introduce competition to rails. Until now, Finland has had a state-owned monopoly on passenger and freight services, with only minor competition on the freight services. Currently Helsinki Region carries out the first major tendering on the passenger rail services for urban rails. At the same time Finnish government have been studying and preparing broader tendering schemes on Finnish rails.

We argue that there are some major features which make competition schemes on Finnish rails different to other EU countries. In this paper, we will present these features and analyse their impacts to the possible competition and tendering schemes. We will focus on the following research questions: What kind of competition is possible in Finland? What kind of policy does it need? How can Finland benefit from creation of single European railway market?

Finland's geographical location makes trans-national railway connection within EU countries virtually impossible. In addition, Finnish railway gauge differs from the rest of the EU, which makes rail-way stock used in Finnish network unique. For this reason, there are very thin aftermarkets for the rolling stock and Finland cannot fully benefit from the European rolling stock markets. Demand for railway services in Finland is also lower than in the comparable countries in EU, which will make open access services difficult to form up. These physical and economical barriers to entry create a challenge for the formation of the functioning railway market in Finland.

However, in our preliminary research, we have found current institutional features the main cause for the difficulties to build functional competition in the Finnish railway markets. The current incumbent has built very political threshold against competition. We have found path dependence, which have led the incumbent to argue in favour for status quo. Also sunk costs related to rolling stock are less decision-relevant for the incumbent, whereas potential entrants have to take into account risks related to these investments, which creates market power to the incumbent.

Our methodology is qualitative policy analysis, which will build up on the literature review on the academic

literature on railway competition and general transport economics. We discuss the institutional barriers regarding to competition and present some policy implications how to overcome them.

## An alternative regulatory approach for long-distance passenger rail services: An explorative analysis with a focus on Germany

Andreas Knorr and Alexander Eisenkopf

Historically, rail transport has been amongst the most heavily regulated economic sectors even in industrialized countries due to a combination of three factors: politically salient public service obligations, the natural monopoly characteristics and indivisibilities of the track infrastructure and, last not least, the potential for the abuse of market dominance in providing rail transport services in some key markets with infrastructure bottlenecks and without effective intermodal competition. Typically, and regardless of the specific ownership arrangements concerning both the railroad companies and infrastructure providers (public versus private; vertically integrated versus vertically disaggregated), traditional regulation covers areas as different as market entry and exit, infrastructure access rules (both with respect to the allocation of slots and access charges), pricing, technology (especially to ensure interoperability), and, more recently, the related issues of service quality and consumer rights.

The comprehensive regulatory frameworks notwithstanding, efforts to introduce effective intramodal competition to the rail sector have so far achieved limited success in most countries. This is particularly true of long-distance interurban services, and Germany is a case in point. 25 years after the Bahnstrukturreform ("Rail Structure Reform") of 1994, vertically integrated and state-owned Deutsche Bahn AG remains the dominant player in all market segments. While competitors currently control 33.2 per cent of regional and local train services (which are tendered by state governments) and 41.8 percent of rail freight (train kilometres and tonne-kilometres, respectively), long-distance service remains a de facto monopoly with marginal competition on a very limited number on trunk routes after the recent entry of Flixtrain, a subsidiary of Flixbus, Germany's leading intercity bus operator.

The purpose of this paper to explore the aptitude of an alternative regulatory approach to substantially increase intramodal competition on the market for long-distance train services; its primary focus is Germany, although our findings might provide relevant insights for other countries' regulators as well. Our proposed new regulatory regime is a radical departure from the traditional regulatory doctrine which is designed to ensure non-discriminatory infrastructure access for competing rail operators (albeit, at least in Germany, with very limited success due to widespread infrastructure bottlenecks - in the meaning of the essential facilities doctrine - and the various strategic countermeasures by Deutsche Bahn AG, some of which were in breach of antitrust laws. The principal regulatory innovation is to redefine what constitutes the key rail infrastructure. We argue that the critical infrastructure component on heavily utilized trunk routes is not track access but access to the trains which are operated by the incumbent on these routes. Regulators should therefore endeavour to ensure competitors' access to in-service trains. The approach is very similar to the widespread code sharing agreements between airlines but also practiced by Deutsche Bahn AG itself on most ICE trains to/from Frankfurt Airport which also boast dedicated carriages for Lufthansa passengers whose tickets are exclusively sold and priced by the airline.

### Improving Market Confidence in the Procurement and Management of Competitively Tendered Bus Contracts

David Overington and Samuel King

The relationship between Bus Companies (BCs) and Bus Service Purchasers (BSPs) has changed markedly in recent years, due to the introduction of competitive tendering.

Before competitive tendering, BSPs were bound to procure services from the incumbent BCs, and BCs could only sell to the local BSP. Contracts were negotiated between the parties, with price set by negotiation or based on costs plus allowance for profit. BCs faced little real existential threat.

Competitive tendering has changed all this. BSPs can procure services from any BC that chooses to participate in the competitive tendering process. BCs continue to be limited in who they can sell to, since (i) within a BSP's jurisdiction there is no other procurer of scheduled passenger services, and (ii) BCs cannot operate services that are not under contract, for legal and financial reasons. A BC that holds one-contract faces the threat of business closure every time their contract is subject to competitive tendering. The outcome for a two-contract BC on losing one contract is only marginally better.

Faced with the above threats BCs are keen to ensure a good relationship with their BSPs, in the hope that this will hold them in good stead for next tender, or at least not put them out of favour. In contrast, BSPs face

little to no service continuity risk should they adopt a 'hard-nosed' contract management approach: BSP's can be confident that the incumbent will not be the only proponent in the next tender round for any contract. This gives rise to a number of important and related areas to consider for improvement for competitively tendered services:

- To what extent should a BSP be concerned by BC perception that any complaint by the BC to the BSP will have adverse consequences for the BCs' future?
- If a BSP were to take steps to reduce BC fears of adverse consequences, what impact would that be likely to have on competition and competitive pricing?
- What practical steps could a BSP take to give a BC confidence that the BC can raise issues on how a BSP is managing/interpreting their contract without fear of that action having an adverse impact on the BC's future business?
- What practical steps can a BSP take to be confident itself, and to give the market confidence, that tender evaluation is undertaken without undue bias?

This paper will address these points and will propose pragmatic options for improvement.

# Public Transport Tendering and Contracting arrangements in countries under regulatory transition: The case of Cyprus

Panagiotis Papaioannou, Georgios Georgiadis, Anastasia Nikolaidou and Ioannis Politis

Competitive tendering in European Public Transport (PT) sector has enabled operators to seek for business opportunities abroad. Entering in foreign PT markets, however, requires that the host country is able to provide stable and fair regulatory and operating conditions so that foreign operators can develop long-term investment strategies and expect certain yields. This paper explores the case of bus PT tender in Cyprus and discusses the contractual arrangements that have been made in order to trigger the interest and facilitate the equal participation of both national and foreign actors into the competitive tendering procedure that will pertain to the bus PT services countrywide.

Currently, in Cyprus, bus PT services are provided by six private operators, who serve networks with exclusive rights. The respective contracts were directly awarded in 2009, before Reg. 1370/07 came into effect, but the Cypriot government already commenced competitive tendering procedures in order to deliver high-quality PT that will account for over 10% of total trips made countrywide. Through this tender, Cypriot authorities also wish to reserve (foreign) funds to support relevant PT investment programs (e.g. depots, terminals, bus stops, etc.), address public monopolies and local collusion and incorporate successful practices that foreign operators have acquired in other countries.

In Cyprus tender, a set of specific contractual arrangements have been set so as to draw the attention of foreign operators and facilitate their participation into the competitive tendering process. These arrangements pertain, inter alia, to the following: (a) the service areas were remained practically unchanged to allow relatively smaller local operators to bid for individual bundles or any foreign, relatively larger, operator to bid for more than one bundle, (b) the contract's duration was set to the maximum of Reg. 1370/07 provisions to enable, inter alia, for more reliable long-term business planning, (c) a "fee-based on a net-cost basis" contract secures a monthly fee for the operators who undertake both the revenue and the production risk, in case of weak ticket revenue, as well as allows to modify services considering operators' accumulated expertise, (d) the selection criteria favour those bidders who demonstrate serious commitment for lifelong PT investments, (e) vacant lands are pre-reserved in all service areas for the operators to develop their own bus depots, (f) the concessionaires have the right to review the network prior to the commencement of contract services and (g) rental of buses is permitted and thus foreign operators will not be obliged to purchase and transfer right-hand buses in Cyprus from abroad.

Other vital issues, regarding the eligibility criteria for participation and the evaluation criteria, which had been extensively discussed among the competent authority and its advisors, are also presented. Furthermore, technology aspects are considered, given that the respective Ministry has recently implemented two PT telematics systems, namely an AVL system and an integrated smart fare collection application. Finally, the paper discusses additional legislation amendments that Cyprus must implement in order for the above contractual arrangements to be legitimate.

Shaping contracts, shaping markets: standardization and procured bus traffic in Sweden Alexander Paulsson, Anders Wretstrand, Stig Westerdahl and Malin McGlinn

Despite the vast research by transport economists on contracts in public transport markets and tendered bus traffic, relatively little is known about the attempts at standardizing these long-term contracts. The picture emerging from previous research is that contract design is pivotal because the contract is the primary device the public transport authorities can use to govern the contracted traffic operators. This paper investigates the industry-wide collaborative efforts to standardize both incentive-based and production-based contracts in the market for procured bus traffic in Sweden. Standards generally coordinate and structure interactions in predictable ways in an organizational field or in a market. Drawing upon the rich literature on standardization, we investigate whether the efforts to standardize contracts regulate processes or outcomes, and whether legitimacy is gained through an inclusive and collaborative process of standard-setting or by showing evidence that standard-adoption leads to superior results. An analysis of qualitative interviews with 12 key informants from public transport authorities and private bus operators as well as official documents produced by the industry, yields three results: (i) standard-setting is recognized as an inclusive and crucial process amongst the representatives in the industry, yet (ii) standard-adoption is fragmented, both in terms of geographical diffusion and in terms of organizational depth within the public transport authorities, which suggest that (iii) contract standardization is a matter of contention and continuous negotiations as the standardized contracts effectively standardize the allocation of economic risks between the contracting parties. The results add new knowledge to our understanding of how contracts not only shape public transport markets, but also how these contracts are shaped by the actors in that market. This study is part of a growing body of research on public transport markets inspired by branches of economic sociology and organizational theory that investigate how markets are organized. As such, this project will contribute to future research on similar topics.

### Applications and effects of the MEAT award criteria: Findings from Swedish tenders of public bus services

Ivan Ridderstedt, Johan Nyström and Roger Pyddoke

In the late 1980's, competitive tendering of public transport was initiated in Sweden to increase efficiency. Over time, the development of tender policy and institutions has increasingly revolved around quality. It may be quality in terms of the product or service tendered, but in fulfillment of wider societal goals connected to equality, environmental impact, etcetera. The lowest-price award criterion has been complemented with the Most economically advantageous tender (MEAT) award criteria, which allows procuring agencies to construct a multi-dimensional award criterion. Quality aspects are either explicitly valuated or both the monetary value of the bid and quality are converted into a score, which still give an implicit valuation.

Whilst the MEAT criteria seem to respond well to governments interest in both cost and quality, there are some inherent drawbacks of this approach. Firstly, most quality dimensions are difficult and costly to evaluate. Secondly, a MEAT criterion is less transparent than lowest price with a set of requirements. Thirdly, the increased administration of submitting a bid and the inflated quality requirements of firms might deter SME participation. With such caveats, there is a risk of MEAT criteria tender policy being bad for efficiency and not contributing in achieving stated goals.

The aim with the study is to contribute with empirical findings on how the MEAT criteria is applied in public tenders and its effects. For the case of Swedish tenders of public bus services, we answer the following three research questions:

- 1. How are the MEAT criteria applied?
- 2. How robust are variants of the MEAT criteria in what bidder is awarded the contract to small changes in the weighting of quality?
- 3. What are the effects of the MEAT criteria on SME participation and success rate?

The analysis is conducted using data on 565 tendered bus contracts by the Swedish Regional Public Transport Authorities from 2007 to 2017. It is found that there are myriad of different applications of MEAT criteria in the sample. The type of quality aspects included ranges widely, from environmental impact to assessments of organizational quality of firms, and there is no standard on weights between bid and quality, or how to assess and grade quality. The paper will also provide quantitative results on the robustness of the MEAT criteria policy in tenders of public bus services as well as its effect on SME participation and success rate. Hence, the study contributes with empirical findings on several key issues related to the MEAT criteria, with implications for procurers and policy makers considering if, when and how to employ a MEAT criteria tender policy.

### The capabilities of authorities in a hybrid institutional regime: A case study of local public transport in Russia

Alexander Ryzhkov

The capabilities of local authorities are considered as one of the main requisites for successful public transport provision. Authorities are generally expected to plan the network, organise the provision of transport supply and monitor the performance of operators. However, little attention is usually paid to the dynamic development of such capabilities. The aim of this study is to describe the development of local authorities' capabilities in the field of public transport provision. The study is conducted on a case of Russia which changed its public transport legislation in 2015 and allocated the network planning and service design powers to local authorities. Moreover, Russia brings additional questions as the legislation has introduced a hybrid regime of public transport governance. Local authorities are allowed to organise the provision of transport supply using two organisational forms, namely the services with regulated or non-regulated fares, which can be described as non-commercial and commercial services respectively. Since then, authorities had started to develop different types of skills. The picture becomes even more complicated as a significant share of capabilities can be held by large municipally-owned operators. In order to describe the evolution of capabilities, the study would rely on qualitative research framework based on written questionnaires and semi-structured interviews with public officials. The paper would be structured as follows: introduction, public transport governance in Russia, methods, results, and conclusion. The findings should make an important contribution to the field of public transport governance.

### Public public transport: Why some cities choose to move away from competitive tendering of public transport

Didier van de Velde, Anders Wretstrand, Karin Thoresson, Fabio Hirschhorn and Alexander Paulsson

This paper takes as its point of departure the recent trend of moving away from competitive tendering in favour of public ownership and in-house production of public transport. This has been the case in several urban areas in European countries, including areas in the UK, France, Denmark, and Sweden. While many urban areas have resisted the broad transition towards outsourcing public transport provision to private parties, which was related to the spreading of neo-liberal ideas in the political and institutional systems in Europe since the nineties, this study investigates urban areas in which the competitive model has been adopted – and abandoned.

The overall aim of the paper is to contribute with further knowledge of why some urban areas tend to withdraw from the competitive model. We argue that there are important lessons to be learned about the practical side of different regimes from this trend and how it is locally manifested. The study is based on an empirical investigation of selected cases in the UK, France, Denmark, and Sweden. It aims to provide an analysis including the following aspects of each case:

- 1) The political discourse and rationales surrounding the decision to "insource" public transport provision;
- 2) The experiences of competitive tendering (including its practical implementation);
- 3) The perspectives and opinions of main stakeholders (in particular local authorities, transport authorities, and operators) about the reasons for these changes and their consequences so far;
- 4) Local factors and main elements of the local contracting and competitive history in an attempt to identify possible (institutional) triggers for these developments;
- 5) Available performance data that would allow to objectivise some of the issues (contribution to social aims).

The empirical material consists of a combination of qualitative and quantitative data, derived from documents (political propositions and decisions, local/regional authority documents, performance data, etc.) and semi structured interviews with politicians, public servants, transport operators, and other relevant actors. The mode of procedure is to gather and analyse data for each case and then make a comparison between the cases.

The expected outcome of this research is 1) to draw preliminary conclusions on the presence or absence of similar triggers and effects in the various areas mentioned (path dependency hypothesis), and 2) to identify whether preventable problems constitute root causes for such developments (advisory/recommendation aim).

Do incentive contracts steer towards sustainable transport policies and public transport goals? A study of three Swedish metropolitan regions

Anders Wretstrand, Karin Thoresson and Hans Danielson

The characteristics of the Swedish public transport market today in the larger metropolitan regions are competitive tendering in the form of gross cost contracts with significant ridership and quality incentives. Strategic planning of supply, regulatory frameworks on fare levels and structures are politically decided, and the public local and regional bodies keep ticket incomes. Around 50% of the operating costs are covered by ticket income. The market has seen a development of standardized model contracts, along with PTAs focusing on public transport as an important means for sustainable urban and regional development. However, it is unclear whether the model contract designs in fact support the overarching policy goals. In order to better understand the links between policy and contract design, we conducted a study that was divided into two parts. Firstly, by identifying the links through an inventory of current strategy document and main contracts in the regions of Stockholm, Gothenburg/Västra Götaland and Malmö/Skåne; secondly, by identifying the processes beyond the links, through a semi-structured interview study targeting politicians, planners and business administrators in these three regions. The questions and the interview chain were developed in a co-production process with the regions.

The strategic policy goals were classified along three themes (as quasi-KPIs): market goals (modal share, competing with other modes etc.), customer goals (accessibility, customer satisfaction, efficiency, less competition) and technical goals (vehicle standards and fuel technology, effectiveness). Results show high alignment between policy and technical issues, moderate alignment between policy and customer issues, and misalignment between policy goals and market issues. Technologies are easy to specify and thus decide on while contracting out PT services. Customer satisfaction could be influenced through the contract design (bonus/malus), but some KPIs are more or less influenced by external factors. Finally, policy goals that contain levels of market share could be supported by ridership incentives, but as other studies have demonstrated, incentive levels need to be adjusted to local conditions and/or be much higher than suggested by current model contracts.

The processes, from policy, strategy, tactics and contracting to operation were analysed through the lens of a management-control-systems approach (Control Package). Results show that the different organisations within the regions influence level of alignment. Even if there is a clear tendency across the regions to give more freedom through incentives to the operator, hybrid forms of control systems seem to emerge instead. Examples are cultural control mechanisms (e.g. value chain, branding, shared values), cybernetic control mechanisms (e.g. monitoring coupled to ridership incentives) and administrative control mechanisms (increased collaboration, frequent working group meetings, balancing the budget effects caused by change of risk allocation). The emerging hybrid control systems signalled that the PTAs experienced increased complexity and challenges caused by high levels of incentives, which could have impacts for future tendering. E.g., how to organise the authority in order to develop and fine-tune the control package, or whether to decide on increase or decrease of the ridership incentive.