A COMPARISON ANALYSIS OF EUROPEAN TRANSPORT SERVICE CONTRACTS: VALUE FOR MONEY VS SOCIAL SURPLUS

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1. INTRODUCTION

Governments have recently been redefining the conventional boundaries between the public and private sectors. The provision and management of transport services, which had previously been the preserve of the public sector, is gaining greater importance in the investment portfolios and operations of the private sector (Armstrong and Sappington, 2006). The development of such private participation in urban public transport can be attributed to two main factors related to service supply: first is the need for the public transport operator to deliver services in relation to customer demand on the basis of performance standards; and second are the budgetary constraints, which compel cost reductions and require production improvements.

Within this process, the evaluation of the performance of transport service and operation is a way to align the interests of the various players in the urban public provision (Hart, 2003; Bajari et al., 2007). Efficiency and effectiveness are the two perspectives from which we can monitor performance, however, if in the efficiency case we examine how performance is achieved in relation to outputs and inputs, when we evaluate the effectiveness, we focus our attention on the importance of the output in relation to changes in customer demand. This implies the necessity to design contractual

agreements between local authorities and transport operators within flexible frameworks which can combine these two broad evaluation criteria, viz. efficiency and effectiveness.

Recent practice on delegation contracts has shown not only a common use of high powered incentives based on the increase of available resources in relation to the increase of performance, but it also favors low powered incentives in order to increase accountability, transparency and to give *voice* to the customers (Williamson, 1999). As a consequence, the role of the customer has increased its stake in the design of contracts. Customers are no longer seen as users and customer satisfaction is not based on a priori predefined targets but rather customer needs and requirements are evaluated within the specific context and the service operations of the public transport.

With this in mind, our objective in this paper is to analyze the recent evolutions of urban public transport contracts, particularly from the point of view of the transport operator. The new trends in contractual agreements allow us to examine how the relationship between public authorities and transport operators in Europe indicates increasing involvement in the partnership. Transport authorities and operators can achieve higher service effectiveness and efficiency when they align their interests towards a common integrated transport policy in order to stimulate new initiatives and opportunities.

The paper is developed according to the following structure. In section 2 we briefly survey the recent empirical findings on the relative efficiency of bus contracts in Europe. In sections 3, 4 and 5 we present the recent evolutions of contractual arrangements in the urban public transport sector in relation to risk allocation, quality performance and externalization. The case of the Limburg contract in section 6 serves as an example to illustrate the expectations of a private operator towards contract evolution and relationships with authorities. Section 7 concludes and offers some policy recommendations.

2. THE IMPACT OF BUS CONTRACTS ON PERFORMANCE: A SURVEY OF RECENT EMPIRICAL EVIDENCE

The involvement of private operators in the Urban Public Transport (henceforth UPT) sector relies on the implicit assumption that private service provision tends to outperform public service provision. However, no clear consensus has emerged from either the theoretical or empirical literature regarding whether production of public services is carried out more efficiently by a private firm (Vining and Boardman, 1992; Megginson and Netter, 2001). The assumption nevertheless seems to be reasonable in the UPT sector for three main reasons. First, delegated management is very often associated with *ex ante* competition whereas public management is not. Second, delegated management may allow the public authority to benefit from economies of scale and scope made by private operators (several studies have provided evidence of such economies in the UPT sector. See for example, Berechman, 1987; De Rus Nombela, 1997; Dalen et al., 2002; Fillipini and Prioni, 2003). And lastly, some studies (De Rus and Nombela, 1997) reveal that private company bus drivers receive lower wages and fewer benefits than drivers in a public firm.

Delegation of contracts in the UPT sector can be classified according to the following standard typology:

- Net cost contract: in this type of contract both commercial (on revenue) and industrial (on costs) risks are borne by the private operator;

- Gross cost contract: this type of contract allocates the risk on revenue to the public authority and the risk on costs to the transport operators;

- Cost-plus contract: in this type of contract all risks are borne by the public authority.

Since the seminal paper by Farell (1957), econometric analyses have been developed in order to evaluate the different levels of performance of bus operators based on

contract typology. Following the literature, fixed-price contracts (FP) produce more incentives than cost-plus contracts (C+) (Laffont and Tirole, 1993), because the level of incentives for maximizing the technical efficiency depends on the proportion of risks (commercial and industrial) supported by the operator. Kerstens (1996) provides in his work evidence that transferring the risks to the operator stimulates technical efficiency. The author evaluates how technical efficiency differs between regulatory contracts, by considering a sample of 114 French urban public transit networks in 1990.

Roy and Yvrande (2007) use a panel database of 135 different French urban transport networks (period 1995-2002) and they estimate that contractual schemes are a key determinant of performance, but more precisely, their results support the hypothesis that cost-plus contracts (C+ contracts) provide lower technical efficiency. Furthermore, operators under gross cost contracts (GC contracts) have higher levels of technical efficiency than operators regulated by fixed-price contracts.

Amaral (2009) extends the results from the previous studies by analyzing the local authority's capacity for expertise and control on contract performance. The author uses an original database of 55 large French urban transport networks (year 2002) and estimates a stochastic production frontier. The main result of the study is that the transfer of revenue risk may produce two counteracting effects on performance: a negative effect when the local authority's capacity for expertise and control is low and a positive effect when the local authority's competencies are high. In the next sections we examine how public transport contracts are evolving and discuss how their innovative aspects increase service performance.

3. CONTRACTUAL RELATIONSHIPS: RISK ALLOCATION

Risk allocation, as seen in the previous section, leads to the definition and design of various types of contracts between the transport authority and operators; however, there is a common view expressed in the different procedures about how to allocate the risks, and that it is necessary in particular to limit revenue and commercial risks between the

contractual partners. In so doing, it is becoming a common approach to adopt fixed-subsidy contracts to reduce risks, as can be observed for example, in France (Figure 1). As a consequence, financing is becoming increasingly sophisticated and complex financial solutions have been developed to monitor and cover the amount of risk not covered by compensation subsidies, for example, the “updating formula”.

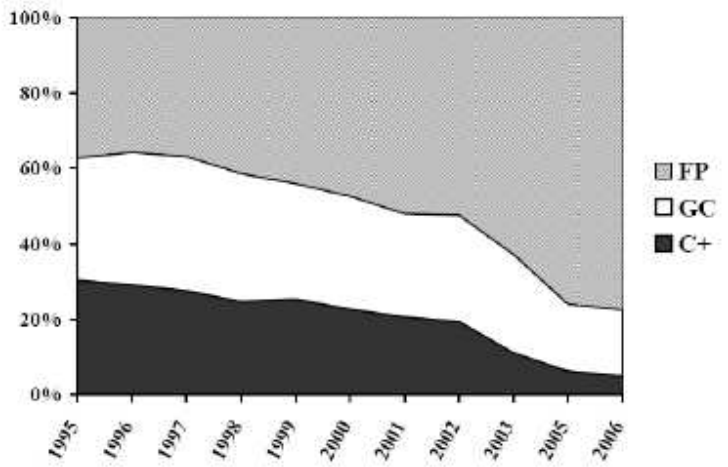

Figure 1. **Evolution of the delegation of contracts in the French UPT sector (1995-2006)** Source: Amaral (2009)

Political risk or a “change of law” has to be limited or even excluded by the operator in the negotiations as it is too often a source of conflict with the authority. This type of risk can be related to diversified topics such as variations in company taxation, change of VAT rate, accessibility obligations for handicapped people, or implementation of new safety devices. As all these measures are decided by a public authority, it is logical that the authority has to compensate for additional costs generated by a change of the legislative or taxation framework.

Monitoring and limiting revenue risk in contracts can be achieved through a greater advisory role and more commercial autonomy given to the operator. As far as main activities such as ticketing, setting up new fare structures or developing information

systems is concerned, the operator can play an advisory role to the authority; this role may be important in reaching a precise assessment of the consequences in operational terms before the contract is signed. In terms of commercial initiative given to the operator, it is necessary to set up a clearly framed revenue risk in the contract. For example, in the Netherlands the contracts are characterized by the principle of a “right for all to transit” and by a tendering approach oriented on qualitative proposals. The Dutch approach thus favors the emergence of “flexible” and “smart” solutions such as transport on demand on a wide scale and customer-oriented services.

Revenue risk may also be borne by the operator, but in this case the authority is expected to contribute, for example, by each revenue Euro with one Euro and ½ public subsidy. This mechanism of compensation proportionate to patronage is completed by a very open tendering procedure concerning kilometre offer, vehicle quality and proposed types of services. Tendering procedures are selected in order to generate qualitative and quantitative bids from the operator when a wide variety of initiatives in terms of commercial services and planning policy are available. The operator’s bids certainly must prioritize innovation, creativity and flexible services. This trend is being exemplified by the Limburg contract case, which we examine in section 6. Another example is given by the regional rail authorities in Germany, where the commercial initiatives have a significant role in the contractual agenda; for instance, some German regions have adopted “tenders on functionalities” thus forcing bidders to imagine how to reach objectives set by the political decision-maker in order to minimize bureaucracy.

In relation to commercial risks we can observe that this type of risk can be borne by the operating company as in the cases of PPPs and BOT (Build, Operate, Transfer) contracts for new light rail lines in the UK or Spain. But in these contracts the commercial risk is monitored and periodically revised because it is strongly influenced by transport demand and public transport market share.

As for urban, suburban or regional operations, the trend in the allocation of commercial risks is to favor incentives based on traffic results but with a limited scope. In other

words, the incentive mechanism can be tailored to the agreement that authority and operator aim to co-operate on the basis of limited risks with controlled consequences in order to avoid extreme situations such as company bankruptcy. Nevertheless, limiting commercial risk does not mean that it should disappear for the contract's operator. Recent contractual development in Sweden takes this requirement into account. For more than two decades Swedish transport authorities had opted for gross cost contracts that were allocated on the basis of the cheapest offer on the mere criteria of the lowest kilometre cost ratio, and the revenue risk was borne by the authority. Transport authorities are becoming more aware of the limited benefit, in terms of service quality and commercial results, with contracts that are awarded only on the basis of production costs.

As can been seen from various experiences, commercial risks allocation requires a reassessment of the aims of the public transport authorities. In some countries today, public transport is considered as a commercial activity fulfilling a public service and it is provided by operators paid mainly on the basis of the "transport consumption", i.e. according to the patronage on the network. Local authorities as well as central governments must, in the first instance, create policy to increase the use of public transport. Certainly, this is not the task of the operator, especially when buses are blocked in traffic jams. In other words, in order to transfer commercial risk to the operator, traffic has to be regulated, for example, through policy that prioritizes public transport vehicles by allowing for commercial speed, and thus improving reliability for customers. Operators can be accountable to their ridership and quality performance only if the community is committed to promoting public transport.

We conclude that city authorities, when entering into agreements for the contractual allocation of risks with the transport operator, have to assume their responsibility for urban land use, particularly in city centres. If the choice is not to prioritize public transport, the solution can be simply 'to charter' passenger transport; the company is thus paid on the basis of operational means provided, as it is nearly impossible to deliver quality and increase passenger numbers in a car-oriented city. Operators and their

associations clearly have to ask political decision-makers what the community is ready to pay for: either a congested, polluted and noisy city served by a minimal transport network mainly made for captive customers – or a smooth running sustainable city with public transport benefiting from real priorities and a well-monitored commercial risk managed by the operator in close co-operation and confidence with the authority.

4. MONITORING PERFORMANCE AND QUALITY INCENTIVES

We can observe that to a large extent, the operator's remuneration is based on designated performance levels that can be monitored by transport companies: service punctuality and reliability, cleanliness of rolling stock and stations, and availability of information are the most common criteria, nonetheless in recent years these criteria have broadened to include diverse issues such as fare evasion reduction and revenue increase. Together with a bonus-penalty system, remuneration based on performance should increase the service quality level, mainly in the case of gross cost contracts, but also for net cost agreements. In net cost contracts the revenue risk is supported by the operator; we therefore achieve through this mechanism a way to increase service quality and increase passenger numbers. For example, British rail operators must pay high penalties for 'short train formations', 'passengers in excess' and modifying timetables without appropriate notice. If we consider in conjunction with the quality dependent subsidies the 'no claims bonus' type system, we can conclude that operators are increasingly in charge of tracking information and complaints management, which is constantly monitored through regular checks. Periodical surveys of the passenger satisfaction rate are made public and linked with a bonus-penalty scheme leading to bonuses or fines for the company.

Since railway privatisation in 1995/1996, Great Britain has developed performance and quality contract design on a systematic and industrial basis, thus setting the standard for the rest of Europe. In general, in defining the service quality for urban transport operators, we seek to achieve a clear structure of performance and quality level based on the ISO 9004.2 norm loop for quality service. In the quality loop we consider the perspectives of customers and transport operators. In relation to customers, we will

identify the expected quality of the service and the perceived level of quality by the customers during the journey; for instance, information quality, such as information on the vehicle and on platforms, fare prices, services available in the station, and other means of transportation, travel options in case of delays, phone number for complaints, and station environment such as cleanliness, easy access, waiting room comfort, graffiti, visible safety instructions. We will quantify for the transport operator the targeted quality of the service and the delivered quality, i.e. the level of the quality actually achieved by the transport company. For instance: vehicle presentation such as cleanliness inside and outside, lighting, information on board; or ticket sales such as queue duration, station opening times, availability of vending machines, reliability of access barriers.

This criteria regime allows for benchmarking with average values and setting up of bonus-penalty systems. The definition of the criteria list shows the desire of the authority to reach tangible results on the entire transport chain and the commitments that the operators will have to fulfil in order to complete the strategy of attracting more passengers to rail services. This strategy certainly shows a strong emphasis on the customer in the contract. For instance, the Stockholm Metro contract includes a large set of quality criteria on trains, stations, customer service, together with passenger volumes. In France, quality certification of transport companies is often a prerequisite set by organizing authorities before awarding or renewing a contract. And again quality criteria and bonus-penalty systems are included in all conventions signed since more than ten years. We can therefore conclude that quality criteria are a substantial part of the contract agreement, and that they can vary from country to country, from the standard punctuality, cleanliness and reliability objectives, to staff attitude and driver's behaviour toward customers.

5. "BACK TO THE BASICS" AND EXTERNALIZATION

The trend to outsource numerous activities which had been until recently under the operator's remit, aims to decrease costs related to maintenance, rolling stock property and real estate. The focus in the contract on the customer is combined with the trend for

the operator to outsource activities that are no longer considered to be part of his core business: this is the case for maintenance of rolling stock and equipment. Maintenance activity is increasingly delegated to third parties, contracted in relation with the operating contract, and completed with penalties owed by the maintenance company if it fails to reach its objectives. Maintenance outsourcing is now fairly common in rail contracts, with heavy maintenance systematically delegated to suppliers or maintainers. This approach is also being extended to light rail and metro operations; for example, the maintenance contract between Alstom and the London Underground for the Northern Line includes a guaranteed number of trains available daily and a capped failure ratio. This is also the approach of the NordOstseeBahn regional rail system in Schleswig-Holstein in Germany, and of the two tramway systems in Barcelona.

Delegating maintenance is a direct consequence of the opening of transport services to competition. Moreover operators - and particularly rail operators - are now ordering rolling stock according to functional specifications and asking suppliers to commit on performance and maintenance costs. These obligations require a commitment of the manufacturer for the entire life-cycle of the vehicles, which implies that the operators may decide not to delegate the complete maintenance in order to set up partnerships with rolling stock manufacturing companies dedicated to maintenance. Sophisticated technologies and complex technical solutions adopted for both rail and road vehicles are certainly driving this process of externalization; in fact, we can observe that very few transport companies now have the required competencies to maintain computer-aided technologies or a Euro-3 bus.

Externalization can also be led by business development, that is, when a company is expanding outside its usual remit in order to serve new territories. Outsourcing in this case is necessary to ensure maintenance and garages.

In relation to investments, a similar approach towards externalization is prevailing. In countries where authorities had previously been in charge of purchasing rolling stock or financing equipment, operators are now asked to invest in it, as in the case of tender of

contract in Nancy, France. However, the operator may not be willing to hold these important assets on his balance sheet because it ties up capital, which explains the frequent call on leasing companies to provide trains and buses, as well as park and ride facilities or maintenance workshops.

Rolling stock companies (ROSCOs), first set up in the UK during rail privatization, have successfully expanded throughout Europe, are now involved in numerous countries, and are working with new railway operators as well as established public monopolies in Germany, the Netherlands and Switzerland, to name a few. Another advantage for the operator in leasing assets is to transfer the residual value risk at the end of the contract to a third party. It can also accelerate the start-up period if it takes over a new contract at short notice by allowing for the quick delivery of trains.

These new contractual developments are of course to be seen as part of the European policy framework which aims to separate infrastructure from operations in order to increase competitiveness and efficiency. In this context, we observe greater complexity and sophistication in the contractual agreements, which ranges from including levels of performance delivered by the infrastructure companies, to the evaluation of access fees, as in the case of 'Performance Regime' in Great Britain.

When we examine the bus companies and their business strategies we observe a more traditional contract structure in chartered operations, particularly when the main operator decides to subcontract parts of services to other companies. For instance, in Germany large municipal companies may subcontract a very limited number of bus lines to local private SMEs. The main reason for this approach is to reduce operating costs, because local and often family-run companies may have different working agreements with lower labour costs. This solution is common in France as well, where urban bus companies contract local private coach operators in order to increase their market share. Moreover, in blighted urban areas or in economically depressed regions, the strategy to subcontract local coach companies is implemented by the institutional organization of public transport authorities in order to protect small businesses and secure activities and

employment. However, in France a reduction in subcontracting agreement chartered operations is evident, and they are therefore consigned to becoming an exception which is merely tolerated by the urban transport authority.

At present, monitoring and restricting subcontracting means a deeper involvement of the authority in subcontracting contracts through different initiatives such as capped subcontracting, detailed specifications from the authority through acceptance procedures, obligation to tender for subcontractors by the urban operator (no more direct award), authority selects subcontractors (no longer by urban company); subcontracting contracts to be signed and included in the offer of the urban company prior to awarding the urban tender (and not negotiated after).

At this point we can summarize the main trends of contracting practices, which are characterized by three specific contractual orientations. First, is the close monitoring of risks and a more precise risk allocation between the authority and the operator; it is based on the concept that each signatory is accountable for the risks that he has the power to monitor and control. Second, is the creation of incentives in order to develop operator initiatives, which can potentially increase economic and commercial performance and ensure the fulfilment of the authority's expectations. And third, is the necessity to refocus the operator's business strategies through, for instance, contracting with third parties in order for the operator to concentrate on the core business, i.e. deliver quality service to customers and develop public transport market share. This implies focussed attention on passengers' interests and, last but not least, transparency in the authority-operator relation. In the next section we examine a specific contract arrangement with an interesting structure and a variety of innovative contractual elements.

6. THE LIMBURG CONTRACT: ENTREPRENEURSHIP, MULTIMODALITY AND CUSTOMER ORIENTATION

The contract signed between the Dutch Province of Limburg and Veolia Transport Nederland illustrates an innovative approach of contract design, a strategy embraced by the transport group as well as local authorities.

6.1 The Context

Located at the crossroads of Belgium, Germany and the Netherlands, the Province of Limburg is a long and narrow territory of 2,210 km^2 with 1.2 million inhabitants (552 inhabitants/km2) and two main cities: Maastricht (120,000) and Heerlen (90,000), the population being mainly concentrated in the southern part of the region.

Since 2000 the Dutch transportation market has been partly opened to competition and 17 transit authorities are now responsible for urban and regional transport in the 12 Provinces. The competitive market is dominated by three groups: Connexxion/Transdev, Arriva and Veolia Transport. Let us observe that the private company Q-Buzz has recently entered the Dutch public transport market.

In 2006 the government of Limburg decided to reorganize and simplify the transport system to a fully integrated scheme by modifying the existing complex mobility scheme, that is, one regional rail system operated by the national railway company, viz., the national company, and competing bus lines, and 15 different taxi companies. A tender was launched with clear specifications:

- A demand-driven, customer-oriented system;
- A system structured around a strong rail backbone;
- Complemented by bus lines fed by various taxi offerings.

The elected government of 2007 has been providing a strong impetus to this policy. Today, of the four Provincial Executives in place, one has full responsibility for public transportation as well as logistics, soil pollution, sustainable energy production, and energy savings. Nonetheless, this policy has encountered forceful local resistance and operational constraints. The main reasons for this ‘dragging of the feet’ attitude were due

to poor public perception, a negative image of a French transport company listed on the stock exchange, the presence of unreliable, old and expensive Diesel trains from NS, and the lack of transparency regarding train ridership managed by NS.

The Limburg Province was the first province to issue a tendered multimodal contract involving three modes based on an integrated transport policy. The contract was won in 2006 by Veolia Transport Nederland. The new operator not only had to face the negative factors mentioned above, but it also had to manage a shorter implementation period because the previous incumbent main operator had launched a legal case against the authority.

6.2 A New Generation of Transit Contract

Awarded to a unique operator for 10 years, the contract represents 1,190 employees and a turnover of €100 million/year. The contract allocates the sharing of responsibilities between the parties, and it gives autonomy to the operator. In particular, Veolia Transport is responsible for generating revenue turnover with full commercial risk, for network design, and it has broad freedom on the choice of transport modes to be operated. Limburg Province (PTA) stipulates fares, sets contractual minimum service levels, and approves decisions taken by the operator. In addition, two main constraints had to be taken into account: the NS national rail operator imposes its national fare system on regional lines and Veolia Transport was forced to accept them, and information to customers had to comply with the national “9292” website, which provides integrated travel information on all PT modes throughout the country and is funded by all public transport companies in the Netherlands.

Customer orientation is the keyword of the contract which encompasses an holistic approach to make travelling easier: the operator has to define and optimize connecting times, solutions in case of service disruptions, flexibility between modes, diversity of customer interfaces (call centre, Internet, etc.) and customized services (transport on demand).

The contract is multimodal because it includes urban services in Maastricht and Heerlen, and the provincial service, transit and para-transit, trains, buses and taxis, fixed routes, and on-demand services. 240 buses and 24 train sets owned by the operator, and 300 taxis, owned or chartered by the operator carry some 53 million passengers/year. The taxi offer is important and divided into three specific types: taxis on fixed route or “VKB” (maximum of 8 passengers), “Regiotaxi” with door-to-door services for people who don't have access to regular PT (all types of customers) and “Bellbus,” which offers on-demand lines from bus stop to bus stop along virtual lines and pre-planned routes.

An integrated system brings many benefits to travellers by rethinking the system in terms of fare consistency and seamless combination of trips. A single control centre operated by Veolia Transport Nederland for trains, buses and taxis, traffic control and disruptions management is run together with a call centre (working 24/7) handling bookings as well as information about on-demand services. This brings benefits for the system efficiency with interoperability and staff flexibility (train drivers can drive buses and vice versa).

6.3 Incentives and Funding

The system has been designed to evolve to lower subsidies and more passenger revenues:

- 2008: PTA subsidies €46 million /Passenger revenues €58 million;
- 2013: PTA subsidies €50 million /Passenger revenues €65 million.

Subsidies are revised annually according to the national index based on fuel price and cost of living.

A bonus-penalty mechanism is based on four criteria: on-time performance of rail services, yearly customer satisfaction increase, continuity of service, and passenger revenue to cost coverage ratio.

The contract length of 10 years (against 6 to 8 years in the Netherlands) is appropriate for the operator to achieve results set by the authority in terms of patronage, commercial revenue and leadership.

6.4 Improved System Effectiveness

In terms of optimization of public funds, i.e. for the same amount of subsidies, the production shows since 2007 an increase, respectively of +30% of timetable hours on buses, +47% of timetable hours on trains (South), and +9% on timetable hours on trains (North).

As for ridership, an increase of 29% has been registered on buses, 43% on trains (South) and 25% on trains (North).

All buses are “Environmentally Enhanced Vehicles” (EEV), which makes the Limburg rolling stock the largest green bus fleet in the Netherlands. New solar panels are being installed at bus stops to provide passenger information, and 350 bus stops have already been equipped with solar panels.

An aggressive marketing plan has been implemented to boost off-peak traffic and a website has been launched for ticket sales (booking, buying and printing at home). Real-time passenger information is effective at 700 bus stops, together with screen displays inside buses and signage implemented in shopping malls, PT hubs, and leisure facilities. The staff carry out multi-skilled activities (drivers and dispatchers). This has a great impact on productivity because staff members can substitute for each other, and thus enhancing flexibility and efficiency of the operations since we have a reduction of staff turnover and staff cost.

Given that one of the main objectives of the contract is to boost profitability, the Limburg contract aims to develop passenger revenues through more direct sales and by creating new services to facilitate mobility, which will be achieved with a range of interventions:

from call centre to “mobility centre”, from websites to a “one-stop shop,” and through the inclusion of a mobile phone service.

7. SUMMARY AND POLICY RECOMMENDATIONS

The contractual relationships between transport authorities and operators have been expanding continuously, and major contractual changes have taken place over recent years in order to evaluate performance of transport services. We have shown how these changes have been motivated by the desire to encompass new stakeholders, such as rolling stock suppliers, civil engineering companies, financial investors, and rail infrastructure managers. But above all, also through the Limburg contract case, we have highlighted how contractual changes are instigated by the willingness towards better control over - and a more equitable spread of - industrial (or cost related) and commercial (or revenue related) risks.

The changes in contracts for public transport chiefly affect three areas:

- We can notice increased involvement by the transport authority in contracts, especially in countries with lengthy experience in contracting transport services. This trend is related to the emergence of the flat-rate or fixed-subsidy agreement, and to a new approach of risk sharing between transit authorities and companies;

- Operators in some countries are allowed to develop various commercial initiatives and this trend is linked with the approach to define open call for tenders in order to favor creativity and innovation from the operators. At the same time, quality criteria are systematically included in contracts, often with very detailed requirements for the operator.

- Finally, contracts have been influenced by two driving forces. First, is the increase of the outsourcing of maintenance operations. And the second trend involves

disaggregating investments, a logical consequence of the investment burden being transferred from the authority to the transport company.

Moreover, robust empirical results have demonstrated that, in general, fixed-price (FP) contracts provide higher performance than other contracts; nevertheless, we need to take into account the impacts of the institutional environment and the adverse effects of cost reducing efforts on non-contractible quality. This sheds light on the necessity to extend the empirical research on urban public transport performance, particularly on the effects of contractual schemes, and of costs on quality, e.g., punctuality, reliability, "passengers in excess," safety, cleanliness, information provision, attitude of staff, and customer satisfaction.

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